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**THE WITT CATALOGUE
A TAXONOMIC ATLAS OF THE
EURASIAN AND NORTH AFRICAN
NOCTUOIDEA**

**VOLUME 9
XYLENINAE I**

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A Taxonomic Atlas of the
Eurasian and North African
Noctuoidea

XYLENINAE I.

László Ronkay, Gábor Ronkay, Péter Gyulai
& Zoltán Varga



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Authors' addresses

László Ronkay – Department of Zoology, Hungarian Natural History Museum,

H-1088 Budapest, Baross u. 13, Hungary. E-mail: ronkay@mail.zoo.nhmus.hu

Gábor Ronkay – H-1137 Budapest, Szent István krt 4, Hungary. E-mail: gaborronkay@gmail.com

Péter Gyulai – H-3530 Miskolc, Mélyvölgy u. 13/A, Hungary. E-mail: adriennygyulai@gmail.com

Zoltán Varga – Department of Evolutionary Zoology and Human Biology, University of Debrecen,

H-4010 Debrecen, Hungary. E-mail: varga.zoltan@science.unideb.hu



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Preface

With this volume we wish to open a new field in the treatment of the Noctuidae sensu stricto, the subfamily Xyleninae, supposedly the taxonomically most diverse subfamily of Noctuidae. The first large clade of the tribe Xylenini we started the revisional work with is the *Agrochola-Telorta-Hyalobole* generic complex. This work has been started still at beginning of the eighties of the last century and continued with the revisions of the Balkanic, western Asiatic and, finally, with the Himalayan-Sino-Pacific taxa of this giant lineage.

The interpretation of *Agrochola* sensu lato has been changed in several time and the first splitting of the western Palaearctic groups is dated, similarly to our work, to the beginning of 80'es. Subsequently, the lumping tendencies dominated in the supraspecific grouping of the clade and only a few genera have been distinguished though the large *Agrochola* complex was divided into numerous subgenera. The complete revision of this taxonomic entity revealed the need to separate *Agrochola* s. str. from practically all other major groups put into this large sac and the detailed study of the Central and Eastern Asiatic "*Agrochola*" led to the description of a number of new genera and subgenera for the more ancient, mainly Himalayan-Pacific lineages.

It is worth mentioning that there are certain additional lineages which would belong to this major clade rather than to the conistroid genera (e.g. *Cirrhia*, *Spudaea*, *Jodia*, *Evisa* etc.) which are omitted from this volume, mainly due to the large size of the present item; these groups will be discussed in a forthcoming volume of the series. Thus, the *Agrochola-Telorta-Hyalobole* generic complex is treated in this volume in 16 genera, with the description of 6 new genera, 10 new subgenera, 2 new species and 3 new subspecies. The genitalia of both sexes of each taxa are illustrated and their phylogenetic and biogeographical connections are also discussed. Since these genera and their species/subspecies demonstrate a rich variety of colourful vs. unicolorous appearance with considerable geographical and individual variation, it was necessary to figure a larger number of specimens of most taxa, including valuable type materials from several large European collections, due to the friendly courtesy of our colleagues.

Similarly to the earlier volumes of this series, this volume is also based on a large number of genital slides, almost exclusively prepared by the authors. The technique of photographic reproduction was also continuously improved, mostly by long experience of Gabor Ronkay and also by the kind helpfulness of our friends in the Natural History Museum Vienna, The Natural History Museum London, the Zoological State Collection Munich and State Collection of Natural History Karlsruhe.

The authors would like to expect that this book will be a worthy continuation of the Taxonomic Atlas series and hope that our work will meet the approval both of professional entomologists and of enthusiasts of this fascinating group of moths.

Budapest, Miskolc and Debrecen, February, 2017

the Authors

Abbreviations

- BC CAS – Biological Centrum, Czech Academy of Sciences, České Budejovice
- BIN – Biological Institute, Russian Academy of Sciences, Novosibirsk
- BMNH – The Natural History Museum (formerly British Museum, Natural History), London
- CMF – collection of Chien-Ming Fu, Taiping
- EIHU – Entomological Institute, Hokkaido University, Sapporo
- ESRI – Taiwan Endemic Species Research Institute, Chi-Chi
- GYP – slide of Péter Gyulai
- HH – slide of Hermann-Heinrich Hacker
- HM – slide of Márton Hreblay
- HRT – collection of Han-Rong Tzuoo, Puli
- HT – slide of Hubert Thöny
- HNHM – Hungarian Natural History Museum, Budapest
- ICZN – International Code of Zoological Nomenclature
- LMK – Kärntner Landesmuseum, Klagenfurt
- LSL – The Linnean Society, London
- MHNG – Museum of Natural History, Geneva
- MNHNP – Museum National d'Histoire Naturelle, Paris
- NHMB – Natural History Museum, Basel
- NHMW – Naturhistorisches Museum, Wien
- NLMW – Niederösterreichisches Landesmuseum, Wien
- NRS – Naturhistoriska Riksmuseet, Stockholm
- NSMT – National Science Museum, Tsukuba
- OP – slide of Oleg Pekarsky
- RL – slide of Ronkay László
- SMNK – Staatliches Museum für Naturkunde, Karlsruhe
- SMNS – Staatliches Museum für Naturkunde, Stuttgart
- TLM – Tiroler Landesmuseum Ferdinandeum, Innsbruck
- USNMW – National Museum of Natural History, Washington
- VZ – slide of Zoltán Varga
- ZFMK – Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn
- ZISP – Zoological Institute, Russian Academy of Sciences, St. Petersburg
- ZMHU – Museum für Naturkunde (formerly Zoologisches Museum der Humboldt-Universität), Berlin
- ZMM – Zoological Museum of the Lomonosov University, Moscow
- ZMUC – Zoological Museum, University of Copenhagen
- ZSM – Zoologische Sammlung des Bayerischen Staates (Zoologische Staatssammlung, München).

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László Ronkay, Gábor Ronkay, Péter Gyulai and Zoltán Varga

Taxonomic and nomenclatural summary

The authors of all newly described taxa are the four authors of the volume except in case of *Agrocholorta* (*Pacificorta*) *taiwanawae* where the authors are Ronkay, Ronkay, Shikata, Gyulai & Varga.

Neotype designation

Orthosia kindermanni Fischer von Röslerstamm, 1838

Lectotype designations

Orthosia nitida var. *deleta* Staudinger, 1881
Cosmia trapezoides Staudinger, 1882
Orthosia kindermanni var. *pauli* Staudinger, 1891
Orthosia rupicapra Staudinger, 1879
Orthosia litura var. *meridionalis* Staudinger, 1871
Amathes egorovi Bang-Haas, 1934
Orthosia gratiosa Staudinger, 1881
Orthosia helvola var. *sibirica* Staudinger, 1882
Xanthia vulpecula Lederer, 1853
Orrhodia ciliata Staudinger, 1881

Newly described taxa

Newly described genera

Genus *Hazaropolia* **gen. n.**
Genus *Vulpechola* **gen. n.**
Genus *Agrocholorta* **gen. n.**
Genus *Suginistra* **gen. n.**
Genus *Edentelorta* **gen. n.**
Genus *Incertobole* **gen. n.**

Newly described subgenera

Subgenus *Flavirenorta* **subgen. n.**
Subgenus *Kyutekparkorta* **subgen. n.**
Subgenus *Mimicotelorta* **subgen. n.**
Subgenus *Shipherorta* **subgen. n.**
Subgenus *Semirenorta* **subgen. n.**
Subgenus *Pacificorta* **subgen. n.**
Subgenus *Acuminorta* **subgen. n.**
Subgenus *Anstineobole* **subgen. n.**
Subgenus *Tzuoobole* **subgen. n.**
Subgenus *Fuobole* **subgen. n.**

Newly described species

Agrocholorta (Flavirenorta) stoyani **sp. n.**
Agrocholorta (Pacificorta) taiwanawae **sp. n.**

Newly described subspecies

Anchoscelis (Anchoscelis) meridionalis maghrebianus **ssp. n.**
Maraschia grisescens balcanica **ssp. n.**
Hazaropolia hazara marmorata **ssp. n.**

Revised status, **stat. rev.**

Agrochola orejoni terranova (Parenzan, 1982) **stat. rev.**
Anchoscelis (Anchoscelis) tripolensis (Hampson, 1914) **stat. rev.**
Anchoscelis (Anchoscelis) rupicapra kresnaensis (Ronkay & Mészáros, 1982) **stat. rev.**

Raised to genus

Anchoscelis Guenée, 1839 **stat. rev.**
Frivaldszkyola Ronkay, 1984 **stat. n.**

Downgraded to subspecies

Anchoscelis (Anchoscelis) trapezoides naumanni (Hacker & Ronkay, 1990) **stat. n.**
Agrocholorta (Flavirenorta) antiqua kosagezai (Hreblay, Peregovits & Ronkay, 1999) **stat. n.**

New synonyms

- Agrochola occulta* Hacker, 1996 – synonym of *Agrochola lychnidis* ([Denis & Schiffermüller], 1775) **syn. n.**
Agrochola lychnidis aequalis Hacker, 1996 – synonym of *Agrochola lychnidis* ([Denis & Schiffermüller], 1775) **syn. n.**
Agrochola deleta decolorata Boursin, 1951 – synonym of *Anchoscelis (Anchoscelis) deleta* (Staudinger, 1882) **syn. n.**
Amathes oropotamica thermopotamica Wiltshire, 1941 – synonym of *Anchoscelis (Anchoscelis) oropotamica oropotamica* (Wiltshire, 1941) **syn. n.**
Amathes modesta Brandt, 1941 – synonym of *Anchoscelis (Anchoscelis) oropotamica oropotamica* (Wiltshire, 1941) **syn. n.**
Agrochola sairtana Derra, 1990 – synonym of *Anchoscelis (Anchoscelis) luteogrisea* (Warren, 1911) **syn. n.**
Agrochola humilis anatolica Pinker, 1980 – synonym of *Anchoscelis (Anchoscelis) humilis* ([Denis & Schiffermüller], 1775) **syn. n.**
Agrochola fibigeri Hacker & Moberg, 1989 – synonym of *Anchoscelis (Alpichola) lactiflora wautieri* (Dufay, 1975), **syn. n.**
Orthosia helvola var. *sibirica* Staudinger, 1882 – synonym of *Anchoscelis (Rufachola) helvola helvola* (Linnaeus, 1758) **syn. n.**
Orthosia caspica Kuznetzov, 1958 – synonym of *Maraschia grisescens grisescens* Osthelder, 1933 **syn. n.**
Orthosia mansueta var. *pontica* Staudinger, 1901 – synonym of *Frivaldszkyola mansueta mansueta* (Herrich-Schäffer, 1850) **syn. n.**
Amathes lota ab. *subdita* Warren, 1911 – synonym of *Leptologia lota* (Clerck, 1759) **syn. n.**
Amathes macilenta plumbea Wiltshire, 1941 – synonym of *Leptologia lota* (Clerck, 1759) **syn. n.**
Anchoscelis plumbea convergens Wiltshire, 1946 – synonym of *Leptologia lota* (Clerck, 1759) **syn. n.**
Agrochola lota schreieri Hacker & Weigert, 1986 – synonym of *Leptologia lota* (Clerck, 1759) **syn. n.**
Amathes macilenta rubescens Wiltshire, 1939 – synonym of *Leptologia macilenta* (Hübner, 1809) **syn. n.**
Hyalobole apicalis Hacker & Ronkay, 1996 – synonym of *Hyalobole phaeosoma* (Hampson, 1906) **syn. n.**

New combinations

- Anchoscelis (Anchoscelis) prolai* (Berio, 1976) **comb. n.**
Anchoscelis (Anchoscelis) deleta (Staudinger, 1882) **comb. n.**
Anchoscelis (Anchoscelis) thurneri (Boursin, 1953) **comb. n.**
Anchoscelis (Anchoscelis) imitata (Ronkay, 1984) **comb. n.**
Anchoscelis (Anchoscelis) pistacinoides (d'Aubuisson, 1867) **comb. n.**
Anchoscelis (Anchoscelis) nitida ([Denis & Schiffermüller], 1775) **comb. n.**
Anchoscelis (Anchoscelis) lunosa (Haworth, 1809) **comb. n.**
Anchoscelis (Anchoscelis) tripolensis (Hampson, 1914) **comb. n.**
Anchoscelis (Anchoscelis) polybela (de Joannis, 1903) **comb. n.**
Anchoscelis (Anchoscelis) approximata (Hampson, 1906) **comb. n.**
Anchoscelis (Anchoscelis) deosaiensis (Ronkay & Ronkay, 2000) **comb. n.**
Anchoscelis (Anchoscelis) nekrasovi (Hacker & Ronkay, 1992) **comb. n.**
Anchoscelis (Anchoscelis) pamiricola (Hacker & Ronkay, 1992) **comb. n.**
Anchoscelis (Anchoscelis) trapezoides trapezoides (Staudinger, 1882) **comb. n.**
Anchoscelis (Anchoscelis) trapezoides naumanni (Hacker & Ronkay, 1990) **comb. n.**
Anchoscelis (Anchoscelis) statira (Boursin, 1960) **comb. n.**
Anchoscelis (Anchoscelis) zoltanus (Ronkay & Ronkay, 2000) **comb. n.**
Anchoscelis (Anchoscelis) griseovariegata (Ronkay & Ronkay, 2000) **comb. n.**
Anchoscelis (Anchoscelis) spectabilis (Hacker & Ronkay, 1990) **comb. n.**

- Anchoscelis* (*Anchoscelis*) *scabra* (Staudinger, 1892) **comb. n.**
Anchoscelis (*Anchoscelis*) *fuscomixta* (Gyulai & Ronkay, 2006) **comb. n.**
Anchoscelis (*Anchoscelis*) *pauli* (Staudinger, 1892) **comb. n.**
Anchoscelis (*Anchoscelis*) *kindermanni* (Fischer von Röslerstamm, 1838) **comb. n.**
Anchoscelis (*Anchoscelis*) *consueta* (Herrich-Schäffer, 1852) **comb. n.**
Anchoscelis (*Anchoscelis*) *rupicapra rupicapra* (Staudinger, 1879) **comb. n.**
Anchoscelis (*Anchoscelis*) *rupicapra kresnaensis* (Ronkay & Mészáros, 1982) **comb. n.**
Anchoscelis (*Anchoscelis*) *oropotamica oropotamica* (Wiltshire, 1941) **comb. n.**
Anchoscelis (*Anchoscelis*) *oropotamica archar* (Ronkay, Varga & Hreblay, 1998) **comb. n.**
Anchoscelis (*Anchoscelis*) *meridionalis meridionalis* (Staudinger, 1871) **comb. n.**
Anchoscelis (*Anchoscelis*) *orientalis* (Fibiger, 1997) **comb. n.**
Anchoscelis (*Anchoscelis*) *agnorista* (Boursin, 1955) **comb. n.**
Anchoscelis (*Anchoscelis*) *hypotaenia* (Bytinski-Salz, 1936) **comb. n.**
Anchoscelis (*Anchoscelis*) *litura* (Linnaeus, 1761) **comb. n.**
Anchoscelis (*Anchoscelis*) *luteogrisea* (Warren, 1911) **comb. n.**
Anchoscelis (*Anchoscelis*) *turcomanica* (Ronkay, Varga & Hreblay, 1998) **comb. n.**
Anchoscelis (*Anchoscelis*) *humilis* ([Denis & Schiffermüller], 1775) **comb. n.**
Anchoscelis (*Alpichola*) *egorovi* (Bang-Haas, 1934) **comb. n.**
Anchoscelis (*Alpichola*) *azerica* (Ronkay & Gyulai, 1997) **comb. n.**
Anchoscelis (*Alpichola*) *lactiflora lactiflora* (Draudt, 1934) **comb. n.**
Anchoscelis (*Alpichola*) *lactiflora wautieri* (Dufay, 1975) **comb. n.**
Anchoscelis (*Alpichola*) *janhillmanni* (Hacker & Moberg, 1989) **comb. n.**
Anchoscelis (*Alpichola*) *elbursica* (Gyulai & Ronkay, 2006) **comb. n.**
Anchoscelis (*Alpichola*) *dubatolovi* (Varga & Ronkay, 1991) **comb. n.**
Anchoscelis (*Osthelderichola*) *osthelderi* (Boursin, 1951) **comb. n.**
Anchoscelis (*Osthelderichola*) *gratiosa* (Staudinger, 1882) **comb. n.**
Anchoscelis (*Rufachola*) *helvola helvola* (Linnaeus, 1758) **comb. n.**
Anchoscelis (*Rufachola*) *helvola pallescens* (Warren, 1909) **comb. n.**
Anchoscelis (*Haemachola*) *haematidea* (Duponchel, 1827) **comb. n.**
Hazaropolia hazara (Hacker, 1990) **comb. n.**
Fivaldszkyola mansueta mansueta (Herrich-Schäffer, 1850) **comb. n.**
Fivaldszkyola mansueta sphakiota (Ronkay, Yela & Hreblay, 2001) **comb. n.**
Fivaldszkyola staudingeri (Ronkay, 1984) **comb. n.**
Fivaldszkyola elami (Ronkay, 2001) **comb. n.**
Leptologia (*Xandria*) *blidaensis* (Boursin, 1951) **comb. n.**
Vulpechola vulpecula (Lederer, 1853) **comb. n.**
Agrocholorta (*Agrocholorta*) *albirena albirena* (Boursin, 1956) **comb. n.**
Agrocholorta (*Agrocholorta*) *albirena annamica* (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**
Agrocholorta (*Agrocholorta*) *albirena chihutuana* (Chang, 1991) **comb. n.**
Agrocholorta (*Agrocholorta*) *albirena doiinthanoni* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Agrocholorta*) *karma* (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**
Agrocholorta (*Agrocholorta*) *attila* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Agrocholorta*) *zita* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Flavirenorta*) *flavirena* (Moore, 1881) **comb. n.**
Agrocholorta (*Flavirenorta*) *gorza* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Flavirenorta*) *punctilinea* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Flavirenorta*) *antiqua antiqua* (Hacker, 1992) **comb. n.**
Agrocholorta (*Flavirenorta*) *antiqua kosagezai* (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**
Agrocholorta (*Mimicotelorta*) *atrifusa* (Ronkay & Kobayashi, 1997) **comb. n.**
Agrocholorta (*Mimicotelorta*) *telortoides* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Mimicotelorta*) *fibigeri* (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**
Agrocholorta (*Kyutekparkorta*) *parki* (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**

- Agrocholorta* (*Kyutekparkorta*) *magarorum* (Benedek, Babics & Saldaitis, 2013) **comb. n.**
Agrocholorta (*Shipherorta*) *humidalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**
Agrocholorta (*Shipherorta*) *pallidilinea* (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**
Agrocholorta (*Semirenorta*) *semirena* (Draudt, 1950) **comb. n.**
Agrocholorta (*Semirenorta*) *siamica* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Semirenorta*) *minorata* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Semirenorta*) *csoevarii* (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**
Agrocholorta (*Semirenorta*) *kunandrasi* (Hreblay & Ronkay, 1999) **comb. n.**
Agrocholorta (*Semirenorta*) *emilia* (Ronkay, 2001) **comb. n.**
Agrocholorta (*Semirenorta*) *plumbitincta* (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**
Agrocholorta (*Pacificorta*) *nawae* (Matsumura, 1926) **comb. n.**
Agrocholorta (*Pacificorta*) *amamiensis* (Shikata, 2015) **comb. n.**
Agrocholorta (*Pacificorta*) *kimurai* (Shikata, 2015) **comb. n.**
Suginistra sakabei sakabei (Sugi, 1980) **comb. n.**
Suginistra sakabei continentalis (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**
Edentelorta edentata (Leech, 1889) **comb. n.**
Incertobole evelina (Butler, 1879) **comb. n.**

Family **Noctuidae** Latreille, 1809

Subfamily **Xyleninae** Guenée, 1837

Tribe **Xylenini** Guenée, 1837

Subtribe **Xylenina** Guenée, 1837

Genus ***Agrochola*** Hübner, 1821

Agrochola Hübner, 1821, *Verzeichniss bekannter Schmetterlinge*: 243. Type-species: *Noctua pistacina* [Denis & Schiffermüller], 1775, by subsequent designation by Hampson, 1906.

Taxonomy. *Agrochola* has long been considered as a very large, supposedly polyphyletic, Holarctic-Oriental genus, currently consisting of more than seventy described species the majority of which having a fairly typical external appearance. The European species of the agrocholoid complex have been subjected by certain authors (e.g. Berio, 1980; Beck, 1991 1996, 1999) to radical splitting into numerous genera and subgenera. The thorough revision of the entire (Holarctic-Oriental) agrocholoid generic complex which represents a common clade suggests to split the former, sac-like genus *Agrochola* and distinguish two large, really compact clades (*Anchoscelis*, *Agrocholorta*) and some further mono- or oligobasic lineages (e.g. *Friwaldszkyola*, *Leptologia*, *Sunira*, *Propenistra*, etc.) at generic level. The genus *Agrochola* sensu stricto contains, due to the subsequent type-species designation, only a pair of species representing two rather distinct evolutionary lines while the majority of the western Palaearctic species formerly placed into *Agrochola* belongs to the genus *Anchoscelis*.

Diagnosis. The genus contains only two species, which are rather remote from each other but the configuration of the vesica indicates their monophyly.

The genus *Agrochola* includes two medium-sized species (wingspan 30–42 mm) with rather robust body and narrow, acutely pointed forewings. Antennae of both sexes filiform, male antenna with somewhat longer fasciculate cilia. Forewing ground colour very variable, from pale ochreous to deep violaceous-brown and fumous grey, antemedial and postmedial crosslines double, slightly sinuous, orbicular and reniform stigmata distinctly outlined, claviform stigma absent.

In the male genitalia, uncus long, relatively strong, with hooked apex, tegumen broad, low, penicular lobes small, juxta broadly pentagonal or narrow, subdeltoidal, vinculum strong, V-shaped. Valvae rather short, distal parts more or less symmetrical or markedly asymmetrical. Costa heavily sclerotised, cucullus narrow or rather broad, corona short, weak or absent. Sacculus short, clavus a small rounded lobe, subapical costal extension long, straight, sclerotized on both valvae, right valva may have an additional,

shortly cuneate process proximally, harpe short or long, slender, strongly curved. Aedeagus medium-long, thick, cylindrical, carina may bear large, apically serrate, sclerotized dorso-lateral and small ventral plate. Vesica broadly tubular, basal part short, straight, scobinate, medial part inflated, bent ventrally, distal third curved laterally. Medial part with one or two smaller, membranous diverticula; distal third with large, scobinate, terminal diverticulum and a small subconical one at base of ductus ejaculatorius. Terminal part of vesica is armed by a narrow, rather strongly verrucose ribbon or a long field of short spinules.

The main features of the female genitalia are as follows: ovipositor very long, weak or shorter, conical, antrum broad, short, its sclerotized plate falcate or quadrangular, ductus bursae more or less straight, flattened, slightly ribbed, partly sclerotized. Appendix bursae membranous, conical-semiglobular, situated close to ductus bursae or ventro-laterally nearby fundus, corpus bursae large, ovoid or ellipsoidal, without signum or with three rounded signum-patches.

Distribution. Euro-Siberian. The type-species of the genus has a broad distribution from the African Mediterranean to Central Siberia and the western Himalayas while the other species is rather stenochorous, occurring in small areas of the western part of the Mediterranean.

Agrochola lychnidis ([Denis & Schiffermüller], 1775)

(Plate 1, Figs 1–4; Plate 34, Figs 1–16; gen. fig. 1)

Noctua lychnidis [Denis & Schiffermüller], 1775, *Ankündigung eines systematischen Werkes von den Schmetterlinge der Wienergegend 1775*: 76. Type-locality: [Austria] Vienna region. Types destroyed.

Synonymy

- Noctua pistacina* [Denis & Schiffermüller], 1775, *Ankündigung eines systematischen Werkes von den Schmetterlinge der Wiener Gegend 1775*: 77. Type-locality: [Austria] Vienna region. Types destroyed;
- Phalaena Noctua canaria* Esper, 1791, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen* 3(3): 524, pl. 156, figs 5–6. Type-locality: Italy, Florence region;
- Phalaena Noctua rubetra* Esper, 1791, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen* 3(3): 523, pl. 156, figs 3–4. Type-locality: Italy, Florence region;
- Phalaena Noctua schoenobaena* Esper, 1791, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen* 3(3): 525, pl. 157, figs 2–3. Type-locality: Italy, Florence region;
- Phalaena Noctua serina* Esper, 1791, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen* 3(3): 522, pl. 156, figs 1–2. Type-locality: Italy, Florence region;
- Phalaena lineola* Donovan, 1801, *The Natural History of the British Insects* 10: 94, pl. 360. Type-locality: no locality given (Great Britain by implication);
- Noctua ferrea* Haworth, 1809, *Lepidoptera Britannica; sistens Digestionem novam Insectorum Lepidopterorum quae in Magna Britannia Reperiuntur, Larvarum Pabulo, Temporeque Pascendi; Expansione Alarum; Mensibusque Volandi; Synonymis atque Locis Observationibusque Variis* 2: 231. Type-locality: England, Wisbeach;
- Noctua sphaerulatina* Haworth, 1809, *Lepidoptera Britannica; sistens Digestionem novam Insectorum Lepidopterorum quae in Magna Britannia Reperiuntur, Larvarum Pabulo, Temporeque Pascendi; Expansione Alarum; Mensibusque Volandi; Synonymis atque Locis Observationibusque Variis* 2: 230. Type-locality: Great Britain;
- Noctua venosa* Haworth, 1809, *Lepidoptera Britannica; sistens Digestionem novam Insectorum Lepidopterorum quae in Magna Britannia Reperiuntur, Larvarum Pabulo, Temporeque Pascendi; Expansione Alarum; Mensibusque Volandi; Synonymis atque Locis Observationibusque Variis* 2: 232. Type-locality: Great Britain;
- Orthosia pistacina* var. *silesica* Schultz, 1905, *Entomologische Zeitschrift* 18: 33. Type-locality: [Germany, Poland] Schlesien, Heinrichau; Hertwigladen. Syntypes;
- Orthosia haematidea* f. *corsica* Culot, 1914, *Noctuelles et Géométrés d'Europe. Première Partie Noctuelles* 2: 82, pl. 54, fig. 8. Type-locality: [France] Corsica. Types: in coll. BMNH;
- Agrochola lychnidis aequalis* Hacker, 1996, *Esperiana* 4: 300. Type-locality: Cyprus, vicinity of Paphos. Holotype: male, in coll. ZSM, **syn. n.**;
- Agrochola occulta* Hacker, 1996, *Esperiana* 4: 456, pl. Y, fig. 6. Type-locality: [Turkey] Syria, Amanus, Düldül Dag (Yüksek Dag), Jashil-dere (Yeshil valley). Holotype: male, in coll. ZSM, **syn. n.**

Diagnosis. The species is enormously variable in all populations, both in the forewing colouration and in numerous features of the male genitalia. This variation completely obscures any possible geographic tendency, even though *A. lychnidis* is one of the most widespread species of the agrocholoid generic complex.

Agrochola occulta is treated here as synonymous with *A. lychnidis*. This taxon is known only from a single specimen with several striking features in the male genitalia. This specimen is considered as a teratological example; its external appearance, however, is confusingly similar to that of the pale forms of *A. lychnidis*.

Agrochola lychnidis differs externally from *A. orejoni* by its narrower wings with less conspicuous crosslines but stronger pale covering of the veins, considerably smaller, flattened stigmata, more sinuous postmedial line, the absence of the stronger spots following the subterminal line and the more unicolorous, generally darker hindwing. Wingspan 32–42 mm.

The male genitalia of the two species differ in almost every detail, e.g. the valvae of *A. lychnidis* are broader, not or only slightly asymmetrical, the subapical costal extensions and the cucullus are narrower, longer; the vesica has no subterminal spinulose field. The female genitalia are also easily distinguishable, the ovipositor of *A. lychnidis* is much longer, its antrum is falcate, not quadrangular, and the corpus bursae has three signa (*A. orejoni* has none).

Agrochola lychnidis can be distinguished from the externally somewhat similar *Anchoscelis* species (e.g. *A. (A.) rupicapra*, *A. (A.) oropotamica*, or the members of the *A. (A.) lunosa* species-group) by the darker, evenly greyish-brown suffused hindwings and the more robust body; from the taxa of the *A. (A.) deleta* and *A. (A.) nitida* species-groups by the longer wings, much narrower orbicular and reniform stigmata and the differently running crosslines. The genitalia of *A. lychnidis* and the mentioned *Anchoscelis* groups differ conspicuously; see the group features in the generic and species-group diagnoses.

Distribution. A widespread Euro-Siberian species, extending rather far to the north in Europe (its northernmost localities are northern Denmark and southern Sweden). Outside Europe it is recorded from the Maghreb area (Morocco, Tunisia), the Near East, Turkey, Cyprus, Armenia, Iran, Turkmenistan, Kazakhstan, Tadjikistan, western and central Siberia and from the western Himalayas (Pakistan, Indus valley); in Europe it is a rather frequent species while in western and central Asia it is rare.

The species inhabits various types of deciduous forests; the first adults emerge from the end of August and are on the wing to the end of November.

Agrochola orejoni orejoni Agenjo, 1951

(Plate 1, Figs 5–6; Plate 34, Figs 17–23; gen. fig. 2)

Agrochola orejoni Agenjo, 1951, *Eos* 27: 414, pl. 7, figs 9–18. Type-locality: Spain, Burgos. Holotype: male, in coll. IEE Madrid.

Synonymy

Agrochola orejoni f. or ssp. *guadarramana* Agenjo, 1951, *Eos* 27: 421, pl. 7, figs 17–18. Type-locality: Spain, Sierra de Guadarrama, Cercedilla, Estación Alpina, 1500 m. Holotype: male, in coll. IEE Madrid.

Diagnosis. An externally very variable species; several forms were described by Agenjo (1951) on the basis of variation in the ground colour of body and forewings. We treat them all but one as infrasubspecific so they are omitted from the synonymy. The Iberian taxon *guadarramana* Agenjo, 1951 and the later described ssp. *terranae* were supposed to represent externally recognizable ‘geographical isolates’ different enough in their external appearance from the nominate race as to merit subspecific status. After checking a large series of specimens from both localities, we consider all Iberian populations as taxonomically homogeneous while the complete isolation of the Italian population and the remarkable differences in the genitalia of both sexes support the distinctness of *terranae* at subspecies level. Wingspan 30–35 mm.

The male genitalia of *A. orejoni* differ strikingly from those of *A. lychnidis*, the main differential features are as follows: uncus shorter, juxta longer and narrower, subdeltoidal, with an apical notch, valvae with strongly asymmetrical costal plates expanding apically into a large, heavily sclerotized cucullus, with double digitus on the right valva and simple on the left one, harpe shorter and somewhat thicker, aedeagus more curved ventrally, vesica broader and longer, recurved ventrally and has a more complex configuration with two suprabasal and two terminal diverticula, one of the latter is long, curved, finger-like and scobinate, at its base with a spinulose field made up of numerous very small cornuti.

In the female genitalia, the ovipositor of *A. orejoni* is much shorter, more conical than in *A. lychnidis*, the antrum is broader, more ring-like, with a rectangular sclerotised plate, the ductus bursae is straighter, with two stronger sclerotised areas at distal end and along the main tube, the appendix bursae is less elongated, does not reaching proximal end of ductus bursae and the corpus bursae lacks the signa.

Distribution. Western Mediterranean. The typical subspecies has a reduced number of localities scattered throughout the Iberian central plateau (the provinces of Burgos, Cuenca, León, Madrid, Salamanca, Segovia, and Teruel).

The species inhabits open Mediterranean sclerophyllous woodlands and xerophilous and meso-xerophilous scrub at medium and moderately high altitudes; the adults are on the wing from late August to mid-November, depending on latitude and altitude.

Agrochola orejoni terranovae Parenzan, 1982 stat. rev.

(Plate 1, Figs 7–8; Plate 34, Figs 24–26; gen. fig. 3)

Agrochola orejoni terranovae Parenzan, 1982, *Entomologica, Bari* 17: 139, figs 10a–11a. Type-locality: Italy, Terranova. Holotype: male, in coll. IEB (Istituto de Entomologia Bari).

Diagnosis. The taxon *terranovae* shows generally similar variation in the external features as the typical *A. o. orejoni* but most often somewhat short-winged with less acute forewing apex and more blurred dark markings. The two subspecies are completely allopatric and their isolation has a long geographical history which also supports the separation of the two races. Wingspan 30–35 mm.

The male genitalia of the ssp. *terranovae* differ from those of the typical subspecies by the broader, medially less constricted juxta, the broader cucullus with broader and less acute apex and posterior processes of digitus in both sides, the broader and less tapering pollex-like process on the right valva and the longer and stronger harpes. In the females, the ductus bursae is proportionally longer and somewhat less sclerotised in the Italian subspecies than in the ssp. *orejoni*.

Distribution. The eastern subspecies of *A. orejoni* occurs in southern Italy (Monte Pollino at Terranova, Basilicata province).

Genus *Anchoscelis* Guenée, 1839 stat. rev.

Anchoscelis Guenée, 1839, *Bulletin de la Société Entomologique de France* 8: 483. Type-species: *Noctua nitida* ([Denis & Schiffermüller], 1775, by subsequent designation by Duponchel, 1841.

Synonymy

Omphaloscelis Hampson, 1906, *Catalogue of the Lepidoptera Phalaenae in the British Museum* 6: 469. Type species: *Noctua lunosa* Haworth, 1809, by subsequent designation;

Agrolitha Berio, 1980, *Bolletino della Società Entomologica Italiana* 112(1–3): 14. Type-species: *Phalaena Noctua litura* Linnaeus, 1758, by original designation;

Pseudanchoscelis Beck, 1991, *Atalanta* 22(2–4): 204. Type-species: *Orthosia kindermanni* Fischer von Röslerstamm, 1838, by original designation;

Thurnerichola Beck, 1991, *Atalanta* 22(2–4): 206. Type-species: *Agrochola thurneri* Boursin, 1953, by original designation;

Humichola Beck, 1991, *Atalanta* 22(2–4): 205. Type-species: *Noctua humilis* [Denis & Schiffermüller], 1775, by original designation.

Taxonomy. A very large Palaearctic genus, currently consisting of some fifty described taxa, see the checklist below. The majority of the species have a fairly typical external appearance; this genus comprises most of the ‘typical’ looking species of *Agrochola* s.l. The species of *Anchoscelis* s.l. can be arranged into really compact species-groups often with characteristic autapomorphies but the synapomorphic

features of the male genitalia (e.g. the configuration of the vesica and the distal half of the valva) show their common origin. These larger lineages are treated here as subgenera (*Alpichola*, *Osthelderichola*, *Haemachola*, *Rufachola*), while they, together with certain, mainly European, species-groups of the subgenus *Anchoscelis* are often separated on generic level (e.g. Berio 1980, Beck 1991, 1996, 1999).

The closest relatives of *Anchoscelis* are *Agrochola* s. str. and the *Maraschia-Hazaropolia* lineage. The basic ground plan of the vesica displays phyletic connections with the species of *Cirrhia* Hübner, 1821 and also resembles those of certain Orthosiini groups. The majority of the main lineages of the European species-groups show a typically allopatric speciation, but species of the parallel lineages of the same species-group may occur sympatrically see, for instance, the species of the *nitida*- and the *deleta*- groups.

Genus *Anchoscelis* Guenée, 1839

Subgenus *Anchoscelis* Guenée, 1839

- prolai* (Berio, 1976) **comb. n.**
deleta (Staudinger, 1882) **comb. n.**
thurneri (Boursin, 1953) **comb. n.**
imitata (Ronkay, 1984) **comb. n.**
pistacinoides (d'Aubuisson, 1867) **comb. n.**
nitida ([Denis & Schiffermüller], 1775) **comb. n.**
lunosa (Haworth, 1809) **comb. n.**
tripolensis (Hampson, 1914) **stat. rev., comb. n.**
polybela (de Joannis, 1903) **comb. n.**
approximata (Hampson, 1906) **comb. n.**
deosaiensis (Ronkay & Ronkay, 2000) **comb. n.**
nekrasovi (Hacker & Ronkay, 1993) **comb. n.**
pamiricola (Hacker & Ronkay, 1993) **comb. n.**
trapezoides trapezoides (Staudinger, 1882) **comb. n.**
trapezoides naumanni (Hacker & Ronkay, 1990) **comb. n., stat. n.**
statira (Boursin, 1960) **comb. n.**
zoltanus (Ronkay & Ronkay, 2000) **comb. n.**
griseovariegata (Ronkay & Ronkay, 2000) **comb. n.**
spectabilis (Hacker & Ronkay, 1990) **comb. n.**
scabra (Staudinger, 1892) **comb. n.**
fuscomixta (Gyulai & Ronkay, 2006) **comb. n.**
pauli (Staudinger, 1892) **comb. n.**
kindermanni (Fischer von Röslerstamm, 1838) **comb. n.**
consueta (Herrich-Schäffer, 1852) **comb. n.**
rupicapra rupicapra (Staudinger, 1879) **comb. n.**
rupicapra kresnaensis (Ronkay & Mészáros, 1982) **stat. rev., comb. n.**
oropotamica oropotamica (Wiltshire, 1941) **comb. n.**
oropotamica archar (Ronkay, Varga & Hreblay, 1998) **comb. n.**
meridionalis meridionalis (Staudinger, 1871) **comb. n.**
meridionalis maghrebianus **ssp. n.** (Algeria, Morocco)
agnorista (Boursin, 1955) **comb. n.**
hypotaenia (Bytinski-Salz, 1936) **comb. n.**
orientalis (Fibiger, 1997) **comb. n.**
litura (Linnaeus, 1761) **comb. n.**
luteogrisea (Warren, 1911) **comb. n.**
turcomanica (Ronkay, Varga & Hreblay, 1998) **comb. n.**
humilis ([Denis & Schiffermüller], 1775) **comb. n.**

Subgenus *Alpichola* Ronkay, 1984

- egorovi* (Bang-Haas, 1934) **comb. n.**
azerica (Ronkay & Gyulai, 1997) **comb. n.**
lactiflora lactiflora (Draudt, 1934) **comb. n.**
lactiflora wautieri (Dufay, 1975) **comb. n.**
janhillmanni (Hacker & Moberg, 1989) **comb. n.**
elbursica (Gyulai & Ronkay, 2006) **comb. n.**
dubatulovi (Varga & Ronkay, 1991) **comb. n.**

Subgenus *Osthelderichola* Beck, 1991

- osthelderi* (Boursin, 1951) **comb. n.**
gratiosa (Staudinger, 1882) **comb. n.**

Subgenus *Rufachola* Beck, 1991

- helvola helvola* (Linnaeus, 1758) **comb. n.**
helvola pallescens (Warren, 1909) **comb. n.**

Subgenus *Haemachola* Beck, 1991

- haematidea* (Duponchel, 1827) **comb. n.**

Diagnosis. Medium-sized or small species (wingspan 25–45 mm), with rather robust body. Head large, eyes globular, frons smooth or finely verrucose-corneous, often slightly or rather strongly convex, with long vestiture, palpi rather short, slightly upturned. Male antenna in all but one species shortly, loosely fasciculate (that of *A. (A.) polybela* widely bipectinate), that of female filiform with very short, sparse cilia. Abdomen elongate, thick, especially in females, in some cases female abdomen rather shortened, basal abdominal coremata present, tip of ovipositor often protruding from abdomen. Forewing variably long, usually elongate with finely or more markedly pointed apex, outer margin evenly arcuate, sometimes slightly flattened at termen. Ground colour strongly variable from pale ochreous to blackish grey, wing pattern also strongly variable, crosslines and orbicular and reniform stigmata usually present but may be diffuse or obsolete, in pale forms often hardly visible. Hindwing smaller, sometimes markedly small and rounded, apex may be pointed or finely rounded, most often suffused with darker grey or brownish.

Male genitalia. Uncus short or medium-long, most often slender; tegumen broad, rather long, penicular lobes of variable size; juxta usually subdeltoidal with variably long apical plate, sometimes shield-like; valvae regularly symmetrical (no markedly asymmetrical valvae are known in *Anchoscelis*), elongate, often curved at apical third, costal part often convex at middle or in distal third, costal extension(s) (digitus(es)) usually wedge-shaped, pointed but may also be broader, apically more rounded, distal part of costal plate often serrate-dentate or bearing 2–3 longer processes. Harpe long or very long, slender, usually S-shaped. Aedeagus rather long, cylindrical, arcuate or rather strongly curved, carina may have strongly dentate or serrate ventral (or ventro-lateral) plate, sometimes also stronger dorsal process. Vesica long, broadly tubular, medial part often coiled, basal and medial parts usually bearing membranous diverticula, distal half may bear smaller or larger field of cornuti and/or sclerotized ribs, terminal cornutus most often present, usually long, thorn- or spine-like.

Female genitalia. Ovipositor usually weakly sclerotized, often very long, telescopic, with fine papillae or much shorter, conical. Antrum usually calyculate, discoidal or funnel-like, with stronger but usually narrow, falcate or quadrangular sclerotized plate. Ductus bursae rather long, flattened, often folded, partly heavily sclerotized, in certain cases short, weak, without sclerotized parts, appendix bursae rounded or conical, wrinkled, sometimes with smaller or larger sclerotized apical plate, corpus bursae large, discoidal, globular or elliptical, often with rounded-elliptical signa.

Distribution. The genus is distributed across practically the whole Palaearctic region, except the far northern ranges and the eastern and south-eastern parts of the Himalayan-Sino-Pacific territory. The majority of the known species and species-groups, however, are distributed in the Mediterranean region and in Asia Minor; most species are rather stenochorous.

An originally arboreal group, the most ancient members of the complex inhabit monsoonic, usually high montane forests in the western Himalayan region. Most of their descendants followed this generally arboreal life style but some of the species (and species-groups) expanded to occupy different niches, adapting to dry, warm, often lightly wooded or even open biotopes, xerophilous Mediterranean shrubby or bushy woodlands or desert-like or semi-desert habitats or occur in mountains high above the timberline. The species are univoltine with late autumnal adults, the overwintering stage of the great majority of the species is the egg. Certain species may be active throughout the winter, especially in the most southerly distributed populations of western Asiatic and Mediterranean species.

Subgenus *Anchoscelis* Guenée, 1839 stat. rev.

Anchoscelis Guenée, 1839, *Bulletin de la Société Entomologique de France* 8: 483. Type-species: *Noctua nitida* ([Denis & Schiffermüller], 1775, by subsequent designation by Duponchel, 1841.

Diagnosis. The subgenus *Anchoscelis* comprises those large lineages within the genus which have strongly sclerotised costal plate with well-developed process(es) of digitus or a long, variably strongly serrated ventral margin of costal plate. The vesica displays the characteristic long, tubular structure with membranous basal and medial diverticula, a variably long field of cornuti and/or sclerotized ribs and a terminal cornutus; reductive trends may be observed in certain species-groups.

In the female genitalia, the ovipositor is usually weakly sclerotized, medium-long or very long, telescopic, with fine, long papillae anales, antrum usually calyculate, discoidal or funnel-like, with stronger but usually narrow, falcate or quadrangular sclerotized plate, the ductus bursae is usually tubular and flattened, often folded, partly heavily sclerotised (only rarely short and less sclerotised), the appendix bursae is well-developed, rounded or conical, wrinkled, sometimes with smaller or larger sclerotized apical plate, corpus bursae large, discoidal, globular or elliptical, signa (if present) small and rounded (patch-like) or longer, ribbon-like.

Distribution. Trans-Palaeartic. The subgenus is widespread from the Maghreb area and western Europe to central Siberia and the western and south-western Himalayas, except the far northern ranges. The moths may inhabit arboreal and more open, sometimes subalpine and desert habitats; the adults are usually autumnal but certain species may appear at the end of the summer while others are on the wing throughout the winter.

The *deleta*-group (“*Thurnerichola* Beck, 1991”)

Diagnosis. The species of the lineage are usually variable in the forewing ground colour and the intensity of the standard noctuid maculation. All known taxa have unicolorous and well-marked forms, but this variation has no taxonomic importance. The members of the lineage are often confusingly similar externally but the genitalia of both sexes show striking differences. The lineage contains two closely related, allopatric pairs of species (*A. (A.) deleta* and *A. (A.) prolai*, *A. (A.) thurneri* and *A. (A.) imitata*), their distribution displays a curiously disjunct pattern, with *A. (A.) thurneri* occurring between the areas of *A. (A.) prolai* and *A. (A.) deleta*.

The subgenus *Thurnerichola* Beck, 1991, erected for *A. thurneri* (and, thus, for this lineage) is a mere synonym of *Anchoscelis*.

Distribution. Ponto-Mediterranean-Anatolian. The westernmost isolate of the lineage occurs in the Apennines, another species lives in the Balkans while the two eastern species occur partly sympatrically in eastern Anatolia and northern Iraq.

***Anchoscelis (Anchoscelis) prolai* (Berio, 1976) comb. n.**

(Plate 2, Figs 1–2; Plate 34, Figs 27–31; gen. fig. 4)

Agrochola prolai Berio, 1976, *Bolletino della Societa Entomologica Italiana* **108**: 22, fig. 1. Type-locality: Italy, Vivaro Romano, Lazio. Holotype: male, in coll. SMNK.

Diagnosis. The species is the westernmost member of the *deleta*-group. *Anchoscelis (A.) prolai* is almost indistinguishable from its close relatives on external features, although the colouration of both wings is often paler, the antemedial line is more oblique, less curved inwards near inner margin and the orbicular stigma is more oblique and flattened than those of *A. (A.) deleta* and *A. (A.) thurneri*. Wingspan 30–35 mm.

The configuration of the genitalia of both sexes of *A. (A.) prolai* is conspicuously different from those of *A. (A.) deleta* and *A. (A.) thurneri* in almost all detail. The most important specific features of the male genitalia are the dentate arms of the juxta (being smooth in the other two taxa), the narrow valva with parallel margins (the relatives have medially or medio-apically broadened valva with strongly convex costal margin), the costal extension is not pointed apically (but are pointed-acute in *A. (A.) deleta* and *A. (A.) thurneri*), the aedeagus is less curved but distally more tapering, the armature of the carina is different, the basal half of the vesica has no long sclerotized ribs (which are present in the allied species), the subterminal diverticulum is weak, without strong apical cornuti field as in the sister taxa and the terminal cornutus is about thrice as long as in *A. (A.) deleta* and *A. (A.) thurneri*.

The female genitalia of *A. (A.) prolai* differ from those of *A. (A.) deleta* and *A. (A.) thurneri* by the much smaller, narrower antrum, the considerably longer ductus bursae, the less developed appendix bursae, and the absence of the sclerotized plate of the proximal part of the bursa copulatrix.

Distribution. Central Mediterranean; endemic to the Italian peninsula. The species occur locally, its main habitats are rather cold, humid brook valleys with *Populus* and *Salix* groves at medium high altitudes (between 500–1000 m a.s.l.). The flight period is assumed to be rather short, the first imagines appear at the end of September, most known specimens were collected in the first half of October.

***Anchoscelis (Anchoscelis) deleta* (Staudinger, 1881) comb. n.**

(Plate 2, Figs 3–4; Plate 34, Figs 32–41; gen. fig. 5)

Orthosia nitida var. *deleta* Staudinger, 1881, *Horae Societatis Entomologicae Rossicae* **16**: 75. Type-locality: Turkey, Amasia. Lectotype: male, here designated, in coll. ZMHU.

Lectotype designation. Lectotype of *Orthosia nitida* var. *deleta* Staudinger, 1881, here designated: male, "Origin" (pink label), [Turkey] "Amasia, [18]89, Man.[isadjian]", "*deleta* Stg." (with handwriting), "Préparation No. MB129 Ch. Boursin", coll. ZMHU.

Diagnosis. The differently coloured forms of the species appear in all known populations from the Balkans to eastern Turkey, these forms are clearly infrasubspecific and have no taxonomic significance.

Anchoscelis (A.) deleta is externally practically indistinguishable from *A. (A.) thurneri* and *A. (A.) prolai*, but the forewings are usually somewhat longer and narrower than those of the related species (wingspan 29–35 mm); this species has the palest and most shining examples within the four members of the species-group. The satisfactory identification requires, however, the study of the genitalia.

In the male genitalia, the juxta of *A. (A.) deleta* is broadly subdeltoidal, with rather short, broad apical plate, the valva is relatively short, broadened medially, with strongly convex costal margin, the costal extension is long, acute, finely serrate, the harpe is regularly S-shaped. The aedeagus is strongly curved; the ventral plate of carina is smooth while dorsal plate is strongly dentate, with conspicuously larger apical tooth. The vesica has well-developed sclerotized ribs in basal half, basal diverticula relatively large, subterminal diverticulum long, tubular, with well-developed spinulose field apically, and the terminal cornutus is fine, pin-like. In *A. (A.) thurneri*, the juxta is narrower, longer, with more slender apical plate, the valva is more elongate, less dilated medio-apically, with less convex costal margin, the harpe is much longer, finer, apically sinuous, the aedeagus is less curved, the last tooth of the dorsal plate of the carina is not considerably larger than the preceding ones, the left side is with a long row of strong spines near

the end of the carina arranged into a collar-like half-ring, the basal diverticula and the terminal cornutus are smaller.

The diagnostic features of the female genitalia are as follows: antrum cup-shaped with rather narrow, falcate sclerotized plate anteriorly, ductus bursae broad, flattened posterior half with stronger sclerotized laminae and folds, anterior part of ductus bursae tubular, membranous, wrinkled, appendix bursae relatively large having large, rounded sclerotized plate situated postero-laterally, corpus bursae discoidal-globular with an additional larger sclerotized patch and a wrinkled-ribbed zone around the medium-long signum. *Anchoscelis (A.) thurneri* has larger, longer antrum with broader sclerotized part, longer, stronger ductus bursae, narrower, wrinkled appendix bursae with smaller sclerotized part being situated more proximally, and smaller corpus bursae, without sclerotized plate and without wrinkled zone around signum.

The comparison of *A. (A.) deleta* with *A. (A.) prolai* is given above, under the diagnosis of the latter taxon.

Distribution. Ponto-Mediterranean. The species is known from the Balkans only from Bulgaria, outside Europe it occurs in most parts of Turkey, recorded also from Iraq, Azerbaijan and Armenia.

A xero- and thermophilous species, being characteristic of hot, dry, shrubby, dwarfed or hard-leaved oakwoods and mixed oak forests, most often on rocky slopes and hillsides, especially on limestone. The first moths appear in the middle of September and are on the wing to the end of October, with the peak of flight at the beginning of October.

***Anchoscelis (Anchoscelis) thurneri* (Boursin, 1953) comb. n.**

(Plate 2, Figs 5–7; Plate 34, Figs 42–49; gen. fig. 6)

Agrochola thurneri Boursin, 1953, *Zeitschrift der Wiener Entomologischen Gesellschaft* **36**: 64, pl. 5, figs 5–6. Type-locality: Makedonia, Ochrid, Petrina Planina. Holotype: male, in coll. SMNK.

Diagnosis. The closest relative of *A. (A.) thurneri* is the eastern Anatolian *A. (A.) imitata*, this latter taxon differs by its narrower, flattened orbicular and reniform stigmata having darker filling and the paler hind-wing colouration. Wingspan 28–34 mm. The male genitalia of *A. (A.) thurneri* differ conspicuously from those of *A. (A.) imitata* by the smaller juxta without strongly serrate dorso-apical part, broader, distally not or only slightly curved valva with larger cucullus, shorter and thicker, medially less sinuous harpe, acutely pointed (wedge-shaped) digitus, more curved aedeagus with prominently longer, spiniform carinal teeth and long, eversible, serrate dorsal bar.

The main difference in the female genitalia of the two sister-species can be found in the size and sclerotisation of ductus bursae: it is longer and narrower, medially less sclerotised and distally less dilated in *A. (A.) thurneri*.

The species is similar externally also to *A. (A.) deleta*, but the forewing is slightly shorter, broader, the antemedial line is more arcuate, angled rather strongly inwards near inner margin and the orbicular and reniform stigmata are broader, less flattened, the former is less oblique. The variation in the intensity of the dark pattern is usually greater in this species, the percentage of well-marked specimens having more conspicuous dark spots along postmedial line and, especially, at subterminal line, is significantly higher than in case of *A. (A.) deleta*. The separation of the two species can easily be made by the study of the genitalia. The typical features of the genitalia and the comparison with those of *A. (A.) deleta* are given in the diagnosis of the preceding species.

Distribution. Ponto-Mediterranean. *Anchoscelis (A.) thurneri* known from the Balkans (Macedonia, Bulgaria, Greece) only. The species inhabits bushy forests and groves, usually at relatively low and medium-high altitudes, but may also occur higher up in montane rocky slopes and gorges. The adults are on wing from September to November.

***Anchoscelis (Anchoscelis) imitata* (Ronkay, 1984) comb. n.**

(Plate 2, Fig. 8; Plate 34, Fig. 50; gen. fig. 7)

Agrochola imitata Ronkay, 1984, *Acta Zoologica Academiae Scientiarum Hungaricae* **38**: 186, pl. 1, fig. 7; gen. fig. 8. Type-locality: Iraq, "Zawita Dohuk" [= Duhok]. Holotype: male, in coll. HNHM.

Diagnosis. *Anchoscelis (A.) imitata* is an allopatric sister-species of *A. (A.) thurneri* from which it differs by its narrower, flattened orbicular and reniform stigmata having darker filling and the paler hindwing colouration. Wingspan 29–30 mm.

The differences in the genitalia are more conspicuous. *Anchoscelis (A.) imitata* has, in comparison with *A. (A.) thurneri*, larger, broader juxta with strongly serrate apical part, narrower, distally more curved valva with smaller, more acute cucullus, longer, finer harpe, distally dilated, double-peaked costal extension, thicker, less curved aedeagus and considerably shorter teeth on the carina (male); shorter, broader, distally strongly dilated ductus bursae with strong medial sclerotization (female).

Distribution. Eastern Anatolian. The species is known only from south-eastern Turkey and northern Iraq.

The *nitida*-group ("*Anchoscelis* Guenée, 1839")

Diagnosis. The species of the lineage are usually variable in the forewing ground colour and the intensity of the standard noctuid maculation. All known taxa have unicolorous and well-marked forms, but this variation has no taxonomic importance.

Distribution. Holo-Mediterranean-Anatolian, with rather strong expansion to the central and northern parts of Europe.

***Anchoscelis (Anchoscelis) pistacinoides* (d'Aubuisson, 1867) comb. n.**

(Plate 3, Figs 1–2; Plate 35, Figs 1–10; gen. fig. 8)

Orthosia pistacinoides d'Aubuisson, 1867, *Bulletin de la Société Histoire Naturelle Toulouse* **1**: 42. Type-locality: France, Toulouse.

Synonymy

Amathes garibaldina Turati, 1905, *Il Naturalista Siciliano* **18**: 25;

Agrochola dujardini Dufay, 1975, *Bulletin Mensuel de la Société Linnéenne de Lyon* **44**: 42;

Agrochola xanthia Dufay, 1975, *Bulletin Mensuel de la Société Linnéenne de Lyon* **44**: 43.

Diagnosis. The taxonomic status of this taxon is disputed since Dufay (1975) distinguished the western *nitida*-like French populations based on some subtle genital differences under the name *Agrochola dujardini*. Herewith we treat *A. (A.) pistacinoides* and *A. (A.) nitida* as a generally allopatric species-pair having a narrow zone of hybridisation in the southern parts of the Central Alps.

Anchoscelis (A.) pistacinoides is an externally strongly variable species; the ground colour of head, thorax and forewings varies most often from reddish shaded brown to chestnut (with the same variation as in *A. (A.) nitida*), certain specimens are prominently reddish, with visible designs or almost without them (f. *garibaldina*), some are ochreous with orange tinge, and some may be yellowish-ochreous with very apparent designs (f. *xanthia*).

Anchoscelis (A.) pistacinoides is on average slightly larger than *A. (A.) nitida* with its wingspan 30–37 mm. It is externally often inseparable from *A. (A.) nitida*, so that the proper identification requires the detailed examination of the genitalia. There are, however, certain putative features which may help in the preliminary identification, e.g. the more vivid reddish shade of the forewings, and the less prominent, mostly reddish-brownish covered forewing veins; the underside is usually paler than in *A. (A.) nitida*.

The basic configuration of the male genitalia is similar to those of *A. (A.) nitida*, differing mostly in small details in the shape and size of the juxta, the distal half of the valva and the harpe. The juxta of *A. (A.) pistacinoides* has smaller basal and narrower apical part, the basal process of digitus has a broader base and the small apical process is always single, the valva is slightly more elongate and broadened at cucullus, and the harpe is somewhat longer and slenderer than in *A. (A.) nitida*.

In the female genitalia, *A. (A.) pistacinoides* has narrower, more ovoid antrum than in *A. (A.) nitida*, with narrower but longer antevaginal plate, somewhat longer ductus bursae broadening towards its insertion to the bursa copulatrix, and larger sclerotised basal pouch of appendix bursae.

Distribution. Atlanto-Mediterranean. Its range extends from the Iberian peninsula to Switzerland and Central Italy, it occurs also along the Atlantic Coast to Belgium and the large western Mediterranean islands (Corsica, Sardinia, Sicily).

Anchoscelis (A.) pistacinoides inhabits open mesoxerophytic and mesophytic shrublands, rocky slopes and bushy grasslands from the lowlands up to the montane levels; the moths are on the wing from late August to mid-November.

***Anchoscelis (Anchoscelis) nitida* ([Denis & Schiffermüller], 1775) comb. n.**

(Plate 3, Figs 3–4; Plate 35, Figs 11–20; gen. fig. 9)

Noctua nitida ([Denis & Schiffermüller], 1775, *Ankündigung eines systematischen Werkes von den Schmetterlinge der Wiener Gegend 1775*: 86. Type-locality: [Austria] Vienna region. Type(s): destroyed.

Synonymy

Orthosia insueta Freyer, 1838, *Neuere Beiträge zur Schmetterlingskunde mit Abbildungen nach der Natur* 3: 90, pl. 256, fig. 3. Type-locality: [Turkey] Constantinople.

Diagnosis. The species shows a remarkable variation in colour and the intensity of the forewing pattern, which led to the descriptions of numerous forms. *Anchoscelis (A.) nitida* is often confusingly similar to its sister taxon, *A. (A.) pistacinoides*, although its forewing ground colour is most often less reddish but brownish or even greyish-brown, and the veins are regularly paler than ground colour, thus, the forewing is sometimes conspicuously reticulate. Wingspan 30–38 mm.

Comparing the genitalia of the two species, *Anchoscelis (A.) nitida* has broader, more deltoidal juxta, slenderer large process of digitus, often double small apical process, somewhat thicker and shorter harpe (males); broader but shorter antrum, distally broader, proximally narrower ductus bursae and smaller, weaker sclerotised basal pouch-like part of appendix bursae (females).

Distribution. An expansive eastern Mediterranean species, its area extending rather far to the north in Scandinavia, the western borders of its range are still poorly known due to the (possible) confusion with *A. (A.) pistacinoides*. It is widespread in the central and eastern areas of Europe, appearing much locally in Asia Minor and Armenia.

A silvicolous species, appearing in very different forested habitats, preferring mesophilous and dry, warm oakwoods and mixed deciduous forests. The adults are on the wing from the very end of August to the mid-October.

The *lunosa*-group (“*Omphaloscelis* Hampson, 1906”)

Diagnosis. The *lunosa*-group is separated from the other lineages of *Anchoscelis* s.l. by the characteristic head structure, the development of antennal rami in males and certain features of the larva, feeding generally on Gramineae, all traits which are unique within the *Agrochola* generic complex. The specially modified head structure is most probably a consequence of the adaptation of the group to hardened soils developing under xeric conditions. In fact, this is the only group of the *Agrochola* complex sensu lato in

which real desert/semi-desert species evolved. This supposed origin would explain the presence of such a frontal structure in *A. (A.) lunosa*, the most widespread member of the group, which has subsequently expanded into the more temperate W-European area but retained the frontal prominence (and the late flight season of the adults) as being of advantage within (sub)eremic conditions.

The external morphological features of the species-group fit well with those of the other lineages of *Anchoscelis*, except of the structure of the head and the male antenna. The frons of all other *Anchoscelis* taxa is smooth and either flat or slightly bulged, occasionally with mesial depression too, while that of the *lunosa*-group is strongly projected and divided into superior and inferior parts. The superior part appears as a semi-circular elevated sclerotized plate with raised rugose margins, below which an oblique lower wall is situated. The male antenna can be either shortly serrate with loosely fasciculate cilia from base towards almost its tip, or broadly bipectinate, similarly to the members of the genus *Episema* Ochseneimer, 1816. The female antenna is shortly setose-ciliate; the palpi are rather short, porrect, ventral side of second segment with long hairs.

The group features of the male clasping apparatus are the short, flattened, apically tapered uncus; small, narrow penicular lobes; broad, inferiorly subdeltoidal juxta; acutely V-shaped vinculum; relatively short, narrow valvae with weak corona and narrow, acutely triangular cucullus bearing small, claw-like, terminal process; reduced clavus; strong, rather thick and medially curved harpe; and the well-developed, strongly sclerotised digitus with large, broadly triangular and flattened anterior process and variably serrate distal margin. The aedeagus and the vesica are rather uniform in the species-group: vesica rather short, tubular, with subbasal and subterminal diverticula, an elongate field of short spiculi, and long, spiniform terminal cornutus.

In the female genitalia, the ovipositor is medium-long, conical, with long, slender gonapophyses; antrum rather small, quadrangular, flattened and sclerotized; ductus bursae long, tubular, partly folded and ribbed, with variably strong folded crest at junction with corpus bursae. Appendix bursae very small, conical, membranous; corpus bursae relatively small, globular-cubic, its walls membranous, finely wrinkled, with large, rounded, sclerotized proximo-lateral plate, signa absent.

Distribution. The three species of the species-group are restricted to the western Europe and western and central parts of northern Africa.

Anchoscelis (Anchoscelis) lunosa (Haworth, 1809) **comb. n.**

(Plate 3, Figs 7–8; Plate 4, Figs 1–2; Plate 35, Figs 21–32; gen. fig. 10)

Noctua lunosa Haworth, 1809, *Lepidoptera Britannica; sistens Digestionem novam Insectorum Lepidopterorum quae in Magna Britannia Reperiuntur, Larvarum Pabulo, Temporeque Pascendi; Expansione Alarum; Mensibusque Volandi; Synonymis atque Locis Observationibusque Variis* 2: 230. Type-locality: England, Norfolk.

Synonymy

Orthosia subjecta Duponchel, 1836, *Histoire Naturelle des Lépidoptères ou Papillons de France, Supplément* 3: 219, pl. 27, fig. 3.
Type-locality: [France] Chateaudun. Types: in coll. MNHNP.

Diagnosis. *Anchoscelis (A.) lunosa* is a highly variable species with continuous colour range from pale ochreous to dark grey- or blackish-brown and from pale, more or less patternless forms to well-marked ones; these forms, many of which are named, have no taxonomic value. It can be distinguished from its eastern, allopatric sister species, *A. (A.) tripolensis*, besides the differences of the frontal plate, by its stronger toothed male antennae, broader forewings with usually pale defined crosslines, somewhat more sinuous antemedial and more inwardly curved postmedial line below cell, less distinct dark median fascia, usually stronger subapical blackish dots and more extensive darker markings of the hindwing. The development of the frons of the two species is remarkably different, that of *A. (A.) lunosa* (male) is much bigger and protruding, in fact it is as thick as the diameter of eye, while that of *A. (A.) tripolensis* is shorter, about half the diameter of eye.

Anchoscelis (A.) lunosa can be distinguished from the third member of the lineage, *A. (A.) polybela*, by its thinner, shortly serrate and finely fasciculate-ciliate male antenna, much sharper defined outlines of regularly shaped orbicular and reniform stigmata, the absence of the dark, long basal dash and arrowhead sports (which are typical of *A. (A.) polybela*) and the interrupted dark submarginal stripe of the hindwing forming most often two rounded patches.

The species is easily distinguished from the somewhat similar *Agrochola* and *Anchoscelis* species (e.g. *Agrochola lychnidis* and *Anchoscelis (A.) humilis*) by its diagnostic external features, the most important of which are, the structure of the frons, the pale (whitish-ochreous) hindwing with characteristic dark marginal patches, the strongly marked, lunulate discal spot, the shape and the dark filling of the stigmata and the subterminal line. Wingspan 32–37 mm.

The male genitalia of *A. (A.) lunosa* differ from those of *A. (A.) tripolensis* by the strongly spinose-scobinate basal section of the vesica, somewhat shorter and thicker harpe, broader, more shield-like juxta, distally broader uncus and the smaller terminal cornutus of the vesica; from those of *A. (A.) polybela* by the stronger valvae, broader and longer anterior process and less serrate ventral margin of digitus, thinner harpe and the spiny collar on the basal tube of vesica.

The main differences between the female genitalia of *A. (A.) lunosa* and *A. (A.) polybela* can be found in the length of the gonapophyses and the position of the large sclerotised plate of the bursa, as *A. (A.) lunosa* has shorter apophyses anteriores and more posteriorly located plate in the bursa.

Distribution. Atlanto-Mediterranean. The species occurs predominantly in south-western Europe (Portugal, Spain, France), with distribution extending northwards to the British Isles, Germany and Netherlands along the Atlantic Coast in fairly temperate and humid climate; it is also present in the Atlas region in NW Africa (Morocco, Algeria).

The species inhabits open, grassy habitats; the adults are on the wing, depending on the climate of the areas, from August to December.

***Anchoscelis (Anchoscelis) tripolensis* (Hampson, 1914) stat. rev., comb. n.**

(Plate 4, Figs 3–4; Plate 35, Figs 33–35; gen. fig. 11)

Amathes tripolensis Hampson, 1914, *The Annals and Magazine of Natural History* (8)13: 148. Type-locality: Libya [as Tripoli], Cyrene. Holotype: male, in coll. BMNH.

Synonymy

Omphaloscelis teukyrana Turati, 1924, *Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale in Milano* 53: 86, pl. 3, figs 25–26. Type-locality: Libya, Cyrenaica, Berca). Syntypes: 2 males, **syn. n.**

Diagnosis. The easternmost species of the lineage differ externally from the otherwise very variable *A. (A.) lunosa* by the shorter frontal protuberance, thinner and filiform male antennae, rather unicolorous and narrower, more elongated apically less pointed forewings with dark reniform stigma and fine dark median fascia, less distinctly marked, less sinuous and not pale defined crosslines, shorter subapical black mark and the clearer hindwing with small discal spot and small dark submarginal patches; the forewing colouration varies from pale beige to deep reddish-brown with almost no pale lining of veins (f. *adusta* Turati, 1924).

The male genitalia of *A. (A.) tripolensis* lack the conspicuous basal scobination (“spiny collar”) of the vesica which is typical of *A. (A.) lunosa*; in addition, the uncus is broader, the harpe is longer and somewhat thinner, the juxta is more deltoidal inferiorly and more extended superiorly, and the terminal cornutus is larger than in its sister species.

Distribution. The range of the species is restricted to the Libyan coastal area of mediterranean Africa.

***Anchoscelis (Anchoscelis) polybela* (de Joannis, 1903) comb. n.**

(Plate 4, Figs 5–6; Plate 35, Figs 36–45; gen. fig. 12)

Euxoa polybela de Joannis, 1903, *Bulletin de la Société entomologique de France* 1903: 28. Type-locality: Algeria, Philippeville. Holotype: female, in coll. MNHNP.

Diagnosis. An easily recognisable species, which cannot be confused with any other species of the agrolid complex due to the pectinate male antenna, the long dark basal dash, the indistinct outlines of the dark reniform stigma, divided into two parts with the whitish cellvein and the very strong and long, dark brown to blackish arrowhead spots, among other characters. It resembles more certain Noctuinae species belonging to the genera *Cladocerotis*, *Powellinia*, *Pachyagrotis*, *Eucoptocnemis* etc. rather than the other *Anchoscelis* species. Wingspan 32–39 mm.

The male genitalia of *A. (A.) polybela* differ from those of the closest related *A. (A.) lunosa* and *A. (A.) tripolensis* by the thinner uncus, broader, more shield-like juxta, somewhat shorter valva with evenly serrate ventral margin of digitus, and the thicker and less curved harpe. It is worth mentioning that the basal section of the vesica of *A. (A.) polybela* lacks the spiny collar like in *A. (A.) tripolensis* and the size of the terminal cornutus of vesica has also similar measures, being larger in both *A. (A.) polybela* and *A. (A.) tripolensis* than in *A. (A.) lunosa*.

The female genitalia of *A. (A.) polybela* can be distinguished from the otherwise very similar copulatory organ of *A. (A.) lunosa* by the longer apophyses anteriores, the more membranous ductus bursae and the more proximally positioned sclerotised patch of corpus bursae.

Distribution. The species occurs in a rather small distribution area in the NW African arid territories; it has been recorded from Morocco, Algeria and Tunisia.

The *trapezoides*-group

Diagnosis. The *trapezoides*-group comprises medium-large species with relatively strong body, elongate-triangular, pointed forewing and small, more or less rounded hindwing. Eyes small, globular, palpi short, slender, upturned, with long ventral hair-scales; frons broad, smooth, slightly prominent. Antenna of male ciliate with long, fasciculate cilia, that of female filiform with scarce, short cilia. The forewing pattern is very homogeneous within the group, consisting of sharply defined, oblique, usually straight ante- and postmedial crosslines, well-defined orbicular and reniform stigmata and most often interrupted, slightly sinuous subterminal line; the ground colour is ochreous, yellowish, pale brown or greyish, often strongly varying within the same species. The male abdomen is slender, relatively short, abdominal coremata present; the abdomen of the female is stronger, thicker, the tip of the long ovipositor is hanging out from the abdomen.

The ground plan of the genitalia of both sexes of the *A. (A.) trapezoides*-group is similar to that of the *A. (A.) statira*-group. In the male genitalia, the uncus is thicker than in the *A. (A.) statira*-group, the valva is shorter with dilated cucullus (it is broader than the medial section of valva), the valval apex may have acute dorsal process (in the *A. (A.) trapezoides*- and *A. (A.) approximata*-lineages), the corona is situated near to middle of cucullus, the digitus is shorter, less serrate, the harpe is shorter, more or less straight, and the vesica has considerably shorter medial field of stronger cornuti, sitting on small diverticulum.

In the female genitalia, the antrum of the *A. (A.) trapezoides*-group is calyculate or cup-shaped with rather weak sclerotization, the ductus bursae is weaker, narrower than in the *A. (A.) statira*-group, the appendix bursae is situated at distal (caudal) end of bursa (except in *A. (A.) deosaiensis*), often with heavily sclerotized plate of irregular shape, the bursa is sometimes bilobate, and the corpus bursae has no signum.

Distribution. The species-group consists of stenochorous species of allopatric distribution, the range of the group extending from the NW Himalayas to the western Hindukush, the Hissar Mts and to the eastern part of the Tien Shan massif. All species seems to be restricted to deep rocky gorges and stream

valleys, inhabiting shrubby and gallery forest patches along brooks and rivers at medium high and relatively high altitudes (2000–3500 m). Univoltine, the imagines are on wing late in autumn, from the end of August to the end of October, depending on the elevation of the locality and the climate of the actual year.

***Anchoscelis (Anchoscelis) approximata* (Hampson, 1906) comb. n.**

(Plate 4, Figs 7–8; Plate 35, Figs 46–53; gen. fig. 13)

Amathes approximata Hampson, 1906, *Catalogue of the Lepidoptera Phalaenae in the British Museum* 6: 511, pl. 107, fig. 22.
Type-locality: [Pakistan, Kaghan valley] “Kashmir, Dugi Pass”. Lectotype: male, in coll. BMNH.

Synonymy

Agrochola leptographa Hacker & Ronkay, 1990, *Esperiana* 1: 386, pl. F, figs 7–8. Type-locality: Pakistan, Kaghan valley, Naran, 2400 m. Holotype: male, in coll. ZSM.

Diagnosis. *Anchoscelis (A.) approximata* is rather remote from the other taxa of the species-group, according to its characteristic differences in the external and genital features compared with those of the other members of the *A. (A.) trapezoides* group. The typical external features of the species are the relatively shorter, broader forewings (wingspan 32–36 mm), the lack of the whitish definition of the ante- and postmedial crosslines and the stigmata and the rather strongly marked, darker brownish subterminal line; the ground colour of the hindwing is darker ochreous than those of *A. (A.) deosaiensis*, *A. (A.) nekrasovi* and *A. (A.) pamiricola*.

The distinctive features of the male genitalia are the narrowly tubular, reclinate vesica without basal coiling or large subbasal diverticulum; the strong, rather short, more or less straight cornuti of the medial cornuti field sitting on a semiglobular diverticulum; the short, thick uncus, the strong, cuneate apical process of the cucullus and the long, straight harpe.

The female genitalia can be characterized by the long, tubular, membranous ductus bursae and the large, discoidal, slightly helicoid appendix bursae with strong basal crests and finely sclerotized ribs and wrinkles in apical (distal) half.

Distribution. *Anchoscelis (A.) approximata* has a rather limited distribution in the south-eastern part of the Himalayas. It seems to be restricted to the central and upper parts of the Kaghan valley and the Muzaffarabad region (Thunian). It inhabits medium-high and higher deciduous and mixed forests, appearing also above the timberline. The imagines are on the wing from the end of August to the beginning of October.

***Anchoscelis (Anchoscelis) deosaiensis* (Ronkay & Ronkay, 2000) comb. n.**

(Plate 5, Figs 1–2; Plate 36, Figs 1–9; gen. fig. 14)

Agrochola deosaiensis Ronkay & Ronkay, 2000, *Acta Zoologica Academiae Scientiarum Hungaricae* 46(4): 368, figs 12–15, 34, 37.
Type-locality: Pakistan, Kashmir, Himalaya Mts, Deosai Mts, Bubin valley, 3300 m, 35°13,5'N, 75°02,7'E. Holotype: male, in coll. G. Ronkay (Budapest).

Diagnosis. *Anchoscelis (A.) deosaiensis* resembles externally *A. (A.) trapezoides*, *A. (A.) pamiricola* and *A. (A.) nekrasovi* but is somewhat larger in size, the whole forewing pattern is paler, less conspicuous, the crosslines and stigmata are fine, and the median fascia is more diffuse, without stronger patch between orbicular and reniform stigmata. Wingspan 35–40 mm.

The genitalia of both sexes differ conspicuously from those of all other species of the species-group. The unique feature of the male genitalia of *A. (A.) deosaiensis* is the very long vesica, being conspicuously longer than those of the other members of the *A. (A.) trapezoides*-group, without basal coiling or recurved distal half, but with two rather large basal diverticula. The medial, membranous part of the tube of vesica is very long; the cornuti field is situated far more distally than in the other species, the cornuti of this field are the largest within the species-group.

The diagnostic feature of the female genitalia is the strongly bilobate bursa with the apical part of appendix bursae extending over fundus bursae proximally, this long appendix bursae has large, elongate sclerotized plate. The appendix bursae of *A. (A.) pamiricola*, the other species of the group having rather bilobate bursa, is much shorter, rounded-discoidal, without stronger sclerotized lamina, and the antrum is smaller and the ductus bursae is less sclerotized than in *A. (A.) deosaiensis*.

Distribution. Northwest-Himalayan. A species occurring in the higher regions of the NW Himalayas and the SW Karakoram Mts (only a single datum is given from the Naltar valley, Karakoram Mts, about 50 km northwards from the Deosai Mts).

An autumnal species, the moths are on the wing in October; the second part of the flight period is overlapping with the last aspects of the year.

***Anchoscelis (Anchoscelis) nekrasovi* (Hacker & Ronkay, 1992) comb. n.**

(Plate 5, Figs 3–4; Plate 36, Figs 10–11; gen. fig. 15)

Agrochola nekrasovi Hacker & Ronkay, 1992, *Esperiana* 3: 214, pl. G, fig. 14. Type-locality: Tadjikistan, Hissar Mts, Kondara valley, Kvak, 1850 m. Holotype: male, in coll. Nekrasov (Moscow).

Diagnosis. *Anchoscelis (A.) nekrasovi* and *A. (A.) pamiricola* represent a closely related, allopatric species-pair which differs from *A. (A.) trapezoides* by their somewhat less acute forewings, less prominently double antemedial and postmedial crosslines, and the absence of the dark filling of the lower part of reniform stigma, and certain features of the genitalia of both sexes. In males, the *nekrasovi-pamiricola* species-pair has apically more rounded valvae, without the fine apical tooth which is typical of the *trapezoides* lineage, the vesica has a small basal curve, then projecting forward and not reclinate dorsally like in the related two species, and the subterminal bundle of spinules are considerably stronger; in females, the bursa copulatrix is more bilobate and entirely membranous, lacking the strong sclerotised plate at junction of ductus bursae which is present in *A. (A.) trapezoides*.

Anchoscelis (A.) nekrasovi differs externally from *A. (A.) pamiricola* by its paler ochreous, more unicolorous forewings, with some fine brownish irroration in the marginal field (and not stronger orange-brown or reddish-brown suffusion in the basal and marginal areas which is characteristic of *A. (A.) pamiricola*), and the almost fully simple, not partly double crosslines. Wingspan 36–37 mm.

In the male genitalia, the main difference between the two species can be found in the vesica, as the subterminal cornuti field of *A. (A.) nekrasovi* consists of remarkably stronger, thicker cornuti; in addition, this species has somewhat longer apical section of juxta, shorter and more rounded cucullus and more V-shaped vinculum than in *A. (A.) pamiricola*.

Distribution. The species is known only from the Hissar Mts in Tadjikistan.

***Anchoscelis (Anchoscelis) pamiricola* (Hacker & Ronkay, 1992) comb. n.**

(Plate 5, Figs 5–6; Plate 36, Figs 12–16; gen. fig. 16)

Agrochola pamiricola Hacker & Ronkay, 1992, *Esperiana* 3: 214, pl. G, figs 12–13. Type-locality: Tadjikistan, Pamir Mts, Khorog, Botanical Garden, 2200 m. Holotype: male, in coll. Nekrasov (Moscow).

Diagnosis. *Anchoscelis (A.) pamiricola* can be separated from its sister-species, *A. (A.) nekrasovi*, by its generally darker shade of forewings with more prominent median fascia, stronger, partly double ante-medial and postmedial crosslines, and the darker suffusion of the marginal field (and often also the basal area) which is much weaker or absent from *A. (A.) nekrasovi*. Wingspan 34–37 mm.

The differences between *A. (A.) pamiricola* and the members of the *trapezoides-naumannii* lineage are found in the differently marked crosslines which are weaker and only partly double in *A. (A.) pamiricola*,

the filling of reniform stigma is unicolorous, without dark scales in its lower half, and the forewing apex is less acute.

The male genitalia of the two closely related species are very similar but the apical part of valva is less elongated in *A. (A.) pamiricola*, the dorsal part of the juxta is shorter, and the cornuti of the subterminal fascia are finer than in *A. (A.) nekrasovi*.

Distribution. The species has two known populations, in the Hissaro-Pamir mountain system in Tadjikistan, and in the Central Tien Shan in Kazakhstan (Almaty region).

***Anchoscelis (Anchoscelis) trapezoides trapezoides* (Staudinger, 1882) comb. n.**

(Plate 5, Figs 7–8; Plate 36, Figs 17–22; gen. fig. 17)

Cosmia trapezoides Staudinger, 1882, *Entomologische Zeitung. Entomologischen Vereine zu Stettin* 43: 45. Type-locality: [Uzbekistan] Lepsa. Lectotype: male, in coll. ZMHU; here designated.

Lectotype designation. Lectotype of *Cosmia trapezoides*, here designated: male, "Origin" (pink label), [Uzbekistan] "Lepsa, Hbhr. (Haberhauer)"; "*Cosmia trapezoides*" (with handwriting), "Préparation No. MB88 Ch. Boursin" (printed label), coll. ZMHU.

Diagnosis. *Anchoscelis (A.) t. trapezoides* is an externally strongly variable species, its colouration varies from pale sandy ochreous to deep red-brown and the intensity of the forewing markings shows also a large individual variation.

The two subspecies of *A. (A.) trapezoides* differ from *A. (A.) nekrasovi* and *A. (A.) pamiricola* by their more contrasting forewing markings (whitish or whitish-ochreous defined antemedial and postmedial crosslines, whitish outlines of orbicular and reniform stigmata, and darker suffusion in the lower part of the reniform stigma) and the somewhat darker, more brownish or greyish suffused hindwings. The male genitalia of *A. (A.) trapezoides* are separable from those of *A. (A.) nekrasovi* and *A. (A.) pamiricola* by the distally more curved and apically more pointed valvae, the shorter juxta and the much weaker spinules of the medial cornuti field. The female genitalia of the two species-groups are conspicuously different as the bursa of *A. (A.) trapezoides* is practically unilobate, having heavily sclerotised, large and folded plate in appendix bursae, while the bursa of *A. (A.) pamiricola* is bilobate and entirely membranous.

The typical subspecies of *A. (A.) trapezoides* can be distinguished from the more uniformly coloured ssp. *naumanni* by the stronger, more whitish defined crosslines, somewhat darker hindwing colouration and certain features of the male genitalia. The male genitalia of the two subspecies are very similar but the dorsal part of the juxta is broader and shorter in *A. (A.) t. trapezoides*, the distal part of valva is less angled, the harpe is shorter and thicker, more wide-based, and the terminal cornutus of the vesica is somewhat finer, shorter than in *A. (A.) t. naumanni*. In the female genitalia, the heavily sclerotised and folded plate of appendix bursae is less rounded posteriorly in the ssp. *trapezoides* than in the ssp. *naumanni*.

Distribution. The species is rather widespread in Central Asia. The typical subspecies occurs in most parts of the entire Tien Shan massif, the ssp. *naumanni* is known from certain areas of the Hissar-Pamir mountain system and from eastern Afghanistan.

***Anchoscelis (Anchoscelis) trapezoides naumanni* (Hacker & Ronkay, 1990) stat. n., comb. n.**

(Plate 6, Figs 1–2; Plate 36, Figs 23–28; gen. fig. 18)

Agrochola naumanni Hacker & Ronkay, 1990, *Esperiana* 1: 386, pl. F, fig. 9. Type-locality: East Afghanistan, Prov. Kunar, Nuristan, Lindai-Sin valley, Barge-e-Matal, 2200 m. Holotype: male, in coll. SMNK.

Diagnosis. The southern subspecies of *A. (A.) trapezoides* differs externally from the typical populations by its more ochreous-greyish to sand-brown coloured forewings, weaker, more ochreous definition of the antemedial and postmedial crosslines, the less conspicuous paler outlines of the orbicular and reniform

stigmata, the usually darker filled reniform stigma, and the darker, more evenly ochreous-grey or ochreous brown suffused hindwings. The known two populations have certain differences in the forewing colouration but the very scarce material is too small for a microsystematic study.

The genitalia of the two subspecies are very similar, with some slight but recognisable differences which are as follows: the dorsal part of the juxta is longer and more tapering in the ssp. *naumanni*, the distal part of valva is more curved, the harpe is finer, and the terminal cornutus of the vesica is more robust than in the ssp. *trapezoides* (males); the appendix bursae is posteriorly more rounded in the ssp. *naumanni* (females).

Distribution. The southern subspecies of *A. (A.) trapezoides* lives in Tadjikistan (in the Hissaro-Pamir system) and the eastern and south-eastern areas of Afghanistan (Nuristan and the Safed Koh Mts).

The *statira*-group

Diagnosis. The *statira*-group contains two lineages, both represented by allopatric twin species. The *statira*-line (including *A. (A.) statira* and *A. (A.) zoltanus*) can be characterized by the reduced crosslines of the forewing and by the semiglobular, appendix bursae situated at fundus bursae. The species of the *spectabilis*-line, *A. (A.) spectabilis* and *A. (A.) griseovariegata*, have well defined crosslines on the forewing marked with whitish grey, smaller, not conspicuously prominent appendix bursae, situated at middle of the larger, more discoidal corpus bursae.

The group features of the male genitalia, in comparison with those of the *trapezoides*-group are the following: uncus longer and slenderer; valva longer and narrower, without acute dorsal process; corona longer and continued along ventral margin of cucullus; costal plate longer, more serrate; harpe longer and thinner, S-shaped; vesica much longer and more tubular, coiling subbasally, with long, narrow medial field of short spinules.

The differences between the female genitalia of the two species-groups are also very prominent as the taxa of the *statira*-group have broader antrum with fine, falcate or lyriform sclerotized plate; shorter but proximally much broader and stronger sclerotised, more flattened ductus bursae; proximo-laterally positioned appendix bursae with rounded, heavily sclerotized plate; and the corpus bursae has a rounded or elliptical signum which is missing from the members of the *trapezoides*-group.

Distribution. The species-group consists of stenochorous species of allopatric distribution, the range of the group extending from the NW Himalayas through the western Hindukush, the Hissar Mts, the Tshar Mts and the Zeravshan Mts to the eastern part of the Tien Shan massif. All species seems to be restricted to deep rocky gorges and stream valleys, inhabiting shrubby and gallery forest patches along brooks and rivers at medium high and relatively high altitudes (2000–3500 m). Univoltine, the imagines are on wing late in autumn, from the end of September to the end of November, depending on the elevation of the locality and the climate of the actual year.

Anchoscelis (Anchoscelis) statira (Boursin, 1960) **comb. n.**

(Plate 6, Figs 3–4; Plate 36, Figs 29–36; gen. fig. 19)

Agrochola statira Boursin, 1960, *Bulletin Mensuel de la Société Linnéenne de Lyon* **29**: 147. Type-locality: Afghanistan, Khinjan valley, Ferush Tagan. Holotype: male, in coll. ZSM.

Diagnosis. The two sister-species of the *statira*-line, *A. (A.) statira* and *A. (A.) zoltanus*, are easily separable by their external features. *Anchoscelis (A.) statira* has somewhat more acute forewings than its twin species, with more variegated pattern, consisting of more sharply defined crosslines and stigmata; the crosslines are more sinuous, especially the strongly waved subterminal line which is defined in its full length by blackish-grey at inner side. Wingspan 33–38 mm.

In the male genitalia, the entire medial part of the vesica is longer in *A. (A.) statira* than in *A. (A.) zoltanus*, with longer medial cornuti field, the juxta is basally narrower, the clavus is larger and the harpe is somewhat longer.

In the female genitalia, the antrum of *A. (A.) statira* is broader but shorter, more cup-shaped than that of *A. (A.) zoltanus*, the bursa is more bean-shaped with stronger and larger sclerotised plate in appendix bursae.

Distribution. The species is known from a rather small area in eastern Afghanistan (Khinjan valley, Salang valley, Nuristan). It inhabits stream valleys, deep rocky gorges of the central part of the Hindu-kush Mts, occurring in medium high and higher altitudes. The imagines are on wing at the late autumn (September-October).

***Anchoscelis (Anchoscelis) zoltanus* (Ronkay & Ronkay, 2000) comb. n.**

(Plate 6, Figs 5–8; Plate 36, Figs 37–44; gen. fig. 20)

Agrochola zoltanus Ronkay & Ronkay, 2000, *Acta Zoologica Academiae Scientiarum Hungaricae* 46(4): 355, figs 3–6, 27–28.

Type-locality: Pakistan, Kashmir, Himalaya Mts, Deosai Mts, Bubin valley, 3300 m, 35°13,5'N, 75°02,7'E. Holotype: male, in coll. G. Ronkay (Budapest).

Diagnosis. *Anchoscelis (A.) zoltanus* is the sister species of *A. (A.) statira*, the two species are, however, easily distinguishable by their external and genital features. The forewings of *A. (A.) zoltanus* are almost unicolorous, dark bluish grey, the crosslines are partly or fully reduced except most parts of subterminal line, the outlines of the stigmata are fine, often obsolescent, sometimes defined with whitish. *Anchoscelis (A.) statira* has somewhat more acute forewings with more variegated pattern, consisting of more sharply defined crosslines and stigmata. Wingspan 33–38 mm.

The most conspicuous difference in the male genitalia can be found in the medial part of the vesica which is shorter in *A. (A.) zoltanus*, and the cornuti field is also somewhat shorter than in *A. (A.) statira*; in addition, the juxta of *A. (A.) zoltanus* has broader apical part, the clavi are smaller, the costal plate is less serrate and the harpe is somewhat shorter.

In the female genitalia, *A. (A.) zoltanus* has more calyculate antrum with broader sclerotized plate than that of *A. (A.) statira*, its bursa is more bilobate, generally less sclerotized, with smaller and more proximally projecting heavily sclerotized lamina of appendix bursae.

Distribution. *Anchoscelis zoltanus* appears as a stenochorous species, being restricted to the western Himalayas. It has been found only in the high upper part of the Bubin valley, in a deep, stream valley with patches of gallery forests and shrubby mixed forests, surrounded by steep, dry, rocky walls. Univoltine, late autumnal species, the first adults were observed at the end of September, the peak of the flight was at the mid-October of the same year. All specimens were collected at light none of them appeared around the sugar baits.

***Anchoscelis (Anchoscelis) griseovariegata* (Ronkay & Ronkay, 2000) comb. n.**

(Plate 7, Figs 1–2; Plate 37, Figs 1–9; gen. fig. 21)

Agrochola griseovariegata Ronkay & Ronkay, 2000, *Acta Zoologica Academiae Scientiarum Hungaricae* 46(4): 362, figs 8–9,

30–31. Type-locality: [Tadjikistan] Hissar Mts, Kondara, 1100 m. Holotype: male, in coll. P. Gyulai (Miskolc).

Diagnosis. The external appearance of *A. (A.) griseovariegata* and *A. (A.) spectabilis* is rather similar but the ground colour of the former species is paler, ochreous-greyish, the pattern is more extensive due to the paler ground colour; the crosslines are less interrupted, broader, the definition of the stigmata is weaker than in *A. (A.) spectabilis*. Wingspan 37–40 mm.

The male genitalia of the two sister-species are very similar but differ in a series of details which are as follows: *A. (A.) griseovariegata* has, in comparison with *A. (A.) spectabilis*, slenderer valvae with narrower cucullus, thicker and less acutely pointed large process of digitus and thicker harpe, basally broader subdeltoidal juxta with shorter and narrower dorsal section, stronger developed medial cornutui field and more robust terminal cornutus in the vesica.

The male genitalia of *A. (A.) griseovariegata* are similar also to those of *A. (A.) zoltanus* and *A. (A.) statira*, differing from them by the smaller, less angular penicular lobes, narrower apical (dorsal) part of juxta, broader, more U-shaped vinculum, thicker and shorter harpe and the broader medial cornuti field of vesica.

The female genitalia of *A. (A.) griseovariegata* differ from those of *A. spectabilis* by its longer, narrower antrum, narrower ductus bursae with almost parallel lateral margins and by its smaller, elliptical medio-lateral sclerotized plate of the appendix bursae. The differences between the female genitalia of the two lineages of the *A. (A.) statira* group are discussed in the characterization of the species-group (see above).

Distribution. The species is restricted to the medium-high and higher parts of the western and central high mountains of Tadjikistan (Hissar Mts, Tshar Mts, Zeravshan Mts). A late autumnal species, its flight period extending from the end of September to the end of October.

Anchoscelis (Anchoscelis) spectabilis (Hacker & Ronkay, 1990) **comb. n.**

(Plate 7, Figs 3–4; Plate 37, Figs 10–12; gen. fig. 22)

Agrochola spectabilis Hacker & Ronkay, 1990, *Esperiana* 1: 387, pl. F, fig. 6. Type-locality: Uzbekistan, Alai Mts, Dugobo, 2200 m. Holotype: female, in coll. HNHM.

Diagnosis. *Anchoscelis (A.) spectabilis* differs from its sibling species, *A. (A.) griseovariegata* by its darker, less variegated ground colour, less continuous crosslines, more prominent stigmata and some features of the male and female genitalia. Wingspan 35–36 mm.

The male genitalia of *A. (A.) spectabilis* can be distinguished from those of *A. (A.) griseovariegata* by the somewhat shorter and remarkably broader valvae with stronger ventral angles, broader cucullus and longer, more acute anterior process of digitus plate, longer and dorsally broader apical section of juxta, thinner and more evenly curved harpe, thinner medial cornuti field and finer distal cornutus of the vesica.

The antrum of *A. (A.) spectabilis* is shorter but broader than that of *A. (A.) griseovariegata*, the ductus bursae is stronger, broader, distally strongly tapering, its posterior part is folded laterally, and the sclerotized part of appendix bursae is significantly longer, larger, situated more close to fundus bursae.

Distribution. The few known specimens are found at relatively high altitude in the western parts of the Tien-Shan mountain system (Alai Mts, Chatkal region). The bionomics of the species is poorly known, the few known moths were collected at light, in the second half of September and in the third decade of November.

The *kindermanni*-group (“*Pseudanchoscelis* Beck, 1991”)

Diagnosis. The subgenus *Pseudanchoscelis* Beck, 1991, established for this species-group, is a synonym of *Anchoscelis*. The *kindermanni*-group comprises relatively small to medium-large species (wingspan 25–35 mm) with relatively strong body, elongate-triangular, pointed, forewing and small, more or less rounded hindwing. Frons broad, smooth, slightly prominent; antenna of male ciliate with long, fasciculate cilia; that of female filiform with scarce, short cilia. The forewing pattern is very homogeneous within the group, consisting of sharply defined, oblique, usually straight ante- and postmedial crosslines, well-defined orbicular and reniform stigmata and most often interrupted, slightly sinuous subterminal line;

the ground colour is ochreous, yellowish, pale brown or greyish, often strongly varying within the same species. The male abdomen is slender, relatively short, abdominal coremata present; the abdomen of the female is stronger, thicker, the tip of the long ovipositor is hanging out from the abdomen.

The ground plan of the genitalia of both sexes are rather uniform throughout the species-group, the diagnostic features are as follows:

Male genitalia. Uncus medium-long, curved; valva long, rather slender, with parallel dorsal and ventral margins; cucullus triangular, acutely pointed; corona medium-long, relatively fine; costal plate long and strong, finely serrate, usually with two long and pointed, cuneate or triangular processes (digitus) situated rather far from each other (the subapical process may be reduced); harpe medium-long, rather strong, distally tapering and medially variably strongly curved; aedeagus medium-long, with ventral and ventro-lateral sclerotised carinal plates terminated most often in teeth or pyramidal crests; vesica (in all but one species) long, broadly tubular, recurved ventrally, with two medial and a large subterminal diverticulum; medial part with weaker or stronger scobinate section, sometimes with longer sclerotised ribbon; terminal part of vesica with long, stick-like terminal cornutus and variably long subterminal spinulose field.

Female genitalia. Ovipositor long, telescopic, with long, fine papillae anales and thin apophyses, antrum broad but short, sclerotised; ductus bursae long, sclerotised and folded, strongly dilated posteriorly, curved at junction to corpus bursae, most often continuing in the wall of the bursa by a sclerotised plate, appendix bursae with variably strongly sclerotised basal area, corpus bursae discoidal-ovoid, with two or three small, rounded signa.

The genitalia of *A. (A.) scabra* are strongly autapomorphic, especially the configuration of the aedeagus and the vesica, they are characterised separately, under the diagnosis of the species.

Distribution. The species-group consists of stenochorous species of allopatric distribution, the range of the group extending from the Island of Sicily to eastern Anatolia. All species seems to be restricted to xerothermic woodlands and rocky places, the imagines are on wing late in autumn, between September–December, depending on the elevation of the locality and the climate of the actual geographic region and year.

***Anchoscelis (Anchoscelis) scabra* (Staudinger, 1891) comb. n.**

(Plate 7, Figs 5–6; Plate 37, Figs 21–30; gen. fig. 23)

Orthosia scabra Staudinger, 1891, *Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden* 4: 299. Type-locality: [Israel] Jerusalem. Lectotype: male, in coll. ZMHU.

Diagnosis. The species is a strongly autapomorphic member of the species-group, representing a different lineage; it has an overlapping area with *A. (A.) pauli* in the Near East. *Anchoscelis (A.) scabra* is easily separable from the other species of the group by its paler colouration of both wings (forewings sandy ochreous to pale sand-brown; hindwings whitish-ochreous with weak brownish-grey irroration) and the much weaker, more indistinct pattern; the orbicular and reniform stigmata are smaller and weaker defined than in the other taxa of the lineage.

The genitalia are similar to those of the species of the *kindermanni*-group, with a number of striking autapomorphies. In the male clasping apparatus, the vinculum is very long (ca twice as long as in the related taxa) and acutely pointed, the juxta is subdeltoidal with well-developed ventro-medial process, the cucullus is shorter but more acute, the sclerotised costal plate is broadly arched, having a single but very long proximal process (digitus), and the harpe is characteristically S-shaped. The aedeagus is much longer and thinner than in the other species of the group, having smaller and weaker sclerotised carinal plates. The proximal tube of the vesica is much shorter than in the typical members of the group, with very small scobinate patch only, the subterminal diverticulum and the spinulose field are very large and the terminal cornutus is also considerably longer than in the related taxa.

The female genitalia of *A. (A.) scabra* differ from those of the other members of the *kindermanni*-group by the much longer, calyciform antrum, the much weaker sclerotised and posteriorly not folded

and dilate ductus bursae, the very small sclerotised plate at junction of ductus bursae to corpus bursae, and the more ovoid bursae with weaker signa.

Distribution. The species is endemic to the Near East, it is known from Israel and Jordan (the records mentioned by Kravchenko et al (2008) from Turkey and Iraq require confirmation). A late autumnal species, the moths are on the wing from October to December.

***Anchoscelis (Anchoscelis) fuscomixta* (Ronkay & Gyulai, 2006) comb. n.**

(Plate 7, Figs 7–8; Plate 37, Figs 31–34; gen. fig. 24)

Agrochola (Anchoscelis) fuscomixta Ronkay & Gyulai, 2006, *Esperiana* 12: 216, pl. 25, figs 10–11; gen. fig. 17. Type-locality: Iran, Prov. Azerbaijan E-Sharqi, 7 km NW of Miyane. Holotype: male, in coll. P. Gyulai (Miskolc).

Diagnosis. *Anchoscelis (A.) fuscomixta* is the eastern sibling taxon of *A. (A.) pauli* and *A. (A.) kindermanni*, the darkest member of the species-group, especially the dark brownish hindwing is characteristic for *A. (A.) fuscomixta*. The dark, partly blackish-brownish irroration of the forewing is also distinctive, as compared with the other taxa of the lineage. Wingspan 25–28 mm.

The male genitalia of *A. (A.) fuscomixta* are similar to those of *A. (A.) pauli* and *A. (A.) kindermanni* but differ in a series of well-discernible features. The harpe of *A. (A.) fuscomixta* is longer and slenderer, the juxta is less tapering distally, the scobinate part of the vesica is shorter but stronger, and the terminal cornutus of the vesica is longer than that in the two closely related taxa. In addition, the distal (subapical) process of the costal plate is considerably longer, more digitiform than in *A. (A.) pauli*; the carinal plates have much broader tooth-like crests and the vesica has shorter spinulose field than in *A. (A.) kindermanni*.

Distribution. The easternmost known member of the *A. (A.) kindermanni* species-group is found in the north-western edge of Iran, in a single locality only. The moths are on the wing in the late autumn, the specimens of the type-series were collected at the very end of October.

***Anchoscelis (Anchoscelis) pauli* (Staudinger, 1891) comb. n.**

(Plate 8, Figs 1–2; Plate 37, Figs 35–45; gen. fig. 25)

Orthosia kindermanni var. *pauli* Staudinger, 1891, *Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden* 4: 301. Type-locality: [Israel] Jerusalem. Lectotype: male, here designated; in coll. ZMHU.

Lectotype designation. Lectotype of *Orthosia kindermanni* var. *pauli*, here designated: male, "Origin" (pink label), "*kindermanni* var. *pauli*" (with handwriting of Staudinger), [Israel] "Jerusalem, (18)91, Paulus" (with handwriting), coll. ZMHU.

Diagnosis. *Anchoscelis (A.) pauli* is often confusingly similar to its related species, *A. (A.) kindermanni* and *A. (A.) consueta* though is usually paler coloured, the ground colour is ochreous-yellowish or pale rufous with less intensive pinkish-brown to red-brown irroration in the median area and the hindwings are also paler, less evenly suffused with brownish. These features help in the identification of the typical specimens but as all three species are highly variable, the study of the genitalia is inevitable for the problematic specimens. Last but not least, the three above-mentioned species are apparently known as allopatric therefore the locality also can help in the identification but it is not impossible that the areas of *A. (A.) pauli* and *A. (A.) consueta* are partly overlapping in Hatay and the very southern areas of the Taurus massif.

The male genitalia of *A. (A.) pauli* differ from the other species under discussion by the very broad costal plate with widely triangular subapical ventral margin (while the other two species have prominent pollex-like subapical ventral process), the medially more constricted juxta and the armature of the carinal plates and the vesica. In *A. (A.) pauli*, the carinal plates are broadly crested, similarly to those of *A. (A.) consueta* but are somewhat smaller, while the carinal plates of *A. (A.) kindermanni* have long spine-like processes. The spinulose field is the shortest in *A. (A.) pauli* and the terminal cornutus is somewhat shorter

than in *A. (A.) kindermanni*. Finally, *A. (A.) pauli* and *A. (A.) kindermanni* lack the strongly sclerotised ribbon from the medial section of the vesica which is characteristic of *A. (A.) consueta*.

In the female genitalia, the ovipositor of *A. (A.) pauli* is proportionally shorter and the antrum is larger than in the other two species, the ductus bursae is shorter and straighter, with longer and more bifid sclerotised plate at junction to corpus bursae, and the sclerotisation of the appendix bursae is more extensive in *A. (A.) pauli* than in its close relatives.

Distribution. The species is endemic to the Near East. It has been recorded from Israel, Jordan, Lebanon, NW Syria and the southern part of Hatay in Turkey. The moths are on the wing from October to January.

***Anchoscelis (Anchoscelis) kindermanni* (Fischer von Röslerstamm, 1838) comb. n.**

(Plate 8, Figs 3–5; Plate 37, Figs 47–50; Plate 38, Figs 1–4; gen. fig. 26)

Orthosia kindermanni Fischer von Röslerstamm, 1838, *Abbildungen zur Berichtigung und Ergänzung der Schmetterlingskunde besonders de Microlepidopterologie als Supplement zu Treitschke's und Hübner's Europaeischen Schmetterlingen*: 77, pl. 36, figs 1a–1c. Type-locality: [Croatia] Dalmatia. Neotype: male, in coll. ZMHU, here designated.

Synonymy

Orthosia ballotae Duponchel, 1842, *Histoire Naturelle de Lépidoptères ou Papillons de France, Supplement 3*: 600, Pl. 50, fig. 1.

Type-locality: [Croatia] “Hongrie”;

Orthosia consueta sensu auctorum, nec Herrich-Schäffer, 1852;

Agrochola wolfschlaegeri Boursin, 1953, *Zeitschrift der Wiener Entomologischen Gesellschaft 38*: 62. Type-locality: Makedonia, Ochrid, Petrina Planina. Holotype: male, in coll. SMNK.

Agrochola kindermanni sicula Bischof & Bittermann, 1996, *Esperiana 4*: 482, pl. Y, figs 7–8. Type-locality: Italy, Sicily, Madonie, 1 km N Piano Battaglia, 1500 m, 14°02'E, 37°52'N. Holotype: male, in coll. Bischof (Bad Königshofen).

Neotype designation. Neotype of *Orthosia kindermanni* Fischer von Röslerstamm, 1838, here designated: male, “Dalmatia October” (white label), “74631”, “*Orthosia kindermanni* F.R., m, det. Dr. G. Enderlein” (the name with handwriting of Enderlein), coll. ZMHU.

Diagnosis. The taxonomic and nomenclatural problems surrounding the identity of ‘*Orthosia kindermanni*’ and its consequences originate from the lack of the original type material of *kindermanni* and are discussed in detail by Hacker (1996), Zilli (1999) and Ronkay et al (2001). The first two concepts are mainly based on the same information but with their somewhat different approach has led to the different interpretation of the names used for the, otherwise undoubtedly distinct, well-known, species. Hacker supposed the conspecificity of the type of *A. (A.) kindermanni* from Dalmatia with the other populations of the species occurring recently in several parts in the Balkan peninsula, rejecting the possibility of the sympatric appearance of the two species under discussion, therefore he synonymized *A. (A.) wolfschlaegeri* with *A. (A.) kindermanni*, preserving the junior synonymic name *consueta* for the other species recently recorded only from Asia Minor.

Zilli also doubted but not rejected whether the two species occurred sympatrically in the Balkans, or at least in Dalmatia (according to the slide of Boursin published in 1953). In his opinion, without the formal designation of a neotype for *A. (A.) kindermanni*, it is better to restore the names in usage for more than forty years for the two species under discussion. This concept was accepted by Ronkay et al, suggesting also the formal designation of a neotype of *A. (A.) kindermanni*, proposing the designation of that specimen the genitalia of which was illustrated by Boursin in the original description of *A. (A.) wolfschlaegeri*. This specimen, however, could not be found in the subsequent years and there is only a photo which is surely insufficient for keeping the stability of the taxon. Unfortunately, there is no newly collected specimen known from the vicinity of Fiume (Rijeka) but the species is found repeatedly along the coasts and the islands of Dalmatia and all newly collected specimens are identical with *A. (A.) wolfschlaegeri*. Finally, the use of the two names remained inconsistent after the above-mentioned three papers, and the name “*kindermanni*” is frequently used for “*wolfschlaegeri*”.

To solve this problem, an old museum specimen from Dalmatia is designated here as the neotype of *Orthosia kindermanni*, and, therefore, this name will refer to the Balkanic species (and *A. (A.) wolfschlaegeri* is stated as its junior synonym), while the name “*consueta*” is used for the western Asiatic species.

The Sicilian populations were described by Bischof & Bittermann (1996) as a distinct geographic subspecies, based on certain features of the male genitalia. According to Zilli (1999), these genital differences are partly missing or the features are overlapping with those of the typical specimens from the Balkans, or simply artefacts (the absence of the apical plate of the juxta). The concept of Zilli has been accepted by Ronkay et al (2001) and the authors of this revision, thus, *A. (A.) kindermanni* is considered as homogeneous from a taxonomic point of view.

Anchoscelis (A.) kindermanni is often confusingly similar to *A. (A.) consueta*, thus, the study of the genitalia is required for the satisfactory identification. There are, however, certain external features in which the two species show some differences, as *A. (A.) kindermanni* has, in comparison with *A. (A.) consueta*, more variegated, more conspicuous dark forewing pattern, stronger and darker median fascia, narrower inner half of median area, somewhat darker, stronger reniform stigma and more uniformly darkened hindwing, without or with more diffuse discal spot.

The male genitalia differ from those of *A. (A.) consueta* by their longer uncus, broader basal plate of juxta, narrower valva with longer, ventrally more serrate costal plate, larger distance between costal extension and pollex-like process, much longer, more thorn-like and not serrate teeth of carina, absence of cristate sclerotized ribbon of vesica and longer terminal cornutus.

In the female genitalia, the antrum is broader, larger than in *A. (A.) consueta*, with larger sclerotized part, rather convex caudal edge of ventral plate and deeper caudal incision of dorsal plate, broader posterior third of ductus bursae, more discoidal corpus bursae with stronger, larger, more postero-lateral sclerotized plate.

Distribution. Adriato-Ponto-Mediterranean. No records are given outside Europe. The species is typical of the eastern Mediterranean dwarfed oak forests and hard-leaved forests, occurring also in rocky slopes and gorges with bushy and shrubby vegetation. The adults appear late in the autumn, the flight period extends from the middle of October to December.

***Anchoscelis (Anchoscelis) consueta* (Herrich-Schäffer, 1852) comb. n.**

(Plate 8, Figs 6–8; Plate 38, Figs 5–14; gen. fig. 27)

Orthosia consueta Herrich-Schäffer, 1852, *Systematische Bearbeitung der Schmetterlinge von Europa* 6: 59. Type-locality: [Turkey] Constantinople (Istanbul).

Synonymy

Agrochola kindermanni sensu auctorum, nec Fischer von Röslerstamm, 1838.

Diagnosis. A very strongly variable species which is confusingly similar to its allopatric twin species, *A. (A.) kindermanni*. The two species can be distinguished, however, by their genitalia which show easily recognisable differences in both sexes. Wingspan 30–34 mm.

The key features of the male genitalia of *A. (A.) consueta* are the long processes of the costal plate (digitus) which are much closer to each other than in any other species of the *kindermanni*-group, the dorsally broad, more or less quadrangular juxta and the presence of a long and strong, partly cristate sclerotised ribbon in the scobinate median section of the vesica. The harpes of *A. (A.) consueta* are somewhat longer than in *A. (A.) kindermanni*, and the carinal plates are also different as they have serrate-pyramidal processes while in *A. (A.) kindermanni* the carinal plates have spine-like extensions.

The female genitalia of *A. (A.) consueta* differ from those of *A. (A.) kindermanni* by the smaller, more quadrangular antrum, the less asymmetrical, more cordiform posterior and the much broader, more sclerotised anterior parts of ductus bursae; the sclerotised patch of corpus bursae is weaker than in *A. (A.) kindermanni*.

Distribution. Anatolian. It is relatively widespread in Turkey, known also in northern Iraq, and the northern part of the Near East (Lebanon). *Anchoscelis (A.) consueta* is a xerophilous species; its main habitats are hot, dry, shrubby karstic or dwarfed oakwoods and mixed oak forests, hard-leaved oak forests and bushy slopes. The flight period is September–November.

The *rupicapra*-group

Diagnosis. The *rupicapra*-group is the sister-lineage of the *kindermanni*-group, containing two closely related sister species, *A. (A.) rupicapra* and *A. (A.) oropotamica*. Both species of the group have two distinct subspecies and *A. (A.) oropotamica* has supposedly further, still unnamed subspecies but the available material is insufficient for micro-taxonomic decisions.

The group-features of the male genitalia distinguishing the *rupicapra*-group from the *kindermanni*-group are the thick, apically strongly spatulate and flattened harpe, the quadrangular, variably strongly serrate subapical process of costal plate and the differently built sclerotised plate(s) of the carina (males), and the less folded and curved, weaker sclerotised ductus bursae (females).

Distribution. Ponto-Mediterranean-Turkestanian.

Anchoscelis (Anchoscelis) rupicapra rupicapra (Staudinger, 1879) **comb. n.**

(Plate 9, Figs 1–2; Plate 38, Figs 15–24; gen. fig. 28)

Orthosia rupicapra Staudinger, 1879, *Horae Societatis Entomologicae Rossicae* 14: 390. Type-locality: Turkey, Taurus. Lectotype: male, here designated; in coll. ZMHU.

Lectotype designation. Lectotype of *Orthosia rupicapra*, here designated: male, "Origin" (pink label), [Turkey] "Taurus, Hbhr. [= Haberhauer]" (with handwriting); coll. ZMHU.

Diagnosis. *Anchoscelis (A.) rupicapra* differs externally from its sister species, *A. (A.) oropotamica*, by its on average somewhat larger measures (wingspan 28–36 mm vs 27–34 mm), broader and apically less pointed forewing, conspicuously narrower, less lunulate reniform and smaller, most often more flattened and oblique, not rounded orbicular stigmata. The ground colour is ochreous-brown or reddish-brown, often with fine pinkish shade, only rarely slate-grey or greyish while in *A. (A.) oropotamica* greyish shaded or grey-brown specimens occur more frequently. It can be distinguished from the externally somewhat similar *A. (A.) orientalis* by its generally paler colouration even the reddish-brown coloured specimens are paler with better defined, narrow reniform stigma with dark brown or blackish dot at lower part (without whitish scales in the outline) and the much paler hindwings with clearly visible dark discal spot. Wingspan 28–36 mm.

The male genitalia of the two closely related species are conspicuously different. *A. (A.) rupicapra* has, comparing with *A. (A.) oropotamica*, longer and distally not dilated valva with less acute apex, longer costal plate with long and cuneate proximal and smaller, more or less quadrangular subapical extension, rounded apical plate of harpe, shorter juxta, two long, partly dentate crest-like plates of the ventral carina, much stronger spinules of the terminal spinulose field and longer, stronger terminal cornutus.

In the female genitalia, the antrum of *A. (A.) rupicapra* is longer, more cup-shaped than in *A. (A.) oropotamica*, the posterior part of ductus bursae is shorter and less sclerotised, the appendix bursae and the sclerotized plate of corpus bursae are larger than in its eastern sister-species.

Distribution. Ponto-Mediterranean. The species occurs in certain areas of the Balkans, Turkey, Iraq, Armenia and Cyprus. A xero- and thermophilous species, inhabiting hot, dry bushy and shrubby oak forests, forest steppes, also evergreen oak forests and Mediterranean shrubberies. The adults are on wing rather late in autumn, usually in October–November; in the Near East also throughout the winter (until February).

Anchoscelis (Anchoscelis) rupicapra kresnaensis (Ronkay & Mészáros, 1982)
stat. rev., comb. n.

(Plate 9, Figs 3–4; Plate 38, Figs 25–26; gen. fig. 29)

Agrochola rupicapra kresnaensis Ronkay & Mészáros, 1982, *Folia Entomologica Hungarica* **43**: 148, fig. F; gen. figs 4–6. Type-locality: Bulgaria, Struma valley, Kresna gorge. Holotype: male, in coll. HNHM.

Diagnosis. The westernmost populations of the species differ from the typical ssp. *rupicapra* by the homogeneous reddish- or orange-ochreous forewing ground colour; the individual variation of the ssp. *kresnaensis* is much smaller than in the Anatolian population.

Distribution. The ssp. *kresnaensis* is endemic to the Balkans (SW Bulgaria, NW Greece). The moths can be found mostly in October.

Anchoscelis (Anchoscelis) oropotamica oropotamica (Wiltshire, 1941) comb. n.

(Plate 9, Figs 5–6; Plate 38, Figs 27–35; gen. fig. 30)

Amathes oropotamica Wiltshire, 1941, *Journal of the Bombay Natural History Society* **42**: 475, fig. 11. Type-locality: Iran, Prov. Fars, Sineh Sefid. Holotype: female: in coll. BMNH.

Synonymy

Amathes modesta Brandt, 1941, *Mitteilungen der Münchner Entomologischen Gesellschaft* **31**: 848, fig. 33. Type-locality: Iran, Laristan, Sardze region. Syntypes: in coll. NRS;

Amathes oropotamica thermopotamica Wiltshire, 1941, *Journal of the Bombay Natural History Society* **42**: 476, fig. 10. Type-locality: Iran, Shapur gorge, Tang-Chugan. Holotype: female: in coll. BMNH; **syn. n.**

Diagnosis. The species shows a remarkable colour variation within the populations and throughout its wide range. Interestingly, the populations occurring in the Kopet-Dagh Mts are almost homogeneous from this respect and show certain differences comparing with those of the other Iranian specimens. These latter populations are treated as a distinct geographical subspecies, ssp. *archar*. There are three other, even more easterly distributed populations occurring in Uzbekistan (Kitab), Tadjikistan and Kirghisia (Nuratay; Plate 38, Fig. 45) but are known by single specimens. They are larger and somewhat more long-winged than the other examples, having larger and more prominently darkened orbicular and reniform stigmata but their genitalia do not show distinctive features when compared with those of the typical *A. (A.) oropotamica*. These two populations represent most probably distinct geographical subspecies but additional material is necessary for proper decisions.

Anchoscelis (A.) oropotamica differs externally from *A. (A.) rupicapra*, by its somewhat narrower and more elongated forewings with somewhat more pointed apex, larger, more lunulate reniform stigma and larger, rounded orbicular stigma. The rather dark greyish-brownish coloured specimens of *A. (A.) oropotamica* are also similar to *A. (Alpichola) dubatolovi*, but are on average smaller in size (wingspan 27–34 mm vs 32–36 mm, respectively), having less acutely pointed forewings with more sinuous postmedial line and paler and more unicolorous hindwings, without darker marginal suffusion and with weaker or obsolete discal spot.

The male genitalia of the two species are conspicuously different. In the clasping apparatus, *A. (A.) oropotamica* has shorter valva with shorter costal plate, bearing two broad, rather quadratic extensions, apically more triangular plate of harpe and longer, narrower juxta. The aedeagus of *A. (A.) oropotamica* is characterised by the ventral crests of carina fused into single, heavily sclerotised and strongly double-peaked process, the reduced bundle of spinules and the shorter, finer terminal cornutus.

In the female genitalia, *A. (A.) oropotamica* has, in comparison with *A. (A.) rupicapra*, narrower, more sclerotized, ring-like antrum, much stronger, verrucose sclerotization of ductus bursae, smaller appendix bursae and weaker, smaller sclerotized plate of corpus bursae.

Distribution. Iranian-Turkestanian. The typical populations occur in the mountainous areas of Iran, it is known also from Uzbekistan, Tadjikistan and Kirghisia; the flight period is October–November, depending on the climate of the locality.

Anchoscelis (Anchoscelis) oropotamica archar (Ronkay, Varga & Hreblay, 1998)
comb. n.

(Plate 9, Figs 7–8; Plate 38, Figs 36–44; gen. fig. 31)

Agrochola oropotamica archar Ronkay, Varga & Hreblay, 1998, *Acta Zoologica Academiae Scientiarum Hungaricae* 44(3): 256, figs 39, 82–83, 152. Type-locality: Turkmenistan, 80 km SE of Tedjen, 200–300 m, 36°56'N, 60°53'E. Holotype: male, in coll. G. Ronkay (Budapest).

Diagnosis. The populations occurring in the Kopet-Dagh area differ from the typical subspecies by the uniformly pale ochreous to reddish-ochreous forewing ground colour, the conspicuously dark reniform stigma and the paler greyish suffusion of the hindwing; the populations are rather homogeneous in the external appearance of the individuals.

Distribution. The eastern subspecies is known from the Turkmenian side of the Kopet-Dagh massif. The moths are on the wing in October–November.

The *litura*-group (“*Agrolitha* Berio, 1980”).

Diagnosis. A very compact Holo-Mediterranean-Caspian group consisting of closely related, often entirely allopatric species. It comprises two main lineages (the *meridionalis*- and the *litura*-lines) which are easily separable by their external and genital features, and two rather remote species with conspicuous specific autapomorphies. One of them is the Cyprian endemic *A. (A.) orientalis*; the other is *A. (A.) hypotaenia*, occurring in the Near East.

Some authors (e.g. Berio, 1980; 1985 and Beck, 1991, 1996, 1999) treat this species-group as a distinct subgenus, *Agrolitha*. The main features of the genitalia of the *A. litura*-group, however, matching with those of the *A. nitida*-, *A. kindermanni*-, *A. rupicapra*- and the *A. humilis*-groups, therefore it is interpreted here as a well-defined species-group within the subgenus *Anchoscelis*.

The two main lineages includes problematic taxa from a taxonomic point of view, the taxonomic rank of the allopatric species is often dubious, due to the very small, often subtle genital differences between the otherwise externally better distinguishable taxa. Thus, the rank of the taxon *luteogrisea* has been remained problematic, here we followed the opinion published recently by Beshkov (2016) who found sympatrically occurring *A. (A.) litura* and *A. (A.) luteogrisea* in Bulgaria and considered it as a species distinct from *A. (A.) litura*.

The two main lineages are characterised by the triangular forewings with prominent dark (often black) costal mark at subterminal line, a darker, often reddish-or reddish-brown triangular patch at costal end of median fascia (the costal areas of antemedial and postmedial lines are usually also marked by darker spots), the most often well-developed, large reniform stigmata. The antennae are filiform in both sexes, those of males with longer fasciculate cilia; the male abdomen is generally slender, the females have strong, robust body with usually slightly protruding ovipositor.

The features of the male genitalia unifying the species-group are the very short and fine uncus, the small and only sparsely hairy penicular lobes, the serrate-dentate costal plate with several smaller peaks (*litura*-group) or with two strong processes (*meridionalis*-group; a shared feature with the *kindermanni*- and the *rupicapra*-groups), the short and fine, rather distally and dorsally positioned harpe with long basal bar, and the rather weakly sclerotised carina without specialised appendages. The configuration of the vesica is similar to those of the formerly discussed species-groups and also to certain subgenera of *Anchoscelis*, displaying the monophyly of this giant clade. The otherwise conspicuously dissimilar clasp-

ing apparatuses of the two other species have stronger uncus, differently built costal plate (digitus), and longer and stronger harpe.

The female genitalia are generally similar to those of the previously discussed two species-groups (and also to those of the *statira*- and *humilis*-groups and the subgenus *Alpichola*), differing from them by the differently sized and sclerotised ductus bursae.

Distribution. Holo-Mediterranean-Caspian. The members of the *meridionalis*-group are all rather stenochorous and distributed in the western and the African Mediterranean. The European species of the *litura*-group are more widespread while the easternmost species is endemic to the Kopet-Dagh massif. The two remaining species are both stenochorous and occur in the same region: one of them lives in Cyprus, the other is in the Near East.

***Anchoscelis (Anchoscelis) meridionalis meridionalis* (Staudinger, 1871) comb. n.**

(Plate 10, Figs 1–2; Plate 38, Figs 46–49; Plate 39, Figs 1–4; gen. fig. 32)

Orthosia litura var. *meridionalis* Staudinger, 1871, in Staudinger & Wocke, 1871, *Catalogue der Lepidopteren des Europäischen Faunengebiets*: 117. Type-locality: Southern France. Lectotype: male, here designated; in coll. ZMHU.

Lectotype designation. Lectotype of *Orthosia litura* var. *meridionalis*, here designated: male, “Origin” (pink label), [France] “Ar-dèche m.” (with handwriting of Staudinger), “125.” (printed label), 12/10 (with handwriting), coll. ZMHU.

Diagnosis. The typical subspecies of *A. (A.) meridionalis* differs from the other species of the *litura*-group by the dark ochreous-greyish, olive-grey or pruinose bluish-grey forewings (often with fine violaceous irroration), obsolescent orbicular stigma and prominent, broad reddish or reddish-brown median fascia; the forewing apex is more acute, and the antemedial and postmedial crosslines are less distinctly marked than in the species of the *A. (A.) litura* species-complex. Wingspan 29–36 mm. The diagnostic features between the two subspecies of *A. (A.) meridionalis* are discussed under the Diagnosis of the ssp. *maghrebianus*.

The male genitalia of *A. (A.) meridionalis* are very similar to those of *A. (A.) agnorista*. The two species differ mostly in the shape and size of the double costal extensions (digitus): the entire plate is longer in *A. (A.) meridionalis* than in *A. (A.) agnorista*, and the two processes are more distant from each other. Other slight differences are the finer uncus, the somewhat smaller juxta and the finer terminal cornutus of the vesica of *A. (A.) meridionalis*. The differences between the clasping apparatuses of *A. (A.) meridionalis* and the species of the *A. (A.) litura* species-complex are very conspicuous, the main differences are listed in the characterisation of the *litura* species-group.

The key features of the female genitalia are the shape of the antrum (it is broader and more trapezoidal in *A. (A.) meridionalis* than in *A. (A.) agnorista*) and the shape of the sclerotised appendix bursae which is somewhat smaller in *A. (A.) meridionalis* and less rounded laterally.

Distribution. Western Mediterranean. It is a widespread but not abundant species which is known from the Iberian Peninsula, SE France and NW Italy.

The species inhabits open Mediterranean sclerophilous forests, xerophilous and meso-xerophilous shrublands and dry bushy grasslands. The moths are on the wings from mid-October to early December.

***Anchoscelis (Anchoscelis) meridionalis maghrebianus* ssp. n.**

(Plate 10, Figs 3–4; Plate 39, Figs 5–14; gen. fig. 33)

Holotype. Male, Morocco, High Atlas Mts, 4 km NE of Oukaïmeden, 2295 m, 31°14'N, 7°49,52'W, 27.IX.2005, Gy.M. László & G. Ronkay (coll. G. Ronkay).

Paratypes. Morocco. 2 males, 1 female, Middle Atlas Mts, Ifrane, 1700 m, R. Pinker (coll. NHMW); 1 male, 1 female, with same locality but from 1500–1600 m, 9–22.X.1973, Friedel (coll. NHMW); 1 male, High Atlas Mts, Oukaïmeden, 2700 m, 5.X.1996, M. Pedersen (coll. P. Gyulai); 1 male, 1 female, Marrakesh, 1800 m, 13.XII.1990, C. Eliasson (coll. G. Ronkay). 5 males, 13 females, High Atlas Mts, Oukaïmeden, 2500 m, 1–20.XI.2012, Müller, Mooser & Révay (coll. P. Gyulai); 1 male, High Atlas Mts,

below Oukaimeden, 2200 m, 25.IX.–10.X.2012, Müller, Mooser & Révay (coll. P. Gyulai); 2 males, High Atlas Mts, Aghbalou oak forest, 1200 m, X.2012, Müller, Mooser & Révay (coll. P. Gyulai); 1 female, High Atlas Mts, Ourika, Agaiouar forest 2600 m, 12–30.IX.2012, Müller, Mooser & Révay (coll. P. Gyulai). Slide Nos GYP 4555, 4556, 4557 (females). **Algeria.** 20 males, 6 females, Lambèse, X.1912, H. Powell (coll. BMNH); 1 male, with same data (coll. MNHNP); 38 males, 16 females, with same locality but XI.1912, H. Powell (Slide Nos RL11764m, RL11765m, RL11766f, RL11767f, coll. BMNH); 10 males, 13 females, with same locality but, X.1913, H. Powell (coll. BMNH); 2 males, 1 female, with same locality but, XI.1913, H. Powell (coll. BMNH); 10 males, 4 females, from the same locality and data, Chierotti (coll. BMNH); 1 female, from the same locality, March 1914, Sari-Aamar (coll. BMNH); 2 males, Algeria, Lambèse, Sari Lakhdar ben Laoues, II–III.1913, ex coll Oberthür (coll. BMNH); 1 female, Prov. Constantine, Batna, V. Faroult, X.1910 (coll. BMNH).

Diagnosis. The North African subspecies differs from the typical ssp. *meridionalis* by its on average smaller size (wingspan 24–30 mm vs 29–36 mm, respectively), paler dark forewing markings and a generally “faded” appearance which provides the moths a paler composition although the greyish specimens have a rather similar ground colour. The ochreous-greyish forewing is typical only for this subspecies. It is worth to note that more or less “*maghrebianus*-like” specimens can be found in a low numbers in the southern areas of the Iberian peninsula while the typical “*meridionalis*” is very rare but also present in Morocco. This “partly overlapping” distribution pattern may also imply the possibility of the existence of two closely related species but, as the genitalia show no mentionable differences, the taxon is treated here as two geographic subspecies.

Distribution. North-west Africa. The subspecies lives in Morocco and Algeria. The moths are on the wing mostly in the late autumn and the first part of the winter (October-December) but there are observations also from the very early spring.

***Anchoscelis (Anchoscelis) agnorista* (Boursin, 1955) comb. n.**

(Plate 10, Figs 7–8; Plate 39, Figs 20–25; gen. fig. 35)

Agrochola agnorista Boursin, 1955, *Zeitschrift der Wiener Entomologischen Gesellschaft* **40**: 246, pl. 26, figs 1–2, 4. Type-locality: Algeria, Lambèse. Holotype: male, in coll. SMNK.

Diagnosis. *Anchoscelis (A.) agnorista* differs externally from the different populations of *A. (A.) meridionalis* by the darkened basal, medial and submarginal fields and the contrastingly paler (occasionally whitish) marginal area; the reniform stigma is more distinctly marked than in the other taxa of the *meridionalis*-line.

The specific differences between *A. (A.) agnorista* and *A. (A.) meridionalis* can be found in the shape and size of the costal plate (digitus), the juxta and the terminal cornutus in the males and the shape of the antrum and the sclerotised part of appendix bursae in the females. The diagnostic feature of the male genitalia mentioned by Boursin in the original description (“the very short harpe which it is much shorter than those of the other taxa of the species-complex”) has not been confirmed by the subsequent studies, it is similarly sized and shaped in *A. (A.) meridionalis* (see the gen. figs 32, 33 and 35), too. The diagnostic features of *A. (A.) agnorista* are the shorter costal plate with long and flattened, somewhat divergent ventral processes allied closer to each other than in *A. (A.) meridionalis*, the juxta is somewhat larger, the terminal cornutus is stronger, the antrum is more calyculate, with more evenly arched anterior margin, and the sclerotised part of appendix bursae is somewhat larger and more rounded laterally than in its sister-species.

Distribution. NW African. The species is known only from Morocco and Algeria. The moths are on the wing in the late autumn (October-November).

***Anchoscelis (Anchoscelis) hypotaenia* (Bytinski-Salz, 1936) comb. n.**

(Plate 11, Figs 1–2; Plate 39, Figs 26–30; gen. fig. 36)

Amathes hypotaenia Bytinski-Salz, 1936, *Entomologist's Record and Journal of Variation* 48(1): 3. Type-locality: Lebanon, Beirut. Holotype: female, in coll. SMNK.

Synonymy

Amathes hypotaenia wiltshirei Bytinski-Salz, 1936, *Entomologist's Record and Journal of Variation* 48(1): 4. Type-locality: Lebanon, Arayah. Holotype: male, in coll. SMNK; **syn. n.**

Diagnosis. *Anchoscelis (A.) hypotaenia* represents a distinct lineage within the *litura*-group, displaying several features which cannot be found else in the clade. The forewings are most often remarkably darker while the hindwings are most often paler than in the other related species of the group.

The genitalia are strongly autapomorphic in both sexes, displaying a number of features being unique within the *litura*-group. In males, the uncus is much longer and stronger than in the *meridionalis*- and the *litura*-lines, the penicular lobes are larger, more elongate and more hairy, the valvae are longer and apically more acute, with reduced cucullus, the harpe and the double processes of digitus are much longer and stronger than in the other members of the species-group, finally, the terminal cornutus of the vesica is absent. In the female genitalia, the ovipositor is much shorter, more conical than in any other species of the *litura*-group, the appendix bursae is rugose-wrinkled but lacks the large sclerotised plate and signa are also absent.

Distribution. The species occurs in the Near East. The moths fly during the winter; the flight period is November-January.

***Anchoscelis (Anchoscelis) orientalis* (Fibiger, 1997) comb. n.**

(Plate 10, Figs 5–6; Plate 39, Figs 15–19; gen. fig. 34)

Agrochola orientalis Fibiger, 1997, *Entomologisk Meddelelser* 65: 17, pl. 1, figs 1–3; gen figs 1, 3, 5. Type-locality: "Cyprus-North, K.K.T.C., Kantara, 700 m". Holotype: male, in coll. ZMUC.

Diagnosis. *Anchoscelis (A.) orientalis* is another strongly autapomorphic species within the species-group, its external appearance resembles mostly to dark and weakly patterned specimens of *A. (A.) rupicapra* but the genitalia clearly display its close relationship with the taxa of the *A. (A.) litura* species-complex.

The male genitalia differ strikingly from all other species of the group by the very broadly flattened processes of the digitus, the longer and thinner uncus, the differently shaped juxta, the shorter spinulose field and the shorter terminal cornutus of the vesica.

The female genitalia of *A. (A.) orientalis* are similar to those of the other related species, but have broadly cup-shaped antrum, longer and slenderer, more sclerotised ductus bursae and more conical, rather membranous appendix bursae with rounded sclerotised plate only.

Distribution. Endemic to Cyprus. A typical member of the winter fauna, the moths are on the wing from the end of November to January.

***Anchoscelis (Anchoscelis) litura* (Linnaeus, 1761) comb. n.**

(Plate 11, Figs 3–4; Plate 39, Figs 31–39; gen. fig. 37)

Phalaena Noctua litura Linnaeus, 1761, *Fauna Suecica* (Edn 2): 320. Type-locality: Sweden, Holmiae. Lectotype: male, in coll. LS London.

Synonymy

Phalaena Noctua polluta Esper, 1788, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen* 4: pl. 127, fig. 5.

Type-locality: no locality given (Europe);

Noctua ornatrix Geyer, 1834, in Hübner, *Sammlung Europäischer Schmetterlinge* 4: pl. 172, figs 813–814. Type-locality: Germany, Augsburg;

Orthosia litura var. *borealis* Sparre-Schneider, 1882, *Forhandlingar i Videnskabs-Selskabet i Christiania* 1882(1): 69. Type-locality: Norway.

Diagnosis. The taxonomy of the different populations of the *litura*-complex is possibly the most difficult question of the *Agrochola* s.l. branch. The intra-populational variation is very large and the genitalia of both sexes are very similar even in the externally easily distinguishable specimens. Moreover, the traditionally distinguished taxa have a confusing distribution pattern: the western Asiatic populations are rather sporadic (with large gaps between them) and all of them are known by a few specimens only while the widespread European *A. (A.) litura* is one of the most frequent and most ubiquitous *Anchoscelis* species - except in the central part of the Balkans where it seems to occur intermingled with *A. (A.) luteogrisea*. In Bulgaria, there are externally typical *litura* and *luteogrisea* specimens can also be found but both are rarely observed; *luteogrisea* is relatively frequent in the western parts of Turkey but rarer in the central and the eastern parts of Anatolia and the Armenian highland. A SE Turkish population was described as a distinct species, *sairtana*, which is hardly distinguishable, however, from the other eastern populations of *luteogrisea*. Finally, there is a larger gap between the externally best differentiated *turcomanica* (Kopet-Dagh massif, possibly also SE Elburs) and the easternmost NW Iranian *luteogrisea*.

The interpretation of these taxa is a matter of concept rather than morphologically well-supported argumentation; the solution of this problem would require other, for instance, molecular taxonomic, information. There are two possible ways of interpretation, considering the separable taxa as (more or less) allopatric subspecies of one large, polytypic species, or distinguishing them at species level. The facts that *A. (A.) agnorista* and *A. (A.) meridionalis maghrebianus* are distinct taxa with sympatric occurrence and easily recognisable external but surprisingly slight genital differences, and that *A. (A.) litura* and *A. (A.) luteogrisea* are found in the same area, support the species-level separation rather than the three or more geographic subspecies concept.

Anchoscelis (A.) litura and *A. (A.) luteogrisea* are often very similar externally although the ground colour of the forewing of *A. (A.) litura* is most often darker, only rarely ochreous. Wingspan 30–40 mm.

The main differences between the two taxa are found in the male genitalia. The apical part of the valva is narrower in *A. (A.) litura* than in *A. (A.) luteogrisea*, having less acutely pointed cucullus and smaller last apical tooth of the costal plate and the terminal cornutus of the vesica is shorter and thicker.

In the female genitalia, *A. (A.) litura* has, in comparison with *A. (A.) luteogrisea*, smaller and narrower sclerotized plate of antrum, weaker lateral fold of ductus bursae and less protruding and more laterally positioned sclerotized apical part of appendix bursae. These genital differences are easily recognizable but rather slight, with a certain amount of variation, and are the main cause for uncertainty in the taxonomic interpretation of these two taxa.

Distribution. An expansive northern Mediterranean species. It is distributed in Europe from the southern areas far to the north towards to central Sweden and Finland; present also in the Near East and western Turkey while its occurrence in the Maghreb area is based only on the existence of old records. It occurs in the western areas partly sympatrically with the related taxon *A. (A.) meridionalis*, the eastern limit of its range is incompletely known, due to the uncertainty of the taxonomic rank of *A. (A.) luteogrisea*. The adults are on wing from the end of August to the end of November.

***Anchoscelis (Anchoscelis) luteogrisea* (Warren, 1911) comb. n.**

(Plate 11, Figs 5–6; Plate 39, Figs 40–48; gen. fig. 38)

Amathes litura ab. *luteogrisea* Warren, 1911, in A. Seitz, *Die Gross-Schmetterlinge der Erde* 3: 152, pl. 32, row h. Type-locality: Turkey, Amasia. Holotype: female, in coll. BMNH.

Synonymy

Agrochola sairtana Derra, 1990, *Esperiana* 1: 396, figs 4–5, 9–10. Type-locality: Turkey, Prov. Siirt, Basor valley, 27 km NW of Siirt. Holotype: male, in coll. ZSM, **syn. n.**

Diagnosis. The taxonomic relationships of *A. (A.) luteogrisea* and *A. (A.) litura* are discussed under the diagnosis of the latter species. The taxonomic identity of *A. (A.) sairtana* is another question which has not been reassuringly solved. The external and genital differences mentioned in the original description are, however, mostly fall within the range of variation of *A. (A.) luteogrisea*, and the known area also included in the distribution of this latter species. Thus, *A. (A.) sairtana* is treated here as synonymous with *A. (A.) luteogrisea*, noting that the future molecular taxonomic studies may prove or reject this statement.

The apical part of the valva of *A. (A.) luteogrisea* is broader with more acute cucullus, the last (most apical) tooth of the costal plate is remarkably larger, more acute and the terminal cornutus of the vesica is somewhat longer, more slender, medially curved.

In the female genitalia, the sclerotized plate of the antrum is broader, larger in *A. (A.) luteogrisea*, the lateral fold of the ductus bursae is also stronger, larger and the sclerotized apical part of the appendix bursae is somewhat more prominent. These genital differences are easily recognizable but rather slight, with a certain amount of variation, and are the main cause for uncertainty in the taxonomic interpretation of these two taxa. Wingspan 30–40 mm.

Distribution. Ponto-Mediterranean. Confirmed records of the species are known from SE Serbia, Bulgaria, Greece, Turkey, Syria, Armenia, Azerbaijan and NW Iran. The moths are on the wing in September–November.

***Anchoscelis (Anchoscelis) turcomanica* (Ronkay, Varga & Hreblay, 1998) comb. n.**

(Plate 11, Figs 7–8; Plate 40, Figs 1–8; gen. fig. 39)

Agrochola turcomanica Varga & Ronkay, 1998, *Acta Zoologica Academiae Scientiarum Hungaricae* 44(3): 258, figs 40, 84–85, 153. Type-locality: Turkmenistan, Kopet-Dagh Mts, Sayvan valley, 10 km N of Sayvan, 1300 m, 38°25'N, 56°52'E. Holotype: male, in coll. HHNM.

Diagnosis. *Anchoscelis (A.) turcomanica* differs externally from *A. (A.) litura* and *A. (A.) luteogrisea* by its generally rufous-brown suffused forewings with more sinuous postmedial line, stronger dark fumous grey defined antemedial line, the reduced dark costal spots and the more greyish shaded hindwings. Wingspan 31–37 mm.

In the male genitalia, the valva of *Anchoscelis (A.) turcomanica* is almost straight with not or only very slightly arched apical third, the costal plate is stronger dentated than in the other two related species, the harpe is longer and the juxta is basally narrower, than in the other members of the *litura*-group.

The female genitalia of *A. (A.) turcomanica* differ from those of the other two closely related species by the shape of the sclerotised appendix bursae which is longer than in *A. (A.) litura* and *A. (A.) luteogrisea*, and the continuation of the sclerotised area towards the corpus bursae is flattened, does not forming a triangular pocket like in the two twin species.

Distribution. Endemic to the Kopet-Dagh mountain system. The species has been found in both sides of the massif, in Turkmenistan and the Khorassan area in Iran; a single record is known from the eastern Elburs.

The *humilis*-group (“*Humichola* Beck, 1991”)

Diagnosis. The monotypical subgenus *Humichola* Beck, 1991, based on this species, is considered here as a synonym of *Anchoscelis*.

The genitalia of both sexes can be characterised by conspicuous autapomorphies, these are the narrow, long, quadrangular juxta with rather deep medio-apical cleft, the large, rounded distal part of the costal plate (digitus) and the dentate plates of the carina (in the male), the broad but very short antrum and the heavily sclerotized, very long ductus bursae consisting of narrow tubular distal and much broader proximal parts (in the female).

Anchoscelis (Anchoscelis) humilis ([Denis & Schiffermüller], 1775) **comb. n.**

(Plate 12, Figs 1–2; Plate 40, Figs 9–16; gen. fig. 40)

Noctua humilis ([Denis & Schiffermüller], 1775, *Ankündigung eines systematischen Werkes von den Schmetterlingen der Wienergegend* 1775: 76. Type-locality: [Austria], Vienna district. Types destroyed.

Synonymy

Agrochola humilis anatolica Pinker, 1980, *Zeitschrift der Arbeitsgemeinschaft Oesterreichischer Entomologen* 31: 74, pl. 1, fig. D3.

Type-locality: Turkey, Kizilcahamam; **syn. n.**

Diagnosis. The very pale Anatolian populations with intense silvery-greyish sheen of the forewing are described as a distinct geographic race, subsp. *anatolica* Pinker, 1980. Somewhat similarly coloured specimens can be found also in the central and eastern Balkan populations, together with the typical ones. Thus, this change of forewing colouration and markings is rather a cline than characters of a geographically isolated subspecies and, therefore, *anatolica* is considered here as synonymous with the nominate *humilis*, **syn. n.**

Anchoscelis (A.) humilis is an unmistakable species with its long, bright, pale greyish forewing with paler outlines of stigmata and filling of the crosslines and the relatively pale hindwing. It differs from the sometimes slightly similar colour forms of *Agrochola lychnidis* by its less pointed forewing, larger, more rounded stigmata (especially the rounded orbicular stigma), reddish defined and less sinuous-laced antemedial and postmedial crosslines and paler greyish hindwings with larger discal spot; from the members of the *deleta*- and *nitida*-group by its on average larger size (wingspan 30–40 mm), more elongated wings, pale ashy-grey to ochreous-grey forewings with straighter antemedial and postmedial crosslines and the paler hindwing; finally, from *Agrochola orejoni* by its less pointed forewings, paler covering of veins, straighter and lighter filled double crosslines, etc.

The most prominent features of the genitalia are listed in the diagnosis of the lineage, their study can undoubtedly decide any problematic questions concerning with the identification of *A. (A.) humilis*.

Distribution. Ponto-Mediterranean. It is rather widespread in southern Europe and in Asia Minor, Armenia and also in certain sub-Mediterranean exclaves of central Europe, distributed westwards in Europe as far as Belgium, France, and NW Germany.

A species typical of dry, warm, often dwarfed oakwoods and mixed oak forests, Mediterranean hard-leaved oakwoods and bushes; it prefers the southern hilly and meso-montane habitats, occurring very sporadically in the lowland. The flight period begins at the end of the summer but the majority of the specimens are on the wing at the end of September-beginning of October.

Subgenus *Alpichola* Ronkay, 1984

Alpichola Ronkay, 1984, *Acta Zoologica Academiae Scientiarum Hungaricae* 30: 184. Type-species: *Amathes egorovi* Bang-Haas, 1934, by original designation.

Diagnosis. A rather compact eastern Mediterranean-western Asian group consisting mainly of closely related, allopatric species; it comprises three lineages, the *lactiflora*-, the *egorovi*, and the *dubatolovi*-lineages. The closest relative of *Alpichola* is the *litura*-group of the subgenus *Anchoscelis*; the species associated formerly with *Alpichola*, "*Agrochola*" *gratiosa*, belongs to a distinct subgenus, *Osthelderichola*.

The subgenus includes small or medium-sized species (wingspan 22–38 mm) with slender body, rather short abdomen and narrow, long, acutely triangular forewing; short, porrect palpi, fasciculate male and ciliate female antenna, long thoracic vestiture and rather smoothly scaled abdomen. Forewing ground colour most often pale ochreous or yellowish (in *A. (A.) dubatolovi* pale grey to greyish-brown), with less conspicuous crosslines and stigmata, hindwing characteristically small, rounded, white or whitish, rarely pale greyish.

The male clasping apparatus has a very characteristic appearance with the long and slender, distally strongly tapering valva with acute cucullus and very short and weak corona, short but strong sacculus with reduced clavus, strongly sclerotized costa (without costal extension) and membranous ventral part and with strong, thick, medium-long, arcuate or curved harpe, with apex pointed. Uncus short, slender, curved, apically hooked, tegumen weak, narrow, rather long, penicular lobes very small. Juxta subdeltoidal with more or less triangular or rhomboidal basal plate and short, narrow, apically deeply incised dorsal lamina, shorter or longer medial process may be present. The configuration of the carina penis and the armature of the vesica are also typical of the subgenus, bearing important specific characters. Aedeagus short, thick, straight, carina often with a strong, serrate-dentate ventral tooth (or plate) and eversible, serrate, dorso-lateral crest. Vesica long, tubular, everted forward, bent ventrally or ventrolaterally medially. Basal half with one or two large, membranous diverticula, a variably long medial spinulose field, a variably strongly bifid terminal diverticulum (sometimes appearing as two distinct diverticula) and a shorter or longer, straight or apically curved terminal cornutus always present.

The group features of the female genitalia are the very long, acute, weakly sclerotized ovipositor, the calyculate antrum with variably broad and deep, often slit-like posterior cleft, the tubular, medium-long ductus bursae often angled medially, usually with strongly sclerotized longitudinal crests and folds and finer wrinkles, the rather short, subconical or semiglobular appendix bursae, with variably strongly sclerotised apical part, and the membranous, discoidal or rather quadrangular corpus bursae with fine wrinkles and with two signa, one of them variably large and elliptical, another long and thin, ribbon-like.

Distribution. A Ponto-Turkestanian group comprising mostly stenochorous and allopatric species, occurring from the Balkans to the Kopet-Dagh while the area of the only widely distributed species, *Anchoscelis (Alpichola) egorovi*, overlaps with those of *A. (A.) lactiflora*, *A. (A.) janhillmanni* and *A. (A.) azerica* in eastern Turkey, Iran and the Caucasus range.

The species of the subgenus inhabit rather open biotopes, at medium-high and high altitudes, often above the timberline, up to 3000m a.s.l., preferring rocky slopes and hillsides covered with open shrubby forests, brook valleys with open gallery forests, subalpine and xeromontane grasslands. The species are usually local but may appear in rather large individual numbers. The adults are on wing from the end of September to the end of November.

Anchoscelis (Alpichola) egorovi (O. Bang-Haas, 1934) **comb. n.**

(Plate 12, Figs 3–4; Plate 40, Figs 17–26; gen. fig. 41)

Amathes egorovi O. Bang-Haas, 1934, *Entomologische Zeitschrift* 48: 56. Type-locality: [Russia, Daghestan] Chodzhal-Machi. Lectotype: male, in coll. NHM Vienna.

Lectotype designation. Lectotype of *Amathes egorovi*, here designated: male, "Type O. Bang-Haas" (printed red label), [Russia] "Dagestan, Chodzhal Machi (Khodzhal Makhi), 23.IX.(19)33, Rjabov" (with handwriting of Ryabov), "*Amathes (Orthosia)*"

egorovi O. BH. Daghestan, Caucasus, 3200 m" (with handwriting), "collectio Dr. Schawerda" (printed label); coll. NHM Vienna.

Synonymy

Agrochola egorovi laciniatae Wiltshire, 1958, *Journal of the Bombay Natural History Society* 55: 233, fig. 2, text fig. 2. Type-locality: Iraq, Rayat, Haj Omran, 5–6000 feet. Holotype: male, in coll. BMNH; **syn. n.**

Diagnosis. *Anchoscelis (Alpichola) egorovi* is the most widespread and externally most variable member of the subgenus. There are a few more or less recognisable tendencies in the variation of the size and the intensity of the pattern but no distinct geographical races can be distinguished within its large area. The intensity of the dark markings is very variable within almost all populations, practically patternless and strongly marked examples can be found in every locality. The strong median fascia, being typical of *A. (A.) egorovi*, is also can be obsolescent, except in the typical populations from Daghestan from where the few known specimens are all strongly marked. Oppositely, the populations occurring in the Zagghros Mts are most often somewhat larger on average than the Turkish ones and are pale ochreous-yellowish. The genitalia of both sexes are, however, conservative, displaying no mentionable differences between the externally often conspicuously different specimens. Thus, *A. (Alpichola) egorovi* is treated here as taxonomically homogeneous.

The type-species of the subgenus is characterised by the long and narrow, yellowish or rarely ochreous forewings with acutely pointed apex, characteristic variably dark grey arcuate median fascia, darkened reniform stigma and pale greyish suffused (not clearly white or whitish) hindwings.

The specific features of the male genitalia are the well developed apical process of the juxta, the long and fine spinulose field of vesica consisting of unevenly long spinules and the fine, spine-like terminal cornutus; those of the female genitalia are the deeply and evenly arched, more or less calyciform posterior margin of antrum, the relatively short ductus bursae with rather broad and proximally less tapering posterior section, and the rather discoidal bursa with weakly sclerotised basal part of appendix bursae and very weak signa.

The male genitalia of *A. (A.) egorovi* differ from all other congeners by the well-developed medio-apical process of juxta; from those of *A. (A.) azerica* by the somewhat shorter and more curved harpe, the broader and stronger dentate dorsal carinal plate, the weaker sclerotized basal tube of vesica, the proximally longer, distally shorter spinules of the medial spinulose field and the distinct two terminal diverticula; from those of *A. (A.) dubatolovi* by the more recurved ventral and the much basally located dorsal carinal plate, the shorter and more uneven spinulose field, the more detached terminal diverticula and the somewhat smaller and weaker terminal cornutus.

The female genitalia differ from those of the most similar *A. (A.) dubatolovi* by the broader and deeper posterior margin of antrum, the proportionally shorter and broader, proximally less tapering ductus bursae, the even weaker basal part of appendix bursae and the weaker signa; the other members of the subgenus have much narrower, more incision-like cleft of antrum, posteriorly broader, proximally more constricted and often strongly folded ductus bursae, stronger sclerotised appendix bursae and stronger signa.

Distribution. Anatolian-Caucasian. The species is known from Turkey, Syria, Iraq, Armenia, Georgia, Azerbaijan and Iran, towards the Central Elburs to the east and to the southern Zagghros (Fars, Esfahan) to the south.

Anchoscelis (Alpichola) azerica (Ronkay & Gyulai, 1997) **comb. n.**

(Plate 12, Figs 5–6; Plate 40, Figs 27–31; gen. fig. 42)

Agrochola azerica Ronkay & Gyulai, 1997, *Acta Zoologica Academiae Scientiarum Hungaricae* 43(2): 141, figs 5–6, 23–24. Type-locality: Azerbaijan, Talysh Mts, Massallynski district, Ysti-su. Holotype: male, in coll. P. Gyulai (Miskole).

Diagnosis. *Anchoscelis (A.) azerica* is a sister-species of *A. (A.) egorovi*. It can be easily separated from all other members of the subgenus by its dark orange-yellowish forewing ground-colour, strong orange-

brownish irroration of the median area and the dark brown, not ochreous-whitish antemedial and post-medial crosslines.

The male genitalia of *A. (A.) azerica* differ from those of *A. (A.) egorovi* by the more deltoidal juxta without distinct apical process, somewhat longer and straighter harpe, longer and narrower, less dentate dorsal carinal plate, the stronger rugose-cristate sclerotized field at the basal tube of vesica, the equally long spinules of the medial spinulose field and the large quadrangular/flap-like terminal diverticulum of the vesica.

Distribution. SE Caucasian. The species is known from Azerbaijan and the north-western part of Iran (Elburs Mts).

***Anchoscelis (Alpichola) lactiflora lactiflora* (Draudt, 1934) comb. n.**

(Plate 12, Figs 7–8; Plate 40, Figs 32–41; gen. fig. 43)

Amathes lactiflora Draudt, 1934, in Seitz, *Die Gross-Schmetterlinge der Erde* 3: 151, pl. 19, row a. Type-locality: [Turkey] Diyarbakir. Holotype: male (type destroyed).

Diagnosis. *Anchoscelis (Alpichola) lactiflora* is very similar externally to *A. (A.) janhillmanni* and *A. (A.) elbursica*, these three species form a distinct line within *Alpichola*. *A. (A.) lactiflora* can be distinguished externally from *A. (A.) janhillmanni* by its on average smaller size (wingspan 26–31 mm vs 33–38 mm), narrower, more pointed forewings with smaller, narrower orbicular and reniform stigmata; from *A. (A.) elbursica* by its on average smaller size, paler ochreous, not or only rarely brownish suffused forewings, paler defined crosslines and stigmata and lighter, milky whitish hindwings without or with only very weak brownish-greyish irroration at inner area and with obsolete (or deleted) discal spot. The differences between the two subspecies of *A. (A.) lactiflora* are discussed under the diagnosis of the ssp. *wautieri*.

The key features of the male genitalia of *A. (A.) lactiflora* are the apically curved terminal cornutus (a unique feature within *Alpichola*) and the flattened, less dentate ventral carinal plate (all other *Alpichola* species have thorn- or hook-like ventral carinal process); that of the female genitalia is the broadly V-shaped posterior cleft of the antrum and the medium-long and posteriorly strongly, asymmetrically dilated ductus bursae.

Distribution. Anatolian. The species is known mostly from the central regions of Turkey, it occurs also in other part of Turkey and in the Near East (Lebanon); the flight period is September-October.

***Anchoscelis (Alpichola) lactiflora wautieri* (Dufay, 1975) comb. n.**

(Plate 13, Figs 1–2; Plate 40, Figs 42–51; gen. fig. 44)

Agrochola wautieri Dufay, 1975, *Bulletin Mensuel de la Société Linnéenne de Lyon* 44: 150, figs 2, 4–5. Type-locality: Macedonia, Carino region, Prespa Lake. Holotype: male, in coll. MNHNP.

Synonymy

Agrochola fibigeri Hacker & Moberg, 1989, *Nota Lepidopterologica* 12(2): 130, gen. fig. 4. Type-locality: Greece, Chelmos, Kalavryta, 2150 m. Holotype: male, in coll. ZSM; **syn. n.**

Diagnosis. *Anchoscelis (Alpichola) wautieri* was originally described as an allopatric sibling species of *A. (A.) lactiflora*, based on certain external and genitalic features. Studies carried out on recent material of the latter species from central and eastern Turkey led to the discovery of a partly overlapping variation of the supposed specific features. The separation of the two taxa at specific level is, therefore, unsupported, so they are treated as two geographic races of the same species.

There is another taxon within *A. (A.) lactiflora wautieri* which was described as a distinct species, *A. (A.) fibigeri*. This taxon is known only from the unique male holotype, displaying conspicuous genitalic

differences with all other members of the subgenus. These genital features are rather unusual within the entire phyletic line, and the subsequent studies on externally similar specimens from the same (higher) ranges of the Chelmos Mts could not confirm the existence of another *Alpichola* species in Europe. Thus, despite the striking differences of the male genitalia (the vesica is narrowly tubular, without basal and subterminal diverticula but with a small group of tiny spinules medially, a rather large spinulose field subterminally and with a very long, slender, thorn-like terminal cornutus), the holotype of *A. (A.) fibigeri* is considered as a teratological specimen and, therefore, the taxon is treated here as synonymous with *A. (A.) lactiflora wautieri*.

The populations occurring in the higher mountain ranges of the central part of the Balkans differ from the nominate subspecies by their somewhat larger size, broader forewings with slightly stronger crosslines and more distinct maculation, the hindwing is somewhat more ochreous. Wingspan 28–32 mm.

The genitalia of the two subspecies show certain mentionable differences which are as follows: in the male genital capsule of the ssp. *wautieri* the valva is somewhat shorter and apically less tapering, with characteristically more curved tip of cucullus, the juxta has narrower apical and more rhomboidal basal part, and the harpe is somewhat finer. In the female genitalia, the antrum of ssp. *wautieri* has broader but shallower, more V-shaped posterior incision, the ductus bursae is somewhat shorter, the sclerotization of the appendix bursae is stronger and the signum is smaller.

Distribution. Ponto-Mediterranean. The western subspecies of *A. (A.) lactiflora* is known from Macedonia and Greece. A xerophilous species, inhabiting meso- and high montane steppes, rocky slopes and brook valleys, mainly near or above the timberline. The flight period is relatively short; the first moths appear at the beginning of September and are on the wing to the end of October.

***Anchoscelis (Alpichola) janhillmanni* (Hacker & Moberg, 1989) comb. n.**

(Plate 13, Figs 3–4; Plate 41, Figs 1–8; gen. fig. 45)

Agrochola janhillmanni Hacker & Moberg, 1989, *Nota Lepidopterologica* 12(2): 128, figs 4–5; gen. figs 3a–c. Type-locality: Turkey, Prov. Hakkari, Tanin Tanin Mts, Elkek Pass, 7 km NNE of Uludere, 2200 m. Holotype: male, in coll. ZSM.

Diagnosis. *Anchoscelis (Alpichola) janhillmanni* can be distinguished from the externally often very similar *A. (A.) lactiflora* by its larger size (wingspan 33–38 mm vs 26–31 mm), broader wings, the stronger double crosslines and well-defined outlines of stigmata; both stigmata are usually larger, broader than in *A. (A.) lactiflora*. Its closest relative is not this species but the externally less similar, on average smaller and somewhat darker, more brownish coloured *A. (A.) elbursica* from which *A. (A.) janhillmanni* differs, besides the size and forewing colouration, the paler clearer whitish hindwing with obsolete or deleted discal spot which is present in its sister taxon, and the inner area of the hindwing is usually irrorated with pale brownish-greyish. In the problematic cases the study of the genitalia provides an easy identification.

The male genitalia *A. (A.) janhillmanni* differ conspicuously from those of *A. (A.) elbursica* by its broader, larger basal plate of juxta, longer uncus, longer harpe, larger lateral carinal plate and smaller, less recurved ventral tooth, and the stronger spines of the spinulose field of the vesica; from those of *A. (A.) lactiflora* by the much larger ventral carinal tooth and the straight terminal cornutus.

In the female genitalia, *A. (A.) janhillmanni* has the narrowest and deepest posterior cleft of antrum within the subgenus, the posterior dilated section of ductus bursae is less asymmetrical than in *A. (A.) elbursica*, and the appendix bursae is somewhat less sclerotised than in its sister-species.

Distribution. Eastern Anatolian. The species is known from eastern and south-eastern Turkey and from NW Iran (Kordestan).

***Anchoscelis (Alpichola) elbursica* (Ronkay & Gyulai, 2006) comb. n.**

(Plate 13, Figs 5–6; Plate 41, Figs 9–18; gen. fig. 46)

Agrochola (Alpichola) elbursica Ronkay & Gyulai, 2006, *Esperiana* 12: 215, pl. 25, figs 6–7; gen. figs 12–13. Type-locality: Iran, Prov. Zanjan, W Elburs Mts, Tarom valley, 20 km NE of Zanjan, 2350 m. Holotype: male, in coll. P. Gyulai (Miskolc).

Diagnosis. *Anchoscelis (Alpichola) elbursica* is the eastern sister-species of *A. (A.) janhillmanni*. It differs from *A. (A.) janhillmanni* and *A. (A.) lactiflora* by its somewhat darker, more brownish suffused forewings, more distinctly marked crosslines and stigmata and the conspicuously darker, large discal spot of the hindwing; from *A. (A.) dubatolovi* by its ochreous or pale ochreous-brown forewings with stronger defined crosslines and stigmata and somewhat paler, less grey-brownish suffused hindwings. Wingspan 28–37 mm. The remarkably paler SW Iranian populations (Fars, Esfahan, Boyerahmad) possibly represent a distinct subspecies; further material and studies are needed to decide this question.

The male genitalia of *A. (A.) elbursica* differ from those of *A. (A.) janhillmanni* by the broader but shorter basal plate of juxta with stronger sclerotised dorso-apical margins, shorter harpe, weaker lateral and stronger, even more dentated and recurved ventral tooth of the carina, the smaller terminal cornutus and the finer spinulose field of the vesica; from those of *A. (A.) lactiflora* by the shorter basal and narrower apical part of juxta, the shorter and thicker harpe, the much robust and hooked ventral carinal plate, and the thinner, straight terminal cornutus.

In the female genitalia, the postero-medial cleft of the lyriform ventral plate of the antrum is much broader, more U-shaped in *A. (A.) elbursica*, the sclerotisation of the appendix bursae is stronger, broader and the rounded signum-plate is larger than in *A. (A.) janhillmanni*; the cleft of the antrum is more angulate and deeper, than in *A. (A.) lactiflora*, the ductus bursae is longer and proximally thinner, and the appendix bursae is stronger sclerotised.

Distribution. The species is the most easterly distributed member of the *A. (A.) lactiflora* line, occurring sympatrically (and syntopically) with *A. (A.) egorovi*. It has been found in the western part of the Elburs Mts, near Zanjan, inhabiting mountain steppes on steep rocky slopes; the moths are on the wing in October.

Remarks. The illustrations of the genitalia of the species have been incorrectly numbered in the original description. In reality, the genitalia of *A. (A.) elbursica* are shown in the Figs 14 and 15 while the Figs 12–13 illustrate *A. (A.) dubatolovi* and the Fig. 16 refers to *A. (A.) janhillmanni*.

***Anchoscelis (Alpichola) dubatolovi* (Varga & Ronkay, 1991) comb. n.**

(Plate 13, Figs 7–8; Plate 41, Figs 19–28; gen. fig. 47)

Agrochola dubatolovi Varga & Ronkay, 1991, *Acta Zoologica Academiae Scientiarum Hungaricae* 37(3–4): 285, gen. figs 59–60. Type-locality: Turkmenistan, Kopet-Dagh, Dushak Mt., 15 km N of Firyuza. Holotype: male, in coll. BIN.

Diagnosis. *Anchoscelis (Alpichola) dubatolovi* is rather remote from the other two lines, it differs from all other members of the subgenus by the grey or grey-brownish forewing ground colour. Wingspan 32–36 mm.

The key feature of the male genitalia is the opposite position of the two strongly sclerotized, dentate plates of the carina of which the dorsal one is eversible and located rather far from the dorsal end of aedeagus in the everted vesica. The medial spinulose field of *A. (A.) dubatolovi* is as long as in *A. (A.) egorovi* but the terminal cornutus is finer, longer, having fine basal plate and the two subterminal diverticula are less detached; the other species of *Alpichola* have shorter spinulose field and differently shaped, most often stronger and longer terminal cornutus.

The female genitalia of *A. (A.) dubatolovi* are most similar to those of *A. (A.) egorovi* but the posterior edge of the antrum is somewhat narrower, the ductus bursae is longer and narrower, stronger sclerotised and folded, and the appendix bursae is somewhat more sclerotised.

Interestingly, *A. (Alpichola) dubatolovi* sometimes can be confused with the rather unicolorous greyish-brownish specimens of *A. (Anchoscelis) oropotamica*, from which it is separable by the somewhat

more pointed forewings, evenly arched (not sinuous) postmedial line and the more variegated hindwings with darker marginal greyish patches and stronger discal spot.

Distribution. The species is known from the Golestan region in Iran and from both sides of the Kopet-Dagh massif in Iran and Turkmenistan. The moths are on the wing in September-October.

Subgenus *Osthelderichola* Beck, 1991

Osthelderichola Beck, 1991, *Atalanta* 22(2–4): 205. Type-species: *Agrochola osthelderi* Boursin, 1951, by original designation.

Diagnosis. The subgenus comprises two species, *A. (O.) osthelderi* and *A. (O.) gratiosa*, resembling externally mostly the taxa of the *A. (A.) nitida*-group, but the genitalia show the distinctness from the other species-groups of *Anchoscelis*. The two species have a number of specific apomorphies in the genitalia of both sexes which separate them relatively strongly but the similar configuration of the vesica, the longitudinally folded sclerotised part of ductus bursae and the absence of the sclerotised lobe of corpus bursae unify the lineage.

The group features of the male genitalia are the shortly cylindrical aedeagus with weak carinal plates, the ventrally recurved, long, tubular vesica with two membranous basal diverticula, strongly scobinate medial and distal parts, without terminal cornutus and very weak or fully reduced distal spinulose field. The valvae are long and apically acute, with stronger or weaker apical costal lobe, the harpe is dorsally positioned, having strong basal plate fused with the sclerotised posterior edge of sacculus (which may have a spiniform ventral process).

In the female genitalia, the ovipositor of *Osthelderichola* is very long and weak as in certain groups of *Anchoscelis* but is proportionally longer than in the other subgenera due to the short and weak corpus bursae, the calyculate antrum is finely sclerotised, short or medium-long, the sclerotised posterior part of ductus bursae is longitudinally folded, the appendix bursae is more or less discoidal, variably strongly wrinkled-ribbed, the corpus bursae is small, discoidal-ovoid, tiny signum patches may be present.

Distribution. Ponto-Mediterranean-Anatolian.

Anchoscelis (Osthelderichola) osthelderi (Boursin, 1951) **comb. n.**

(Plate 14, Figs 1–2; Plate 41, Figs 29–38; gen. fig. 48)

Agrochola osthelderi Boursin, 1951, *Zeitschrift der Wiener Entomologischen Gesellschaft* 36: 159, pl. 12, fig. 1. Type-locality: Turkey, Marash. Holotype: male, in coll. ZSM.

Diagnosis. *Anchoscelis (Osthelderichola) osthelderi* is easily distinguishable from its sympatrically occurring sister-species, *A. (O.) gratiosa*, by the different wing shape and colouration, the different colour of the venation and the paler filling of the reniform stigma. The body of *A. (O.) osthelderi* is more robust than that of *A. (O.) gratiosa*, the forewings are more remarkably broader and less pointed, more unicolorous with paler, not or only very finely darker defined antemedial and postmedial crosslines, the darker median fascia is only exceptionally prominent, most often obsolete. The forewing veins are always whitish-ochreous, and the reniform stigma is filled with ground colour; the subterminal line is often defined by a full row of blackish dots which is missing or incomplete in *A. (O.) gratiosa*. Last but not least, the hindwing of *A. (O.) osthelderi* is conspicuously darker, more unicolorous than in *A. (O.) gratiosa*. It differs externally from the species of the *A. (A.) nitida*-group by its shorter, somewhat broader forewing with rather convex costal margin having paler ground colour and markings, except (possible) blackish spots of subterminal line. Wingspan 28–33 mm.

The male genitalia of the two *Osthelderichola* species also show conspicuous differences. In *A. (O.) osthelderi* the juxta is narrower and higher, the sacculus is smaller, weaker sclerotised, the distal part of valva is broader and more arched, having broader cucullus, shorter and curved harpe and finely crenelate-serrate subapical costal plate; in addition, *A. (O.) osthelderi* has sclerotized spine at saccular margin which is absent in *A. (O.) gratiosa*. The aedeagus is somewhat more arched and the vesica lacks the weak distal spinulose field which is present in *A. (O.) gratiosa*.

The female genitalia of *A. (O.) osthelderi*, when compared with those of *A. (O.) gratiosa*, have much larger, cup-shaped sclerotized part of antrum, narrower and shorter, more evenly sclerotized ductus bursae, smaller, shorter appendix bursae and the corpus bursae has two small signa which are absent from *A. (O.) gratiosa*.

Distribution. Ponto-Mediterranean-Anatolian. The species is known from the Balkans (Bulgaria and Greece), certain islands of the Aegean archipelago, the Near East and from large areas of Turkey. It is strongly xerophilous, inhabiting shrubby or bushy dwarfed oakwoods and mixed oak forests, in certain places also in more open biotopes. The flight period is September-October.

***Anchoscelis (Osthelderichola) gratiosa* (Staudinger, 1881) comb. n.**

(Plate 14, Figs 3–4; Plate 41, Figs 39–48; gen. fig. 49)

Orthosia gratiosa Staudinger, 1881, *Horae Societatis Entomologicae Rossicae* 16: 76. Type-locality: Turkey, Amasia. Lectotype: male, here designated; in coll. ZMHU.

Lectotype designation. Lectotype of *Orthosia gratiosa*, here designated: male, "Origin" (pink label), [Turkey] "Amasia, Manis. [= Manisadjian]" (yellow label with handwriting), 5/10 (with handwriting), coll. ZMHU.

Diagnosis. The clasping apparatus of *A. (O.) gratiosa* resembles strongly the members of the subgenus *Alpichola*; due to this fact the species was erroneously associated with *Alpichola* until the revision of the European *Agrochola* s. l. fauna (Ronkay et al. 2001).

A small species, being easily distinguished from the externally similar taxa of the *A. (A.) nitida*-group by its smaller size (wingspan 25–30 mm), more slender body, rather pale brownish forewings with less conspicuous dark pattern except dark definition of subterminal line and by the relatively less darkened inner part of the hindwing with well-discernible (although diffuse) discal spot. It differs from its closest relative, *A. (O.) osthelderi*, by its slenderer body, narrower forewings with stronger dark defined antemedial and postmedial crosslines, less prominently pale covered veins, darker filled reniform stigma and remarkably paler, though rather dark brown suffused, hindwings.

The specific features of the male genitalia distinguishing *A. (O.) gratiosa* from *A. (O.) osthelderi* are the very large, shield-like juxta, the strong sacculus having sclerotised distal margin fused with basal plate of harpe, the strong and straight harpe, the narrow and straight, cuneate distal part of valva with acute apex and minute subapical costal lobe. The aedeagus is less arcuate than that of *A. (O.) osthelderi*, the terminal part of vesica possesses a short and weak spinulose field and the spiniform ventral saccular process, being typical of *A. (O.) osthelderi* is absent.

The female genitalia differ from those of *A. (O.) osthelderi* by the much shorter, weaker antrum, the longer, distally more tapering ductus bursae, the larger and more rounded, less wrinkled-ribbed appendix bursae and the entirely membranous corpus bursae, lacking the signa.

Distribution. Ponto-Mediterranean. It has been recorded only from the southern part of the Balkans, including the archipelago, and from Turkey and the Near East.

A locally distributed xero- and thermophilous species. Its flight period is relatively long; the first moths emerge in mid-September, while a few examples can be observed even at the end of November in the same area.

Subgenus *Rufachola* Beck, 1991

Rufachola Beck, 1991, *Atalanta* **22**(2–4): 205. Type-species: *Phalaena Noctua helvola* Linnaeus, 1758, by original designation.

Diagnosis. A monotypical lineage, represented by a relatively large species (wingspan 34–45 mm) with characteristic external appearance. It has strong body, finely ciliate male antenna, elongate, apically pointed forewings, with generally reddish or red-brown ground colour, distinctly marked, sinuous crosslines and variably prominent greyish and brown filling of the orbicular and reniform stigmata; the basal and the inner half of marginal areas most often darker coloured. The hindwings are ochreous with reddish or pinkish margins and cilia and darker grey suffused in the inner areas, sometimes the hindwings are more brownish with paler ochreous marginal field; the last segments of the abdomen are also reddish or pinkish laterally and variably dark greyish dorsally.

The diagnostic features of the male clasping apparatus are the short and thick, curved uncus, the very large, more or less quadrangular penicular lobes, the long and slender valvae with parallel dorsal and ventral margins, very short sacculus, long and thin harpe, shortly wedge-shaped digitus, and the long, acutely triangular cucullus with very long corona. The vesica is broadly tubular, upturned dorsally then curved laterally, having two large subconical medial and a smaller, subterminal diverticula and a long, stick-like terminal cornutus; the distal spinulose field is reduced to a few finely sclerotised ribs.

The female genitalia are characterised by the shortly conical ovipositor, the rather short and broad, quadrangular antrum, the long, tubular, weakly sclerotised ductus bursae with stronger sclerotisation at its junction to appendix bursae, the discoidal, less sclerotised appendix bursae and the elliptical-ovoid corpus bursae having four short and weak signum-stripes.

Rufachola and *Haemachola* form a common clade within *Anchoscelis*. *Rufachola* differs from its closest relative by the larger size, stronger body and different colouration, and several details of the genitalia. In males, *Rufachola* has much shorter and thicker uncus, larger and more quadrangular penicular lobes, thinner harpe and a well-developed digitus which is appearing in *Haemachola* as a short ventral extension of valva. The vesica is differently curved basally and the armature of the distal part is also different, as *Rufachola* has strong terminal cornutus and reduced spinulose field while in *Haemachola* the terminal cornutus is weaker, often double or triple, and the spinulose field is longer, stronger. In the females, the sclerotized parts of ductus bursae and appendix bursae are much weaker in *Rufachola*, and the corpus bursae has the regular four, though short and weak, signum stripes.

Anchoscelis (Rufachola) helvola helvola (Linnaeus, 1758)

(Plate 14, Figs 5–6; Plate 41, Figs 49–52; Plate 42, Figs 1–8; gen. fig. 50)

Phalaena Noctua helvola Linnaeus, 1758, *Systema Naturae* (Edn 10) **1**: 507. Type-locality: Finland. Lectotype: male, in coll. LS London.

Synonymy

Phalaena Bombyx rufina Linnaeus, 1758, *Systema Naturae* (Edn 10) **1**: 822. Type-locality: Germany;

Phalaena Noctua emmedonia Cramer, 1779, *De Uitlandsche Kapellen Voorkommende in Drie Waereld-Deelen Asia, Africa en America* **13**: 92, pl. 247, fig. D. Type-locality: [USA] Virginia;

Phalaena Noctua catenata Esper, 1788, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen* **4**(2): 327, pl. 123, figs 1–2. Type-locality: [Germany] Leipzig region;

Orthosia helvola var. *sibirica* Staudinger, 1882, *Entomologische Zeitung. Entomologischen Vereine zu Stettin* **43**: 46. Type-locality: [Russia or Kazakhstan] Altai. Lectotype: male, here designated, in coll. ZMHU; **syn. n.**;

Phalaena Noctua punica Borkhausen, 1792, *Der Phalaenen zweite Horden, Eulen. Naturgeschichte der Europäischen Schmetterlinge nach Systematischer Ordnung* **4**: 687. Type-locality: no locality given.

Lectotype designation. Lectotype of *Orthosia helvola* var. *sibirica*, here designated: male, "Origin" (pink label), "Altai, Kinderm [ann]" (green label), "Altai" (white label), "Coll. Led.", coll. ZMHU.

Diagnosis. The south-eastern populations are regularly remarkably paler than the European ones, the taxon *pallescens* is considered as a distinct geographic subspecies. Interestingly, the specimens known

from Algeria (Plate 42, Figs 4, 8) are very similar externally to the western Asiatic ones but the material is still insufficient to decide whether they represent another geographic subspecies or there is a cline in the colouration like in the case of *Leptologia (L.) lota*.

Anchoscelis (Rufachola) helvola is the largest western Palaearctic member of the genus *Anchoscelis* with its wingspan 34–45 mm. It is an unmistakable species, no similarly shaped and coloured Noctuidae species is known. The species is rather variable in the forewing ground colour and the intensity of the noctuid maculation.

The diagnostic genitalia features are discussed in detail under the Diagnosis of the subgenus.

Distribution. Euro-Siberian. The most widespread species of the genus, it occurs in large areas of Europe, from the Iberian peninsula to the Ural region, and western and central Siberia (it has occasionally been recorded from within the Arctic Circle), and in NW Africa (Algeria). The populations occurring in the Near East and Asia Minor represent the ssp. *pallescens*.

A species typical of the zonal forest steppe, it occurs in very different forested and rather open biotopes. The flight period starts at the end of August, but the main flight takes place in October.

Anchoscelis (Rufachola) helvola pallescens (Warren, 1911)

(Plate 14, Figs 7–8; Plate 42, Figs 9–16; gen. fig. 51)

Amathes helvola ab. *pallescens* Warren, 1911, in Seitz, *Die Gross-Schmetterlinge der Erde* 3: 152, pl., 37, row g. Type-locality: Turkey, Amasia. Holotype: male, in coll. BMNH.

Diagnosis. The ssp. *pallescens* differs conspicuously from the otherwise rather variable ssp. *helvola* by the generally paler, most often uniformly pale ochreous-brown with fine pinkish or rufous tinge, reduced, often completely missing crosslines and pale stigmata; the hindwing is also paler, light pinkish-ochreous.

Distribution. Anatolian. The eastern subspecies of *A. (R.) helvola* occurs in Lebanon, Turkey, Iraq, Armenia and Azerbaijan. The flight period is rather long, extending from the end of September to the end of December (though the moths fly in the winter only in the Near East).

Remarks. The designation of the neotype of *pallescens* was unnecessary as the holotype of Warren exists in the collection of the BMNH. Thus, the type-locality is Amasia and not Marsh.

Subgenus *Haemachola* Beck, 1991

Haemachola Beck, 1991, *Atalanta* 22(2–4): 205. Type-species: *Noctua haematidea* Duponchel, 1827, by original designation.

Diagnosis. The only species belonging to this subgenus was incorrectly associated by Berio (1985) with the genus *Jodia* Hübner, 1821 on the basis of the similarity of the male genital capsule. The subsequent authors, however, have not followed this placement and retained the species in *Agrochola* s.l. Its closest relative is, despite the striking external differences, the subgenus *Rufachola*.

The main external features of the subgenus are the moderate size (wingspan 28–36 mm), the slender body and the narrow, apically acute forewing; the male antenna is ciliate with short cilia arranged into two lateral rows, the female antenna is finely, sparsely ciliate; basal abdominal coremata present.

The group features of the male genitalia are as follows: uncus long and thin, swollen at base, tapering distally, tegumen broad, with very large, more or less rounded penicular lobes, valva slender, elongate, with parallel dorsal and ventral margins, large and acutely triangular cucullus and very long corona, costal process expanded apically into small, triangular, pollex-like lobe at ventral extremity, sacculus small, narrow, harpe with weak basal and large, strong, curved and very acute apical part. Aedeagus smoothly

arching ventrally, vesica relatively broad, projecting ventrally and coiling once, with median and apical diverticula, distal spinulose field long, narrow, composed of minute spinules and a proximal bunch of very fine and short cornuti, terminal cornutus (cornuti) medium-sized, spine-like.

In the female genitalia, antrum bowl-like, ductus bursae long, slightly wrinkled, folded and notably broadened at its insertion into the bursa, its folding being heavily sclerotised, bridge-like. Appendix bursae very large, broad, with sclerotized distal half, corpus bursae sphaerical, with two or three very short signa.

Anchoscelis (Haemachola) haematidea (Duponchel, 1827)

(Plate 15, Figs 1–2; Plate 42, Figs 17–26; gen. fig. 52)

Noctua haematidea Duponchel, 1827, *Histoire Naturelle de Lépidoptères ou Papillons de France* 7(1): 365, pl. 122, fig. 5. Type-locality: [Italy] Florence. Types: in coll. MNHNP.

Synonymy

Orthosia haematidea f. *causta* Turati, 1913, *Entomologist's Record and Journal of Variation* 25: 16. Type-locality: Italy, Sardinia, Monte Chiesa. Holotype: male;

Orthosia haematidea rubrior Rungs, 1972, *Bulletin du Muséum National d'Historie Naturelle, Série 3, Zoologie* 46: 683. Type-locality: Morocco, Larache, El Korimda. Holotype: male, in coll. MNHNP.

Diagnosis. A strongly variable species, several names have been proposed for colour variants of *A. (H.) haematidea*; specimens referable to most described forms can be found in many populations. There are certain geographic tendencies in this variation as the lighter forms are more frequently occur in the northern areas while the darkest forms in more southerly ones. Furthermore, coastal populations tend to be larger, paler, individuals and inland populations darker and smaller. Thus, no geographical races can be easily recognized, therefore the taxon is treated as taxonomically homogeneous.

Anchoscelis (Haemachola) haematidea is easily separable from the externally somewhat similar *Anchoscelis (R.) helvola* and *Agrochola lychnidis* by its smaller size, more pointed forewings with more obscure crosslines and stigmata and the darker, most often uniformly dark greyish hindwings.

The genitalia of both sexes are remarkably different from those of the closest related *Anchoscelis (R.) helvola* the main specific differences are as follows: *Anchoscelis (Haemachola) haematidea* has longer and thinner uncus, smaller penicular lobes, larger juxta, stronger, distally angled and apically acute harpe, pollex-like process of digitus, finer terminal cornutus(cornuti) and longer distal spinulose field (males); longer antrum, stronger sclerotised and caudally more tapering ductus bursae, larger and much stronger sclerotised appendix bursae and smaller and weaker signa of corpus bursae (females).

Distribution. Western Mediterranean. It is known from western and south-western Europe (Iberian Peninsula, including both Portugal and Spain, France (both Mediterranean and Atlantic shores), Corsica, Sardinia, peninsular Italy and southern England) and from the Maghreb countries (Morocco, Algeria and Tunisia).

Anchoscelis (H.) haematidea inhabits woodlands with heath (*Erica*) understorey, mixed shrublands with heath, and on extensive heathlands. It is a local species, its populations are often relatively numerous. The adults are on the wing from early October to early December.

Genus *Maraschia* Osthelder, 1933

Maraschia Osthelder, 1933, *Mitteilungen der Münchner Entomologischen Gesellschaft* 23: 76. Type-species: *Maraschia grisescens* Osthelder, 1933, by original designation.

Diagnosis. The genus is characterised by the larger measures (wingspan 36–44 mm), broadly triangular forewings and the variably distinct noctuid pattern. This pattern can be pale or only partly defined on a uniformly pale ochreous-grey ground, with only a few darker elements, especially the filling of the stig-

mata (the *grisezens*-group) or with sharply black outlined orbicular and reniform stigmata on a shining rosy-grey ground. The antennae are filiform in both sexes, with somewhat longer ciliation on the males.

The male genitalia are characterised by the long, slender valvae with acute apex, short cucullus with weak but distinct corona, heavily sclerotised digitus with long, cuneate, often partly asymmetrically bifid ventral processes, and the long, tubular vesica with small, subbasal cornutus, a longer medial sclerotised crest terminated in a variably large, rounded field of fine spinules and a large, membranous subterminal diverticulum.

The diagnostic features of the female genitalia are the very long and weak ovipositor, the calyculate-lyriform antrum, the shortly tubular, cristate-rugose ductus bursae, the reticulate-wrinkled appendix bursae and the short, globular-discoidal, weakly membranous corpus bursae with five small, rounded signum-patches.

Distribution. Ponto-Mediterranean - Central Asiatic. The two species of the *M. grisezens* line are distributed from the Balkans to western -Turkestan, while *M. secunda* occurs in the Indus valley in Pakistan.

Maraschia grisezens grisezens Osthelder, 1933

(Plate 15, Figs 3–4; Plate 42, Figs 27–34; gen. fig. 53)

Maraschia grisezens Osthelder, 1933, *Mitteilungen der Münchner Entomologischen Gesellschaft* 23: 76. Type-locality: Turkey, Marsh. Holotype: male, coll. ZSM.

Synonymy

Orthosia grisezens caspica Kuznetsov, 1958, *Entomologicheskoe Obozrenie* 37: 188, fig. 8. Type-locality: Turkmenistan, Kara-Kala. Holotype: male, coll. ZISP.

Diagnosis. *Maraschia grisezens* has three more or less disjunct populations, in the Balkans, in Crete and in western Asia. Their external appearance show certain geographical tendencies but the colouration of the forewing and the intensity of the forewing pattern is rather transitional throughout the Asiatic populations, thus they are considered as taxonomically homogeneous. The external and genital features of the Cretan populations are generally matching with those of certain Asiatic ones, and they are treated here, therefore to belong to the nominotypical ssp. *grisezens* while the Balkanic ones are distinguished from them as a distinct geographic subspecies.

The type-species of the genus differs from *M. hissarensis* by its better defined crosslines and stigmata on a more greyish ground, and the veins of the forewing are usually paler than the ground colour.

The genitalia of the two species are easily distinguishable in both sexes as *M. grisezens* has, comparing with *M. hissarensis*, narrower valvae with shorter and simple process of digitus, longer harpe and differently shaped juxta, stronger and more basally positioned cornutus and stronger medial crest in the vesica (males); regularly calyciform, smoothly sclerotised antrum, and evenly tubular ductus bursae, without large, sclerotised postero-lateral sclerotised section which is characteristic of *M. hissarensis* (females).

Distribution. The typical subspecies of *M. grisezens* is distributed in western Asia, from western Turkey and the Near East to the southern Zagros Mts and the Kopet-Dagh massif in Iran and Turkmenistan; it occurs also in Crete. The moths are on the wing in September-October.

Maraschia grisezens balcanica ssp. n.

(Plate 15, Figs 5–6; Plate 42, Figs 35–38; gen. fig. 54)

Holotype. Male, Croatia, Velebit, Maly Alan Pass, I. Richter, 19.VIII.2014, slide No.: RL11824 (coll. G. Ronkay).

Paratypes. Croatia. 1 female, with same data as holotype, slide No.: RL11823 (coll. HNHM); 3 males, Karlobag, 30.VII.1989, L. Ábrahám (coll. P. Gyulai), slide No.: GYP3170; 2 females, South Velebit, 26.VIII.2011, I. Richter (coll. Richter); 1 male, South Velebit, 15.VIII.2003, L. Srnka (coll. Srnka); 1 female, South Velebit, 12 km Gracac, 1200 m, 11.VIII.2010, L. Srnka (coll. P. Gyulai). **Makedonia.** 1 male, Makedonia, Ochrid, 12.VIII.1955, F. Kasy (coll. NHMW); 1 female, with same locality but 1000 m,

24.VIII.1955, F. Kasy (coll. NHMW); 1 female, with same locality but 31.VIII.1955, F. Kasy (coll. NHMW). **Greece.** 1 male, Peloponnes, Parnon-Mountains, north-east Kosmas, 850 m, 37°07'59"N, 22°45'41"E, 12.IX.2004, E. Friedrich (coll. Friedrich).

Diagnosis. The western subspecies differs from the typical ssp. *grisescens* by its paler, more whitish ground colour with stronger median suffusion and more distinct noctuid pattern, and by a few details of the genitalia. In the males, the ssp. *balcanica* has longer and straighter harpe and slenderer sclerotised plate of the subbasal cornutus, in the females, the antrum is proportionally larger and broader, stronger sclerotised, and the ductus bursae is shorter, with stronger medial sclerotisation than in the ssp. *grisescens*.

Distribution. The new subspecies occurs in the Balkans (Croatia, Makedonia, continental Greece). The phaenology of the western populations is similar to that of the typical subspecies.

Maraschia hissarensis Varga & Ronkay, 1991

(Plate 15, Figs 7–8; Plate 42, Figs 39–42; gen. fig. 55)

Maraschia hissarensis Varga & Ronkay, 1991, *Acta Zoologica Academiae Scientiarum Hungaricae* 37(3–4): 287, pl. 2, fig. 22, gen. fig. 40. Type-locality: Tadjikistan, Hissar Mts, Kondara valley. Holotype: female, in coll. BIN.

Diagnosis. *Maraschia hissarensis* differs externally from *M. grisescens* by its more reddish or ochreous-pinkish shade of the forewing and the less distinctly marked crosslines; the filling of the stigmata is also paler.

The male genitalia differ from those of the two other members of the genus by the double apical process of the digitus and the differently shaped juxta; the harpe is shorter than in *M. grisescens* but longer than in *M. secunda*.

The female genitalia of *M. hissarensis* can be distinguished from those of the other two congeners by the dorso-medially incised antrum and the well-developed and sclerotized lateral appendage of the posterior part of ductus bursae; the ductus bursae is longer and more ribbed, the appendix bursae is shorter and the signa are more equally sized than in *M. grisescens*.

Distribution. Turkestanian. The species occurs in the Hissar Mts and the Tavildara region in Tadjikistan. The first moths appear relatively early in the year, at the end of July and are on the wing to the end of September.

Maraschia secunda Hacker, 1990

(Plate 16, Figs 1–2; Plate 43, Figs 1–3; gen. fig. 56)

Maraschia secunda Hacker, 1990, *Esperiana* 1: 246, pl. B, fig. 5. Type-locality: Pakistan, Kohistan, Indus valley, 2 km W of Pattan, 1050 m. Holotype: male, in coll. ZSM.

Diagnosis. The easternmost known member of the genus is easily separable from the other two species of *Maraschia* by its darker, more shining grey forewing ground colour, and the sharp black outlines of orbicular and reniform stigmata.

The structure of the male genitalia also shows the distinctness of the two main lineages of the genus, the diagnostic features are the distally evenly tapering valva with acute and finely arched cucullus; rather short subapical and fine, triangular antero-medial processes of digitus and huge, rounded dorsal lobe of sacculus, and the reduced armature of the vesica.

Distribution. The species appears as endemic to the upper Indus valley in Pakistan. The few known specimens were collected in low altitude deciduous forest remnants, in September–October.

Genus *Hazaropolia* gen. n.

Type-species: *Eremopola hazara* Hacker, 1990, here designated.

Diagnosis. The new genus is closely related to *Maraschia*, the differential features are as follows: the body of the moths of *Hazaropolia* is conspicuously more gracile and the sclerotization of the wings is also weaker, the forewing markings are much stronger, more complex, and the male antenna is somewhat stronger ciliate-fasciculate than in *Maraschia*.

The male genitalia are characterised by the strongly simplified valval structure, the shape of the valva resembles slightly that of *Sunira* but narrower and more tapering apically, and the position and shape of the harpe is different. The vesica is also rather simple, relatively short and broadly tubular, densely scobinate, with two well-developed parallel fields of fine, long spinules.

The configuration of the female genitalia is similar to that of *Maraschia* but the antrum is weaker and shorter, the posterior part of ductus bursae is entirely membranous, the anterior part is smoothly sclerotised, the surface of appendix bursae is more densely rugose-reticulate and the corpus bursae lacks the signa.

Distribution. Western Himalayan. The only known species of the genus occurs in all three large mountain systems of NW Pakistan.

Hazaropolia hazara hazara (Hacker, 1990) **comb. n.**

(Plate 16, Figs 3–4; Plate 43, Figs 4–12; gen. fig. 57)

Eremopola hazara Hacker, 1990, *Esperiana* 1: 252, figs 14a; 14b. Type-locality: Pakistan, Kaghan valley, Saiful Muluk. Holotype: male, coll. Hacker (ZSM).

Diagnosis. The typical subspecies is generally darker and the forewings are less variegated, usually deep ashy-grey with some plumbeous shade, and the hindwings are also darker, more brownish-grey-suffused than in the ssp. *marmorata*. The genitalia of the two subspecies differ mainly in the shape of the juxta which is medially more constricted and the dorsal section has almost parallel sides; in addition, the harpe of the ssp. *hazara* is evenly wide from its base, less tapering apically and the uncus is broader than in the northern subspecies.

Distribution. SW Himalayan. The typical subspecies of *H. hazara* occurs in the higher parts of the Kaghan valley.

Hazaropolia hazara marmorata ssp. n.

(Plate 16, Figs 5–6; Plate 43, Figs 13–20; gen. fig. 58)

Holotype. Male, Pakistan, Himalaya Mts, Kashmir, Deosai Plains, 3650 m, 35°01'N, 75°12'E, 16–18.VIII.1998, G. Ronkay & Z. Varga (coll. G. Ronkay).

Paratypes. Pakistan. 6 males, with the same data as the holotype (coll. HNHM); 4 males, with the same data as the holotype (coll. G. Ronkay and Gy. Fábíán); 3 males, 3 females, from the same locality but from 3400 m, 5.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay and Gy. Fábíán); 1 male, from the same locality but from 3700 m, 35°01'N, 75°12'E, 6.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay); 1 female, Bubin village, 3300 m, 14.VIII.2001, G. Ronkay (coll. G. Ronkay); 5 males, 2 females, 3 km NW of Chilam Chauki, 75°04,8'E, 35°04'N, 3380 m, 22–23.IX.1998, P. Gyulai & A. Garai (coll. P. Gyulai); 3 males, close to Bubin village, 3030 m, 24–25.IX.1998, P. Gyulai & A. Garai (coll. P. Gyulai); 3 males, 1 female, Hindukush Mts, Shandur Pass, 3300 m, 29–31.VIII.1997, Gy. Fábíán & G. Ronkay (coll. P. Gyulai, G. Ronkay and Gy. Fábíán); 1 male, 5 km E of Shandur Pass, 3750 m, 21–22.VIII. 2001, G. Ronkay (coll. G. Ronkay); 2 males, with the same data (coll. P. Gyulai and HNHM); 2 males, 1 female, 5 km E of Shandur Pass, 3250 m, 23.VIII.2001, G. Ronkay (coll. G. Ronkay); 4 males, with the same data (coll. P. Gyulai and HNHM).

Diagnosis. The northern subspecies differ conspicuously from the typical ssp. *hazara* by its paler, more whitish suffused and strongly whitish-grey variegated forewings, and the hindwings are also paler, more whitish-greyish than in the nominate subspecies.

The male genitalia of the ssp. *marmorata* have, in comparison with the ssp. *hazara*, somewhat larger and broader, dorsally more evenly tapering juxta, thinner uncus and basally broader harpe.

Distribution. The northern subspecies is distributed in the eastern Hindukush, the NW Karakoram and the Nanga Parbat area in the NW Himalayas. The moths inhabit the subalpine regions with rich herba-ceous vegetation above the timberline, they are on the wing in August-September.

Genus *Fivaldszkyola* Ronkay, 1984

Fivaldszkyola Ronkay, 1984, *Acta Zoologica Academiae Scientiarum Hungaricae* 30: 183. Type-species: *Cerastis mansueta* Herrich-Schäffer, 1850, by original designation.

Diagnosis. The genus is rather distant from the other groups of *Agrochola* s.l., but with certain imaginal morphological features similar to some taxa of the 'conistroid' branch of the generic complex. This fact led Beck (1996, 1999) to consider *Fivaldszkyola* as a genus distinct from *Agrochola* and *Anchoscelis*, his statement is confirmed here.

Fivaldszkyola contains three allopatric species, *F. mansueta*, *F. staudingeri* and *F. elami*, representing two lineages within the genus. The first two species are allopatric sister taxa while *F. elami* is relatively distant from this lineage, displaying remarkable differences in its external and genital features.

The external appearance of the genus is very characteristic. All three species of *Fivaldszkyola* are relatively small (wingspan 28–36 mm) with strong body and narrow forewing. Male antenna loosely fasciculate with short, weak cilia, female antenna filiform, very shortly, sparsely ciliate. Male abdomen rather slender, with long lateral ridges, abdomen of female thicker, flattened dorso-ventrally, slightly dilated caudally, as in several *Lithophane* species, last sternite of female broad, heavily sclerotized, deeply incised medially at caudal edge. Forewing apex finely rounded, outer margin finely crenulated; ground colour pale ochreous grey, bluish-grey or turquoise-grey, with variably intense olive-greyish and pale greenish shade and whitish and darker grey irroration. Subbasal, antemedial and postmedial lines broad, double, strongly sinuous, often partly interrupted, defined with whitish and blackish spots. Median fascia (the darkest part of wing) broad, diffuse, variably dark brownish grey, partly touching reniform stigma, lower parts of antemedial and medial lines and median area with weak ochreous-orange, reddish or rufous definition and suffusion. Orbicular stigma small, rounded, filled with greenish-grey or greyish, reniform stigma narrow, filled with dark brownish grey. Hindwing ochreous-grey, suffused variably strongly with dark greyish brown, veins, discal spot and transverse lines slightly darker, often obsolescent.

The diagnostic features of the male genitalia are the long and slender, medially constricted and distally somewhat dilated, dorsally arched valva with very long, S-shaped harpe, heavily sclerotised costal area with long and pointed or acute subapical digitus, the sclerotised, narrowly triangular cucullus lacking corona, the prominent, thinner or thicker digitiform clavus and the configuration of the vesica. Aedeagus broadly cylindrical, arcuate, with stronger ventral carinal plate; vesica long, tubular, weakly membranous, everted forward, basal part bent ventrally, curved upwards at medial third, basal third with two rather large diverticula projecting in opposite directions, medial third slightly inflated, densely scobinate and rugose-wrinkled. Distal third with a pointed spine- or thorn-like subterminal cornutus of variable length, and with a weak, narrow, field of fine spinules touching base of cornutus and with a large terminal diverticulum opposite, this diverticulum may be covered by fine, long spinules.

The female genitalia are characterised by the short and rather weak ovipositor with fine apophyses, the sclerotised, more or less lyriform antrum with slightly folded surfaces, the short, flattened, partly folded and strongly sclerotized ductus bursae, connected to antrum with short, membranous neck and variably sclerotized extensions proximally running into apical part of corpus bursae, an additional scler-

rotized plate may also be present. Appendix bursae conical or semiglobular, with weaker sclerotized plate or with a large, heavily sclerotized, conical 'pocket', corpus bursae elliptical, finely ribbed, with two long, narrow, ribbon-like signa.

Distribution. *Friwaldszkyola* has a rather restricted distribution extending from the south east Balkans and the Aegean archipelago eastwards to eastern Turkey, the Near East and Iran. The genus comprises xero- and thermophilous species, inhabiting hot, strongly isolated, rocky places with rather open, shrubby woodlands, most often dwarfed and/or hard-leaved oakwoods. The species are usually local and infrequent, their flight period is rather long, the adults can often be found throughout the whole winter period.

***Friwaldszkyola mansueta mansueta* (Herrich-Schäffer, 1850) comb. n.**

(Plate 16, Figs 7–8; Plate 43, Figs 21–30; gen. fig. 59)

Cerastis mansueta Herrich-Schäffer, 1850, *Systematische Bearbeitung der Schmetterlinge von Europa, Zugleich als Text, Revision und Supplement zu J. Hübner's Sammlung europäischer Schmetterlinge*, 2: 322, pl. 92, fig. 472. Type-locality: Turkey, Smyrna [= Izmir]. Lectotype: male, in coll. HNHM.

Synonymy

Orthosia mansueta var. *pontica* Staudinger, 1901, in Staudinger & Rebel, *Catalog der Lepidopteren des Palaearctischen Faunengebietes* 1901: 144. Type-locality: Turkey, Amasia. Lectotype: male, in coll. ZMHU; **syn. n.**

Diagnosis. The species has two, externally clearly separable geographic subspecies, *F. m. mansueta* and *F. m. sphakiota* while the Central and Eastern Anatolian populations show a cline in the forewing colouration from the darker and stronger marked typical *mansueta* to the f. *pontica*. In addition, there is a relatively large individual variation of these populations, while the Cretan subspecies is rather uniform in colouration and forewing pattern.

The nominate subspecies is the most colourful member of the entire genus, its forewing ground colour is olive-greenish, the f. *pontica* is bluish-grey or turquoise-greyish, the lower half of the median area is suffused with orange-ochreous, often with some golden shade, the outer stripe of the antemedial line and the lower half of the median fascia are orange-reddish or bright rufous (the median area is uniformly bluish grey in the f. *pontica* and the antemedial and medial lines have no or only very weak ochreous-orange definition). The external and genital differences between the two subspecies of *F. mansueta* are given under the Diagnosis of the ssp. *sphakiota*.

Friwaldszkyola mansueta can be distinguished from its twin species, *F. staudingeri*, by its on average larger measures (wingspan 30–36 mm vs 29–32 mm), more greyish and greenish suffused forewings, less prominent ochreous-reddish irroration below cell and the hindwings are darker, more unicolorous grey-brown.

In the male genitalia, *F. mansueta* differs from *F. staudingeri* by its large, somewhat broader but distally shorter juxta with evenly tapering dorsal (apical) part, more proximally projecting costal extension, more distally positioned and more evenly arcuate harpe and much shorter subterminal cornutus (about half as long as in *F. staudingeri*). In the female genitalia, the antrum of *F. mansueta* is somewhat larger than that of *F. staudingeri*, the proximal part of corpus bursae has no additional sclerotized plate between the sclerotized extensions of the ductus bursae, and the sclerotized area of the appendix bursae is significantly weaker, not pocket-like as in *F. staudingeri*.

Distribution. Ponto-Mediterranean. It is known from the south-eastern Balkans, the Aegean archipelago and from Turkey; the former references from the northern parts of the Near East refer most probably to *F. staudingeri*.

The species inhabits xerothermic tall-grass-steppes mixed with shrubby forest patches; the moths are on the wing, depending on the locality, from the end of September to December or even to January.

***Frivaldszkyola mansueta sphakiota* (Ronkay, Yela & Hreblay, 2001) comb. n.**

(Plate 17, Figs 1–2; Plate 43, Figs 31–35; gen. fig. 60)

Agrochola mansueta sphakiota Ronkay, Yela & Hreblay, 2001, *Noctuidae Europaeae* 5: 102, pl. 7, figs 40–42; gen. figs 60, 260.
Type-locality: Greece, Crete, 1 km S of Venerato, 18 km S of Heraklion, 350 m. Holotype: male, in coll. ZMUC.

Diagnosis. The Cretan subspecies is somewhat smaller than the ssp. *mansueta* (wingspan 29–33 mm). The forewing colouration is in between *F. m. mansueta* and *F. staudingeri*, due to its paler, rather ochreous-greyish, forewing ground colour but the dark hindwing and the darkened basal area of the forewing are typical of *F. mansueta*. The Cretan subspecies also differs from the nominotypical race by the less strongly marked crosslines with paler, more ochreous-orange definition, the paler ochreous suffusion of the median area, the smaller, less darkened orbicular and the more conspicuous, dark reniform stigma.

The different continental and Aegean populations of *F. mansueta* show no remarkable differences in the configuration of the genitalia. The males of *F. m. sphakiota* have, in comparison with *F. m. mansueta*, somewhat longer and slenderer, more arched harpe, thicker clavus and smaller terminal cornutus in the vesica.

Distribution. Endemic to Crete. The moths prefer xerothermic, most often rocky slopes and hillsides, especially on calcareous substrate. The flight period is long, extending from November to February–March.

***Frivaldszkyola staudingeri* (Ronkay, 1984) comb. n.**

(Plate 17, Figs 3–4; Plate 43, Figs 36–45; gen. fig. 61)

Agrochola staudingeri Ronkay, 1984, *Acta Zoologica Academiae Scientiarum Hungaricae* 30: 180, pl. 1, figs 3–4; gen. figs 1, 4.
Type-locality: Israel, Jerusalem. Holotype: male, in coll. ZMHU.

Diagnosis. *Frivaldszkyola staudingeri* is the southern sister-species of *F. mansueta*, resembling mostly to the Cretan ssp. *sphakiota* than to the different populations of the nominotypical ssp. *mansueta*. It differs from *F. mansueta* by its smaller size (wingspan 29–32 mm), more ochreous to ochreous-brown forewing ground colour and paler greyish suffused ochreous-whitish hindwing; the stigmata and the crosslines are more grey defined and less regularly outlined than in *F. mansueta*.

The male genitalia of *F. staudingeri* differ from those of *F. mansueta* by the larger penicular lobes, narrower, distally longer juxta, more apically projecting costal extension, shorter and less evenly arcuate harpe and the much longer subterminal cornutus (about twice as long as in *F. mansueta*) followed by a larger field of fine spinules.

In the female genitalia, the antrum of *F. staudingeri* is somewhat smaller, shorter than that of *F. mansueta*, the proximal part of corpus bursae has an additional sclerotized plate between the sclerotized extensions of the ductus bursae, and the sclerotized area of the appendix bursae is stronger sclerotized, rather pocket-like.

Distribution. Levantine. The species is known from the Near East and the Hatay region of Turkey. The flight period is long, extending from October to January.

***Frivaldszkyola elami* (Ronkay, 2001) comb. n.**

(Plate 17, Figs 5–6; Plate 37, Figs 13–20; gen. fig. 62)

Agrochola (*Anchoscelis*) *elami* Ronkay, 2001, *Annales historico-naturales Musei nationalis hungarici* **93**: 202, figs 2, 9. Type-locality: Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 38°03'N, 48°23'E. Holotype: male, in coll. Gy. Fábíán (Budapest).

Diagnosis. *Frivaldszkyola elami* differs externally from the other members of the genus by its somewhat more elongate, apically more pointed forewing, more unicolorous olive-greyish ground colour, without prominent markings, uniformly dark filling of the reniform stigma and the paler whitish grey hindwing without lighter marginal zone. It is worth to note that the series of the species is conspicuously homogeneous, the forewing ground colour and the intensity of the noctuid pattern and the shade of the hindwing are highly uniform, in spite of the related, externally strongly variable taxa. Wingspan 31–35 mm.

The male genitalia of *F. elami* differ from those of the two other congeners by the longer and more narrowly tubular vesica with densely spinose subterminal diverticulum and large, robust terminal cornutus, stronger, apically spatulate uncus, narrower tegumen, longer, and narrower juxta, straighter valva with larger clavus, stronger and shorter S-shaped harpe, and more apically projecting digitus; the sclerotized ventral edge of the costal plate is strongly serrate-cristate, not smooth as in *F. mansueta* and *F. staudingeri*.

The female and its genitalia are still unknown.

Distribution. Anatolian-Iranian. It is known from the Zagros Mts in Iran and a single locality of SE Turkey. The species was found as rather frequent in the type-locality, where the specimens were collected inside a deep rocky gorge. It is also worth to mention that only the male sex is known yet. The moths are on the wing in October–November.

Genus *Leptologia* Prout, 1901

Leptologia Prout, 1901, *Entomologist's Record and Journal of Variation* **13**: 183. Type-species: *Phalaena lota* Clerck, 1759, by original designation.

Diagnosis. The genus is relatively remote from the other large lineages of *Agrochola* s.l. by its external appearance and the configuration of the male genitalia. It contains two lineages the male genitalia of which display conspicuous differences in certain features (e.g. the lobes of the uncus or the structure and armature of the vesica), therefore these lineages are considered here as two distinct subgenera.

The main external features are as follows: medium-sized or small species (wingspan 26–40 mm) with relatively slender body, relatively long, slender, slightly upturned palpi, fasciculate male antenna with medium-long or very long fasciculate cilia, shortly ciliate female antenna. Forewing narrow with acute apex, outer margin evenly arcuate or slightly flattened, sometimes finely concave below apex. Ground colour varies from pale ochreous through ochreous-brown and reddish to dark plumbeous grey, subterminal line very characteristic, straight, vivid reddish or rufous, with fine ochreous line externally, lower half of reniform filled with black(ish). *Leptologia* differs from the different lineages of *Anchoscelis* mostly by the latter two features, which unify, on the other hand, the two subgenera.

The group features of the male genitalia are the small, weak tegumen with short penicular lobes; the more or less subdeltoidal, narrow juxta with apically broadened dorsal plate; the long, strong vinculum; the elongate, distally tapering valva with pointed, rather short cucullus without corona; the small, tuberculate clavus; the long, curved harpe and the relatively short, slender, finely acute or somewhat broader, apically rounded or pointed digitus ('ampulla'). Aedeagus long, narrowly tubular, arcuate, carina with somewhat stronger dorso-lateral and ventral plates.

In the female genitalia, the structure of ductus bursae is very characteristic, consisting of three different sections: a narrowly tubular and usually weakly sclerotised anterior third, an inflated discoidal-

quadrangular, partly ribbed-cristate median third and the stronger sclerotised and flattened posterior section. Other typical features are the shortly conical, weak ovipositor, the calyculate, trapezoidal or shortly quadrangular, sclerotized antrum, the small appendix bursae and the small discoidal-ovoid corpus bursae having four fine signum-stripes.

The details of the clasping apparatus, the configuration of the vesica and the ductus bursae and appendix bursae of the female genitalia are very differently built in the two subgenera, *Leptologia* and *Xandria*, their detailed characterisation is given under their diagnoses.

Distribution. Holarctic. The range of the genus almost covers the entire western half of the Palaearctic region, one of the three species is stenochorous while the other two are rather widespread in Europe and in western Asia; *L. (L.) lota* occurs also in North America.

Subgenus *Leptologia* Prout, 1901

Leptologia Prout, 1901, *Entomologist's Record and Journal of Variation* **13**: 183. Type-species: *Phalaena lota* Clerck, 1759, by original designation.

Diagnosis. The two subgenera are distinguished by their external appearance, the configuration of the uncus and the basal section of the vesica and certain parts of the female genitalia. In the subgenus *Leptologia* the moths are on average larger with stronger body and more greyish forewing ground colour (except the very eastern and western populations), the uncus is almost simple, with very fine medial lobe, the basal half of vesica is inflated and armed by two large groups of strong, slender spines; the posterior third of ductus bursae is shorter, partly folded, having more or less parallel margins, and the medial third of ductus bursae is strongly dilated quadrangular, finely wrinkled-ribbed.

In *Xandria*, the moths are smaller with slenderer body (the wingspan is not always smaller but the moths themselves are more gracile), the uncus has huge, densely hairy lobes, the basal part of vesica lacks the cornuti being typical of *Leptologia* s. str. but has two membranous lateral diverticula oppositely, one of them long, tubular, with fine apical cornutus, other one much smaller, semiglobular. The female genitalia are characterised by the much stronger sclerotised posterior part of ductus bursae and the also stronger sclerotised, more discoidal medial third.

Leptologia (Leptologia) lota (Clerck, 1759)

(Plate 17, Figs 7–8; Plate 44, Figs 1–20; gen. fig. 63)

Phalaena lota Clerck, 1759, *Icones Insectorum Rariorum cum Nominibus eorum Trivialibus, Locisque e C. Linnae* **1**: pl. 8, fig 1. Type-locality: not stated (Sweden).

Synonymy

Phalaena Noctua hypophaes Goeze, 1781, *Entomologische Beyträge zu des Ritter Linné zwölften Ausgabe des Natursystems* **3**(3): 252. Type-locality: no locality given;

Orthosia americana Morrison, 1875, *Proceedings of the Academy of Natural Sciences of Philadelphia* **27**: 434. Type-locality: "North America". Types: in coll. MSU East Lansing;

Amathes lota ab. *subdita* Warren, 1911, in A. Seitz, *Die Gross-Schmetterlinge der Erde* **3**: 152, pl. 37, row c. Type-locality: Turkey, Amasia. Holotype: male, in coll. BMNH, **syn. n.**;

Amathes macilenta plumbea Wiltshire, 1941, *Journal of the Bombay Natural History Society* **42**: 476, fig. 11. Type-locality: Iran, Shapur gorge, Tang-Chugan. Holotype: male, in coll. BMNH, **syn. n.**;

Anchoscelis plumbea convergens Wiltshire, 1946, *Entomologist's Record and Journal of Variation* **58**: 4. Type-locality: Iran, Kermanshah. Holotype: male, in coll. BMNH, **syn. n.**;

Agrochola lota schreieri Hacker & Weigert, 1986, *Neue Entomologische Nachrichten* **19**: 154. Type-locality: Turkey. Holotype: male, in coll. ZSM, **syn. n.**

Diagnosis. The species shows a rather conspicuous variation in the forewing ground colour, but the different colour forms can be found in all populations although their frequency may be very different throughout the range of the species. Generally, the typically grey coloured specimens appear in the central part of its range (in Central and northern Europe), while the more westerly and easterly distributed populations are more ochreous or reddish shaded. The western populations have no names though already the south-western European specimens have paler grey colouration and the NW African moths are prominently ochreous or reddish suffused. Interestingly, the Turkish and Iranian populations are repeatedly described, firstly by Warren from Amasia (see the Plate 44, Fig. 13), subsequently by Wiltshire and Hacker & Weigert but these names refer to differently coloured populations of *L. (L.) lota* which cannot be attributed to distinct geographical ranges due to the large intra-population variation and the continuous changes in the external features from the Balkans to Iran and Turkmenistan. Thus, *L. (L.) lota* is considered as taxonomically homogeneous, despite the often conspicuous external differences between selected specimens.

Leptologia (L.) lota is an easily recognizable species, the more reddish examples may resemble certain dark forms of *L. (X.) macilenta* but the forewing is broader, the stigmata are more flattened and the hindwing and the underside are remarkably darker. Interestingly, the taxon *plumbea* was originally described as a subspecies of *L. (X.) macilenta* and one of the paratypes of *L. (X.) macilenta rubrescens* is also a specimen of *L. (L.) lota*; the genitalia of both sexes are conspicuously different (see the diagnosis of the subgenus). Wingspan 31–40 mm.

The reddish-shaded North African *L. (L.) lota* populations are very similar externally to the recently discovered Moroccan *S. circellaris* population, even the reddish subterminal line is similarly straight in the sympatrically occurring two species. They can be distinguished by their strikingly different genitalia in both sexes.

Distribution. Holarctic, with Euro-Siberian dominance. The species is rather widespread in the western part of the Palaearctic region, from the Maghreb countries (Morocco, Algeria) throughout Europe towards western Asia (the Near East, Turkey, Armenia, Iraq, Iran, Turkmenistan) and western Siberia as far to the east as the Altai range; it is known from the north-eastern part of the Nearctic, too.

A hygrophilous species, inhabiting humid, rather cool biotopes, it occurs mostly in gallery forests, lowland marshy and swampy forests and larger, open willow stands. The imagines are on wing from the end of August to the beginning of November.

Subgenus *Xandria* de Laever, 1983, stat. rev.

Xandria de Laever, 1983, *SHILAP Revista de Lepidopterologia* 10(4): 328; objective replacement name of *Alexia* de Laever, 1979, nec Stephens, 1833. Type-species: *Noctua macilenta* Hübner, 1809, by monotypy.

Synonymy

Alexia de Laever, 1979, *SHILAP Revista de Lepidopterologia* 6: 287, junior homonym of *Alexia* Stephens, 1833 (Coleoptera, a junior synonym of *Sphaerosoma* Samuella, 1819, Endomychidae).

Diagnosis. The detailed comparison of the two subgenera is given in the Diagnosis of *Leptologia*. The two subgenera usually can be distinguished externally by the strength of the body, the wing shape and the forewing colouration, as *Xandria* is most often smaller, more narrow-winged and ochreous to reddish-brown while the typical populations of *Leptologia* are regularly grey or greyish and only the western and eastern populations have more reddish or ochreous shade.

The diagnostic features of the male genitalia are the very broad, lobate and densely hairy uncus, the broader, flattened and apically rounded digitus, the spineless basal half of vesica with long tubular diverticulum terminated in fine, acute cornutus, the larger distal cornuti field and the long terminal cornutus.

The female genitalia of *Xandria* are distinguished from those of *Leptologia* s. str. by the larger and stronger sclerotised antrum, the stronger sclerotised posterior third of ductus bursae and the more rounded and stronger sclerotised-cristate medial section of ductus bursae.

***Leptologia (Xandria) macilenta* (Hübner, 1809)**

(Plate 18, Figs 1–2; Plate 44, Figs 21–29; gen. fig. 64)

Noctua macilenta Hübner, 1809, *Sammlung Europäischer Schmetterlinge* 4: pl. 89, fig. 418. Type-locality: [Europe].

Synonymy

Noctua flavilinea Haworth, 1809, *Lepidoptera Britannica; sistens Digestionem novam Insectorum Lepidopterorum quae in Magna Britannia Reperiuntur, Larvarum Pabulo, Temporeque Pascendi; Expansione Alarum; Mensibusque Volandi; Synonymis atque Locis Observationibusque Variis* 1: 243. Type-locality: England, Norfolk;*Amathes macilenta rubescens* Wiltshire, 1939, in Ellison & Wiltshire, *Transactions of the Royal Entomological Society of London* 88: 37, pl. 1, fig. 10. Type-locality: Lebanon, Luize. Holotype: male, in coll. BMNH; **syn. n.**

Diagnosis. An externally variable species but taxonomically uniform over the larger part of its distribution. It can be sometimes confused with its sister-species, *L. (X.) blidaensis*, due to the very similar elements of wing pattern though *L. (X.) macilenta* has less variegated and more shining forewing colouration with more prominent reddish subterminal line, weaker, usually obsolete dark dots of terminal line and less uniformly brownish suffused hindwings. *Leptologia (X.) macilenta* is on average larger in size than *L. (X.) blidaensis* (wingspan 29–40 mm vs 26–33 mm) and the cilia of the male antenna is shorter than in its close relative.

The male genitalia of *L. (X.) macilenta* differ from those of *L. (X.) blidaensis* by the broader and somewhat shorter uncus, dorsally broader juxta, shorter vinculum, broader digitus, medially more curved aedeagus, and the basally straight (not strongly ventrally bent) vesica with considerably larger, stronger distal cornuti field.

In the female genitalia, the antrum is smaller in *L. (X.) macilenta* than in *L. (X.) blidaensis*, the posterior sclerotised part of ductus bursae is longer, caudally more tapering and the medial dilated section is larger, more cristate-ribbed.

Distribution. Northern Mediterranean. It is a widespread species distributed in most parts of Europe and towards to the south-east to the Near East, Turkey, the Caucasus range and Cyprus. It occurs sympatrically with its sister species, *L. (X.) blidaensis* in southern Italy, southern France and in the Iberian peninsula.

It is a mainly woodland species, inhabiting various types of deciduous forest, but may also occur in lightly wooded or open biotopes. The flight period is rather long, the first moths appear at the end of August and specimens can be observed in late autumn, even in the northern parts of its range; in the Near East the imagines fly until February.

***Leptologia (Xandria) blidaensis* (Stertz, 1915)**

(Plate 18, Figs 3–4; Plate 44, Figs 30–39; gen. fig. 65)

Orthosia blidaensis Stertz, 1915, *Deutsche Entomologische Zeitschrift. Gesellschaft Iris zu Dresden* 29: 130, pl. 3, fig. 7. Type-locality: Algeria, Blida.

Diagnosis. *Leptologia (X.) blidaensis* is often very similar to *L. (X.) macilenta*, although somewhat differently coloured; usually less variable, displaying some variability in intensity of ground colour and markings. It is more variegated and more ochreous-brownish to pale chestnut coloured, with less prominent subterminal line and with stronger dark dots between the veins at base of cilia. It has on average smaller measures, the wingspan is 26–33 mm; the male antenna has longer cilia than in *L. (X.) macilenta*.

The male genitalia of *L. (X.) blidaensis* differ from those of *L. (X.) macilenta* by the upper lobes of uncus slightly narrower when observed dorsally, more rounded basally when observed laterally, the longer vinculum, the longer and more square penicular lobes, the dorsally narrower and basally more rounded juxta, the narrower and more distally projecting digitus and the different structure of the aedeagus and the vesica. The aedeagus of *L. (X.) blidaensis* is shorter, more distally curved; the vesica projects ventrally and curves smoothly to the left, having very large suprabasal diverticulum with two pouches, a small, round dorsal one and another one projecting ventrally which is narrow, long and bears a short but strong cornutus; and the distal spinulose field is much smaller and weaker than in *L. (X.) macilenta*.

The female genitalia of *L. (X.) blidaensis* is larger than those of *L. (X.) macilenta* having larger, longer antrum and narrower ductus bursae with shorter and proximally less tapering sclerotised posterior section and smaller, weaker, less sclerotised inflated section.

Distribution. Atlanto-Mediterranean. The species is distributed from the NW African Mediterranean (Morocco and Algeria) throughout the Iberian Peninsula, including Portugal and Spain, towards southern France (both from the Mediterranean and Atlantic areas), Sardinia, Sicily and the peninsular, meridional Italy, inhabiting meso-xerophilous and xerophilous biotopes. The adults are on the wings late in the season, from mid-October to mid-January, being most abundant in November.

Genus *Sunira* Franclemont, 1950

Sunira Franclemont, 1950, *Bulletin of the Brooklyn Entomological Society* **45**: 148. Type-species: *Xanthia bicolorago* Guenée, 1852, by original designation.

Synonymy

Delaeveria Berio, 1980, *Annali del Museo Civico di Storia Naturale Giacomo Doria* **83**: 14. Type-species: *Phalaena circellaris* Hufnagel, 1766, by original designation. Preoccupied, a junior primary homonym of *Delaeveria* Schütze, 1961 (Geometridae); *Ellaeveria* Berio, 1980, *Bolletino della Societa Entomologica Italiana* **112** (1–3): 40. Type-species: *Phalaena circellaris* Hufnagel, 1766, by original designation. An objective replacement name for *Delaeveria* Berio, 1980.

Diagnosis. The genus comprises four Nearctic and a single Palaearctic species. The species of *Sunira* bear a resemblance to certain taxa of the Himalayan-Pacific genus *Hyalobole* due to their ochreous- or reddish-brownish forewing ground colour with darker red-brown markings and darker brownish-grey hindwings with rather broad ochreous costal stripe but the hindwing cell has no hyaline part, the forewing is less pointed apically and differently marked (e.g. reddish subterminal line, dark patch in reniform stigma, etc.) and the genitalia of both sexes are conspicuously different in the two genera. Wingspan 30–45 mm. Male antenna shortly fasciculate at basal three-quarters, last quarter ciliate, that of female shortly, sparsely ciliate.

The configuration of the genitalia shows the close relationships between *Sunira* and *Leptologia* sharing a number of synapomorphies e.g. the structure of the vesica, the dorsally positioned harpe and the medially dilated and sclerotised ductus bursae. The differential features of the male genitalia are the regularly curved, longer uncus, the shorter and broader valvae, the characteristically bilobate-cristate, sclerotised harpe, the very short digitus, the thicker aedeagus with apically specially spinose-serrate ventral carinal plate and the lack of the terminal cornutus. In the female genitalia, the medial section of *Sunira* is stronger sclerotised and more folded-cristate than in *Leptologia* and the signa are much weaker.

Distribution. Holarctic. The single Palaearctic species does not occur in North America.

Sunira circellaris (Hufnagel, 1766)

(Plate 18, Figs 5–6; Plate 44, Figs 40–43; Plate 45, Figs 1–8; gen. fig. 66)

Phalaena circellaris Hufnagel, 1766, *Berlinisches Magazin* **3**(4): 404. Type-locality: [Germany] Berlin region.

Synonymy

Noctua ferruginea [Denis & Schiffermüller], 1775, *Ankündigung eines systematischen Werkes von den Schmetterlinge der Wiener Gegend* **1775**: 86. Type-locality: [Austria] Vienna region. Types destroyed;

Bombyx fuscago Esper, 1786, *Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen* **3**: 382. pl. 75, fig. 5. Type-locality: [Germany] Leipzig region;

Phalaena Noctua undata Borkhausen, 1792, *Tabellarisches Verzeichniss der in der Churmark Brandenburg Einheimischen Schmetterlinge* **2**: 17. Type-locality: [Germany] Berlin region. Preoccupied, a junior primary homonym of *Noctua undata* Fabricius, 1775.

Diagnosis. *Sunira circellaris* has a North American vicariant sibling species, *S. verberata* (Smith, 1904).

The eastern populations of *S. circellaris* are generally paler coloured than the typical ones, displaying a more or less continuous, rather cline-like change from Eastern Europe and Asia Minor through northern Iran and Turkmenistan towards Kazakhstan and western Siberia.

The recently discovered Moroccan *S. circellaris* population resembles the reddish-shaded North African *L. (L.) lota* and even its reddish subterminal line is straighter than in the other populations. This population represents most probably a distinct subspecies but the material is still insufficient for a detailed micro-taxonomic study.

Sunira circellaris is an unmistakable species, no similarly coloured *Agrochola*-like species is known. It has reddish subterminal line and darkened lower section of reniform stigma like in the closest related *Leptologia* species but the subterminal line is strongly sinuous, not straight, the reniform stigma is larger, broader, and the dorsal part of the hindwing is ochreous, not greyish-brown suffused. It differs from the externally similar members of *Hyalobole* s. str. by its less pointed forewings with characteristically reddish subterminal line and dark filled lower third of reniform stigma, differently running and coloured crosslines and the lack of the hyaline part of the male hindwing; the genitalia are conspicuously dissimilar in both sexes. Wingspan 34–44 mm.

The genitalia are characterized in the diagnosis of the genus.

Distribution. Euro-Siberian. A widespread species, distributed widely in most parts of Europe from the Iberian peninsula to the Ural region, and from Asia Minor through Armenia, Iran, Turkmenistan and western Turkestan (Kazakhstan) towards western Siberia; a newly discovered population occurs in Morocco.

A rather ubiquitous species inhabiting various forested biotopes and open shrubby grasslands. The flight period starts relatively early as the first adults appear at the end of the summer. The flight period is very long, it extends until the beginning of the winter but in certain southern localities a few moths may be observed in the second half of the winter.

Genus *Vulpechola* gen. n.

Type-species: *Xanthia vulpecula* Lederer, 1853, here designated.

Diagnosis. The *Agrochola* s.l. complex is represented in the Himalayan-Pacific region only by a few main lineages which are interpreted here as distinct genera. The species of these genera, *Vulpechola*, *Agrocholorta*, *Suginistra*, *Telorta*, *Gigatelorta*, and *Incertobole*, have long been arranged into the genera *Agrochola* (s.l.) or *Telorta*, in often rather different and disputed combinations and supraspecific rank.

The genus *Vulpechola* includes a single species resembling externally more the members of *Telorta* s.l. but having strongly marked orbicular and reniform stigmata and double antemedial and postmedial crosslines, this combination of forewing pattern is absent in the *Telorta* species-complex.

The diagnostic features of the male genitalia are the distally strongly dilated valvae with more or less rounded triangular cucullus, and short and weak corona, strongly sclerotised, apically bifurcate digitus and very long and rather thick, slightly S-shaped harpe. The vesica is long, tubular, with long submedial ventral diverticulum, a subterminal dorsal tubular diverticulum armed by fine sclerotisation, and a very long and acute-cuneate terminal cornutus oppositely.

The female genitalia are also very characteristic with the medium-long and weak ovipositor, entirely membranous antrum and ductus bursae, the position of the junction of ductus bursae at the middle of the rather sponge-cake-shaped bursa copulatrix, the large, partly scobinately sclerotised, discoidal appendix bursae and the similarly large, membranous corpus bursae having four inequally long, relatively weakly sclerotised signum-patches.

Distribution. Siberian-Pacific.

***Vulpechola vulpecula* (Lederer, 1853) comb. n.**

(Plate 18, Figs 7–8; Plate 45, Figs 9–16; gen. fig. 67)

Xanthia vulpecula Lederer, 1853, *Verhandlungen des Zoologisch-Botanischen Vereins in Wien* 3: 374, pl. 4, fig. 5. Type-locality: [Kazakhstan] Altai Mts. Lectotype: male, in coll. ZMHU.

Synonymy

Xanthia vulpina Eversmann, 1855, *Bulletin de la Société Impériale des Naturalistes de Moscou* 28(2): 374. Type-locality: [Russia] Altai Mts. Type(s): in coll. ZIN.

Lectotype designation. Lectotype of *Xanthia vulpecula*, here designated: male, green ring label, [Russia] “Altai” (brown label with handwriting), “Coll. Led. [= Lederer]” (printed label); coll. ZMHU.

Diagnosis. A medium-sized species (wingspan 33–40 mm) with acutely pointed forewing, often with fine concavity below apex, generally ochreous-reddish shaded pale brown forewings (the Chinese specimens are somewhat more reddish shaded) with fine, sharply marked double crosslines and complete outlines of stigmata.

It is easily separable from all other members of the *Agrochola-Telorta* generic complex (e.g. the externally somewhat similar *Sunira circellaris* and *Edentelorta edentata*) by the above-mentioned external features; the genitalia of the three genera are strikingly different in both sexes (see the gen. figs 66, 67 and 101).

Distribution. Siberian-Pacific. The species has a large area in Central and Eastern Asia, extending from the Altai Mts throughout Mongolia and Transbaikalia to the Pacific region (Russian Far East, Manchuria, Korea and Japan) and western China (Shaanxi, Sichuan).

Genus *Agrocholorta* gen. n.

Type-species: *Agrochola albirena* Boursin, 1956, here designated.

Taxonomy. The genus *Agrocholorta* is a large and rather diverse complex of externally and genitally often remarkably different species-groups which are considered as subgenera of the same genus, despite the mentioned differences. The group apomorphies of the male genitalia of these subgenera can be found in the differently built but homologous parts of the clasping apparatus while the structure of the aedeagus and the vesica unify them into a monophyletic clade. The closest related genera are *Suginistra* and *Telorta*, these three genera form a species-rich monophylum where the internal relationships are sometimes requiring clarification, due to the often unique and autapomorphic modifications of the same basic structure of the genitalia and partly the forewing colouration and pattern. Another problem is the rather low level of knowledge of this large genus, a considerably part of the described species is known only by one sex and a very limited number of specimens. The entire generic complex has a characteristic phenology with usually late autumnal or winter adults flying often in frosty weather in high(er) montane forests. The overwhelming majority of the *Agrocholorta* species were described recently as a result of the intense and specially planned exploration of the Himalayan-Sino-Pacific winter fauna and the proportion of the still undiscovered taxa is supposedly large.

The firstly found member of the clade, *A. (Flavirenorta) flavirena*, was originally described in *Graphiphora* and placed into this generic complex by Boursin (1943, as ‘*Orthosia*’); the second species, *A. (Semirenorta) semirena*, was described in *Lasiplexia*. The genus *Agrocholorta* has long been represented only by these two species until the new, recent exploration of the winter noctuid fauna, though the next species in the row, *A. (Flavirenorta) antiqua*, was originally placed into *Xylena* Ochseneimer, 1816. The other *Agrocholorta* species described in the last two decades are placed into *Agrochola* (Hreblay & Ronkay 1997, Hreblay & Ronkay 1999, Hreblay, Peregovits & Ronkay 1999, Ronkay et al 2010), *Agrochola* (s.l.) (Benedek & Ronkay 2001), or *Conistra* (Shikata 2015). The north-easternmost member of the generic complex, *Suginistra sakabei* was originally described as *Agrochola* (Sugi, 1980) but later,

on the basis of certain features of the male genitalia, it has been transferred to *Conistra* Hübner, [1821] by Sugi & Seino (1986). In this revision the lineage is interpreted, according to the special armature of the vesica, as a distinct genus.

Genus *Agrocholorta* gen. n.

Subgenus *Agrocholorta* subgen. n.

- albirena* (Boursin, 1956) **comb. n.**
 ssp. *annamica* (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**
 ssp. *chihtuana* (Chang, 1991) **comb. n.**
 ssp. *doiinthanoni* (Hreblay & Ronkay, 1999) **comb. n.**
karma (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**
attila (Hreblay & Ronkay, 1999) **comb. n.**
zita (Hreblay & Ronkay, 1999) **comb. n.**

Subgenus *Flavirenorta* subgen. n.

- flavirena* (Moore, 1881) **comb. n.**
stoyani **sp. n.**
antiqua antiqua (Hacker, 1993) **comb. n.**
antiqua kosagezai (Hreblay, Peregovits & Ronkay, 1999) **comb. n., stat. rev.**
punctilinea (Hreblay & Ronkay, 1999) **comb. n.**
gorza (Hreblay & Ronkay, 1999) **comb. n.**

Subgenus *Mimicotelorta* subgen. n.

- atrifusa* (Ronkay & Kobayashi, 1997) **comb. n.**
telortoides (Hreblay & Ronkay, 1999) **comb. n.**
fibigeri (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**

Subgenus *Kyutekparkorta* subgen. n.

- magarorum* (Benedek, Babics & Saldaitis, 2013) **comb. n.**
parki (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**

Subgenus *Shipherorta* subgen. n.

- humidalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**
pallidilinea (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**

Subgenus *Semirenorta* subgen. n.

- semirena* (Draudt, 1950) **comb. n.**
siamica (Hreblay & Ronkay, 1999) **comb. n.**
minorata (Hreblay & Ronkay, 1999) **comb. n.**
csoevarii (Ronkay, Ronkay, Gyulai & Hacker, 2010) **comb. n.**
kunandrasi (Hreblay & Ronkay, 1999) **comb. n.**
emilia (Ronkay, 2001) **comb. n.**
plumbitincta (Hreblay, Peregovits & Ronkay, 1999) **comb. n.**

Subgenus *Pacificorta* subgen. n.

- nawae* (Matsumura, 1926) **comb. n.**
taiwanawae Ronkay, Ronkay, Shikata, Gyulai & Varga **sp. n.**
amamiensis (Shikata, 2015) **comb. n.**
kimurai (Shikata, 2015) **comb. n.**

Subgenus *Agrocholorta* subgen. n.

Diagnosis. The subgenus is characterised by the presence of the subapical valval spine and the dense hair-brush substituting the corona (reduced only in *A. (A.) zita*), the flattened-twisted, apically spatulate and often variably asymmetrical extension of digitus, the long harpe with sclerotised and long ventral basal plate and the shield-like juxta (males); the medium-long ovipositor with fine papillae anales, the huge and heavily sclerotised antrum, the variably long, partly sclerotised, tubular ductus bursae, and the ample corpus bursae having fine, weak signa.

The subgenus comprises four species representing two distinct lineages, the *albirena*- and the *zita*-groups. The *albirena*-group includes, according to the genitalia features, besides the two large species also *A. (A.) attila* while the *zita*-line differs remarkably from the other members of the subgenus by both its specific external and genital characteristics.

Distribution. Himalayan-Sino-Pacific. All species have winter adults, their flight period extend from November to January (February), in a continuous brood.

Agrocholorta (Agrocholorta) albirena albirena (Boursin, 1956) **comb. n.**

(Plate 19, Figs 1–2; Plate 45, Figs 17–20; gen. fig. 68)

Agrochola albirena Boursin, 1956, *Zeitschrift der Wiener Entomologischen Gesellschaft* **41**: 35, pl. 5, figs 1, 5. Type-locality: South China, Canton [Guangdong]. Holotype: male, in coll. ZFMK.

Diagnosis. *Agrocholorta (A.) albirena* is the most widespread member of the subgenus, displaying strong geographical differentiation but the genitalia show the conspecificity of the externally often remarkably different populations which are considered here as subspecies.

The different populations of *A. (A.) albirena* differ externally from their closest relative, *A. (A.) karma*, by their somewhat smaller size (wingspan 38–44 mm) and, except ssp. *chihtuana*, broader, less elongated and apically less pointed forewings. The ground colour is typical of each subspecies and all continental races are usually darker than *A. (A.) karma* and show only small or moderate individual variation. The Taiwanese subspecies is also different in this respect, displaying a considerable variation in the forewing ground colour and the shade of the reniform stigma, varying from bright whitish to pinkish or even orange-brown.

The male genitalia of *A. (A.) albirena* can be distinguished from those of *A. (A.) karma* by their strongly sclerotised, dentate carinal plate, the longer and slenderer valvae and the simple but more cristate-twisted digituses. In the female genitalia, the antrum of *A. (A.) albirena* is much larger than that of *A. (A.) karma*, and the ductus bursae is broader and stronger sclerotised, having a postero-lateral sclerotised lobe at left side what is missing from *A. (A.) karma*.

The comparisons of *A. (A.) albirena albirena* with the other subspecies are given under the diagnoses of the three other taxa.

Distribution. The nominotypical ssp. *albirena* occurs in SE China (Guangdong, Guangxi, Hunan).

***Agrocholorta (Agrocholorta) albirena annamica* (Hreblay, Peregovits & Ronkay, 1999) comb. n.**

(Plate 19, Figs 3–4; Plate 45, Figs 21–28; gen. fig. 69)

Agrochola albirena annamica Hreblay, Peregovits & Ronkay, 1999, *Acta Zoologica Academiae Scientiarum Hungaricae* 45(1): 43, figs 47–49, 138. Type-locality: Vietnam, Prov. Lao Cai, Fan-si-pan Mts, Sa Pa, 1300 m. Holotype: male, in coll. HNHM.

Diagnosis. The populations occurring in northern Vietnam differ externally from both the typical *albirena* populations from SE China and from the Taiwanese *A. (A.) a. chihtuana* by its larger size (wing-span 41–44 mm) and homogeneous, very dark violaceous brown forewing ground colour with reduced crosslines.

The male genitalia of the Vietnamese subspecies differ from those of the ssp. *albirena* by their more elongate valvae, stronger, thicker harpe, somewhat broader juxta, stronger ventral bar of carina and shorter, finer cornutus of vesica, from the ssp. *chihtuana* by the broader valvae, higher, narrower juxta, reduced clavi, stronger basal plates of harpes, stronger crests on costal extensions, shorter pollexes, longer, narrower dentate ventral bar of carina and more arcuate cornutus of vesica.

Distribution. Northern Vietnam.

***Agrocholorta (Agrocholorta) albirena doiinthanoni* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 19, Figs 7–8; Plate 45, Figs 37–40; gen. fig. 71)

Agrochola albirena doiinthanoni Hreblay & Ronkay, 1999, *Esperiana* 7: 526, pl. 17, fig. 82. Type-locality: North Thailand, Prov. Chiang Mai, Doi Inthanon NP, 2300 m. Holotype: male, in coll. M. Hreblay (HNHM Budapest).

Diagnosis. The population occurring in northern Thailand differs from the ssp. *albirena* and the ssp. *annamica* by its somewhat broader wings with paler, more deep-rufous brown ground colour and narrower reniform stigma. In the male genitalia, the ventral bar of carina is broader and apically more obtuse than in the other two continental subspecies.

Distribution. Northern Thailand.

***Agrocholorta (Agrocholorta) albirena chihtuana* (B.S. Chang, 1991) comb. n.**

(Plate 19, Figs 5–6; Plate 45, Figs 29–36; gen. fig. 70)

Agrochola chihtuana B.S. Chang, 1991, *Illustrations of Moths in Taiwan* 5: 178, fig. 197. Type-locality: Taiwan, Chihtu. Holotype: male, in coll. NMNST.

Diagnosis. The Taiwanese ssp. *chihtuana* is the smallest and most gracile subspecies of *A. (A.) albirena*, having most often slenderer and apically more acutely pointed forewings than in the other three races. The ground colour is more variable than in the continental subspecies, varying from paler rosy-brown to deep brown, as well as the colouration of the reniform which varies from clear white to pinkish-ochreous and pale orange-brown; these features are also typical only for this subspecies. Wingspan 37–41 mm.

Distribution. Taiwan. The moths are on the wing only in the coldest period of the year, from the end of November to the beginning of February.

***Agrocholorta (Agrocholorta) karma* (Hreblay, Peregovits & Ronkay, 1999) comb. n.**

(Plate 20, Figs 1–2; Plate 46, Figs 1–6; gen. fig. 72)

Agrochola karma Hreblay, Peregovits & Ronkay, 1999, *Acta Zoologica Academiae Scientiarum Hungaricae* 45(1): 45, figs 50–51, 139–140. Type-locality: West Nepal, 20 km N of Dailekh, 3000 m. Holotype: male, in coll. M. Hreblay (HNHM Budapest).**Diagnosis.** *Agrocholorta (A.) karma* represents the westernmost taxon of the *A. (A.) albirena* complex; the differences in the genitalia between *A. (A.) karma* and *A. (A.) albirena* are significantly larger than between the other geographic subspecies of *A. (A.) albirena*, this fact serves the basis for considering the Nepalese taxon as a full species.The specimen illustrated by Yoshimoto (1993, p. 132; plate 62, fig. 17) as “*Agrochola albirena*” represents also *A. (A.) karma*. The statement about the genitalia of this “*A. albirena*” being identical with those of *A. (A.) a. chihtuana* is erroneous.*Agrocholorta (A.) karma* differs from the continental populations of *A. (A.) albirena* by its slightly larger size (wingspan 42–44 mm) and the paler, claret-brown ground colour.In the male genitalia, the costal processes of *A. (A.) karma* are bifurcate, the ventral plate of the carina is reduced to a beak-shaped, short process, while the costal processes of *A. (A.) albirena* are cristate but simple, and the ventral carinal plate is much larger.The female genitalia of the two species differ in the shape and size of the antrum and ductus bursae, the antrum is considerably smaller, narrower in *A. (A.) karma*, the ductus is also narrower, without a larger, pocket-like postero-lateral lobe which is present in *A. (A.) albirena*.**Distribution.** Southern Himalayan. *Agrocholorta (A.) karma* is known from different regions of the Nepal Himalaya, from the western areas to the lower chains of the Kanchenjunga Himal. It is a member of the winter fauna, the imagines are on wing from the beginning of November to mid-January, and the specimens found at this time are rather fresh.***Agrocholorta (Agrocholorta) attila* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 20, Figs 3–4; Plate 46, Figs 8–12; gen. fig. 73)

Agrochola attila Hreblay & Ronkay, 1999, *Esperiana* 7: 527, pl. 17, fig. 84. Type-locality: North Thailand, Prov. Nan, 30 km E of Pua, 1700 m. Holotype: male, in coll. M. Hreblay (HNHM Budapest).**Diagnosis.** *Agrocholorta (A.) attila* and *A. (A.) zita* are remarkably smaller than the members of the *A. (A.) albirena* - *A. (A.) karma* species-pair (wingspan 32–36 mm versus 37–44 mm), their ground colour is rather variegated, less unicolorous, the reniform stigma is smaller, narrower, and the crosslines are stronger than in their larger relatives. The main external difference between *A. (A.) attila* and *A. (A.) zita* can be found in the crosslines which are sinuous and less distinct in *Agrocholorta (A.) attila* while almost straight in *A. (A.) zita*.The basic configuration of the male genitalia of *A. (A.) attila* is more similar to those of *A. (A.) albirena* and *A. (A.) karma* by the general structure of the clasping apparatus but the harpe is much shorter, the digitus lacks the long, flattened and twisted, often asymmetrical processes, the carinal sclerotisation is moderate, the vesica is shorter, its main tube more or less straight and basally strongly scobinate-dentate, and the terminal cornutus is absent.The male genitalia of *A. (A.) attila* differ strongly from those of *A. (A.) zita* by the shorter, more shield-like juxta, longer and distally tapering valva with well-developed apical hair-brush and subapical ventral sclerotised process, much shorter and weaker harpe and conspicuously thinner, more tubular vesica lacking terminal cornutus.**Distribution.** Northern Indo-Chinese. The species is known from the type-locality (Thailand, Prov. Nan) only. The moths have been collected at the higher montane forest regions, in January.

***Agrocholorta (Agrocholorta) zita* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 20, Fig. 5; Plate 46, Fig. 7; gen. fig. 74)

Agrochola zita Hreblay & Ronkay, 1999, *Esperiana* 7: 526, pl. 17, fig. 83. Type-locality: North Thailand, Prov. Nan, 30 km E of Pua, 1700 m. Holotype: male, in coll. M. Hreblay (HNHM Budapest).

Diagnosis. The species can be distinguished from its similarly small relative, *A. (A.) attila* by its almost straight and distinctly marked antemedial and postmedial crosslines which are unique within the subgenus *Agrocholorta*.

The male genitalia of *A. (A.) zita* differ from those of all other members of the subgenus by the reduced hairbrush of the valval apex, the simplified digitus, the strongly curved harpe and the ample, more or less discoidal vesica armed by short, broad-based cornutus.

Distribution. Northern Indo-Chinese. The known range of the species is restricted to the vicinity of the type-locality in Northern Thailand (Prov. Nan). *Agrocholorta (A.) zita* occurs sympatrically (and syntopically) with *A. (A.) attila*, the two known specimens were collected in January.

Subgenus *Flavirenorta* subgen. n.

Type-species: *Graphiphora flavirena* Moore, 1881, here designated.

Diagnosis. The subgenus includes three major lineages (the *flavirena*-, the *antiqua*- and the *gorza*-groups) with rather uniform external appearance and prominent differences in the genitalia of both sexes. The genus is characterised mostly by the features of the male copulatory organ having sclerotised and strongly asymmetrical clasping apparatus with strong harpes, conspicuously asymmetrical saccular extensions and clavi; short and weak tegumen with characteristic penicular lobes; simplified distal part of valvae with fine apical spine and moderately long corona consisting of fine coronal setae; specially modified carina penis having most often sclerotised appendages or crests on both surfaces; and the very small or fully reduced cornutus of the vesica. The diagnostic features of the female genitalia are the medium-long, conical ovipositor with long, fine papillae anales, the heavily sclerotised antrum and postvaginal plate, the strongly tapering and partly sclerotised, partly rugose-wrinkled ductus bursae, the small appendix bursae and the elliptical-ovoid corpus bursae without signa or with fine, long signum-stripes.

The apomorphic features of the three lineages are discussed in the diagnoses of each species-group.

Distribution. Himalayan-Sino-Tibetan.

The *flavirena*-group

Diagnosis. The synapomorphic features of the *flavirena*-group are the very strongly asymmetrical valvae with huge right sacculus and spinose-hairy saccular extensions, long and more or less stick-like harpes, slender and strongly laterally projecting penicular lobes, the very strong, somewhat antler-like ventral carinal process with furcated apex and the fine, cone-shaped terminal cornutus in the male genitalia. The female genitalia show common features with the taxa of the *antiqua*-group, differing strongly from the *gorza*-group by the laterally folded antrum, the weakly sclerotised, rugose-wrinkled ductus bursae, and the presence of signum-stripes (see also the Diagnosis of the latter species-group).

***Agrocholorta (Flavirenorta) flavirena* (Moore, 1881) comb. n.**

(Plate 20, Figs 5–8; Plate 46, Figs 13–23; gen. fig. 75)

Graphiphora flavirena Moore, 1881, *Proceedings of the Zoological Society of London* **1881**: 352, pl. 38, fig. 3. Type-locality: [India, Sikkim] Darjeeling. Holotype: male, in coll. BMNH.

Synonymy

Graphiphora vulpina Moore, 1882, *Description of new Indian Lepidopterous Insects from the Collection of the late Mr. W. S. Atkinson. Heterocera. Part 2.* **1882**: 118. Type-locality: [India, Sikkim] Darjeeling. Holotype: male, in coll. ZMHU.

Diagnosis. *Agrocholorta (Flavirenorta) flavirena* differs externally from the most similar and closest related taxa, *A. (F.) stoyani*, *A. (F.) antiqua antiqua*, *A. (F.) antiqua kosagezai* and *A. (F.) punctilinea* by the less sinuous, not finely crenellate-laced postmedial line. This feature, though not very prominent, can help in the separation of the otherwise often confusingly similar species of the subgenus *Flavirenorta* and one of the smaller species of *Agrocholorta* s. str. (*A. (A.) attila*), while the other external features, including the colouration, the intensity of the darker markings and the paler filling of the reniform stigma, are strongly variable in all known species. The only other member of the two subgenera having straight postmedial line, *A. (A.) zita*, has straighter and more oblique antemedial line and the reniform stigma is less constricted at middle than in the species of *Flavirenorta*.

The male claspings apparatus is rather similar for the first look to that of *A. (F.) stoyani* (see the gen. figs 75 and 76) but the aedeagus of the two species differ conspicuously and there are easily recognisable differences also in the harpes, the tegumen, the juxta and the uncus as well. The aedeagus of *A. (F.) flavirena* is characterised by the long, spine-like, heavily sclerotised and apically finely bifurcate submedial ventral process which is rather strongly divergent from the main tube of the phallus, and by the shorter but strong dorsal carinal spine. The ventral process of *A. (F.) stoyani* is much broader and apically much more bifurcate, with serrate-dentate longer arm, and it is directed parallel with the distal tube of the phallus, and the dorsal spine of the carina is reduced to a fine, short plate. The basic structure of the vesica is similar in the two species but the main tube is more recurved in *A. (F.) flavirena* and the medial diverticulum is much shorter than in *A. (F.) stoyani*.

The male genitalia of the two species differ strikingly from those of *A. (F.) antiqua* by their much more asymmetrical claspings apparatus with thinner uncus, larger, more elongated penicular lobes, much longer harpes, saccular extensions and distal sections of valvae, the shorter aedeagus with much weaker carinal sclerotisation and the shorter vesica armed by a fine conical cornutus.

The female genitalia of *A. (F.) flavirena* differ from those of *A. (F.) antiqua* by the smaller and laterally not folded antrum, the differently built postvaginal plate (see the gen. figs 75 and 78), from those of *A. (F.) punctilinea* and *A. (F.) gorza* by the much smaller and less flattened antrum, the differently built postvaginal plate and the less sclerotised posterior section of ductus bursae.

Distribution. Southern Himalayan. The species occurs in the eastern part of Nepal and the bordering areas of the Indian Sikkim. The species inhabits the higher montane deciduous forest regions; the moths are on the wing in October–November.

***Agrocholorta (Flavirenorta) stoyani* sp. n.**

(Plate 20, Fig. 8; Plate 46, Fig. 31; gen. fig. 76)

Holotype: male, “Vietnam, Prov. Lao Cai, Fansipan Mts, Legendary Place (Sin Chai), 14 km NW of Sa Pa, 1900–2000 m, 103°46,06'E, 22°20,9'N, 8.XII.1997, leg. L. Peregovits & L. Ronkay”; slide No.: RL1950m, in coll. HNHM.

Diagnosis. *Agrocholorta (Flavirenorta) stoyani* is very similar externally to *A. (F.) antiqua kosagezai* and the holotype has long been mixed with this species; the small external differences between the two species were recognised only after the dissections, indicating also the close relationship of *A. (F.) stoyani* with *A. (F.) flavirena*. The new species differs from *A. (F.) antiqua kosagezai* by its somewhat sharper defined,

less crenellate postmedial line, being less curved at costal margin and the medially more constricted reniform stigma having weaker, less rounded whitish central patch; from *A. (F.) flavirena* by its more laced and less pale defined postmedial line.

The male genitalia prominently show that the new species is the eastern sister taxon of *A. (F.) flavirena* and differ conspicuously from those of *A. (F.) antiqua antiqua* and *A. (F.) antiqua kosagezai*. The clasping apparatus of *A. (F.) stoyani* has, in comparison with *A. (F.) flavirena*, somewhat thicker uncus, distally narrower and less hairy penicular lobes, longer, more sand-clock-shaped juxta, longer and straighter harpes and proportionally shorter right saccular process. The differences between the two species are even larger in the structure of the aedeagus and the vesica. In *A. (F.) stoyani*, the sclerotised ventral process is larger, broader and apically much stronger bifurcate than in *A. (F.) flavirena*, the longer apical arm is broader and serrate-dentate, and the entire process is parallel with the distal tube of the aedeagus. The second specific difference is the reduction of the dorsal spine of the carina which is well-developed in *A. (F.) flavirena*. The vesica of *A. (F.) stoyani* is less reclinate than in *A. (F.) flavirena* and has a very long medial diverticulum.

Distribution. Northern Indo-Chinese. The unique known specimen was found in a higher montane primary forest in the Fan-si-pan Mts (Northern Vietnam) where it occurs together with *A. (F.) antiqua kosagezai*. The specimen was collected in a frosty night in December, in a light snowfall.

Remarks. The holotype of *A. (F.) stoyani* was collected on sugar ropes together with two specimens of (the subsequently described) *A. (F.) kosagezai* and was considered as conspecific with these two specimens. Thus, it has been included into the type series of the latter taxon and has been hidden until the thorough revision of all available specimens belonging into the subgenus *Flavirenorta*.

The *antiqua*-group

Diagnosis. The group features of the male genitalia of the *antiqua*-group are the strongly asymmetrical saccular parts of the valvae, being larger at right side, the similarly strongly asymmetrical saccular extensions being much shorter and at right side more curved than in the *flavirena*-group, the dentate-serrate dorsal surface of the flattened clavus, the rather short and thick, apically rounded harpes, the medium-long and relatively narrow distal sections of valvae (being much shorter and broader than in the *flavirena*-group), the very long, narrowly tubular aedeagus with two heavily sclerotised and serrate-dentate carinal plates, and the tubular, reclinate vesica, without cornutus.

Agrocholorta (Flavirenorta) antiqua antiqua (Hacker, 1992) **comb. n.**

(Plate 21, Figs 3–4; Plate 46, Fig. 26–27; gen. fig. 77)

Xylena antiqua Hacker, 1992, *Esperiana* 3: 188, pl. F, fig. 11. Type-locality: North Thailand, Doi Inthanon, 2300 m, 98°30'E, 18°35'N. Holotype: male, in coll. ZSM.

Taxonomy. The surprising discovery of the species and its actually quite unusual configuration of the male genitalia led to the tentative placement of the species into *Xylena* Ochseneimer, 1816, despite the dissimilar external appearance. The subsequent discoveries confirmed the high diversity of often strongly autapomorphic male genitalia of the clade in which *antiqua* is far not the most extreme and unusual. Unfortunately, the originally published genitalia figure is not accurate in certain points (e.g. the absence of the saccular extensions or the evenly serrate dorsal margin of sacculus), therefore its conspecificity with the some ten years later described *kosagezai* has not been recognised. The study of the genitalia of the holotype and additional specimens from Thailand and Vietnam revealed the close relationships between the two taxa and, according to the very small material, the real individual variation of certain genitalic features cannot be fairly estimated. Moreover, the newly found Chinese specimens are all females, which cannot be compared with the male types of *antiqua* and *kosagezai*. Thus, the smaller differences between

antiqua and *kosagezai* are considered here as insufficient for the separation of the two taxa at species level and they are treated as two distinct subspecies of the same species.

Diagnosis. *Agrocholorta (F.) antiqua* is known by a few worn specimens only, therefore the external differences between the three populations are poorly visible. The Thai ssp. *antiqua* specimens are somewhat darker, more brownish than the Viet and Chinese ssp. *kosagezai*, the postmedial line is somewhat more sinuous and the subterminal line is followed by a paler, though rather indistinct, ochreous stripe, similarly to *A. (K.) magarorum* see the Plate 46, Figs 26–27 and 32–33). Wingspan 37–39 mm.

The male genitalia of *A. (F.) antiqua* cannot be confused with those of *A. (F.) flavirena* and *A. (F.) stoyani* due to the strongly sclerotised, serrate-dentate carinal plates, the lack of cornutus of the vesica, the much shorter saccular extensions, harpes, and distal valval sections, etc.; with *A. (K.) magarorum* also by the absence of the cristate ventro-lateral twin-process of the right harpe, etc.

The female genitalia of *A. (F.) antiqua* (known by the ssp. *kosagezai*) differ from those of *A. (F.) flavirena* by the broader and laterally folded antrum, the humped postvaginal plate and the somewhat longer and broader ductus bursae; from those of *A. (F.) punctilinea* by the less rectangular and less flattened antrum and the longer ductus bursae with less sclerotised posterior section; and from *A. (K.) magarorum* by the larger and more sclerotised antrum, smaller postvaginal plate and the longer, more rugose-ribbed ductus bursae.

The differences between the two subspecies of *A. (F.) antiqua* are given under the diagnosis of the ssp. *kosagezai*.

Distribution. Northern Indo-Chinese. The typical ssp. *antiqua* occurs in the high mountainous areas of Northern Thailand (Doi Inthanon and Doi Phahompok in Chiang Mai province). The known specimens were found in the high montane forest regions, in January.

***Agrocholorta (Flavirenorta) antiqua kosagezai* (Hreblay, Peregovits & Ronkay, 1999)
stat. rev., comb. n.**

(Plate 21, Figs 5–6; Plate 46, Figs 28–30; gen. fig. 78)

Agrochola kosagezai Hreblay, Peregovits & Ronkay, 1999, *Acta Zoologica Academiae Scientiarum Hungaricae* 45(1): 39, figs 43, 135. Type-locality: Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900–2000 m, 22°20'N, 103°46'E. Holotype: male, in coll. HHNM.

Diagnosis. The two known males from Northern Vietnam and the few female specimens from China are treated here as a common taxon, according to their very similar external features.

The ssp. *kosagezai* is somewhat paler, more reddish-brown or claret-brown than the darker brown coloured ssp. *antiqua*. Wingspan 37–39 mm.

The male genitalia of the ssp. *kosagezai* differ from those of the ssp. *antiqua* by the finer and shorter saccular extensions and the thinner harpes with more elongated, more foot-shaped plates.

Distribution. Indo-Chinese. The eastern subspecies occurs in the Fansipan area in Northern Vietnam and in SE China (Hunan).

The *punctilinea*-group

Diagnosis. The group comprises two externally rather different species (a smaller and distinctly marked and a much larger, paler species) but the female genitalia (the males are as yet unknown) clearly show their close relationship. The group features of the female genitalia are the heavily sclerotised, flattened and rather quadrangular antrum, the sclerotised posterior part of the otherwise relatively short ductus bursae and the absence of the signa.

***Agrocholorta (Flavirenorta) punctilinea* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 21, Fig. 2; Plate 46, Fig. 24; gen. fig. 79)

Agrochola punctilinea Hreblay & Ronkay, 1999, *Esperiana* 7: 525, pl. 17, fig. 80. Type-locality: East Nepal, Deorali Danda, Dhupi Pass, 3300 m. Holotype: female, in coll. M. Hreblay (HNHM Budapest).

Diagnosis. The species resembles externally mostly *A. (F.) antiqua kosagezai*, differing from it by the stronger defined dark dots of the subterminal line. It differs from the typical population of *A. (F.) antiqua* by its paler ground colour, more distinctly marked antemedial and postmedial crosslines and the darker dots following the postmedial line; from *A. (F.) flavirena* also by the more sinuous postmedial line and the larger, broader orbicular and reniform stigmata; from *A. (Mimicotelorta) telortoides* by the sinuous and less oblique crosslines, darker filling of the orbicular and reniform stigmata, the smaller dark dots of the subterminal line and the weaker, greyish splitted hindwing discal spot. Wingspan 37 mm.

The female genitalia display its close relationship with *A. (F.) gorza*, differing conspicuously from those of the other members of the subgenus *Flavirenorta* by the features provided in the diagnosis of the species-group. *Agrocholorta (F.) punctilinea* can be distinguished from *A. (F.) gorza* by the narrower antrum, the shorter and anteriorly stronger sclerotised ductus bursae and the smaller appendix bursae, the proportion of the antrum and the ductus bursae is just the opposite in *A. (F.) gorza*.

Distribution. Southern Himalayan; the known area of the species is restricted to eastern Nepal. The unique specimen was found rather high in the Kanchenjunga massif, at the upper region of the broad-leaved forest belt; the collecting date (end of November) is also very late at this altitude.

***Agrocholorta (Flavirenorta) gorza* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 21, Fig. 1; Plate 46, Fig. 25; gen. fig. 80)

Agrochola gorza Hreblay & Ronkay, 1999, *Esperiana* 7: 527, pl. 18, fig. 85. Type-locality: West Nepal, 11 km N of Dailekh, 2350 m. Holotype: female, in coll. M. Hreblay (HNHM Budapest).

Diagnosis. *Agrocholorta (F.) gorza* is the largest species of the subgenus (wingspan 44 mm), resembling externally mostly the large species of the subgenus *Agrocholorta* (*A. karma*, *A. albirena*) but having somewhat more acutely pointed forewing with paler brown ground colour and brown filled reniform stigma.

The female genitalia of *A. (F.) gorza* are very similar to those of *A. (F.) punctilinea* but the antrum is shorter and broader, more rectangular, and the ductus bursae is longer, longer than the antrum while in *A. (F.) punctilinea* the ductus bursae is shorter than the more elongated antrum.

Distribution. Southern Himalayan. The species is the westernmost member of *Agrocholorta*, it is found in West Nepal. The only known specimen was found during the winter (mid-January) in a medium-high montane forest region.

Subgenus *Mimicotelorta* subgen. n.

Type-species: *Telorta atrifusa* Hreblay & Kobayashi, 1997, here designated.

Diagnosis. The subgenus contains three externally more or less similar species with allopatric occurrence; the monophyly of this lineage is strongly supported by their very characteristic female genitalia. The male genitalia are also strongly autapomorphic with the almost symmetrical valvae with short but thick, bifurcate harpes, short and downwardly curved, apically pointed digituses, the narrow and sclerotised sacculi with long, flattened distal saccular extensions being significantly longer at right valva. The short and thick aedeagus with sclerotised and apically curved ventral carinal plate and the rather short, inflated vesica

with terminal cornutus is present in certain other subgenera of *Agrocholorta* (in most similar stage in the subgenus *Semirenorta*), displaying the common roots of the different clades of the genus. Unfortunately, the male sex is known only in one species, the other two are known by their female holotypes.

The female genitalia are characterised by the medium-long, acutely conical ovipositor, the sclerotised, more or less rounded antrum, the very short but broad, rather cup- or funnel-shaped and sclerotised ductus bursae, the strongly rugose-wrinkled appendix bursae with variably sized and shaped lateral extension, and the ample, elliptical-ovoid corpus bursae with four irregularly sclerotised ribbon-like signa.

***Agrocholorta (Mimicotelorta) atrifusa* (Hreblay & Kobayashi, 1997) comb. n.**

(Plate 22, Figs 1–2; Plate 46, Figs 37–41; gen. fig. 81)

Telorta atrifusa Hreblay & Kobayashi, 1997, *Acta Zoologica Academiae Scientiarum Hungaricae* 43(1): 56, figs 75, 170–171, 188.

Type-locality: Taiwan, Nantou County, Tayuling, 2550 m. Holotype: female, in coll. Gy. Fábíán (Budapest).

Diagnosis. The species differs externally from the other two *Mimicotelorta* taxa and the externally similar *Telorta* species by the regularly curved, not straight and oblique antemedial line, the smaller orbicular and reniform stigmata, the more prominent dark patch at termen and the absence of the hindwing discal spot; the antemedial and postmedial crosslines are better defined, regularly double in *A. (M.) atrifusa* than in the three members of *Telorta*. Wingspan 33–36 mm.

The diagnostic features of the male genitalia are discussed in detail in the diagnosis of the subgenus; the differences between *A. (M.) atrifusa* and the *Telorta* taxa are conspicuously large (see the gen. figs 81 and 102–104).

The female genitalia of *A. (M.) atrifusa* are very similar to those of *A. (M.) telortoides*, but the antrum is larger, longer, more trapezoidal, the ductus bursae is slightly more asymmetrical and more rounded at left side, and the appendix bursae has more rounded, more semiglobular sclerotised appendage. The antrum of *A. (M.) atrifusa* is larger, longer but narrower than that of *A. (M.) fibigeri*, the ductus bursae is shorter and less funnel-shaped, and the pocket-like appendage of appendix bursae is rounded, not acutely subconical as in the latter species.

Distribution. Endemic to Taiwan. The species inhabits the highest broad-leaved forest regions, it is local and rare everywhere. The adults are typically winter moths, they are on the wing from the middle of November to the first decade of February.

***Agrocholorta (Mimicotelorta) telortoides* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 21, Fig. 7; Plate 46, Fig. 35; gen. fig. 82)

Agrochola telortoides Hreblay & Ronkay, 1999, *Esperiana* 7: 525, pl. 17, fig. 81. Type-locality: Vietnam, Prov. Lao Cai, Fan-si-pan

Mts, 14 km NW of Sa Pa, 1900–2000 m, 22°20'N, 103°46'E. Holotype: female, in coll. G. Ronkay (Budapest).

Diagnosis. *Agrocholorta (M.) telortoides* can be easily distinguished from the closest related *A. (M.) atrifusa* by its larger size (wingspan 38 mm), paler ground colour of both wings, straight antemedial crossline, stronger dark dots following the subterminal line and the large, rounded hindwing discal spot which is missing from *A. (M.) atrifusa*. It is also similar to the members of the genus *Telorta* but in the latter genus these crosslines are generally simple, not double as in *A. (M.) telortoides*, the orbicular and reniform stigmata are also fully outlined with pale ochreous-greyish lines which is absent from the three *Telorta* (s. str.) species.

The female genitalia of *A. (M.) telortoides* differ from those of *A. (M.) fibigeri* by its larger, more quadratic antrum, less sclerotised and posteriorly somewhat narrower ductus bursae and the rather quadrangular, not curved conical sclerotised extension of appendix bursae; from those of *A. (M.) atrifusa* by its shorter but broader, more quadrangular antrum, more infundibular ductus bursae having narrower proximal part, and the smaller, more compact sclerotised section of appendix bursae.

Distribution. Indo-Chinese. It was found in the lower primary forest zone in the Fan-si-pan Mts in northern Vietnam; the unique known specimen was collected at the end of January.

***Agrocholorta (Mimicotelorta) fibigeri* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
comb. n.**

(Plate 21, Fig. 8; Plate 46, Fig. 36; gen. fig. 83)

Telorta fibigeri Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 273, pl. 49, fig. 5. Type-locality: China, Prov. Hunan, Shikengkong Mt., 1500 m, 24°54'N, 112°57'E. Holotype: male, in coll. P. Gyulai (Miskolc).

Diagnosis. The species is most closely allied to the former species, *A. (M.) telortoides* and the Taiwanese endemic *A. (Mimicotelorta) atrifusa*. *Agrocholorta (M.) fibigeri* is distinguishable from *A. (M.) atrifusa* by its larger size (wingspan 37 mm), much paler, dull red-brown forewing ground colour with some violaceous-brown suffusion, straighter and more oblique antemedial line, paler defined postmedial line, darker filled orbicular and reniform stigmata, and unicolorous marginal area with obsolete subterminal line. It is separable from the externally similar *Telorta* species, *T. obscura* and *T. yazakii* by its paler red-brown ground colour, straighter antemedial line and less oblique postmedial line.

The female genitalia of *A. (M.) fibigeri* differ from those of *A. (M.) atrifusa* and *A. (M.) telortoides* by the broader but shorter antrum, longer and anteriorly much more tapering, more funnel-like ductus bursae and the characteristically acute, rather subconical or claw-like sclerotised postero-lateral extension of appendix bursae.

Distribution. SE Chinese. The only known specimen was found in the Nanling Mts, southern Hunan, in the first decade of December.

Subgenus *Kyutekparkorta* subgen. n.

Type-species: *Agrochola parki* Ronkay, Ronkay, Gyulai & Hacker, 2010, here designated.

Diagnosis. The subgenus includes two highly autapomorphic species which are placed tentatively into the same suprageneric unit. The closest related lineage is the subgenus *Flavirenorta*, the external appearance of both species is similar to the taxa of the *flavirena*-group.

The male genitalia of the type-species, *A. (K.) parki*, differ strikingly from all related subgenera of *Agrocholorta* by the following apomorphic features: the tegumen has long, thorn-like penicular processes; the valvae are strongly asymmetrical, the length and width of the left and the right valva are considerably different; the two harpes are very different in length, and both are sinuously curved at apical section; left clavus forms a huge, stick-like, apically serrate-dentate process while the right clavus is reduced to a tiny lobe; and the vesica is long, tubular, reclinate, armed by a very long and strong terminal cornutus. The second species, *A. (K.) magarorum*, has a quite unusual, bifurcation of the right harpe, with broad cristate-serrate subbasal lobe on the outer arm; the right saccular extension is a very long, rather sword-like process (like in the *flavirena*-group of *Flavirenorta*) while the left extension is a broad, flattened and relatively short plate. The aedeagus is long and tubular like in *Flavirenorta* but without ventral process or strongly sclerotised carinal structures.

***Agrocholorta (Kyutekparkorta) parki* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
comb. n.**

(Plate 22, Fig. 5; Plate 46, Fig. 34; gen. fig. 84)

Agrochola parki Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 275, pl. 49, fig. 7. Type-locality: China, Prov. Fujian, Wuyi Shan, 1400 m, 27°41'N, 117°33'E. Holotype: male, in coll. P. Gyulai (Miskolc).

Diagnosis. *Agrocholorta (Kyutekparkorta) parki* differs from the externally most similar relatives, the members of the subgenus *Flavirenorta*, by the unicolorous filling of the reniform stigma, lacking the ochreous inside patch which is typical of the taxa of the *flavirena*-group. *Agrocholorta (K.) parki* is easily separable from the species of the subgenus *Semirenorta* by its darker forewing ground colour, less distinctly encircled stigmata and the entirely brown filled reniform stigma.

The male genitalia of *A. parki* differ strikingly from all known relatives by a number of autapomorphic features; these are discussed in detail under the characterisation of the subgenus.

Distribution. The unique specimen of the species was found in Fujian, SE China. The collecting date is unusually late; this species could be the only member of the genus with the flight period extending to the spring.

***Agrocholorta (Kyutekparkorta) magarorum* (Benedek, Babics & Saldaitis, 2013)
comb. n.**

(Plate 22, Figs 3–4; Plate 46, Figs 32–33; gen. fig. 85)

Agrochola magarorum Benedek, Babics & Saldaitis, 2013, *Esperiana* 18: 7, pl. 1, figs 1–2. Type-locality: West Nepal, Bheri, Dailekh area, 11 km N of Dailekh, 2380 m. Holotype: male, in coll. B. Benedek (Törökbálint).

Diagnosis. The species is externally similar to the members of the subgenus *Flavirenorta* but generally darker and more long-winged than these species. It resembles mostly *A. (F.) antiqua antiqua* but somewhat larger in size (wingspan 38–39 mm), having darker brown, or even blackish-brown shaded forewings, more sinuous postmedial line and more elongate whitish patch inside the reniform stigma.

The male genitalia of *A. (K.) magarorum* differ from all congeners by the specially modified right harpe and the broadly lobate left saccular extension; the right saccular extension is longer and originates more basally than in *A. (F.) flavirena* and *A. (F.) stoyani*, and the aedeagus lacks the ventral process which is present in the latter two species. The harpes of *A. (K.) magarorum* are longer and slenderer, apically not flattened and plate-like as in *A. (F.) antiqua* and *A. (F.) antiqua kosagezai*, the carina has no serrate-dentate sclerotised plates, the clavus is reduced, etc.

The female genitalia of *A. (K.) magarorum* can be distinguished from those of the externally similar taxa of *Flavirenorta* by the weaker sclerotised and smaller antrum and the shorter ductus bursae.

Distribution. The species is known from the western part of the Nepal Himalayas. The adults are on the wing throughout the winter, from the late November to February.

Subgenus *Shipherorta* subgen. n.

Type-species: *Agrochola pallidilinea* Hreblay, Peregovits & Ronkay, 1999, here designated.

Diagnosis. The subgenus comprises two, externally rather dissimilar and within the genus unusually coloured species, the genitalia of which demonstrate their supposed monophyly. *Shipherorta* is also a close relative of *Flavirenorta*, with the following diagnostic features. The subgenus is defined by the simplified clasping apparatus, with rather short and heavily sclerotised, apically acutely tapering valvae

with huge harpe and flattened, spinulose clavus, large, shield-like or cordiform juxta, large thorn-like dorso-lateral carinal tooth (teeth) and variably developed terminal cornutus.

The diagnostic features of the female genitalia are the medium-long and acutely triangular ovipositor, the heavily sclerotised antrum with well-developed dorsal pocket-like appendage, the relatively short and posteriorly sclerotised ductus bursae, the small, semiglobular, rugose-wrinkled appendix bursae and the elliptical-ovoid corpus bursae with weak or very weak signum patches and stripes.

Distribution. The species of the subgenus occur in northern Indochina and the south-eastern parts of China including the frontiers of the Tibetan plateau.

***Agrocholorta (Shipherorta) pallidilinea* (Hreblay, Peregovits & Ronkay, 1999)
comb. n.**

(Plate 22, Figs 6–8; Plate 47, Figs 5–12; gen. fig. 86)

Agrochola pallidilinea Hreblay, Peregovits & Ronkay, 1999, *Acta Zoologica Academiae Scientiarum Hungaricae* 45(1): 42, figs 45, 137. Type-locality: Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900–2000 m, 22°20'N, 103°46'E. Holotype: male, in coll. HNHM.

Diagnosis. *Agrocholorta (Shipherorta) pallidilinea* is the only known member of the genus having ochreous ground colour. It resembles certain large and dark specimens of *Leptologia (Xandria) macilenta* but has somewhat longer and more pointed forewings, differently shaped antemedial and postmedial crosslines and sinuous and ochreous (not straight and bright reddish) subterminal line; the hindwing is uniformly darkened, without ochreous subcostal and basal areas, as in *L. (X.) macilenta*. *A. (S.) pallidilinea* differs conspicuously from the other species of the subgenus, *A. (S.) humidalis* by its different (not grey or greyish) ground colour, less distinct, pale defined (not dark grey or brown) crosslines, etc. Wingspan 36–39 mm.

The male genitalia of the two *Shipherorta* species differ conspicuously in several details. *Agrocholorta (S.) pallidilinea* can be distinguished from *A. (S.) humidalis* by its larger, more rounded penicular lobes, much smaller, rather cordiform juxta, more evenly tapering distal section of valvae, slenderer and more stick-like (not flattened), curved harpe, shorter and thicker aedeagus with two straight carinal spines (a longer dorsal and shorter ventral spine), and the short but strong terminal cornutus.

The female genitalia of *A. (S.) pallidilinea* are separable from those of *A. (S.) humidalis* by the more quadratic antrum with fine ring-like ostium and two rather proximo-dorsal pocket-like appendages, the remarkably longer and broader, partly sclerotised and flattened ductus bursae, the larger, discoidal-globular, finely sclerotised and wrinkled appendix bursae, and the four differently shaped signa (two of them are rather thin, ribbon-like, the third one is broader but shorter, the fourth is small, rounded, patch-like).

Distribution. Southern Himalayan-Indo-Chinese. The species occurs in the high montane primary forests and elfin forests of the Fan-si-pan area in Northern Vietnam; new records are known from China (North Yunnan) by Benedek et al (2013). The adults are on the wing at the late autumn, from the end of October to the beginning of December.

***Agrocholorta (Shipherorta) humidalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
comb. n.**

(Plate 23, Figs 1–2; Plate 47, Figs 1–4; gen. fig. 87)

Agrochola humidalis Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 276, pl. 43, figs 3–4. Type-locality: China, Prov. Hunan, Shikengkong Mt., 1500 m, 24°54'N, 112°57'E. Holotype: male, in coll. G. Ronkay (Budapest).

Diagnosis. *Agrocholorta (S.) humidalis* differs externally from all other *Agrocholorta* species by its ashy-grey to pale brownish grey forewings with fine dark grey or blackish crosslines, and the reddish irroration in and around the reniform stigma.

The male genitalia of *A. (S.) humidalis* differ from those of *A. (S.) pallidilinea* by the smaller penicular lobes, the much larger, pentagonal and dorso-apically incised juxta, the less prominent and less spinulose clavus, the much thicker and straighter, flattened harpe, the longer aedeagus with very strong, acutely conical dorso-lateral carinal tooth, and the specially modified terminal cornutus which is a large, elongated-flattened sclerotised plate having a tiny apex only.

The female genitalia of *A. (S.) humidalis* are separable from those of *A. (S.) pallidilinea* by the deeply U-shaped ostial plate, the large, somewhat funnel-like antrum with large medio-lateral pocket at left side, the short and narrow, rugose ductus bursae, the small, semiglobular appendix bursae and the four more or less equal, weakly sclerotised, ribbon-like signa; from those of *A. (E.) flavirena* and *A. (E.) antiqua kossagezai* by the shorter and posteriorly somewhat broader antrum having a conspicuous postero-lateral pocket-like pouch which is absent in the two latter species, the much shorter ductus bursae and the smaller, less ribbed-cristate appendix bursae.

Distribution. The species is distributed along the eastern edge of the Tibetan plateau, its range extending from Sichuan to Shaanxi. The supposedly local and rare species is a member of the late autumnal aspect, the few known specimens were collected in November.

Subgenus *Semirenorta* subgen. n.

Type-species: *Lasiplexia semirena* Draudt, 1950, here designated.

Diagnosis. The subgenus comprises small to medium-sized moths with relatively broad and apically finely pointed forewings, large or very large, most often bicolorous reniform stigma with whitish-pale ochreous filling and large blackish-brown patch at lower half. It includes three rather distinctly separable lineages, the *semirena*-, the *kunandrasi*-, and the *emilia*-groups.

The typical features of the male genitalia are the fine, long uncus, the flattened-cordiform juxta, the short vinculum, the sclerotised, elongate triangular valvae with cucullate or falcate, sclerotised and often serrate-dentate cucullus, heavily sclerotised sacculus with regularly strong clavus and large or very large, thorn- or sword-like posterior saccular process (*semirena*- and *emilia*-groups) which sometimes reduced to short, digitiform but sclerotised and more basally positioned extension (*kunandrasi*-group). The aedeagus is short and thick, with variably strong ventral carinal process. Vesica ample, inflated, without cornutus or with large terminal sclerotised plate bearing a stronger or weaker cornutus.

In the female genitalia, the ovipositor is shorter than in the other subgenera of *Agrocholorta*, the antrum is simple, moderately sclerotised, flattened and narrower or broader quadrangular, ductus bursae very short, membranous, anterior part rather funnel-like and rugose-wrinkled. Appendix bursae small, conical or semiglobular, membranous with finely sclerotised longitudinal wrinkles, corpus bursae large, sacculiform, with four long, ribbon-like signa.

Distribution. Eastern-Himalayan-Sino-Tibetan. The subgenus has two core areas, in northern Indochina and in continental China eastwards from the Tibetan plateau; the group is unknown from the Pacific area or from Taiwan.

The species of the subgenus *Semirenorta* are typical members of the autumnal-late autumnal aspects of the south-eastern Himalayan (eastern Nepal, northern Thailand, northern Vietnam, S China)-Pacific (i.e. Japan) montane forest fauna, although the first specimens of certain species may appear at the end of the summer period. All but one species (*A. (S.) semirena*) are known only by a few examples; the early stages are unknown.

The *semirena*-group

Diagnosis. The group is characterized by the cucullate or falcate, sclerotised and serrate-dentate cucullus, heavily sclerotised sacculus with strong clavus and very large, thorn- or sword-like posterior saccular process, and the absence of the terminal cornutus of the vesica.

Agrocholorta (Semirenorta) semirena (Draudt, 1950) **comb. n.**

(Plate 23, Figs 3–4; Plate 47, Figs 13–20; gen. fig. 88)

Lasiplexia semirena Draudt, 1950, *Mitteilungen der Münchner Entomologischen Gesellschaft* **40**: 103, pl. 7, fig. 10. Type-locality: China, Prov. Chekiang, West Tien-mu-shan, 1600 m. Holotype: male, in coll. ZFMK.

Diagnosis. The type-species of the subgenus is characterised by the rather pale forewing colouration, it is paler and more ochreous-grey shaded than its closest relative, *A. (S.) siamica*; the reniform stigma is somewhat more arcuate than in *A. (S.) siamica* and the hindwing has also a somewhat paler colouration. The proper identification requires, especially in the worn or faded specimens, the study of the genitalia.

The male genitalia of *A. (S.) semirena* differ from those of *A. (S.) siamica* by the considerably longer and thinner saccular processes and harpes, the longer and less densely serrate ventral arch of cucullus, the thinner clavus and the narrower, more cordiform juxta.

The two species differ in the female genitalia mainly in the size of the antrum and the length of the signa, the antrum of *A. (S.) semirena* is larger, longer and broader, and the signa are shorter, weaker than those of *A. (S.) siamica*.

Distribution. The species is distributed from Northern Indochina (North Vietnam) along the Tibetan plateau to NE China (Hunan, Fujian, Guangxi). It is sympatric with *A. (S.) siamica* in Guangxi.

Agrocholorta (Semirenorta) siamica (Hreblay & Ronkay, 1999) **comb. n.**

(Plate 23, Figs 5–6; Plate 47, Figs 21–24; gen. fig. 89)

Agrochola siamica Hreblay & Ronkay, 1999, *Esperiana* **7**: 528, pl. 18, fig. 87. Type-locality: North Thailand, Prov. Chiang Mai, Doi Phahompok, 18 km NW of Fang, 2100 m. Holotype: male, in coll. M. Hreblay (HNHM Budapest).

Diagnosis. *Agrocholorta (S.) siamica* has a generally darker colouration than the rather pale coloured *A. (S.) semirena*; the reniform stigma is straighter and downwards slightly tapering and the hindwing is also more brownish suffused. Wingspan 33–37 mm.

The male genitalia of *A. (S.) siamica* have, in comparison with *A. (S.) semirena*, remarkably shorter saccular processes, thicker clavi, shorter and less S-shaped harpes, shorter and deeper, ventrally more serrate cucullus and broader juxta. In the female genitalia, the antrum of *A. (S.) siamica* is smaller, shorter than in *A. (S.) semirena*, and the signa are longer than those of *A. (S.) semirena*.

Distribution. Northern Indo-Chinese. The species is known from northern Thailand (Mts Doi Phahompok and Doi Inthanon) and from China (Guangxi), where it is sympatric with *A. (S.) semirena*.

The *kunandrasi*-group

Diagnosis. The group-features are the simplified, rather triangular distal section of valva without falcate and serrate-dentate cucullus, possessing only a variably strong ventral lobe near the basal plate of the harpe, the reduced saccular extension, appearing as a small process sideby the more or less similarly sized clavus, the rather beak-shaped sclerotised ventral carinal process and the presence of the cornutus of the vesica.

The group includes three species, from which *A. (S.) minorata* shows a transitional position between the *semirena* and the *kunandrasi* groups by its straighter harpe, the presence of asymmetrical, short distal saccular processes (longer on the right valva) and the longer, thorn-like clavus.

***Agrocholorta (Semirenorta) minorata* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 23, Fig. 7; Plate 47, Fig. 25; gen. fig. 90)

Agrochola minorata Hreblay & Ronkay, 1999, *Esperiana* 7: 530, pl. 18, fig. 90. Type-locality: [China, Prov. Fujian] "Lingping Südchina". Holotype: male, in coll. ZFMK.

Diagnosis. *Agrocholorta (Semirenorta) minorata* is the smallest member of the subgenus with its wingspan 30 mm.

The male genitalia are easily separable from those of *A. (S.) semirena* and *A. (S.) siamica* by the short, basally positioned saccular process, the shorter and straighter harpe, the rather anteriorly positioned lower process of cucullus, and the presence of a cornutus-plate of the vesica. *Agrocholorta (S.) minorata* can be distinguished from the closer related *A. (S.) csoevarii* and *A. (S.) kunandrasi* by the strong, cuneate lower process of cucullus, the shorter but thicker, straighter harpe, the longer and finer, rather spiniform clavus and the broader but shorter cornutus-plate of the vesica.

Distribution. Chinese. The species is known from the type-locality (China, Fujian) only.

***Agrocholorta (Semirenorta) csoevarii* (Ronkay, Ronkay, Gyulai & Hacker, 2010) comb. n.**

(Plate 23, Fig. 8; Plate 24, Figs 1–2; Plate 47, Figs 26–34; gen. fig. 91)

Agrochola csoevarii Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 274, pl. 50, figs 5–6. Type-locality: Thailand, Prov. Chiang Mai, 4 km S of Kop Dong, 1800 m, 19°52'N, 99°03'E. Holotype: male, in coll. G. Ronkay (Budapest).

Diagnosis. *Agrocholorta (Semirenorta) csoevarii* resembles externally several taxa of the *semirena*-group, *A. (S.) semirena*, *A. (S.) siamica*, *A. (S.) minorata*, somewhat less *A. (S.) emilia* and *A. (S.) plumbitincta*. *Agrocholorta (S.) csoevarii* can be distinguished from these taxa by its uniformly deep and violaceous suffused red-brown forewing ground colour and the twice angled antemedial line; the reniform stigma is most often larger, broader, than in the other *Semirenorta* species. Interestingly, its closest known species, *A. (S.) kunandrasi*, is the only member of the subgenus which is not really similar to *A. (S.) csoevarii* (and the other taxa of the lineage) but the genitalia clearly show their close relationship.

The male genitalia of *A. (S.) csoevarii* and *A. (S.) kunandrasi* have a number of shared features (e.g. the reduced saccular processes, the triangular distal half of valva and the structure of the aedeagus and vesica) but the cucullus of *A. (S.) csoevarii* is narrower and apically more rounded, without small rounded lobe at its proximo-ventral edge, the clavus is characteristically double, consisting of pyramidal inner and digitiform outer processes, the harpe is thicker and apically not curved-hooked and the cornutus of the vesica is wide-based thorn-like, not a sclerotised plate as in *A. (S.) kunandrasi*.

The male genitalia of *A. (S.) csoevarii* differ conspicuously from those of *A. (S.) semirena* and *A. (S.) siamica* by the absence of the distal saccular processes, the simple, more or less triangular distal part of valva without acute apical process and serrate-dentate digitus, the stronger, rather cuneate (bill-like) carinal plate and the presence of a large subbasal cornutus of the vesica.

Distribution. Northern Indo-Chinese. The species is known from North Thailand and North Vietnam. The flight period of the adults is the early and mid-autumn; the moths are on the wing from the end of August to the mid-November. The main habitats are the higher forest regions, a few records are also known from the mesomontane deciduous forest belt.

***Agrocholorta (Semirenorta) kunandrasi* (Hreblay & Ronkay, 1999) comb. n.**

(Plate 24, Figs 3–5; Plate 47, Figs 35–37; gen. fig. 92)

Agrochola kunandrasi Hreblay & Ronkay, 1999, *Esperiana* 7: 529, pl. 18, figs 88–89. Type-locality: Vietnam, Prov. Lao Cai, Fan-si-pan Mts, Frontier Satellite Camp FTC, 2400 m, 22°19'N, 103°47'E. Holotype: male, in coll. HNHM.

Diagnosis. *Agrocholorta (S.) kunandrasi* differs from all other members of the subgenus by the presence of black patches in the upper part of reniform stigma, between reniform stigma and postmedial line and in the cell around orbicular stigma. Wingspan 35–36 mm.

The male genitalia of *A. (S.) kunandrasi* differ from those of the most closely allied *A. (S.) csoevarii* by the broader and more pointed cucullus with small rounded lobe at its proximo-ventral edge, smaller clavus, thinner harpe and smaller, weaker, plate-like terminal cornutus.

Distribution. Northern Indo-Chinese. The species is known from the type-locality (Northern Vietnam, Fan-si-pan Mts) only. This is the only known member of *Agrocholorta* which has summer adults: the three specimens of the type-series were collected at the very end of August in a high montane primary forest area.

The *emilia*-group

Diagnosis. The group includes two closely related species which occur almost sympatrically in the Fan-si-pan Mts. They differ externally from the other members of *Semirenorta* by their remarkably narrower, downwardly tapering reniform stigma and the more unicolorous wings with more simplified wing pattern. The typical features of the male genitalia are the acutely triangular distal section of valva without teeth or lobes, the very long and slender, evenly curved harpes, the very long, falcate and finely spinulose saccular processes and the reduction of the clavus. The aedeagus and the vesica show closer connections with the *semirena*-group but the vesica is more tubular, not reclinate as in *A. (S.) semirena* and *A. (S.) siamica*.

***Agrocholorta (Semirenorta) emilia* (Ronkay, 2001) comb. n.**

(Plate 24, Fig. 6; Plate 47, Fig. 38; gen. fig. 93)

Agrochola emilia Ronkay, 2001, *Annales historico-naturales Musei naturalis hungarici* 93: 200, figs 1, 7. Type-locality: Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 22°17,9'N, 103°48,5'E. Holotype: male, in coll. HNHM.

Diagnosis. The closest relative of *A. (S.) emilia* is *A. (S.) plumbitincta*. It differs externally from *A. (S.) plumbitincta* by its “regular” shape of the reniform stigma (the upper and lower halves being equally wide and the medial part is slightly constricted), and by the significantly larger black patch in the lower section (the reniform stigma of *A. (S.) plumbitincta* is reversed drop-shaped, strongly tapering downwards, its black patch in the lower third is much smaller); from the species of the *A. (S.) semirena* species-complex by its larger size with broader, apically more acute forewing, generally darker ground colour, more sinuous crosslines, and the more concolorous dark grey-brown hindwing. Wingspan 38 mm.

The male genitalia of *A. (S.) emilia* differ from those of all known relatives by their extremely long, straight, acute clavus, the very long, slender, falcate saccular extension, the longer, slenderer, more curved harpe and the complete lack of the subapical ventral extension of the costal plate.

Distribution. Northern Indo-Chinese. The unique type of *A. (Semirenorta) emilia* was collected in the Fan-si-pan Mts by a portable light trap in a dense primary forest stand near a rather deep brook valley; together with specimens of *A. (Shipherorta) pallidilinea* and *A. (A.) albirena annamica*. The species is supposedly a member of the winter fauna, the fresh male specimen was found in the second decade of November.

***Agrocholorta (Semirenorta) plumbitincta* (Hreblay, Peregovits & Ronkay, 1999)
comb. n.**

(Plate 24, Figs 7–8; Plate 47, Figs 39–41; gen. fig. 94)

Agrochola plumbitincta Hreblay, Peregovits & Ronkay, 1999, *Acta Zoologica Academiae Scientiarum Hungaricae* 45(1): 46, figs 52, 142. Type-locality: Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900–2000 m, 22°20'N, 103°46'E. Holotype: female, in coll. HNHM.

Diagnosis. *Agrocholorta (Semirenorta) plumbitincta* is a sister-species of *A. (S.) emilia*. It is similar externally to most species of *Semirenorta* and also to *Suginistra sakabei continentalis*. It differs from the most similar *A. (S.) emilia* by the shape of the reniform stigma which is reversed drop-shaped in *A. (S.) plumbitincta*, strongly tapering downwards, its black patch is much smaller than in *A. (S.) emilia*; from the other taxa of the subgenus *Semirenorta* by its broader forewings with generally darker ground colour, stronger and sharper crosslines, reversed drop-shaped, downwards strongly tapering reniform stigma with much smaller black patch and more concolorous dark grey-brown hindwing; from *Suginistra sakabei continentalis* by its more concolorous wings, more sinuous ante- and postmedial crosslines and apically much broader reniform stigma with larger black patch at lower third. Wingspan 37–39 mm.

The female genitalia of *A. (S.) plumbitincta* differ from those of *A. (S.) semirena* by their smaller, much narrower antrum, somewhat longer ductus bursae, longer, more tubular and curved appendix bursae with stronger ribs apically and smaller, more globular corpus bursae.

Distribution. Endemic to the Fan-si-pan area in Northern Vietnam. The three known female specimens were found in a montane primary forest area at the beginning of December.

Subgenus *Pacificorta* subgen. n.

Diagnosis. The subgenus comprises four closely related species of medium-size (wingspan 35–42 mm) with apically finely acute, below apex slightly concave forewings.

The typical features of the male genitalia are the fine, short and thin, medially strongly curved uncus, the very large, shield-like juxta, the short and thin vinculum, the simplified, slender valvae with characteristic sclerotised, pin-like apical process, the medium-long and thin, stick-like harpe, the long, cylindrical aedeagus with long, tubular, distally dilated vesica with two large medial diverticula and a terminal cornutus composed of finer spinules.

The female genitalia are characterised by the short ovipositor, the long, flattened-tubular, sclerotised antrum with large, rounded posterior lobe, narrowly tubular, sclerotised ductus bursae with strongly sclerotised plate at junction to appendix bursae, the sclerotised appendix bursae with hyaline lateral lobe, and the membranous corpus bursae with four inequally long, ribbon-like signa.

Distribution. The subgenus is distributed in the Pacific area, southwards from Central Japan to Taiwan.

***Agrocholorta (Pacificorta) nawae* (Matsumura, 1926) comb. n.**

(Plate 25, Figs 1–2; Plate 47, Figs 42–46; gen. fig. 95)

Conistra nawae Matsumura, 1926, *Insecta Matsumurana* 1: 55, pl. 1, f. 17. Type-locality: Japan, Honshu, Gifu.

Diagnosis. *Agrocholorta (Pacificorta) nawae* differ from the two southern Japanese relatives, *A. (P.) amamiensis* and *A. (P.) kimurai*, by its larger size (wingspan 37–42 mm), less prominently marked crosslines and stigmata and paler hindwings. It is somewhat paler than the Taiwanese sister-species, *A. (P.) taiwanawae*, they are distinguishable by the study of their genital features, especially of the female genitalia.

The male genitalia are rather uniform throughout the subgenus; the specific differences are slight and are found in the valval shape and the length of the pin-like apical process. *Agrocholorta (P.) nawae* has, in comparison with *A. (P.) taiwanawae*, shorter and medially less tapering valvae and shorter apical process; the harpe is a bit shorter and more oblique than in *A. (P.) taiwanawae*.

In the female genitalia, *A. (P.) nawae* has conspicuously more triangular sclerotised and smaller, more elongated gelatinous-hyaline sections of appendix bursae than in *A. (P.) taiwanawae*, and the sclerotised antrum is narrower and proportionally longer than that of its sister-species.

Distribution. The species is endemic to Japan. The moths inhabit various broad-leaved forests; they are on the wing from January to March.

Agrocholorta (Pacifcorta) taiwanawae Ronkay, Ronkay, Shikata, Gyulai & Varga sp. n.

(Plate 25, Figs 3–4; Plate 48, Figs 1–12; gen. fig. 96)

Holotype. Female, Taiwan, Taichung County, Anmashan, Tashueshan, Forest Recreation Area, 2650 m, 26.I.2002, L. Ronkay (coll. HNHM).

Paratypes. **Taiwan.** Taichung County. 1 male, 2 females, Anmashan, 2100 m, 18.I.1997, C.M. Fu & H.R. Tzuoo (coll. CMF & HRT); 4 females, from the same locality, 2100 m, 1.II.1997, C.M. Fu & H.R. Tzuoo (coll. CMF & HRT); 1 male, from the same area, 2275 m, 18.I.1997, C.M. Fu (coll. CMF). Nantou County. 1 male, Koa-Lung-Dye, vic. Meifeng, 2100 m, 19.I.2002, L. Ronkay (coll. HNHM); 3 males, Tayuling, 2550 m, 16.III.1996, Gy. Fábán & L. Németh, slide Nos: RL11929; RL11930; RL11931 (coll. Gy. Fábán); 1 male, with same data, slide No.: RL11798 (coll. HNHM); 1 specimen, Jian-Tai Forest Trail, 1112 m, 26.II.2014, L.C. Shih (coll. ESRI). Hualien County. 1 male, Pilu-Shenmu, 2150 m, 28.II.2014, M. Owada, H. Endo & C.M. Fu (coll. NSMT). Taitung County. 1 male, 1 female, 2 km E of Hsiangyang, 2200 m, 11–13.III.1996, Gy. Fábán & L. Németh (coll. G. Ronkay). Kaohsiung County. 4 females, 15 km NE of Taoyuan, 1850 m, 16.III.1996, Gy. Fábán & L. Németh, slide Nos: RL11932; RL11933 (coll. Gy. Fábán); 1 female, with same data, slide No.: RL11800 (coll. HNHM); 3 males, Tianchi, 2360 m, 11–12.II.2014, M. Owada & C.M. Fu; 1 male from the same locality, 2280 m, 16–18.II.2016, M. Owada & C.M. Fu; 6 males from the same locality, 2170 m, 11–13.II.2015 (4), 17–18.II.2016 (2), M. Owada & C.M. Fu; 4 males, 1 female, Zhongzhiguan, 1930 m, 20. and 22.I.2015 (2 males), 11 and 13.II.2015 (2 males, 1 female), M. Owada & C.M. Fu (coll. NSMT); 1 specimen, Zhongzhiguan, 1930 m, 18.I.2016, L.C. Shih (coll. ESRI); 1 female, Tianchi, 2280 m, 21.I.2015, leg. C.M. Fu & W.H. Chen (coll. CMF); 1 male, Liguan, 1700 m, 10.III.2015, C.M. Fu & W.H. Chen (coll. CMF); 1 female, Zhongzhiguan, 1880 m, 10.III.2015, leg. C.M. Fu & W.H. Chen (coll. CMF); 5 males, 1 female, Tianchi, 2170 m, 10.III.2015, leg. C.M. Fu & W.H. Chen (coll. CMF); 1 male, Kaohsiung City, Meishan, 1300 m, 10.III.2015, leg. C.M. Fu & W.H. Chen (CCMF).

Diagnosis. *Agrocholorta (Pacifcorta) taiwanawae* is somewhat darker, more brownish than the Japanese sister-species, *A. (P.) nawae*, but the main differences between the two species can be found in the female genitalia. It differs from the two southern Japanese relatives, *A. (P.) amamiensis* and *A. (P.) kimurai*, by its larger size (wingspan 37–42 mm), less prominently marked crosslines and stigmata and paler hindwings.

In the male genitalia, the valvae of *A. (P.) taiwanawae* are somewhat more elongated, straighter and more evenly tapering than in *A. (P.) nawae*, the valval apical process and the harpe are longer and straighter, and the harpe is less oblique than that of *A. (P.) nawae*.

In the female genitalia, *A. (P.) taiwanawae* has the largest and most rounded sclerotised part of appendix bursae within *Pacifcorta*; it is rather rectangular, with broadly rounded gelatinous-hyaline lateral continuation. The antrum is broader and somewhat shorter than in *A. (P.) nawae*, with broader hump on the posterior edge.

Distribution. The species is endemic to Taiwan. It inhabits the high montane deciduous forest belts, occurring very locally in the higher mountainous regions of the island. The moths fly in the second half of the winter period, from January to March.

***Agrocholorta (Pacifcorta) amamiensis* (Shikata, 2015) comb. n.**

(Plate 25, Figs 5–6; Plate 48, Figs 13–14; gen. fig. 97)

Conistra amamiensis Shikata, 2015, *Tinea* 23(3): 150, figs 1–4, 11, 14. Type-locality: Japan, Kagoshima Pref., Amami-Oshima Island, Sumiyo river. Holotype: male, coll. NSMT.

Diagnosis. The *A. (P.) amamiensis* - *A. (P.) kimurai* species-pair differs externally from *A. (P.) nawae* and *A. (P.) taiwanawae* by their smaller size (33–37 mm vs 36–42 mm, respectively), sharper defined crosslines and stigmata and the darker, deeper brown suffused hindwings.

The male genitalia of *A. (P.) amamiensis* are very similar to those of *A. (P.) nawae*, only the apical spine is somewhat shorter. The differences between the female genitalia are remarkably larger as *A. (P.) amamiensis* has the shortest ductus bursae within the subgenus *Pacifcorta*.

Distribution. The species is endemic to the Amami-Oshima Island (Ryukyu Islands, Japan).

***Agrocholorta (Pacifcorta) kimurai* (Shikata, 2015) comb. n.**

(Plate 25, Figs 7–8; Plate 48, Figs 15–16; gen. fig. 98)

Conistra kimurai Shikata, 2015, *Tinea* 23(3): 153, figs 5–8, 12, 15. Type-locality: Japan, Okinawa Island, Nishimei Mt., Chinufuku forest road, 250m. Holotype: male, coll. NSMT.

Diagnosis. *Agrocholorta (Pacifcorta) kimurai* is on average darker and stronger patterned than its allopatric sister-species, *A. (P.) amamiensis*, but there is a certain overlap between the two taxa, therefore the satisfactory identification often requires the study of the genitalia.

In the male genitalia, the valvae of *A. (P.) kimurai* are more elongated and medially more tapering than in *A. (P.) amamiensis*, and the apical spine is longer, as long as in *A. (P.) taiwanawae*; in the female genitalia, the ductus bursae is longer and the sclerotised section of appendix bursae is more acutely triangular.

Distribution. The species is known only from Okinawa.

Genus *Suginistra* gen. n.

Type-species: *Agrochola sakabei* Sugi, 1980, here designated.

Diagnosis. The monotypical genus is distinguished from *Agrocholorta* by the structure of the male genitalia; from *Conistra* by the external appearance and the configuration of the female genitalia. The type-species of the genus has two subspecies of rather different size and external appearance but both subspecies are generally of “agrocholoid” and not “conistroid” habitus, with slenderer body and wings as the original combination suggests. Wingspan 32–39 mm.

The diagnostic features of the male genitalia are the shortly lanceolate uncus, the low and weakly sclerotised tegumen with large, rounded penicular lobes, the very large, shield-like juxta, the elongated-triangular, apically acutely pointed valva without corona and digitus, the long and slender, more or less stick-like harpe, the long, cylindrical aedeagus with eversible, thin ventral carinal bar terminated in finely dentated-serrate plate, long, tubular, distally dilated vesica with hyaline basal part, strongly spinulose dorsal subbasal surface, a long distal field of fine, long spiniform cornuti and a terminal diverticulum oppositely.

The female genitalia are characterised by the medium-long, conical ovipositor with fine, long papillae anales, broad but very short, sclerotised antrum, long, tubular and sclerotized ductus bursae with long lateral fold and a finely verrucose-wrinkled semiglobular anterior section at junction to corpus bursae,

the finely sclerotised, conical-semiglobular appendix bursae, and the large elliptical-ovoid, membranous corpus bursae with two weak signum-stripes.

Distribution. Sino-Pacific. The genus has a rather disjunct range in Japan and in Central China.

***Suginistra sakabei sakabei* (Sugi, 1980) comb. n.**

(Plate 26, Figs 1–2; Plate 48, Figs 17–19; gen. fig. 99)

Agrochola sakabei Sugi, 1980, *Tyo to Ga* 30 (3–4): 203, figs 6, 18. Type-locality: Japan, Honshu. Holotype: female, in coll. EIHU.

Diagnosis. The Japanese populations differ externally from the ssp. *continentalis* by their smaller size (wingspan 32–36 mm, that of the continental subspecies 37–39 mm), slenderer body, narrower and more pointed, more concolorous forewings with less sharply defined crosslines and stigmata, and the less darkened hindwings.

The genitalia of the two subspecies are very similar in both sexes, with some recognisable but small differences in the male genitalia. The penicular lobes of the typical race are more elongated, the juxta is more shield-like with more evenly tapering dorsal part and the spinules of the vesica are shorter than in the ssp. *continentalis*, especially the proximal ones.

Distribution. Endemic to Japan.

***Suginistra sakabei continentalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010) comb. n.**

(Plate 26, Figs 3–4; Plate 48, Figs 20–22; gen. fig. 100)

Agrochola sakabei continentalis Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 274, pl. 50, figs 3–4. Type-locality: China, Prov. Hunan, Nanling Mts, 1500 m, 24°54'N, 112°57'E. Holotype: male, in coll. G. Ronkay (Budapest).

Diagnosis. The continental subspecies of *Suginistra sakabei* differs so strongly from the typical Japanese populations that one could easily consider them as two distinct species. The genitalia of the two taxa show, however, no remarkable differences therefore the two taxa are interpreted here as subspecies of the same species.

The ssp. *continentalis* is larger in size than the ssp. *sakabei* (wingspan 37–39 mm vs 32–36 mm, respectively) having broader and apically less pointed forewing, stronger crosslines, more distinctly marked orbicular and reniform stigmata, differently coloured basal and marginal areas which make the entire wing much more variegated, and the larger, broader hindwing.

In the male genitalia, the penicular lobes of the ssp. *continentalis* are shorter and more rounded than in the ssp. *sakabei*, the juxta is more constricted at medial section and the spines of the distal cornuti field are longer than in the typical race.

Distribution. *Suginistra sakabei* has a strongly disjunct area as the nominotypical subspecies is recorded only from Japan while the ssp. *continentalis* occurs in the southern parts of Central China, in Hunan and Guangxi.

Genus *Edentelorta* gen. n.

Type-species: *Gortyna edentata* Leech, 1889, here designated.

Diagnosis. The type-species of the genus has long been interpreted as a member of the genus *Telorta*. This concept is, however, erroneous as this lineage is distinct from the true *Telorta* and shows closer con-

nections with a hypothetical “ancient *Agrochola*”, with numerous autapomorphies. The genital morphology of *E. edentata* displays certain features in both sexes which can be found separately in the different basic clades of the agrocholoid generic complex in a somewhat modified stage but their combination is typical only for this lineage.

In the external appearance, *Edentelorta* is most similar to certain large *Hyalobole* species (and the strong sexual dimorphism is also typical of this genus), resembling slightly also to *Vulpechola* and some *Anchoscelis* species but rather dissimilar to the two main lineages of *Telorta*. The male antennae are fasciculate, those of *Telorta* are somewhat thickened but not shortly pectinate while those of the species of *Hyalobole* s. str. are very shortly fasciculate, much shorter than in *Edentelorta*.

The diagnostic features of the male clasping apparatus are the broadly lanceolate and apically acute uncus, the extremely large, rounded and densely hairy penicular lobes, the large, subpentagonal juxta, the medium-long valva with more or less truncated apex and reduced corona, the unusually positioned, long and cuneiform, oblique harpe with its basal plate partly fused with costal sclerotised margin, and the relatively short, flattened, rounded-lobate plate of digitus. The aedeagus is rather short and cylindrical, without stronger sclerotisation in the carina; the vesica is broadly tubular and armed by a long field of strong, spiniform cornuti and a very large, thorn-like terminal cornutus.

The typical features of the female genitalia are the very long, weakly sclerotised ovipositor, the large, funnel-like and somewhat sclerotised antrum, the very short, thin and ribbed ductus bursae with sclerotised lateral margins, this stronger sclerotisation is extending on both sides onto the otherwise finely sclerotised posterior section of corpus bursae; the membranous-ribbed (not sclerotised), subconical appendix bursae and the absence of the signa.

Edentelorta edentata (Leech, 1889)

(Plate 26, Figs 5–6; Plate 49, Figs 1–9; gen. fig. 101)

Gortyna edentata Leech, 1889, *Proceedings of the Zoological Society of London* **1889**: 485, pl. 51, fig. 9. Type-locality: Japan, Yokohama, Oiwake. Holotype: female, in coll. BMNH.

Diagnosis. *Edentelorta edentata* is a sexually dimorphic species, the males are significantly smaller and darker coloured than the females. It differs externally from the somewhat similar *Hyalobole* s. str. species by its more acutely pointed forewings with stronger defined and straighter, double antemedial and postmedial crosslines, larger and broader, less distinctly outlined orbicular and reniform stigmata, and much darkened inner area of hindwing. The males lack the hyaline section of the cell which is typical of most *Hyalobole* s. str. and the antennae are longer fasciculate. *Edentelorta edentata* can be easily distinguished from the taxa of *Telorta* s. str. by its smaller size, less straight antemedial and less oblique postmedial lines, stronger subterminal line, weaker defined stigmata and the prominent ochreous costal and outer marginal areas of the hindwing. The forewing veins are not whitish-ochreous covered, the crosslines are not reddish defined and the stigmata are not darker filled as in *Telorta (Acuminorta) shenhornnyi*, and the hindwing is paler in both sexes; the outer margin of forewing is not prominently laced and the stigmata are differently shaped and sized, not darker grey-brown filled as in *Telorta (Acuminorta) acuminata*.

The genitalia of *Edentelorta edentata* are strikingly different from those of the *Telorta* and *Hyalobole* species, see the Diagnosis of the genus.

Distribution. Manchurian-Pacific. The species is widespread and regularly frequent or even common in the southern part of the Russian Far East, most parts of Japan and the Korean peninsula and north-eastern China. An arboreal species, inhabiting various broad-leaved forests; the moths are on the wing from September to November.

Genus *Telorta* Warren, 1910

Telorta Warren, 1910, in Seitz, *Die Gross-Schmetterlinge der Erde* 3: 156. Type-species: *Mesogona divergens* Butler, 1879, by original designation.

Diagnosis. The genus includes two compact species-groups which are treated here as subgenera of the same genus though the differences between them are considerable, similarly to the subgenera of *Agrocholorta*. Four of the five known species have the “regular” *Telorta*-like appearance while the fifth species, *acuminata*, differs from all other closer and more remote relatives by the characteristically laced forewing outer margin. The forewing pattern with straight and oblique antemedial and postmedial crosslines and the well-defined orbicular and reniform stigmata unify the group, as well as the finely fasciculate male antenna being somewhat thicker than the evenly thinner, filiform antenna of the female.

The genitalia structures of the two main lineages are characterized separately under the diagnoses of the subgenera.

Distribution. Manchurian-Pacific, extending southwards to Taiwan.

Subgenus *Telorta* Warren, 1910

Telorta Warren, 1910, in Seitz, *Die Gross-Schmetterlinge der Erde* 3: 156. Type-species: *Mesogona divergens* Butler, 1879, by original designation.

Diagnosis. The subgenus *Telorta* comprises three externally similar species with long and narrow, pointed forewings, straight and oblique, finely whitish defined reddish-brown antemedial and postmedial crosslines, fully encircled, not or only partly darker filled orbicular and reniform stigmata and rather concolorous grey-brown suffused hindwings. They resemble certain groups of *Agrocholorta* (e.g. *Mimicotelorta*, *Pacificorta*) but this similarity is not very strong and the genitalia clearly demonstrate their distinctness.

The male clasping apparatus is characterised by the thin, weak uncus, low and weak tegumen with narrow, rounded penicular lobes, very long and narrow juxta, more or less symmetrical, elongated valvae with acutely triangular cucullus and very weak or reduced corona; the apical third of valva possesses one or two asymmetrical subapical crests or processes. The harpe is long or very long and slender, curved or even sinuous, the sacculus is elongated with long, setose clavus and fine, acute distal saccular processes. Aedeagus medium-long, cylindrical, with long, sclerotised ventral carinal process and flat dorsal plate; vesica short, broadly tubular, recurved ventrally, armed by a variably long and strong basal dorsal spinulose area and the short and fine, apically characteristically truncated terminal cornutus.

The common features of the female genitalia are the long ovipositor with fine, very long papillae anales, the large and sclerotised deltoidal antrum with variably strong postero-medial incision, the short or medium-long, sclerotised ductus bursae with characteristic postero-lateral extension at left side, the rounded or subconical appendix bursae and the discoidal-ovoid corpus bursae with fine, unevenly long four signum-stripes.

Distribution. Manchurian-Pacific. The most widespread species of the subgenus occurs in the north-eastern part of China, from the Central Chinese mountains (Shaanxi) towards NE Manchuria, the Russian Far East, Korea and Japan; the other two species are endemic to Taiwan.

***Telorta (Telorta) divergens* (Butler, 1879)**

(Plate 26, Figs 7–8; Plate 48, Figs 23–32; gen. fig. 102)

Mesogona divergens Butler, 1879, *The Annals and Magazine of Natural History* 5(4): 364. Type-locality: Japan, Yokohama. Holotype: male, in coll. BMNH.

Synonymy

Xanthia coriacea Graeser, 1889, *Berliner Entomologische Zeitschrift* 32(2): 357. Type-locality: [Russia, Primorye] Vladivostok. Syntypes: 4 males, in coll. ZMHU.

Diagnosis. The different populations of *T. (T.) divergens* show a cline-like tendency from the darker northernmost ones to the paler Central Chinese ones, with a rather strong intra-population variation in the northern part of its area. Thus, no geographical subspecies are distinguished within the species and the taxon *coriacea* is considered as a mere synonym of *divergens*.

The type-species of the genus is on average larger than the Taiwanese congeners (wingspan 37–42 mm), and has much paler colouration of both wings. It differs from *T. (T.) obscura* and *T. (T.) yazakii* by its paler, uniformly ochreous-brown forewings with much weaker whitish defined antemedial and post-medial crosslines and larger orbicular and reniform stigmata.

The male genitalia of *T. (T.) divergens* are more robust than those of the two Taiwanese species, having much broader juxta, shorter and thicker harpe, smaller cucullus with longer corona, crest-like digitus, thicker and more ventrally curved carinal process and stronger, longer basal dorsal cornuti field of vesica.

In the female genitalia, *T. (T.) divergens* has, in comparison with *T. (T.) obscura* and *T. (T.) yazakii*, the postero-medially most rounded antrum, the longest and strongest sclerotised ductus bursae with very large postero-lateral appendage at left side, and the large subconical (not rounded) appendix bursae, without sclerotised section at the opposite side of the junction of ductus bursae to corpus bursae.

Distribution. Manchurian-Pacific. The species is widespread and locally frequent in lower and medium-high altitude broad-leaved forests. It has late autumnal adults; the flight period extends from the late September to the end of November-beginning of December.

***Telorta (Telorta) obscura* Yoshimoto, 1987**

(Plate 27, Figs 1–2; Plate 48, Figs 33–36; gen. fig. 103)

Telorta obscura Yoshimoto, 1987, *Tyô to Ga* 38(2): 87, figs 1, 3, 7. Type-locality: Taiwan, Hualien County, Tayuling, 2600 m. Holotype: male, coll. NSM Tsukuba.

Diagnosis. *Telorta (Telorta) obscura* is smaller than its sister-species, *T. (T.) yazakii* (wingspan 34–37 mm versus 36–40 mm), its forewings are somewhat less elongated and apically less pointed, less uniformly red-brown coloured, partly suffused with greyish-brown, with some ochreous-brown irroration in the median area, and the lower part of the reniform stigma is usually more darkened. The older, faded or worn specimens are often hardly distinguishable from the similarly worn examples of *T. (T.) yazakii* therefore the study of the genitalia are necessary for the proper identification.

The male genitalia of the two species are rather similar, with a series of smaller but constant differences. The genital capsule of *T. (T.) obscura* is smaller, less elongate than that of *T. (T.) yazakii*, with more rounded penicular lobes, broader juxta, straighter harpe, smaller distal saccular spine and smaller subapical ventral lobes/spines and digituses (especially the subapical ventral lobe is smaller than in its sister-species), and the outer margin of the cucullus is regularly convex, not sinuous or even concave as in *T. (T.) yazakii*. The configuration of the aedeagus and the vesica is very similar in the two species, but the ventral carinal process is weaker, the basal section of the vesica is more rugose-ribbed and the terminal cornutus is somewhat smaller in *T. (T.) obscura* than in *T. (T.) yazakii*.

In the female genitalia, the differences between the two species are more prominent, as the antrum of *T. (T.) obscura* is broader but shorter, less deltoidal, with deeper postero-medial incision and longer, more

diverging lateral arms, the posterior half of ductus bursae is broader, and the appendix bursae is weaker sclerotised and more rounded than those of *T. (T.) yazakii*.

Distribution. Endemic to Taiwan. The species occurs sympatrically (and often syntopically) with its sister-species, *T. (T.) yazakii*, in the higher montane mixed deciduous forests. Both species are late autumnal but *T. (T.) obscura* usually appears earlier in the year; the moths are on the wing from the late October to the first half of January.

Telorta (Telorta) yazakii Yoshimoto, 1987

(Plate 27, Figs 3–4; Plate 48, Figs 37–44; gen. fig. 104)

Telorta yazakii Yoshimoto, 1987, *Tyô to Ga* 38(2): 87, figs 1, 3, 7. Type-locality: Taiwan, Hualien County, Tayuling, 2600 m. Holotype: male, coll. NSM Tsukuba.

Diagnosis. *Telorta (Telorta) yazakii* has longer and apically more acutely pointed forewings than in *T. (T.) obscura*, with more uniformly deep reddish-brown or rufous ground colour and less prominent darker filling in the lower half of the reniform stigma; wingspan 36–40 mm. Certain specimens are confusingly similar to those of its sister species and the satisfactory identification requires the study of the genitalia.

The male clasping apparatus of *T. (T.) yazakii* is larger with longer valvae and cuculli, the penicular lobes are more triangular, the juxta is narrower, the saccular spine is longer and more acute, the harpe is also longer and thinner, sinuous, and all processes and lobes of the distal part of valva are larger and more asymmetrical than in *T. (T.) obscura*, and the outer margin of the cucullus is sinuous or concave. In addition, the ventral carinal process of the aedeagus is stronger, and the terminal cornutus is somewhat longer than that of *T. (T.) obscura*.

The female genitalia of *T. (T.) yazakii* can be distinguished from those of *T. (T.) obscura* by the longer, more deltoidal antrum with smaller deeper postero-medial incision (it is often somewhat larger than in the gen. fig. 104, but always shorter and less divergent than in *T. (T.) obscura*), the caudal sclerotised part of ductus bursae is narrower, and the appendix bursae is less regularly rounded and stronger sclerotised.

Distribution. Endemic to Taiwan. The species occurs in the same habitats as its sister-species, but appears as more widespread and more frequent than *T. (T.) obscura*. The moths are on the wing from early November to the first half of January.

Subgenus *Acuminorta* subgen. n.

Type-species: *Gortyna acuminata* Butler, 1878, here designated.

Diagnosis. The subgenus *Acuminorta* contains two, externally easily distinguishable species with clearly recognisable synapomorphic genitalia features of both sexes. They resemble somewhat the members of *Telorta* but there are conspicuous specific differences between them. The forewings of the *Acuminorta* species are less elongated than those of *Telorta*, with darker basal and marginal fields and paler median area, the veins are regularly covered by whitish-ochreous, the crosslines are stronger whitish defined and the filling of the orbicular and reniform stigmata is remarkably darker than the colouration of the median area. In addition, the hindwing is less unicolorous and usually partly or mostly ochreous suffused.

The diagnostic male genitalia features of *Acuminorta* distinguishing it from *Telorta* are the differently built juxta having long and sclerotised dorso-lateral arms (a unique feature within the entire agrocholoid generic complex), the lobate or partly inflated, rather ampulla-like digitus, the lack of the subapical processes and the acutely triangular cucullus, the eversible thorn-like basal cornutus (not a firm carinal process) and the long terminal spinulose field consisting of tiny spiculi.

The female genitalia of *Acuminorta* differ from those of *Telorta* by the shorter papillae anales, the more funnel-shaped antrum without large posterior lobe but with broad postvaginal plate, the much weaker sclerotised, thinner ductus bursae, the smaller appendix bursae with rugose and finely sclerotised lateral area and the long transversal signum-stripe.

Distribution. Manchurian-Pacific, including also Taiwan and SE China.

***Telorta (Acuminorta) acuminata* (Butler, 1878)**

(Plate 27, Figs 5–6; Plate 49, Figs 10–17; gen. fig. 105)

Gortyna acuminata Butler, 1878, *The Annals and Magazine of Natural History* 5(1): 83. Type-locality: Japan, Yokohama. Holotype: male, in coll. BMNH.

Synonymy

Telorta acuminata f. *mixtificata* Fernandez, 1932, *Boletin de la Sociedad Espanola de Historia Natural* 32: 453, pl. 14, fig. 3. Type-locality: China, Prov. Hunan.

Diagnosis. The type-species of *Acuminorta* is an easily recognisable species, it cannot be confused with any other members of the *Agrochola* generic complex due to its strongly laced forewing outer margin. The forewing ground colour is paler than in the taxa of the subgenus *Telorta*; the veins are usually paler and the filling of the orbicular and reniform stigmata are remarkably darker than the ground colour; the most often strongly defined dark dots following the subterminal line at termen are also typical of *T. (A.) acuminata*. The hindwing is light ochreous-yellowish with greyish-brown suffusion in the inner area of the wing, it is paler than in the other *Telorta* species, even paler than in the species of *Edentelorta*, *Vulpechola* or *Sunira*.

The male clasping apparatus differs from those of *T. (A.) shenhornnyi* by the much narrower and longer, more quadrangular juxta with shorter dorso-lateral arms, the much stronger developed and densely spinose clavus, the longer and straighter harpe, the larger and less sclerotised, bilobate digitus, and the straighter cucullus with smaller subapical ventral lobe. The eversible basal tooth of the aedeagus is much smaller in *T. (A.) acuminata* than in *T. (A.) shenhornnyi*, while the distal spinulose field is considerably longer, stronger.

In the female genitalia, the antrum of *T. (A.) acuminata* is more funnel-like than that of *T. (A.) shenhornnyi*, broader posteriorly and more tapering anteriorly, the ductus bursae is somewhat longer and thinner, with stronger sclerotised plate at its junction to corpus bursae, and shorter and weaker, most often interrupted signum.

Distribution. The species is widespread along the Pacific Coast in the Russian Far East, Korea, Japan, and eastern China, from Manchuria towards the south, as far as Hunan and Guangxi. It inhabits various broad-leaved and mixed forests; the moths are on the wing in October–November.

***Telorta (Acuminorta) shenhornnyi* Ronkay & Kobayashi, 1997**

(Plate 27, Figs 7–8; Plate 49, Figs 18–27; gen. fig. 106)

Telorta shenhornnyi Ronkay & Kobayashi, 1997, *Acta Zoologica Academiae Scientiarum Hungaricae* 43(1): 54, figs 74, 76–77, 168–169. Type-locality: Taiwan, Taitung County, Hsiangyang Police station, 2320 m. Holotype: male, in coll. Gy. Fábíán (Budapest).

Diagnosis. *Telorta (Acuminorta) shenhornnyi* differs conspicuously from *T. (A.) acuminata* by its generally darker colouration and the not laced outer margin of the forewings. It can be distinguished from the externally somewhat similar *T. (T.) divergens* by its smaller size (wingspan 34–36 mm vs 36–40 mm), darkened basal and marginal fields bordered by prominently whitish defined red-brown crosslines, paler veins and darker filled orbicular and reniform stigmata; from the closest related *T. (A.) acuminata* by the

generally darker colouration of both wings, the evenly arched (not laced) forewing outer margin, larger stigmata, etc. The other two species of the subgenus *Telorta* are much darker in colouration with less prominent crosslines, darker veins, more obscure stigmata, etc.

The specific features of the male genitalia distinguishing *T. (A.) shenhornyeni* from *T. (A.) acuminata* are the much broader, rather cordiform juxta with longer and stronger sclerotised, more acute dorso-lateral arms, the shorter and more curved harpes, the smaller but stronger sclerotised, finger-like digitus, the curved cucullus with larger subapical ventral lobe, the huge and more dorsally positioned basal cornutus and the smaller, weaker distal spinulose field of the vesica.

In the female genitalia, the antrum *T. (A.) shenhornyeni* is somewhat smaller than that of *T. (A.) acuminata* and differently shaped, posteriorly narrower and less funnel-like, less tapering proximally, the sclerotised plate at junction of ductus bursae to corpus bursae is smaller and weaker, and the signum is much longer and stronger than in *T. (A.) acuminata*.

Distribution. Endemic to Taiwan. The species inhabits the high montane deciduous forest belts above 2000 m a.s.l. The moths appear earlier than the other two *Telorta* species in Taiwan; they are on the wing from the second half of October to the beginning of December.

Genus *Gigatelorta* Ronkay, Ronkay, Gyulai & Hacker, 2010

Gigatelorta Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 273. Type-species: *Telorta falcipennis* Boursin, 1958, by original designation.

Diagnosis. The genus comprises two large species (wingspan 39–45 mm, on average the largest members of the generic complex) with rather robust body and broad forewings with strongly convex costa, acute apex and finely concave outer margin below termen. Vestiture of head and thorax rather homogeneous, collar relatively small, rounded, pubescence of tegulae long and dense, hair-like, pro- and metathoracic tufts large. The two species are externally confusingly similar, the specific differences can be found in the structure of the copulatory organs.

Gigatelorta differs from the closely related *Telorta* by the reduced antemedial and postmedial crosslines, the indistinct outline of orbicular stigma, the smaller and narrower reniform stigma and the finer postmedial line, and the very differently built genitalia of both sexes.

The most prominent apomorphic feature of the male genitalia is the huge and heavily sclerotised, strongly asymmetrical genital capsule, which appears like an “irregularly winged butterfly”. *Gigatelorta* differs essentially from *Telorta* by its very weak tegumen with narrow, elongate and oblique penicular lobes, the very long, thin and dorsally recurved sclerite between tegumen and vinculum, the reduced cucullus and corona, the heavily sclerotised saccular parts fused with the similarly strongly, lobate and strongly asymmetrical harpes and the weaker, narrower ampullae, forming a characteristically shaped polygon. The aedeagus is longer, stronger, more tubular than in *Telorta*, with very long, sclerotised ever-sible bars and the vesica is simple, lacking cornuti. The distinctive features of the female genitalia are the short and rather broadly conical ovipositor and the weaker sclerotised signa; the *Telorta* species have considerably longer, pointed ovipositor and characteristically shaped signa.

Distribution. Sino-Taiwanese. The genus is one of the typical winter groups; the moths are on the wing during the winter, from the end of November to the end of February. They inhabit the lower and medium-high deciduous forests in the hilly and meso-montane areas of south-eastern China and Taiwan; the two species are completely allopatric.

***Gigatelorta falcipennis* (Boursin, 1958)**

(Plate 28, Figs 1–2; Plate 49, Figs 30–32; gen. fig. 107)

Telorta falcipennis Boursin, 1958, *Zeitschrift der Wiener Entomologischen Gesellschaft* **43**: 47, pl. 1, fig. 4. Type-locality: China, Prov. Guangdong, Canton. Holotype: female, in coll. ZFMK.

Diagnosis. The two closely related species are very similar externally and, due to the small material available, the variation is hardly estimable. Based on the few known specimens, the postmedial line of *G. falcipennis* is a bit more sinuous than in *G. herois*, and the darker spot in the lower part of reniform stigma is better visible.

The male genitalia of the two species are conspicuously different. In *G. falcipennis*, the penicular lobes are longer and narrower, the vinculum is more elongated, the left sacculus is longer with more sinuous margins and larger, rather foot-shaped than furcate terminal plate, the right sacculus is much broader and strongly bifurcate, the harpe-lobes are broader on both sides, the aedeagus is longer and thinner, medially not thickened, the eversible sclerotised carinal bars are longer and stronger and the vesica is less recurved, more tubular than in *G. herois*.

The female genitalia of *G. falcipennis* have, comparing with those of *G. herois*, longer and narrower antrum, weaker ductus bursae and smaller, more rounded and weaker sclerotised appendix bursae.

Distribution. South-eastern China. The continental species of the genus is known by seldom specimens from the Guangdong-Fujian area. It has winter adults, with the flight period extending from December to February.

***Gigatelorta herois* (Kobayashi, 1998)**

(Plate 28, Figs 3–4; Plate 49, Figs 28–29; gen. fig. 108)

Telorta herois Kobayashi, 1998, *Transactions of the Lepidopterological Society of Japan* **49**(3): 199, figs 1, 2, 4, 5. Type-locality: Taiwan, Taoyuan County, Shangbaling. Holotype: male, coll. NSMT.

Diagnosis. *Gigatelorta herois* differs externally from *G. falcipennis* by its almost straight postmedial line and the obsolete or very fine dark dot at the lower edge of the reniform stigma. Though the distribution of both *Gigatelorta* species is incompletely known, actually the two species can be distinguished also by their locality data as their known range is clearly allopatric.

In the male genitalia, *G. herois* has smaller sacculi on both sides, having more or less straight margins, simple right sacculus (not bilobate as in *G. falcipennis*), broader penicular lobes and cuculli, slenderer harpes, shorter vinculum, medially thickened aedeagus with finer eversible carinal bars and more ample, more recurved vesica.

The female genitalia of *G. herois* differ from those of *G. falcipennis* by its considerably broader, more calyciform antrum and more elongated, stronger sclerotised appendix bursae; the signa are also longer and stronger than in its sister-species.

Distribution. Endemic to Taiwan. A typically winter species, the adults are on the wing from the end of January to early March; inhabiting various lower and medium-high deciduous forest habitats.

Genus *Propenistra* Berio, 1980

Propenistra Berio, 1980, *Annali del Museo Civico di Storia Naturale Giacomo Doria Genova* **83**: 15. Type-species: *Noctua laevis* Hübner, 1803, by original designation.

Diagnosis. The genus is monotypical and rather remote from the other groups of the *Agrochola* generic complex, its closest relatives are *Hyalobole* and *Incertobole*. The external similarity of *P. laevis* with the species of the genus *Spudaea* is superficial, based only on forewing colouration and certain elements of the noctuid maculation. The differential external features distinguishing *Propenistra* from the species of the subgenus *Tzuobole* of *Hyalobole* are the thinner male antenna, the shorter third segment of the labial palp, the somewhat different stigmata of the forewings and the uniformly darkened hindwing without paler ochreous costal area which is typical of the latter lineage. It differs from the other rather closely allied genus *Incertobole* by the smaller size, narrower and apically less pointed forewings with darker filling of reniform stigma and absence of the dark dots following the subterminal line, the differently coloured hindwing, and the filiform male antenna.

The male genitalia are most similar to those of *Incertobole*, the distinctive features are the much broader tegumen with large, lobate penicular lobes, the much broader but shorter, rather shield-like juxta, the longer and thinner, more costally positioned harpe, the entire lack of the corona, and the broader, more reclinate tube of the vesica with smaller terminal cornutus. The male genitalia of *Propenistra* are easily separable from those of the different subgenera of *Hyalobole* by the absence of the ampullar process and the valval corona and the very different armature of the vesica.

The typical diagnostic features of the female genitalia are the medium-long and relatively strong ovipositor (being strikingly shorter than in *Incertobole* and *Hyalobole*), the stronger sclerotised, more or less trapezoidal antrum, and the more tubular, differently sclerotised, long ductus bursae; the elliptical-ovoid corpus bursae is considerably shorter than that of *Incertobole*.

Distribution. The genus is the only western Palaearctic relative of the large monsoonic Asian clade comprising *Incertobole* and *Hyalobole*; their disjunct pattern of distribution is quite unusual though not extraordinary within the Palaearctic Noctuidae (see e.g. *Pseudopanolis* Inaba, 1927).

Propenistra laevis (Hübner, 1803)

(Plate 28, Figs 5–6; Plate 49, Figs 33–40; gen. fig. 109)

Noctua laevis Hübner, 1803, *Sammlung Europäischer Schmetterlinge* **4**: pl. 34, fig. 163. Type-locality: [Europe].

Diagnosis. *Propenistra laevis* is hardly confused with any other related species. In the European fauna it may resemble only the two *Spudaea* species but its body is more slender, the forewing is narrower, the stigmata are broader and the genitalia of both sexes are strikingly different. The closer related taxa are all distributed in the Himalayan-Pacific subregion; their external and genital differences are discussed in the characterisation of the genus. Wingspan 26–35 mm.

Distribution. Northern Mediterranean-Anatolian. The species is distributed locally in Central and Southern Europe, its area extends eastwards to the southern Ural, the Near East, Turkey and Armenia. A xero- and thermophilous species, occurring mostly in dry, warm oakwoods and mixed deciduous forests. The first adults appear relatively early at the end of the summer, the peak of the flight period is usually at the end of September-beginning of October.

Genus *Incertobole* gen. n.

Type-species: *Dasycampa evelina* Butler, 1879, here designated.

Diagnosis. The only known species of the genus has long been placed into *Agrochola* s.l., the original combinations of the three descriptions indicate its external resemblance the members of the genus *Conistra* Hübner, 1821. This similarity is, however, misleading as the species has fasciculate male antenna and quite different genitalia structures in both sexes. Its closest relatives are *Propenistra* and *Hyalobole* from which it can be separated by a series of external and genitalic features.

Incertobole is characterised externally by relatively robust thorax and short abdomen, the rather short but broad, acutely pointed forewings (wingspan 31–35 mm) with finely concave outer margin below apex, the finely pale encircled stigmata, antemedial and postmedial crosslines and light covered forewing veins and the dark dotted subterminal line, and the fasciculate male antenna. The body structure and the wing shape of *Incertobole* is very similar to that of the subgenus *Fuobole* of *Hyalobole* but the colouration and the forewing pattern are conspicuously different, as well as the genitalia in both sexes.

The male genitalia of *Incertobole* differ from those of *Propenistra* by the narrower tegumen with small, rounded penicular lobes, the long and narrow quadrangular juxta, the much shorter and thicker harpe, the presence of a short corona, and the shorter and more inflated vesica with much longer and more robust terminal cornutus. The male genitalia of *Incertobole* can be distinguished from those of all lineages of *Hyalobole* by the absence of the ampulla (only a finely ribbed surface can be found at place of this process), the unspecialised carina penis and the quite different armature of the vesica with the huge terminal cornutus while all but one species of *Hyalobole* have a distal cornuti field instead of a single cornutus (in *Fuobole* the entire vesica is unarmed).

The female genitalia of *Incertobole* differ from those of *Propenistra* by the longer and thinner ovipositor, the weak antrum, the short ductus bursae and the very long, tubular corpus bursae with somewhat dilated fundus bursae; from those of *Hyalobole* by the proportionally shorter ovipositor, the less sclerotised ostial ring (antrum), the very short and tubular sclerotised ductus bursae and the much longer corpus bursae. The only exception is *H. (Tzuoobole) changae*, this species has a surprisingly similar female copulatory organ, though the ovipositor is proportionally longer and the ostial ring is stronger sclerotised than in *Incertobole evelina* but this strong convergence is a notable phenomenon.

Incertobole evelina (Butler, 1879) **comb. n.**

(Plate 28, Figs 7–8; Plate 50, Figs 1–10; gen. fig. 110)

Dasycampa evelina Butler, 1879, *The Annals and Magazine of Natural History* 5(4): 363. Type-locality: Japan, Yokohama. Holotype: male, in coll. BMNH.

Synonymy

Orrhodia canicostata Graeser, 1889, *Berliner Entomologische Zeitschrift* 32(2): 358. Type-locality: [Russia] Amur region, Chabarofka (Khabarovsk). Holotype: male, in coll. ZIN;

Orrhodia ciliata Staudinger, 1892, in Romanoff, *Mémoires sur les Lépidoptères* 6: 490. Type-locality: [Russian Far East] Suifun (Razdolnaya river). Lectotype: male, in coll. ZMHU; here designated.

Lectotype designation. Lectotype of *Orrhodia ciliata*, here designated: male, "Origin" (pink label), "*ciliata*" (with handwriting of Staudinger), [Russian Far East] "Nikolskaja Suifun, 1876, Chr.", "Wladivostok, Chr." (violet labels with handwriting), "*Agrochola evelina* Butl. m, det. Boursin", "Préparation No. MB 268 Ch. Boursin" (printed label), coll. ZMHU.

Diagnosis. The species can be confused with certain similarly patterned eastern Asiatic *Conistra* species (e.g. *C. fletcheri* Sugi, 1958, *C. ardescens* (Butler, 1879) or *C. grisescens* Draudt, 1950) but it has less robust body, fasciculate male antenna, shorter and more cylindrical (not strongly dorso-ventrally flattened) abdomen, shorter and less shining forewings with sharper noctuid pattern and very different copulatory organs in both sexes. The entire body structure, with the fasciculate male antenna and the wing shape resembling mostly to *Hyalobole (Fuobole) conistroides* (their silhouettes are really very similar) but the

colouration and the wing pattern are strikingly different in the two species, see e.g. the Plate 50, Figs 1–10 and Plate 52, Figs 53–55.

The genitalia are characterised in the Diagnosis of the genus, in comparison with the related genera. The male genitalia cannot be confused with any of the externally similar taxa; the female genitalia are only with those of the externally very different *H. (Tzuoobole) changae* (see the gen. figs 110 and 126) but *I. evelina* has proportionally shorter ovipositor and less sclerotised ostial ring.

Distribution. Northern Pacific. The species occurs in the Russian Far East, NE China, the Korean peninsula and Japan. *Incertobole evelina* is a typically winter species with overwintering adults, the first moths appear at the late autumn and are on the wing often throughout the winter until the early spring, depending on the climate of the given area. In the more northern part of its range the overwintering specimens can be found in March–April. The moths are attracted strongly to light and sugar baits.

Genus *Hyalobole* Warren, 1911

Hyalobole Warren, 1911, *Novitates Zoologicae* 18: 141. Type-species: *Hyalobole orthosioides* Warren, 1911, by original designation.

Diagnosis. The genus was originally erected for a single species, *H. orthosioides*, on the basis of the hyaline lower half of the hindwing cell. Now it contains 18 taxa belonging to four main lineages and only one of these lineages (and not all species of this lineage!) bears the main generic feature defined by Warren. On the other hand, the genitalia of both sexes are very characteristic for the genus, several externally strongly different species have very similar genital configuration.

The first systematic consideration of the genus was published by Owada (1994) which is correct in most taxonomic statements but contains a few mistakes, due to the misinterpretations of *H. (H.) orthosioides* and *H. (H.) phaeosoma*. In the subsequent years, unexpectedly many newly discovered taxa were described, widening considerably our knowledge about the external and genital morphological features of this large clade. The main lineages are usually rather homogeneous but two of the large lineages have specially modified members and the fourth lineage displays a number of conspicuous autapomorphies which are missing from the rest of the taxa of the genus. These four lineages are treated here as subgenera of *Hyalobole*, providing higher significance to the shared features than the differential ones. This categorisation is, however, still tentative and the future molecular studies may prove the generic distinctness of some of the subgenera described below.

In the following part, a brief redescription of the genitalia and the taxonomic account of the genus are given.

Male genitalia. Uncus weak, fine, slender, tegumen rather low but broad, often with two pairs of coremata, one pair dorso-apically, second pair on penicular lobes, these lobes are often double. Juxta small, sclerotized, subdeltoidal, often with stronger apical process, vinculum short, rounded. Valva elongated, apically often dilated or falcate, with apex rounded or conical, corona present, usually strong; cucullus may bear a triangular, ventrally projecting lobe. Harpe simple, stick-like, often curved, ampullar (costal) process strong, regularly acute, sometimes bifurcated. Aedeagus small, tubular, arcuate, carina beak-shaped, sometimes with teeth or a bundle of spinules, vesica broadly tubular, recurved dorsally, bearing a variably strong, membranous diverticula and one or two small spinulose fields; exceptionally entirely unarmed.

Female genitalia. Ovipositor very long, posterior papillae weak, apophyses long, strong, anterior papillae sclerotized, apophyses rather long. Antrum a short but broad ring, quadrate or arcuate, ductus bursae flattened, short and strong or longer, weaker, sometimes tubular. Appendix bursae rounded or elongate, wrinkled or slightly sclerotized, corpus bursae small, rounded-elliptical, or much longer, tubular-elliptical; signa absent.

Subgenus *Hyalobole* Warren, 1911

- orthosoides orthosoides* Warren, 1911
orthosoides hyalbre Kobayashi, 2003
variegata Hreblay & Ronkay, 1998
marginalis Hreblay & Ronkay, 1998
medvegymihalyi Ronkay, Ronkay, Gyulai & Hacker, 2010
infenestra Hreblay & Ronkay, 1998
phaeosoma (Hampson, 1906)
subapicalis Hreblay & Ronkay, 1998
subtropica Hreblay, Peregovits & Ronkay, 1999

Subgenus *Anstineobole* subgen. n.

- albimacula albimacula* (Kononenko, 1978)
albimacula nigrizonata Ronkay, Ronkay, Gyulai & Hacker, 2010
kononenkoi Hreblay & Ronkay, 1998

Subgenus *Tzuobole* subgen. n.

- nigripalpis nigripalpis* (Warren, 1911)
nigripalpis hreblayi Kobayashi, 2003
taiwanensis Hreblay & Ronkay, 1998
changae changae Owada, 1994
changae longirostris Hreblay & Ronkay, 1998

Subgenus *Fuobole* subgen. n.

- conistroides* Ronkay, Ronkay, Gyulai & Hacker, 2010

Distribution. Himalayan-Sino-Pacific.

Subgenus *Hyalobole* Warren, 1911

Type-species: *Hyalobole orthosoides* Warren, 1911, by original designation.

Diagnosis. Usually larger (wingspan 27–40 mm) *Hyalobole* species with long, pointed forewings, cell hyaline except in *H. (H.) infenestra* and *H. (H.) medvegymihalyi*. Male genitalia with arcuate, apically dilated valvae with apex rounded (*orthosoides*-group) or falcate-conical, with weaker corona consisting of scarce setae (*phaeosoma*-group). Tegumen with an additional pair of coremata on dorso-apical surface. Carina of aedeagus beak-shaped, without spinulose field.

Distribution. Southern Himalayan-Indo-Chinese.

The *orthosoides*-group

Diagnosis. The species-group includes more or less *Cirrhia* or *Tiliacea*-like species with hyaline inner area of the hindwing cell and yellowish or orange-brown forewing with darker red-brown noctuid pattern.

The group-features of the male genitalia are the single cornuti field of the vesica, the evenly rounded cucullus with long and dense corona and the short and medially curved harpe, those of the female genitalia are the rather long and flattened ductus bursae, the laterally positioned, large and rounded appendix bursae and the small, discoidal corpus bursae.

***Hyalobole (Hyalobole) orthosoides orthosoides* Warren, 1911**

(Plate 29, Figs 1–2; Plate 50, Figs 11–18; gen. fig. 111)

Hyalobole orthosoides orthosoides Warren, 1911, *Novitates Zoologicae* **18**: 142. Type-locality: India, Darjeeling. Lectotype: male, in coll. BMNH.

Diagnosis. The four species of this species-group are often very similar, although the individual variability is rather small and the two sexes are similar in colouration. *H. (H.) orthosoides* is on the average the largest species of the group (wingspan 33–37 mm) with clean, unicolorous orange-yellow forewings with rather sharp crosslines and stigmata but without ochreous and red-brownish variegation, stronger dark medial line and/or marginal suffusion.

In the male genitalia the juxta of *H. (H.) orthosoides* is strong with only slightly broader base than apical part, the ampullar process is long, straight and wedge-shaped, the apical part of valva is rather strongly dilated and the spinulose field of the vesica is large, strong. In *H. (H.) variegata* the juxta is smaller, medially more constricted, having broader basal and narrower dorsal part, the ampulla is similarly straight, long and acute, the apical part of valva is narrower and the spinulose field of vesica is smaller. The juxta of *H. (H.) orthosoides* is similar to that of *H. (H.) marginalis* but the ampulla is longer and straighter, and the valva is apically somewhat more elongated.

In the female genitalia, the proximal papillae anales and the antrum of *H. (H.) orthosoides* and *H. (H.) variegata* are very similar but the ductus bursae of the former is narrower, not straight but sinuous; the apophyses anteriores of *H. (H.) orthosoides* are longer and terminally thinner than those of *H. (H.) marginalis*, the antrum is somewhat longer with deeper cleft of the posterior margin and the ductus bursae is longer, slenderer than in its close relative.

Distribution. Southern Himalayan. The typical subspecies of *H. (H.) orthosoides* is widespread in Nepal and the eastern part of the Indian Himalayas in the medium high forest zones. The flight period is relatively early in the year, the moths are on the wing from the end of September to the middle of November.

***Hyalobole (Hyalobole) orthosoides hyalbre* Kobayashi, 2003**

(Plate 29, Figs 3–4; Plate 50, Figs 19–26; gen. fig. 112)

Hyalobole hyalbre Kobayashi, 2003, *Tinea* **17**(5): 266–277. Type-locality: China, Prov. Sichuan, Chengdu, Dayu Xiling. Holotype: female, in coll. NSMT.

Diagnosis. The taxon was originally described as a distinct species; the comparison of a larger material from Vietnam and China with the different southern Himalayan populations of *H. (H.) orthosoides* clearly shows their conspecificity. The subspecific status of the Indo-Chinese populations was proposed by Ronkay et al (2010).

Distribution. The eastern subspecies of *H. (H.) orthosoides* occurs locally in northern Indochina and along the south-western frontiers of the Tibetan plateau in SE China. The flight period is somewhat later than in the typical subspecies, the adults fly to the end of December.

***Hyalobole (Hyalobole) variegata* Hreblay & Ronkay, 1998**

(Plate 29, Figs 5–6; Plate 50, Figs 27–34; gen. fig. 113)

Hyalobole variegata Hreblay & Ronkay, 1998, in Haruta, *Tinea* **15**(Supplement 1): 237, pl. 153, figs 22–23, gen. figs 1158–1159. Type-locality: Nepal, Ganesh Himal, Gothen village, 3150 m, 28°09'N, 85°12'E. Holotype: male, in coll. HNHM.

Diagnosis. The closest relative of *H. (H.) variegata* is *H. (H.) orthosoides* of which it differs by its slightly smaller size (wingspan 31–36 mm), more variegated forewings and the details of the genitalia. The third

related species, *H. (H.) marginalis* has generally unicolorous basal and medial areas, without remarkable darker pattern and stronger median fascia but the marginal area is darkened, suffused often with blackish-brown.

The male genitalia of the two species are very similar, they can be distinguished by the shape of the juxta which is medially more constricted and ventrally broader in *H. (H.) variegata* than in *H. (H.) orthosioides*; in addition the harpe is somewhat slenderer, the aedeagus is less strongly curved medially and the scobination of the distal part of the vesica is remarkably weaker than in the latter species. The juxta of *H. (H.) variegata* is basally broader and distally narrower than that of *H. (H.) marginalis*, the ampulla is longer and straighter, distally thicker, and the cornuti field of the vesica is somewhat longer and narrower than in its allied species.

In the female genitalia, this species has the largest antrum plate within the three closely related taxa, and the deepest and more evenly arcuate cleft on the caudal margin of antrum.

Distribution. Southern Himalayan. The species is known from the central and eastern parts of Nepal and the lower regions of southern Tibet in China. The adults are late autumnal, the flight period is extending from late September to the beginning of November.

Hyalobole (Hyalobole) marginalis Hreblay & Ronkay, 1998

(Plate 29, Figs 7–8; Plate 50, Figs 35–43; gen. fig. 114)

Hyalobole marginalis Hreblay & Ronkay, 1998, in Haruta, *Tinea* 15(Supplement 1): 238, pl. 153, figs 24–25, gen. figs 1160–1161.

Type-locality: Nepal, 6 km NNE Muldi (Murre), 2835 m, 27°23'N, 85°58'E. Holotype: male, in coll. Hreblay (HNHM).

Diagnosis. The species is somewhat smaller than its close relatives with its wingspan 28–33 mm. The strong dark marginal suffusion gives a characteristic appearance for *H. (H.) marginalis*, this pattern is missing from the two sibling species. The medial line is incomplete, much weaker than in *H. (H.) variegata* and the hindwing is lighter, with weaker greyish-brownish suffusion.

The male genitalia are most similar to those of *H. (H.) orthosioides*, the main differential features are found in the shape and size of the ampullar process and the valva itself. In *H. (H.) marginalis* the ampullar process is shorter and weaker than in *H. (H.) orthosioides* and medially curved, and the valva is also somewhat shorter, apically less dilated. It differs from the third closely related species, *H. (H.) variegata*, by the narrower and medially less constricted juxta, the finer, medially curved ampulla and the shorter but broader cornuti field of the vesica.

The female genitalia of *H. (H.) marginalis* have, in comparison with *H. (H.) variegata* and *H. (H.) orthosioides*, the broadest and shortest antrum with almost straight posterior margin, and the shortest anterior gonapophyses.

Distribution. Southern Himalayan. The species is known from the central and eastern parts of Nepal.

The *infenestra*-group

Diagnosis. The two species of the *infenestra*-group differ from the other members of the subgenus *Hyalobole* by their entirely scale-covered hindwing cell in the males; the hyaline part of the cell being typical of all other members of the subgenus is missing. The valval structures is more or less transitional between the *orthosioides*- and *phaeosoma*-groups with their distally more curved valvae with more elongated cucullus with dorsally projecting apex, while the tegumen lacks the long dorsal hair-brushes. Finally, the armature of the vesica consisting of three groups of cornuti is a synapomorphy of the *infenestra*-group.

***Hyalobole (Hyalobole) medvegymihalyi* Ronkay, Ronkay, Gyulai & Hacker, 2010**

(Plate 30, Figs 1–2; Plate 50, Figs 44–48; gen. fig. 115)

Hyalobole medvegymihalyi Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperia* 15: 277, pl. 51, figs 5–6. Type-locality: China, Prov. Hunan, Nanling Mts, 1500 m, 24°54'N, 112°57'E. Holotype: male, in coll. HNHM.

Diagnosis. *Hyalobole (H.) medvegymihalyi* is most similar externally to the two races of *H. (H.) orthosoides* (ssp. *orthosoides* and ssp. *hyalbre*). It differs from this species by the absence of the hyaline area from the hindwing cell in males, the somewhat narrower forewings with intensive dark grey irroration, much smaller and much darker filled orbicular and reniform stigmata, more interrupted but regularly darker crosslines, and the prominent dark markings between postmedial and subterminal lines. It is easily separable from its closest relative, *H. (H.) infenestra* by its more variegated forewings, much smaller and usually dark filled orbicular and reniform stigmata, stronger dotted terminal line, paler hindwings with smaller discal spot, etc. Finally, *H. (H.) medvegymihalyi* can be distinguished from the somewhat similar *H. (T.) nigripalpis hreblayi* by its more elongate forewing with more concave outer margin below termen, more extensive dark markings, especially in the marginal area, smaller, more sharply defined and dark filled orbicular and reniform stigmata, and the paler hindwing with two diffuse greyish suffused areas.

The male genitalia of *H. (H.) medvegymihalyi* differ from those of *H. (H.) infenestra* by the basally broader uncus, much broader juxta, distally broadened valva and more rounded cucullus with longer and denser corona, shorter and broader harpe with large, discoidal apical section, longer and straighter ampulla, and the shorter aedeagus with differently built basal cornuti fields consisting of shorter spinules. *Hyalobole (H.) medvegymihalyi* can be distinguished from *H. (H.) orthosoides*, *H. (H.) marginalis* and *H. (H.) variegata*, besides the different armature of the vesica, by its broader base of uncus, broader tegumen, distally much more dilated valva with broader and more dorsally projected cucullus, broader and more flattened, more mushroom-shaped harpe and the longer, thinner ampulla.

The female genitalia of the four above-mentioned species are very similar, the ductus bursae of *H. (H.) medvegymihalyi* is straighter than those of the other taxa, its lateral margins are strongly parallel; the corpus bursae is proportionally smaller and less elliptical and the ovipositor is somewhat longer than in the related species. The female genitalia of these four species differ conspicuously from those of *H. (H.) infenestra* by their much longer ductus bursae, more laterally positioned appendix bursae and shorter, elliptical-rounded corpus bursae.

Distribution. Sino-Tibetan. *Hyalobole (H.) medvegymihalyi* has been recorded from the middle section of China eastwards of the Tibetan plateau, from Shaanxi towards Guangxi and Sichuan; its real area is supposedly considerably larger. An autumnal species, the adults are on the wing, according to the known data and depending of the locality, from early October to early December.

***Hyalobole (Hyalobole) infenestra* Hreblay & Ronkay, 1998**

(Plate 30, Figs 3–4; Plate 51, Figs 1–10; gen. fig. 116)

Hyalobole infenestra Hreblay & Ronkay, 1998, in Haruta, *Tinea* 15(Supplement 1): 239, pl. 153, fig. 28, gen. figs 1164–1165. Type-locality: Nepal, Annapurna Himal, 2 km E of Ghorepani, 2900 m, 28°24'N, 83°43'E. Holotype: male, in coll. HNHM.

Diagnosis. *Hyalobole (H.) infenestra* differs from all but one members of the *orthosoides*-line by its entirely scale-covered hindwing cell in the males; the hyaline part of the cell being typical of all other members of the subgenus is missing. Another key feature is the whitish-ochreous encircled, large reniform stigma filled with darker red-brown; the hindwing discal spot is stronger than in the taxa of the *orthosoides*-group. Finally, it is regularly smaller and more short-winged than the other species of the subgenus *Hyalobole* with the wingspan 27–33 mm.

The male genitalia differ from those of *H. (H.) medvegymihalyi* by the smaller, rather deltoidal juxta, the slenderer valvae with longer, more triangular and more dorsally projecting cucullus with weaker co-

rona, much longer and thinner harpe and shorter, more curved ampulla, and the longer aedeagus with larger basal cornuti fields consisting of longer, stronger spinules.

The female genitalia of *H. (H.) infenestra* differ from those of the members of the *orthosioides*-group and of *H. (H.) medvegymihalyi* by the much shorter ductus bursae and the smaller, less laterally developed appendix bursae. These structures are shared features with the two species of the *phaeosoma*-group, but the ductus bursae is even shorter, having less parallel lateral margins and shorter but broader appendix bursae.

Distribution. Southern Himalayan. The species has been recorded from large areas of Central and eastern Nepal. *Hyalobole (H.) infenestra* inhabits the medium-high forest belts, appearing often in the sub-alpine zone. The flight period is somewhat earlier than its relatives, the first adults emerge at the end of September and are on the wing until the end of October.

The *phaeosoma*-group

Diagnosis. The two species of the *phaeosoma*-group are characterised by the prominent sexual dimorphism, with larger, more long-winged males having very long abdomen and huge abdominal hair-tufts, well-developed, wedge-shaped hyaline area in the male hindwing cell and certain features of the genitalia of both sexes. The most striking apomorphy of the lineage is the huge pair of hair-tufts on the dorsal margin of the tegumen; other group feature is the armature of the vesica consisting of two groups of spinules, and a basal small area of small spines dorso-laterally at carina. There are certain features of the clasping apparatus which are shared with *H. (H.) infenestra*, e.g. the rather triangular, dorsally projecting cucullus with sparse corona, the long and distally slender harpe, the fine, slightly ventrally projecting ampulla and the relatively small, deltoidal juxta.

Hyalobole (Hyalobole) phaeosoma (Hampson, 1906)

(Plate 30, Figs 5–6; Plate 51, Figs 11–18; gen. fig. 117)

Amathes phaeosoma Hampson, 1906, *Catalogue of the Lepidoptera Phalaenae in the British Museum* 6: 488, pl 107, fig. 5. Type-locality: [India, Himachal Pradesh] Kulu valley, Sultanpur. Holotype: female, in coll. BMNH.

Synonymy

Hyalobole apicalis Hacker & Ronkay, 1996, *Esperiana* 4: 351, pl. T, figs 15–16. Type-locality: India, Himachal Pradesh, 15 km W of Shimla, 1800 m, 31°04'N, 77°10'. Holotype: male, in coll. ZSM. **syn. n.**

Diagnosis. The two species of the lineage are allopatric sister species, with conspicuous differences in their external appearance while the distinctive features in the genitalia are really small. The fresh specimens of *H. (H.) phaeosoma* are generally variably dark ochreous-brown to deep sand-brown, sometimes with fine greyish or pinkish shade; the old museum specimens are regularly much paler, often with stronger pinkish hue. *Hyalobole (H.) phaeosoma* differs from its more easterly distributed sister-species, *H. (H.) subapicalis*, by its on average larger size (wingspan 32–40 mm vs 31–35 mm), more ochreous (not reddish) brown forewing ground colour, considerably narrower reniform stigma with weaker, more ochreous (less whitish) outline and stronger, darker brown filling in its lower half, the narrower hyaline streak of the male hindwing and the weaker, less prominent hindwing discal spot.

In the male genitalia, *H. (H.) phaeosoma* has, comparing with *H. (H.) subapicalis*, narrower juxta with more pointed sclerotised apex, somewhat broader harpe and ampulla and weaker carinal spines. In the female genitalia, the apophyses posteriores are longer in *H. (H.) phaeosoma*, and the ductus bursae is shorter but broader than in *H. (H.) subapicalis*, having straighter lateral margins.

Distribution. Western Himalayan. The species is distributed in the western part of the Himalayan region, from the southern parts of Kashmir in Pakistan to Himachal Pradesh in India. The species inhabits the

medium-high and higher deciduous and mixed forest belts, between 2000–3000 m altitudes. The adults are members of the latest aspects of the year, they are on the wing in October–November.

***Hyalobole (Hyalobole) subapicalis* Hreblay & Ronkay, 1998**

(Plate 30, Figs 7–8; Plate 51, Figs 19–26; gen. fig. 118)

Hyalobole subapicalis Hreblay & Ronkay, 1998, in Haruta, *Tinea* 15(Supplement 1): 238, pl. 153, figs 26–27, gen. figs 1162–1163. Type-locality: Nepal, Arun valley, 12 km N of Chitre, 2600 m, 27°09'N, 87°27'E. Holotype: male, in coll. M. Hreblay (HNHM Budapest).

Diagnosis. *Hyalobole (H.) subapicalis* is easily distinguished from its western sibling, *H. (H.) phaeosoma*, by its smaller size (31–35 mm versus 32–40 mm), deep reddish-brown forewings with broader and more whitish defined reniform stigma with less darkened lower third), broader hyaline basal streak of the male hindwing cell and the stronger discal spot. The other externally similar relative, *H. (H.) infenestra*, is smaller in size (wingspan 27–33 mm), having more gracile body, shorter male abdomen, more distinct forewing pattern and the cell is fully covered with dark brown scales in both sexes.

In the male genitalia, the juxta of *H. (H.) subapicalis* is broader and apically less pointed than that of *H. (H.) phaeosoma*, the harpe and the ampulla are thinner and the spinulose area at carina penis is stronger than in its twin species. The female genitalia of *H. (H.) subapicalis* differ from those of *H. (H.) phaeosoma* by its shorter apophyses posteriores and longer and narrower, medially more dilated ductus bursae.

The differences between the genitalia of *H. (H.) subapicalis* and *H. (H.) infenestra* are discussed in detail in the characterisation of the two species-groups.

Distribution. Southern Himalayan. The species is known from the Central and eastern parts of Nepal and Burma.

The *subtropica*-group

Diagnosis. The lineage comprises a highly autapomorphic species with a number of characters present only in this species within *Hyalobole*.

The most striking features of the male genitalia are the large and lobate ventral flaps of the valva being separated partly from the saccular part and bearing extensive hair tufts (valval coremata; they are removed in the slide shown in the gen. fig. 119), and the fused harpe-ampulla complex forming a sclerotised forked process with slender arms. Another autapomorphies are the reduced corona, the apically folded juxta, the spiny collar-like sclerotisation of the carina penis and the large spines of the two cornuti fields of the vesica. The diagnostic features of the female genitalia are the strongly sclerotised antrum, the very short ductus bursae and the rounded-calyculate, gelatinous appendix bursae.

***Hyalobole (Hyalobole) subtropica* Hreblay, Peregovits & Ronkay, 1999**

(Plate 31, Figs 1–2; Plate 51, Figs 27–36; gen. fig. 119)

Hyalobole subtropica Hreblay, Peregovits & Ronkay, 1999, *Acta Zoologica Academiae Scientiarum Hungaricae* 45(1): 57, figs 69–70, 152–153. Type-locality: Thailand, Chiang Mai Province, Doi Inthanon NP, 2300 m. Holotype: male, in coll. M. Hreblay (HNHM).

Diagnosis. The males of the strongly sexually dimorphic *H. (H.) subtropica* are most similar to *H. (H.) phaeosoma* but are smaller in size (wingspan 30–32 mm), having pale ochreous caudal tuft, more greyish-ochreous forewings with more indistinct pattern and characteristically triangular grey-brown hindwings

without hyaline cell. The females are generally darker coloured, more brownish, with stronger defined forewing pattern and on average somewhat smaller size.

The diagnostic genitalia features are discussed in detail in the characterisation of the species-group.

Distribution. Northern Indo-Chinese. The stenochorous species is known only from the highest northern regions of Burma, Thailand, and Vietnam. It occurs in the montane elfin forest above 2000 m altitudes; the moths are on the wing throughout the winter period, from the first decade of December to the beginning of February.

Subgenus *Anstineobole* subgen. n.

Type-species: *Agrochola albimacula* Kononenko, 1978, here designated.

Diagnosis. Forewings rather short and broad, cell of hindwing not hyaline. Male genitalia with more elongated, narrower valvae with apex rounded, corona stronger and more dense, harpe strong, straight, costal extension very short, triangular. Aedeagus thick, less curved, carina less elongated, with dorso-lateral field of spinules.

Hyalobole (Anstineobole) albimacula albimacula (Kononenko, 1978)

(Plate 31, Figs 3–4; Plate 51, Figs 37–45; gen. fig. 120)

Agrochola albimacula Kononenko, 1978, *Entomologicheskoe Obozrenie* 57(4): 894, fig. 7. Type-locality: Russian Far East, Southern Primorye, Kedrovaya Padj. Holotype: male, in coll. ZISP.

Diagnosis. The species is easily recognisable by the comparatively broad, pale ochreous-brown forewings with fine pinkish and/or rosy hue, the prominent white dots defining the lower part of the broad reniform stigma and the pale greyish markings of the whitish-ochreous hindwing. Wingspan 30–34 mm.

The differences between the two subspecies are discussed under the diagnosis of the ssp. *nigrizonata*.

The male genitalia are very close to those of the externally conspicuously different *H. (A.) kononenkoi*. *Hyalobole (A.) albimacula* can be distinguished from its Taiwanese sibling by the straighter, less ventrally directed harpe, the broader ampullar process, the dorsally more constricted juxta, the thinner main tube of the vesica with longer medial diverticulum and much smaller field of cornuti.

The female genitalia differ from those of *H. (A.) kononenkoi* by the much broader antrum, the narrower proximal section of ductus bursae, the larger, more falcate-curved appendix bursae and the elliptical-ovoid corpus bursae.

Distribution. The distribution of *H. (A.) albimacula* is rather disjunct, the typical subspecies occurs in the Russian Far East, the Korean peninsula, NE China and the Central Chinese mountains; the ssp. *nigrizonata* is found in Fujian. The flight period is relatively early in the autumn, the first moths appear in the mid-September.

Hyalobole (Anstineobole) albimacula nigrizonata Ronkay, Ronkay, Gyulai & Hacker, 2010

(Plate 31, Figs 5–6; Plate 51, Figs 46–50; gen. fig. 121)

Hyalobole albimacula nigrizonata Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 277, pl. 51, figs 3–4. Type-locality: China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1400 m, 25°32'N, 116°51'E. Holotype: male, in coll. A. Becher (Germany).

Diagnosis. The populations occurring in Fujian differ externally so strongly from the typical ssp. *albimacula* that it is hardly believable that they represent two distinct populations of the same species. Their genitalia are, however, practically identical in all important features, therefore they cannot be interpreted as two distinct species. The ssp. *nigrizonata* has, in comparison with the ssp. *albimacula*, on average smaller size (wingspan 29–32 mm), more unicolorous and more red-brown suffused forewings, more diffuse stigmata and antemedial and postmedial crosslines, much weaker white marking of the reniform stigma and very conspicuous, broad and straight, blackish grey median fascia, and the hindwing is also more unicolorous, without dark grey irroration.

Distribution. The stenochorous SE Chinese ssp. *nigrizonata* occurs in the mountainous areas of Fujian. The flight period is later than that of the typical subspecies, the moths are on the wing from the late October to the end of November.

Hyalobole (Anstineobole) kononenkoi Hreblay & Ronkay, 1998

(Plate 31, Figs 7–8; Plate 52, Figs 1–10; gen. fig. 122)

Hyalobole kononenkoi Hreblay & Ronkay, 1998, in Haruta, *Tinea* 15(Supplement 1): 240, pl. 154, fig. 2. Type-locality: Taiwan, Nantou County, 5 km SW of Tayuling, 2900 m, 24°09'N, 121°17'E. Holotype: male, in coll. M. Hreblay (HNHM Budapest).

Diagnosis. Wingspan 30–31 mm, length of forewing 13 mm. It differs from its continental sister-species, *H. (A.) albimacula*, by its generally darker colouration of the forewings with less sharply defined stigmata, the reduction of the whitish markings of the reniform and the much darker hindwings.

In the male genitalia, *H. (A.) kononenkoi* has narrower basal part of juxta, apically more dilated valva, weaker harpe, longer, narrower costal extension, smaller medial diverticulum and larger, longer cornuti field of vesica.

The female genitalia of the two species differ in several details. *Hyalobole (A.) kononenkoi* has, comparing with *H. (A.) albimacula*, narrower and posteriorly more arcuate antrum, more evenly wide ductus bursae, narrower and more rugose-wrinkled appendix bursae and more elongated corpus bursae.

Distribution. The species is endemic to Taiwan. It inhabits the highest deciduous forest areas of the high mountainous ranges of the island; the flight period is extending from the mid-autumn to the end of December.

Subgenus *Tzuoobole* subgen. n.

Type-species: *Elwesia nigripalpis* Warren, 1911, here designated.

Diagnosis. Small species (wingspan 25–31 mm), without hyaline cell of hindwing; male antenna finely fasciculate or shortly pectinate. Male genitalia with pointed, often elongated projection of peniculus; valvae apically strongly dilated, with corona very long or narrow, elongate with pointed triangular cucullus and medium-long corona; harpe and costal extension rather short, pointed. Aedeagus tubular, curved, carina beak-shaped, with dentated or spinulose dorsal plate; vesica tubular, recurved dorsally, with conical medial diverticulum and long distal cornuti field.

The *nigripalpis*-group

Diagnosis. The taxa of the *nigripalpis*-group differ from the *changae*-line by their shorter and dark covered third segments of the labial palpi. The differential features of the male genitalia are the long and

slender second pair of penicular lobes (this apomorphy is unique throughout *Hyalobole*), medially much more constricted juxta, much narrower valva with only slightly broader cucullus, longer and slenderer harpe, longer and more distally projecting ampulla, and the larger and denser carinal spinulose field.

The female genitalia are also strikingly different in the two groups as the ductus bursae of the *nigripalpis*-group is longer and broader, and the corpus bursae is much shorter and more rounded than in the *changae*-group.

Hyalobole (Tzuobole) nigripalpis nigripalpis (Warren, 1911)

(Plate 32, Figs 1–3; Plate 52, Figs 11–20; gen. fig. 123)

Elwesia nigripalpis Warren, 1911, *Novitates Zoologicae* **18**: 141. Type-locality: [India, Sikkim] Darjeeling. Holotype: male, in coll. BMNH.

Synonymy

Spudea (sic!) eucrinita Turati, 1933, *Bollettino della Societa Entomologica Italiana* **65**: 21. Type-locality: Pakistan, Baltistan, Baltoro, Mustagh. Holotype: male.

Diagnosis. A highly variable species, both in size and colouration and pattern of wings, a variably constant sexual dimorphism also present in certain populations. It can be distinguished from the externally often confusingly similar *H. (T.) taiwanensis* mostly by the study of the genitalia, though the continental species is on average larger than its Taiwanese sister-species with its wingspan 27–31 mm. Moreover, the two species are completely allopatric, therefore the locality clearly indicates the identity of the given specimen.

The genitalia of the two species are very similar; the differences between them are as follows. In males, *H. (T.) nigripalpis* has shorter, apically bifurcate extension of digitus, the dentated plate of the carina is larger, stronger and the cornuti field is smaller, weaker than in *H. (T.) taiwanensis*; in addition, the valvae are somewhat shorter and broader. In females, the ductus bursae of *H. (T.) nigripalpis* is more curved, and tapering proximally, the lateral margins are parallel only in the anterior half of the ductus.

Distribution. Himalayan-Indo-Chinese. The typical subspecies has a wide range along the main Himalayan chain from the historical Kashmir to eastern Nepal and the Indian Sikkim; it was found also in China (Hunan). It is a frequent, locally often common species, one of the commonest members of the Himalayan winter fauna. It flies throughout the entire winter period, from the beginning of October to the beginning of March.

Hyalobole (Tzuobole) nigripalpis hreblayi Kobayashi, 2003

(Plate 32, Figs 4–6; Plate 52, Figs 21–30; gen. fig. 124)

Hyalobole hreblayi Kobayashi, 2003, *Tinea* **17**(5): 266–277. Type-locality: Vietnam, Prov. Lao Cai, Sa Pa, 1300 m. Holotype: female, in coll. NSMT.

Diagnosis. This taxon was proposed to consider, similarly to *Hyalobole (H.) orthosioides hyalbre*, as a distinct species although the genitalia of *H. (T.) n. nigripalpis* and *H. (T.) n. hreblayi* display no mentionable differences. The study of a really comprehensive material of *H. (T.) nigripalpis* from Nepal, India and Indochina undoubtedly has pointed out the conspecificity of the externally different populations (Ronkay et al 2010).

Distribution. Indo-Chinese. It is very widespread and locally common in the high mountainous areas of Northern Thailand and Northern Vietnam, known also from Laos and Burma. The moths inhabit the upper deciduous and elfin forest belts, between 1400–2600 m altitudes. The flight period is very long, extending throughout the winter period, from October to April.

***Hyalobole (Tzuobole) taiwanensis* Hreblay & Ronkay, 1998**

(Plate 32, Figs 7–8; Plate 52, Figs 31–42; gen. fig. 125)

Hyalobole taiwanensis Hreblay & Ronkay, 1998, in Haruta, *Tinea* 15(Supplement 1): 241, pl. 154, fig. 3. Type-locality: Taiwan, Hualien County, Hohuanshan, Luoying Lodge, 2800 m. Holotype: male, in coll. HNHM.

Diagnosis. The species is very similar externally to *H. (T.) nigripalpis*, but on average smaller in size (wingspan 25–29 mm vs 27–31 mm). In the problematic cases the study of the genitalia is necessary for the correct identification.

The male genitalia of *H. (T.) taiwanensis* can be distinguished from those of *H. (T.) nigripalpis* by the longer, apically not bifurcated costal extension, the significantly smaller dentated plate of the carina and the longer cornuti field of the vesica; the valva is also narrower, more elongated than in its sister-species.

In the female genitalia, *H. (T.) taiwanensis* has more straight ductus bursae than in *H. (T.) nigripalpis* with almost parallel margins. The female genitalia are also similar to those of *H. (H.) phaeosoma* but the ductus bursae of the latter species is longer than in the two *Tzuobole* species, and the appendix bursae is long, tubular, not rounded.

Distribution. Endemic to Taiwan. It lives in the medium-high and higher broad-leaved forest zones, occurring more locally than its continental sister-species but it is usually frequent or even common in its habitats. The moths are active throughout the winter, the flight period is very long, extending from the end of October to the end of March.

The *changae*-group

Diagnosis. The lineage is characterised by the prominently long second joints of palpi and the autapomorphic features of the genitalia of both sexes. The group features of the male genitalia are the distally very strongly dilated and rounded valvae with very long corona, the simple, long and slender, evenly arched penicular lobes of tegumen and the short, rather proximally positioned digitus, those of the female genitalia are the very small appendix bursae and the long, weakly membranous corpus bursae.

***Hyalobole (Tzuobole) changae changae* Owada, 1994**

(Plate 33, Figs 3–4; Plate 52, Figs 43–47; gen. fig. 126)

Hyalobole changae Owada, 1994, *Bulletin of the National Science Museum, Tokyo*, Series A (Zoology) 20(1): 44, figs 10–14, 17, 20. Type-locality: Taiwan, Taoyuan, Lalashan, 1600 m. Holotype: male, in coll. NSMT.

Diagnosis. The species is best distinguished from the externally often very similar relatives, *H. (T.) nigripalpis* and *H. (T.) taiwanensis* by its much longer and laterally prominently whitish, not blackish or dark brown covered palpi.

The genitalia of *H. (T.) changae* are strikingly different from the two other species of the subgenus in both sexes; the main differences are discussed in the diagnosis of the species-group and are shown in the gen. figs 122–126.

The differences between the two geographic subspecies of *H. (T.) changae* are listed below, under the diagnosis of the ssp. *longirostris*.

Distribution. Himalayan-Pacific. The only known species of the lineage has two disjunct populations, in Taiwan and in the south-eastern Himalayas including the northern parts of Indochina. The typical subspecies of *H. (T.) changae* is endemic to Taiwan. It inhabits the same forest belts as *H. (T.) taiwanensis* but is much more local and rare. The flight period is also similar to those of its congeners but it seems to be more active in the second half of the winter, in January-February.

***Hyalobole (Tzuobole) changae longirostris* Hreblay & Ronkay, 1998**

(Plate 33, Figs 5–7; Plate 52, Figs 48–52; gen. fig. 127)

Hyalobole changae longirostris Hreblay & Ronkay, 1998, in Haruta, *Tinea* 15(Supplement 1): 242, pl. 154, fig. 1, gen. fig. 1171.

Type-locality: Nepal, Ganesh Himal, near Nesim, 2000 m, 28°08'N, 85°17'E. Holotype: female, in coll. G. Ronkay (Budapest).

Diagnosis. The two populations of *H. (T.) changae* differ in the length of the palpi which is longer in the ssp. *longirostris* and the colouration of the forewings which is more unicolorous, without stronger variegation, the crosslines more indistinct, the two stigmata are marked with fine greyish inner shadows.

The female genitalia of *H. (T.) c. changae* and *H. (T.) c. longirostris* are very similar, only the ostial area is different: the caudal edge of the sclerotised ostial ring is more arcuate in the ssp. *longirostris*; the ostial fovea in the anterior papillae strongly constricted above the ostial ring, this fovea is only slowly tapering caudally in *H. (T.) c. changae*.

Distribution. Southern Himalayan; the subspecies is known to occur in Nepal and in the northern part of Indochina (northern Thailand, northern Vietnam).

Subgenus *Fuobole* subgen. n.

Type-species: *Hyalobole conistroides* Ronkay, Ronkay, Gyulai & Hacker, 2010, here designated.

Diagnosis. The specific autapomorphies of the male genitalia are the long and narrow valva with triangular and acutely pointed cucullus and reduced corona, the subapically positioned, flattened and reversed S-shaped ampulla, the broadly triangular, flat digitus, the subdeltoidal juxta with heavily sclerotised, apically mace-like dorso-medial process, the short cylindrical aedeagus with strongly dentate carina and the tubular, dorsally reclinate vesica lacking the cornuti fields.

The most conspicuous differential characteristics of the female genitalia, in comparison with the other members of the genus, are the sclerotised postvaginal plate, the shortly funnel-like and sclerotised antrum, the narrowly tubular, sclerotised and ribbed, anteriorly strongly curved ductus bursae and the small, subconical and weakly ribbed appendix bursae.

***Hyalobole (Fuobole) conistroides* Ronkay, Ronkay, Gyulai & Hacker, 2010**

(Plate 33, Figs 1–2; Plate 52, Figs 53–55; gen. fig. 128)

Hyalobole conistroides Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 276, pl. 51, figs 5–6. Type-locality: China, Prov.

Shaanxi, Tsinling Mts, South Taibaishan, Dudamen village, 1500 m, 33°50'N, 107°41'E. Holotype: female, in coll. P. Gyulai (Miskolc).

Diagnosis. *Hyalobole (F.) conistroides* is a typical member of the genus, despite its rather unusual external appearance; its closest relatives are the taxa of the *nigripalpis* lineage of the subgenus *Tzuobole*. It is easily separable from all other *Hyalobole* species by its broad and conspicuously acute forewing with strongly convex outer margin. The crosslines and the outlines of the orbicular and reniform stigmata are more diffuse than in *H. (H.) phaeosoma* and the taxa of the *H. (T.) nigripalpis* species-group and the filling of the reniform stigma is not or only partly darker than ground colour. The hindwing is entirely darkened, the hyaline area of the cell is absent in the males, while the subcostal area lacks the paler ochreous stripe which is typical of the *H. (T.) nigripalpis* species-group.

The genitalia differ conspicuously from all known relatives in both sexes; the diagnostic features are mentioned in the characterisation of the subgenus.

Distribution. The species is known from the mountainous parts of Shaanxi and the eastern areas of Sichuan in Central China. The species inhabits the meso-montane forest areas; the moths are on the wing in October–November.

Genus *Cupreobole* Ronkay, Ronkay, Gyulai & Hacker, 2010

Cupreobole Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 279. Type-species: *Cupreobole adrienneae* Ronkay, Ronkay, Gyulai & Hacker, 2010, by original designation.

Diagnosis. The new genus is related to *Hyalobole*, displaying conspicuous autapomorphies which make the adults externally more similar to the type-species of *Estagrotis* Nye, 1975, than to the taxa of the sister-genus.

The distinctive external features of the genus are the filiform, medially thickening, densely but very shortly ciliate male antenna (all *Hyalobole* males have serrate or dentate antenna); the long and thin second and the even finer third joint of the labial palp; the strongly convex forewing outer margin below termen; the well-developed orbicular, reniform and claviform stigmata of similar size; the very dark and uniform blackish grey hindwing suffusion covering almost all parts of wing except ochreous inner part of cell and basal area of costal margin; the inner area of cell is fully scaled, without hyaline part.

The diagnostic male genital characteristics of *Cupreobole* are the huge, wing- or cloak-shaped, sclerotised penicular lobes (resembling slightly certain *Enargia* Hübner, [1821] species), the very long and narrow valvae with almost parallel margins, the long cucullus with well-developed, long corona, the long, slender and curved harpe and the fine, thorn-shaped digitus. Unfortunately, the abdomen of the unique type specimen was partly eaten by museum beetles, therefore the aedeagus is completely missing and the valves are also slightly damaged but the recognisable features of the clasping apparatus well support the separation of this lineage at generic level.

Distribution. China (Prov. Hunan).

Cupreobole adrienneae Ronkay, Ronkay, Gyulai & Hacker, 2010

(Plate 33, Fig. 8; Plate 52, Fig. 56; gen. fig. 129)

Cupreobole adrienneae Ronkay, Ronkay, Gyulai & Hacker, 2010, *Esperiana* 15: 279, pl. 53, fig. 1. Type-locality: China, Prov. Hunan, Shikenkong Mt., 1500 m, 24°54'N, 112°57'E. Holotype: male, in coll. P. Gyulai (Miskolc).

Diagnosis. *Cupreobole adrienneae* can be distinguished from all related *Hyalobole* species by the first look due to its unique colouration and pattern of both wings, especially the very unusual dark-pale composition of the hindwing is strikingly different from those of all known relatives. The forewing colouration resembles mostly *Estagrotis cuprea* (Moore, 1867) but *C. adrienneae* is smaller in size (wingspan 32 mm, that of *E. cuprea* 33–39 mm), the forewing apex is more concave below termen, the three orange-filled and partly dotted stigmata differ strongly from the maculation of *E. cuprea*, and the curiously looking hindwing makes the two species unmistakable.

The distinguishing features of the male genitalia are listed under the diagnosis of the genus.

Distribution. The only known specimen of *C. adrienneae* was found in southern Hunan (China), in a mid-autumnal aspect.

COLOUR PLATES

Magnified images



1. *Agrochola lychnidis* ([Denis & Schiffermüller], 1775) male, Italy



2. *Agrochola lychnidis* ([Denis & Schiffermüller], 1775) female, Austria



3. *Agrochola lychnidis* ([Denis & Schiffermüller], 1775) male, Italy



4. *Agrochola lychnidis* ([Denis & Schiffermüller], 1775) female, Italy



5. *Agrochola orejoni orejoni* (Agenjo, 1951) male, Spain



6. *Agrochola orejoni orejoni* (Agenjo, 1951) female, Spain



7. *Agrochola orejoni terranova* (Parenzan, 1982) male, Italy
(Photo Stoyan Beshkov)



8. *Agrochola orejoni terranova* (Parenzan, 1982) male, Italy
(Photo Stoyan Beshkov)



1. *Anchoscelis prolai* (Berio, 1976) male, Italy



2. *Anchoscelis prolai* (Berio, 1976) female, Italy



3. *Anchoscelis deleta* (Staudinger, 1882) male, Turkey



4. *Anchoscelis deleta* (Staudinger, 1882) female, Turkey



5. *Anchoscelis thurneri* (Boursin, 1953) male, Bulgaria



5. *Anchoscelis thurneri* (Boursin, 1953) male, Bulgaria



7. *Anchoscelis thurneri* (Boursin, 1953) male, Makedonia



8. *Anchoscelis imitata* (Ronkay, 1984) Holotype, male, Iraq



1. *Anchoscelis pistacinoides* (d'Aubuisson, 1867) male, France, (Paratype of *Agrochola dujardini*)



2. *Anchoscelis pistacinoides* (d'Aubuisson, 1867) female, Italy



3. *Anchoscelis nitida* ([Denis & Schiffermüller], 1775) male, Austria, Tyrol



4. *Anchoscelis nitida* ([Denis & Schiffermüller], 1775) female, Austria, Tyrol



5. *Anchoscelis nitida* ([Denis & Schiffermüller], 1775) male, Hungary



6. *Anchoscelis nitida* ([Denis & Schiffermüller], 1775) female, Hungary



7. *Anchoscelis lunosa* (Haworth, 1809) male, France



8. *Anchoscelis lunosa* (Haworth, 1809) female, Germany

1. *Anchoscelis lunosa* (Haworth, 1809) male, Algeria2. *Anchoscelis tripolensis* (Hampson, 1914) Holotype, male, Libya3. *Anchoscelis tripolensis* (Hampson, 1914) male, Libya4. *Anchoscelis tripolensis* (Hampson, 1914) male, Libya
(photo Alberto Zilli)5. *Anchoscelis polybela* (de Joannis, 1903) male, Algeria6. *Anchoscelis polybela* (de Joannis, 1903) female, Algeria7. *Anchoscelis approximata* (Hampson, 1906) male, Pakistan8. *Anchoscelis approximata* (Hampson, 1906) female, Pakistan



1. *Anchoscelis deosaiensis* (Ronkay & Ronkay, 2000) Holotype, male, Pakistan, Himalaya Mts



2. *Anchoscelis deosaiensis* (Ronkay & Ronkay, 2000) Paratype, female, Pakistan, Himalaya Mts



3. *Anchoscelis nekrasovi* (Hacker & Ronkay, 1992) Paratype, male, Tadjikistan, Hissar Mts (Photo Lauri Kaila)



4. *Anchoscelis nekrasovi* (Hacker & Ronkay, 1992) male, Tadjikistan, Hissar Mts (Photo Lauri Kaila)



5. *Anchoscelis pamiricola* (Hacker & Ronkay, 1992) male, Kazakhstan, Tien Shan



6. *Anchoscelis pamiricola* (Hacker & Ronkay, 1992) female, Tadjikistan Pamir Mts



7. *Anchoscelis trapezoides trapezoides* (Staudinger, 1882) Lectotype male, Uzbekistan, Lepsa



8. *Anchoscelis trapezoides trapezoides* (Staudinger, 1882) female, Kazakhstan, Tien Shan



1. *Anchoscelis trapezoides naumanni* (Hacker & Ronkay, 1990)
Holotype, male, Afghanistan, Nuristan



2. *Anchoscelis trapezoides naumanni* (Hacker & Ronkay, 1990) female,
Tadjikistan, Pamir Mts



3. *Anchoscelis statira* (Boursin, 1960) Holotype, male,
Afghanistan, Hindukush Mts



4. *Anchoscelis statira* (Boursin, 1960) Paratype, female,
Afghanistan, Hindukush Mts



5. *Anchoscelis zoltanus* (Ronkay & Ronkay, 2000) Holotype, male,
Pakistan, Himalaya Mts



6. *Anchoscelis zoltanus* (Ronkay & Ronkay, 2000) Paratype, female,
Pakistan, Himalaya Mts



7. *Anchoscelis zoltanus* (Ronkay & Ronkay, 2000) Paratype, male,
Pakistan, Himalaya Mts



8. *Anchoscelis zoltanus* (Ronkay & Ronkay, 2000) Paratype, female,
Pakistan, Himalaya Mts



1. *Anchoscelis griseovariegata* (Ronkay & Ronkay, 2000) Paratype, male, Tadjikistan, Hissar Mts



2. *Anchoscelis griseovariegata* (Ronkay & Ronkay, 2000) Paratype, female, Tadjikistan, Hissar Mts



3. *Anchoscelis spectabilis* (Hacker & Ronkay, 1990) male, Uzbekistan, Chatkal Mts



4. *Anchoscelis spectabilis* (Hacker & Ronkay, 1990) Holotype, female, Uzbekistan, Alai Mts



5. *Anchoscelis scabra* (Staudinger, 1892) Lectotype, male, Israel, Jerusalem



6. *Anchoscelis scabra* (Staudinger, 1892) female, Israel, Jerusalem



7. *Anchoscelis fuscomixta* (Gyulai & Ronkay, 2006) Holotype, male, Iran, Prov. Azerbaijan



8. *Anchoscelis fuscomixta* (Gyulai & Ronkay, 2006) Paratype, male, Iran, Prov. Azerbaijan



1. *Anchoscelis pauli* (Staudinger, 1892) Lectotype, male, Israel, Jerusalem



2. *Anchoscelis pauli* (Staudinger, 1892) female, Israel, Jerusalem



3. *Anchoscelis kindermanni* (Fischer von Röslerstamm, 1838) male, Makedonia



4. *Anchoscelis kindermanni* (Fischer von Röslerstamm, 1838) female, Makedonia



5. *Anchoscelis kindermanni* (Fischer von Röslerstamm, 1838) female, Italy, Sicily (Paratype of *A. kindermanni sicula*)



6. *Anchoscelis consueta* (Herrich-Schäffer, 1852) female, Turkey, Prov. Elazig



7. *Anchoscelis consueta* (Herrich-Schäffer, 1852) male, Turkey, Prov. Icel



8. *Anchoscelis consueta* (Herrich-Schäffer, 1852) female, Turkey, Prov. Icel



1. *Anchoscelis rupicapra rupicapra* (Staudinger, 1879) Lectotype, male,
Turkey, Taurus Mts



2. *Anchoscelis rupicapra rupicapra* (Staudinger, 1879) female,
Turkey, Prov. Elazig



3. *Anchoscelis rupicapra kresnaensis* (Ronkay & Mészáros, 1982)
Holotype, male, Bulgaria, Kresna



4. *Anchoscelis rupicapra kresnaensis* (Ronkay & Mészáros, 1982)
Paratype, female, Bulgaria, Kresna



5. *Anchoscelis oropotamica oropotamica* (Wiltshire, 1941) male,
Iran, Elburs Mts



6. *Anchoscelis oropotamica oropotamica* (Wiltshire, 1941) female,
Iran, Prov. Azerbaijan



7. *Anchoscelis oropotamica archar* (Ronkay, Varga & Hreblay, 1998)
Paratype, male, Turkmenistan



8. *Anchoscelis oropotamica archar* (Ronkay, Varga & Hreblay, 1998)
Paratype, male, Turkmenistan



1. *Anchoscelis meridionalis meridionalis* (Staudinger, 1871) male, France



2. *Anchoscelis meridionalis meridionalis* (Staudinger, 1871) female, France



3. *Anchoscelis meridionalis maghrebianus* ssp. n. Holotype male, Morocco



4. *Anchoscelis meridionalis maghrebianus* ssp. n. Paratype, female, Morocco



5. *Anchoscelis orientalis* (Fibiger, 1997) male, Cyprus
(Photo Egbert Friedrich)



6. *Anchoscelis orientalis* (Fibiger, 1997) female, Cyprus
(Photo Egbert Friedrich)

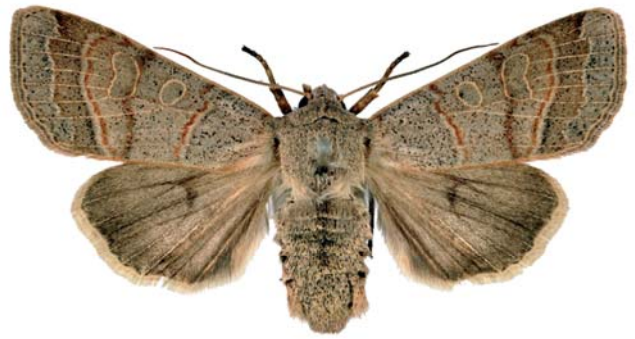


7. *Anchoscelis agnorista* (Boursin, 1955) male, Morocco



8. *Anchoscelis agnorista* (Boursin, 1955) female, Morocco

1. *Anchoscelis hypotaenia* (Bytinski-Salz, 1936) Holotype, male, Lebanon2. *Anchoscelis hypotaenia* (Bytinski-Salz, 1936) female, Lebanon,
(Paratype of *Amathes hypotaenia wiltshirei*)3. *Anchoscelis litura* (Linnaeus, 1761) male, Italy4. *Anchoscelis litura* (Linnaeus, 1761) female, Italy5. *Anchoscelis luteogrisea* (Warren, 1911) male, Turkey, Prov. Agri6. *Anchoscelis luteogrisea* (Warren, 1911) female, Turkey, Prov. Antalya7. *Anchoscelis turcomanica* (Ronkay, Varga & Hreblay, 1998)
Holotype, male, Turkmenistan8. *Anchoscelis turcomanica* (Ronkay, Varga & Hreblay, 1998)
female, Iran, Prov. Khorassan

1. *Anchoscelis humilis* ([Denis & Schiffermüller], 1775) male, Hungary2. *Anchoscelis humilis* ([Denis & Schiffermüller], 1775) female, Hungary3. *Anchoscelis egorovi* (Bang-Haas, 1934) Lectotype, male, Russia, Dagestan4. *Anchoscelis egorovi* (Bang-Haas, 1934) female, Turkey, Prov. Agri5. *Anchoscelis azerica* (Ronkay & Gyulai, 1997) male, Iran, Elburs Mts6. *Anchoscelis azerica* (Ronkay & Gyulai, 1997) female, Iran, Elburs Mts7. *Anchoscelis lactiflora lactiflora* (Draudt, 1934) male, Turkey, Prov. Askale8. *Anchoscelis lactiflora lactiflora* (Draudt, 1934) female, Turkey, Prov. Askale



1. *Anchoscelis lactiflora wautieri* (Dufay, 1975) male, Makedonia



2. *Anchoscelis lactiflora wautieri* (Dufay, 1975) female, Makedonia



3. *Anchoscelis janhillmanni* (Hacker & Moberg, 1989)
male, Turkey, Prov. Hakkari



4. *Anchoscelis janhillmanni* (Hacker & Moberg, 1989)
female, Turkey, Prov. Van



5. *Anchoscelis elbursica* (Gyulai & Ronkay, 2006) male, Iran, Prov. Zanjan



6. *Anchoscelis elbursica* (Gyulai & Ronkay, 2006) female, Iran, Prov. Zanjan



7. *Anchoscelis dubatolovi* (Varga & Ronkay, 1991)
male, Turkmenistan, Kopet-Dagh



8. *Anchoscelis dubatolovi* (Varga & Ronkay, 1991)
female, Iran, Prov. Khorassan

1. *Anchoscelis osthelderi* (Boursin, 1951) male, Turkey, Prov. Hatay2. *Anchoscelis osthelderi* (Boursin, 1951) female, Turkey, Prov. Ankara3. *Anchoscelis gratiosa* (Staudinger, 1882) male, Turkey, Prov. Ankara4. *Anchoscelis gratiosa* (Staudinger, 1882) female, Turkey, Prov. Ankara5. *Anchoscelis helvola helvola* (Linnaeus, 1758) male, Austria6. *Anchoscelis helvola helvola* (Linnaeus, 1758) female, Italy7. *Anchoscelis helvola pallescens* (Warren, 1909)
male, Turkey, Prov. Erzincan8. *Anchoscelis helvola pallescens* (Warren, 1909)
female, Turkey, Prov. Erzincan

1. *Anchoscelis haematidea* (Duponchel, 1827) male, Spain2. *Anchoscelis haematidea* (Duponchel, 1827) female, France3. *Maraschia griseascens griseascens* Osthelder, 1933 male, Armenia4. *Maraschia griseascens griseascens* Osthelder, 1933 male, Armenia5. *Maraschia griseascens balcanica* **ssp. n.** Holotype, male, Croatia6. *Maraschia griseascens balcanica* **ssp. n.** Paratype, female, Makedonia7. *Maraschia hissarensis* Varga & Ronkay, 1991 male, Tadjikistan, Hissar Mts8. *Maraschia hissarensis* Varga & Ronkay, 1991 female, Tadjikistan, Hissar Mts



1. *Maraschia secunda* Hacker, 1990 Holotype, male
Pakistan, Indus valley



2. *Maraschia secunda* Hacker, 1990 Paratype, female
Pakistan, Himalaya Mts, Kaghan valley



3. *Hazaropolia hazara hazara* (Hacker, 1990) male,
Pakistan, Himalaya Mts, Kaghan valley



4. *Hazaropolia hazara hazara* (Hacker, 1990) female,
Pakistan, Himalaya Mts, Kaghan valley



5. *Hazaropolia hazara marmorata* **ssp.n.** Holotype, male,
Pakistan, Deosai Plateau



6. *Hazaropolia hazara marmorata* **ssp.n.** Paratype, female,
Pakistan, Deosai Plateau



7. *Frivaldszkyola mansueta mansueta* (Herrich-Schäffer, 1850)
Lectotype, male, Turkey, Smyrna



8. *Frivaldszkyola mansueta mansueta* (Herrich-Schäffer, 1850)
female, Turkey, Prov. Ankara



1. *Frivaldszkyola mansueta sphakiota* (Ronkay, Yela & Hreblay, 2001)
Paratype, male, Greece, Crete



2. *Frivaldszkyola mansueta sphakiota* (Ronkay, Yela & Hreblay, 2001)
Paratype, male, Greece, Crete



3. *Frivaldszkyola staudingeri* (Ronkay, 1984) Holotype, male, Israel, Jerusalem



4. *Frivaldszkyola staudingeri* (Ronkay, 1984) female, Israel, Jerusalem



5. *Frivaldszkyola elami* (Ronkay, 2001) Holotype, male, Iran, Zagros Mts



6. *Frivaldszkyola elami* (Ronkay, 2001) Paratype, female, Iran, Zagros Mts



7. *Leptologia lota* (Clerck, 1759) male, Austria



8. *Leptologia lota* (Clerck, 1759) female, Austria



1. *Leptologia macilenta* (Hübner, 1809) male, Italy



2. *Leptologia macilenta* (Hübner, 1809) female, Hungary



3. *Leptologia blidaensis* (Stertz, 1915) male, France



4. *Leptologia blidaensis* (Stertz, 1915) female, France



5. *Sunira circellaris* (Hufnagel, 1766) male, Hungary



5. *Sunira circellaris* (Hufnagel, 1766) male, Hungary



7. *Vulpechola vulpecula* (Lederer, 1853) male, Russia, Altai Mts



8. *Vulpechola vulpecula* (Lederer, 1853) female, North Korea

1. *Agrocholorta albirena albirena* (Boursin, 1956) male, China, Prov. Fujian2. *Agrocholorta albirena albirena* (Boursin, 1956) female, China, Prov. Guangxi3. *Agrocholorta albirena annamica* (Hreblay, Peregovits & Ronkay, 1999) male, Vietnam, Fan-si-pan Mts4. *Agrocholorta albirena annamica* (Hreblay, Peregovits & Ronkay, 1999) female, Vietnam, Fan-si-pan Mts5. *Agrocholorta albirena chihtuana* (Chang, 1991) male, Taiwan6. *Agrocholorta albirena chihtuana* (Chang, 1991) female, Taiwan7. *Agrocholorta albirena doiinthanoni* (Hreblay & Ronkay, 1999) Holotype, male, North Thailand8. *Agrocholorta albirena doiinthanoni* (Hreblay & Ronkay, 1999) female, North Thailand



1. *Agrocholorta karma* (Hreblay, Peregovits & Ronkay, 1999)
male, Nepal, Kanchenjunga Himal



2. *Agrocholorta karma* (Hreblay, Peregovits & Ronkay, 1999)
female, West Nepal



3. *Agrocholorta attila* (Hreblay & Ronkay, 1999)
Paratype, male, Thailand, Prov. Nan



4. *Agrocholorta attila* (Hreblay & Ronkay, 1999)
female, Thailand, Prov. Nan



5. *Agrocholorta zita* (Hreblay & Ronkay, 1999)
Holotype, male, Thailand, Prov. Nan



6. *Agrocholorta stoyani* **sp. n.** Holotype, male, Vietnam, Fan-si-pan Mts



7. *Agrocholorta flavirena* (Moore, 1881) male, Nepal, Kanchenjunga Himal



8. *Agrocholorta flavirena* (Moore, 1881) female, Nepal, Kanchenjunga Himal



1. *Agrocholorta antiqua antiqua* (Hacker, 1992) Holotype male, North Thailand



2. *Agrocholorta antiqua antiqua* (Hacker, 1992) male, North Thailand



3. *Agrocholorta antiqua kosagezai* (Hreblay, Peregovits & Ronkay, 1999) Holotype male, Vietnam, Fan-si-pan Mts



4. *Agrocholorta antiqua kosagezai* (Hreblay, Peregovits & Ronkay, 1999) Holotype male, Vietnam, Fan-si-pan Mts



5. *Agrocholorta punctilinea* (Hreblay & Ronkay, 1999) Holotype female, East Nepal



6. *Agrocholorta gorza* (Hreblay & Ronkay, 1999) Holotype female, West Nepal



7. *Agrocholorta telortoides* (Hreblay & Ronkay, 1999) Holotype male, Vietnam, Fan-si-pan Mts



8. *Agrocholorta fibigeri* (Ronkay, Ronkay, Gyulai & Hacker, 2010) Holotype female, China, Prov. Hunan

1. *Agrocholorta atrifusa* (Ronkay & Kobayashi, 1997) male, Taiwan2. *Agrocholorta atrifusa* (Ronkay & Kobayashi, 1997) female, Taiwan3. *Agrocholorta magarorum* (Benedek, Babics & Saldaitis, 2013)
Holotype, male, Nepal (Photo Esperiana database)4. *Agrocholorta magarorum* (Benedek, Babics & Saldaitis, 2013)
Paratype, female, Nepal (Photo Esperiana database)5. *Agrocholorta parki* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
Holotype, male, China, Prov. Fujian6. *Agrocholorta pallidilinea* (Hreblay, Peregovits & Ronkay, 1999)
Holotype, male, Vietnam, Fan-si-pan Mts7. *Agrocholorta pallidilinea* (Hreblay, Peregovits & Ronkay, 1999)
male, Vietnam, Fan-si-pan Mts8. *Agrocholorta pallidilinea* (Hreblay, Peregovits & Ronkay, 1999)
female, Vietnam, Fan-si-pan Mts



1. *Agrocholorta humidalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
Holotype, male, China, Prov. Hunan



2. *Agrocholorta humidalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
Paratype, female, China, Prov. Shaanxi



3. *Agrocholorta semirena* (Draudt, 1950) Holotype, male,
China, Prov. Chekiang



4. *Agrocholorta semirena* (Draudt, 1950) female, China, Prov. Hunan



5. *Agrocholorta siamica* (Hreblay & Ronkay, 1999) male, North Thailand



6. *Agrocholorta siamica* (Hreblay & Ronkay, 1999) female, North Thailand



7. *Agrocholorta minorata* (Hreblay & Ronkay, 1999)
Holotype, male, China, Lingping



8. *Agrocholorta csoevarii* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
female, Vietnam, Fan-si-pan Mts



1. *Agrocholorta csoevarii* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
Holotype, male, Thailand, Prov. Chiang Mai



2. *Agrocholorta csoevarii* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
Paratype, female, Thailand, Prov. Chiang Mai



3. *Agrocholorta kunandrasi* (Hreblay & Ronkay, 1999)
Holotype, male, Vietnam, Fan-si-pan Mts



4. *Agrocholorta kunandrasi* (Hreblay & Ronkay, 1999)
Paratype, female, Vietnam, Fan-si-pan Mts



5. *Agrocholorta kunandrasi* (Hreblay & Ronkay, 1999)
Paratype, female, Vietnam, Fan-si-pan Mts



6. *Agrocholorta emilia* (Ronkay, 2001) Holotype, male,
Vietnam, Fan-si-pan Mts



7. *Agrocholorta plumbitincta* (Hreblay, Peregovits & Ronkay, 1999)
Holotype, female, Vietnam, Fan-si-pan Mts



8. *Agrocholorta plumbitincta* (Hreblay, Peregovits & Ronkay, 1999)
Paratype, female, Vietnam, Fan-si-pan Mts

1. *Agrocholorta nawae* (Matsumura, 1926) male, Japan2. *Agrocholorta nawae* (Matsumura, 1926) female, Japan3. *Agrocholorta taiwanawae* sp. n. Paratype, male Taiwan4. *Agrocholorta taiwanawae* sp. n. Holotype, female Taiwan5. *Agrocholorta amamiensis* (Shikata, 2015) Holotype, male, Japan
(Photo Kei-ichiro Shikata)6. *Agrocholorta amamiensis* (Shikata, 2015) Paratype, female, Japan
(Photo Kei-ichiro Shikata)7. *Agrocholorta kimurai* (Shikata, 2015) Holotype, male, Japan
(Photo Kei-ichiro Shikata)8. *Agrocholorta kimurai* (Shikata, 2015) Paratype, female, Japan
(Photo Kei-ichiro Shikata)

1. *Suginistra sakabei sakabei* (Sugi, 1980) male, Japan2. *Suginistra sakabei sakabei* (Sugi, 1980) female, Japan3. *Suginistra sakabei continentalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
Holotype, male, China, Prov. Hunan4. *Suginistra sakabei continentalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010)
Paratype, male, China, Prov. Hunan5. *Edentelorta edentata* (Leech, 1889) male, South Korea6. *Edentelorta edentata* (Leech, 1889) female, South Korea7. *Telorta divergens* (Butler, 1879) male, South Korea8. *Telorta divergens* (Butler, 1879) female, South Korea



1. *Telorta obscura* Yoshimoto, 1987 male, Taiwan



2. *Telorta obscura* Yoshimoto, 1987 female, Taiwan



3. *Telorta yazakii* Yoshimoto, 1987 male, Taiwan



4. *Telorta yazakii* Yoshimoto, 1987 female, Taiwan



5. *Telorta acuminata* (Butler, 1878) male, South Korea



6. *Telorta acuminata* (Butler, 1878) female, South Korea



7. *Telorta shenhornnyi* Ronkay & Kobayashi, 1997 Paratype, male, Taiwan



8. *Telorta shenhornnyi* Ronkay & Kobayashi, 1997 Paratype, female, Taiwan



1. *Gigatelorta falcipennis* (Boursin, 1958) male, China, Prov. Fujian



2. *Gigatelorta falcipennis* (Boursin, 1958) Holotype, female, China, Prov. Guangdong



3. *Gigatelorta herois* (Kobayashi, 1998) male, Taiwan



4. *Gigatelorta herois* (Kobayashi, 1998) female, Taiwan



5. *Propenistra laevis* (Hübner, 1803) male, Austria



6. *Propenistra laevis* (Hübner, 1803) female, Hungary



7. *Incetobole evelina* (Butler, 1879) male, South Korea



8. *Incetobole evelina* (Butler, 1879) female, South Korea



1. *Hyalobole orthosioides orthosioides* Warren, 1911, male, Nepal, Ganesh Himal



2. *Hyalobole orthosioides orthosioides* Warren, 1911 female, Nepal, Kanchenjunga Himal



3. *Hyalobole orthosioides hyalbre* Kobayashi, 2003 male, Vietnam, Fan-si-pan Mts



4. *Hyalobole orthosioides hyalbre* Kobayashi, 2003 female, Vietnam, Fan-si-pan Mts



5. *Hyalobole variegata* Hreblay & Ronkay, 1998 Paratype, male, Nepal, Langtang Himal



6. *Hyalobole variegata* Hreblay & Ronkay, 1998 Paratype, female, Nepal, Ganesh Himal



7. *Hyalobole marginalis* Hreblay & Ronkay, 1998 Paratype, male, Nepal, Ganesh Himal



8. *Hyalobole marginalis* Hreblay & Ronkay, 1998 Paratype, female, Nepal, Ganesh Himal



1. *Hyalobole medvegymihalyi* Ronkay, Ronkay, Gyulai & Hacker, 2010
Paratype, male, China, Prov. Shaanxi



2. *Hyalobole medvegymihalyi* Ronkay, Ronkay, Gyulai & Hacker, 2010
Paratype, male, China, Prov. Shaanxi



3. *Hyalobole infenestra* Hreblay & Ronkay, 1998
Paratype, male, Nepal, Ganesh Himal



4. *Hyalobole infenestra* Hreblay & Ronkay, 1998
Paratype, female, Nepal, Ganesh Himal



5. *Hyalobole phaeosoma* (Hampson, 1906) male, Pakistan, Himalaya Mts



6. *Hyalobole phaeosoma* (Hampson, 1906) female, Pakistan, Himalaya Mts



7. *Hyalobole subapicalis* Hreblay & Ronkay, 1998 Paratype, male,
Nepal, Kanchenjunga Himal



8. *Hyalobole subapicalis* Hreblay & Ronkay, 1998 Paratype, female,
Nepal, Kanchenjunga Himal



1. *Hyalobole subtropica* Hreblay, Peregovits & Ronkay, 1999 male, Thailand, Prov. Chiang Mai



2. *Hyalobole subtropica* Hreblay, Peregovits & Ronkay, 1999 female, Vietnam, Fan-si-pan Mts



3. *Hyalobole albimacula albimacula* (Kononenko, 1978) male, South Korea



4. *Hyalobole albimacula albimacula* (Kononenko, 1978) female, South Korea



5. *Hyalobole albimacula nigrizonata* Ronkay, Ronkay, Gyulai & Hacker, 2010 Paratype, male, China, Prov. Fujian



6. *Hyalobole albimacula nigrizonata* Ronkay, Ronkay, Gyulai & Hacker, 2010 Paratype, male, China, Prov. Fujian



7. *Hyalobole kononenkoi* Hreblay & Ronkay, 1998 male, Taiwan



8. *Hyalobole kononenkoi* Hreblay & Ronkay, 1998 female, Taiwan



1. *Hyalobole nigripalpis nigripalpis* (Warren, 1911)
male, Nepal, Ganesh Himal



2. *Hyalobole nigripalpis nigripalpis* (Warren, 1911)
female, Nepal, Ganesh Himal



3. *Hyalobole nigripalpis nigripalpis* (Warren, 1911)
male, Nepal, Ganesh Himal



4. *Hyalobole nigripalpis hreblayi* Kobayashi, 2003
female, Vietnam, Fan-si-pan Mts



5. *Hyalobole nigripalpis hreblayi* Kobayashi, 2003
male, Vietnam, Fan-si-pan Mts



6. *Hyalobole nigripalpis hreblayi* Kobayashi, 2003
female, Vietnam, Fan-si-pan Mts



7. *Hyalobole taiwanensis* Hreblay & Ronkay, 1998 male, Taiwan



8. *Hyalobole taiwanensis* Hreblay & Ronkay, 1998 female, Taiwan



1. *Hyalobole conistroides* Ronkay, Ronkay, Gyulai & Hacker, 2010
Paratype, male, China, Prov. Shaanxi



2. *Hyalobole conistroides* Ronkay, Ronkay, Gyulai & Hacker, 2010
Holotype, female, China, Prov. Shaanxi



3. *Hyalobole changae changae* Owada, 1994 male, Taiwan



4. *Hyalobole changae changae* Owada, 1994 female, Taiwan



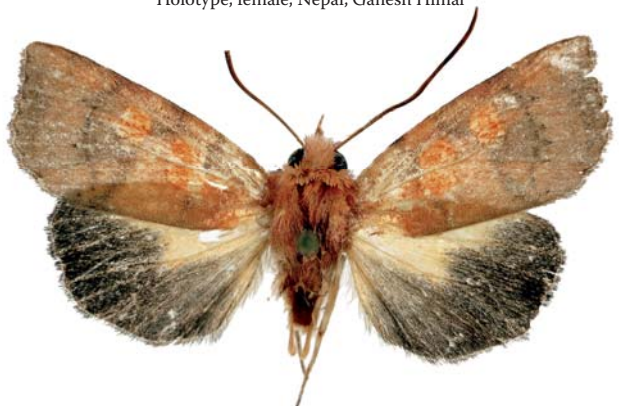
5. *Hyalobole changae longirostris* Hreblay & Ronkay, 1998
male, Thailand, Prov. Chiang Mai



6. *Hyalobole changae longirostris* Hreblay & Ronkay, 1998
Holotype, female, Nepal, Ganesh Himal



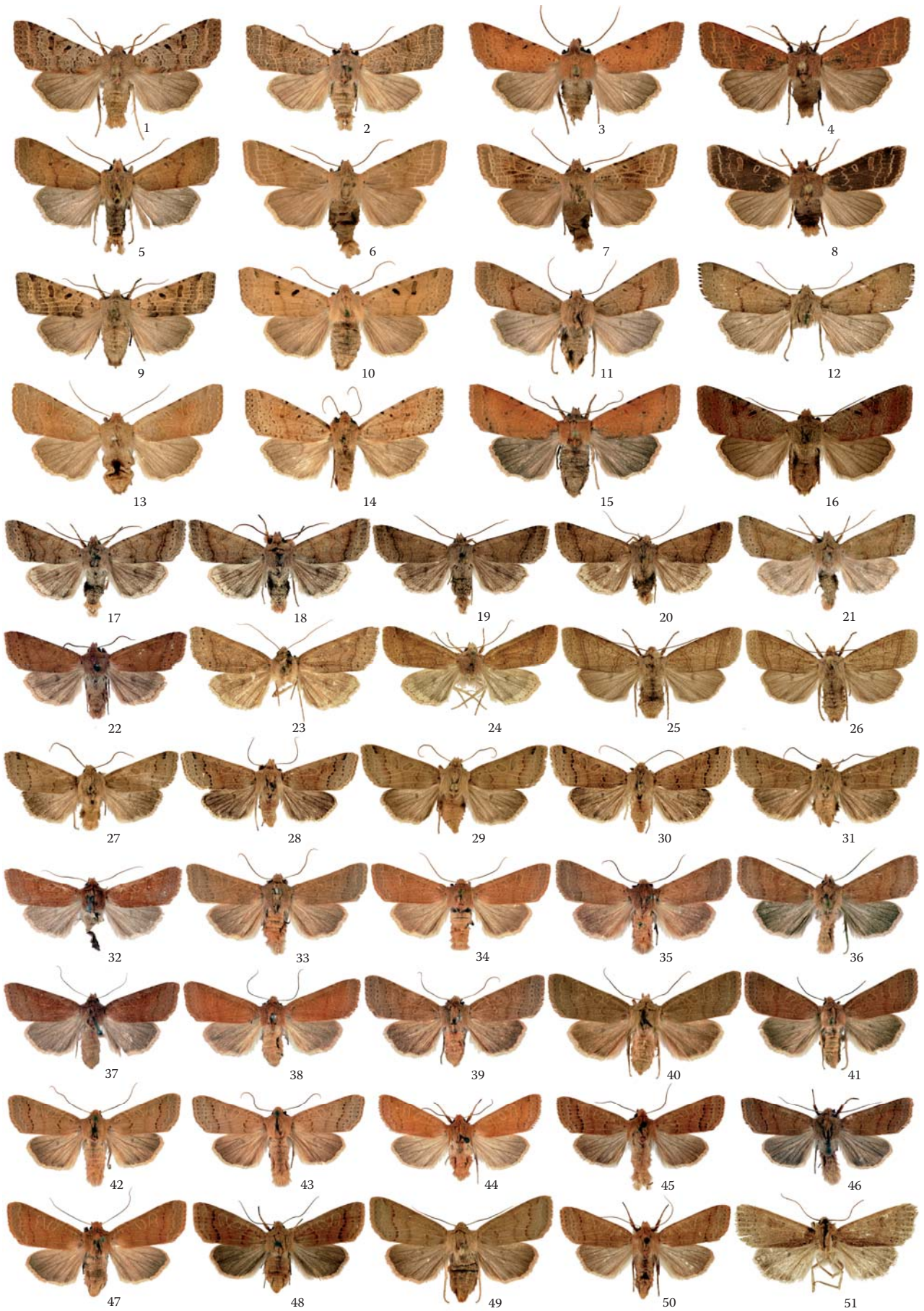
7. *Hyalobole changae longirostris* Hreblay & Ronkay, 1998
female, Thailand, Prov. Chiang Mai



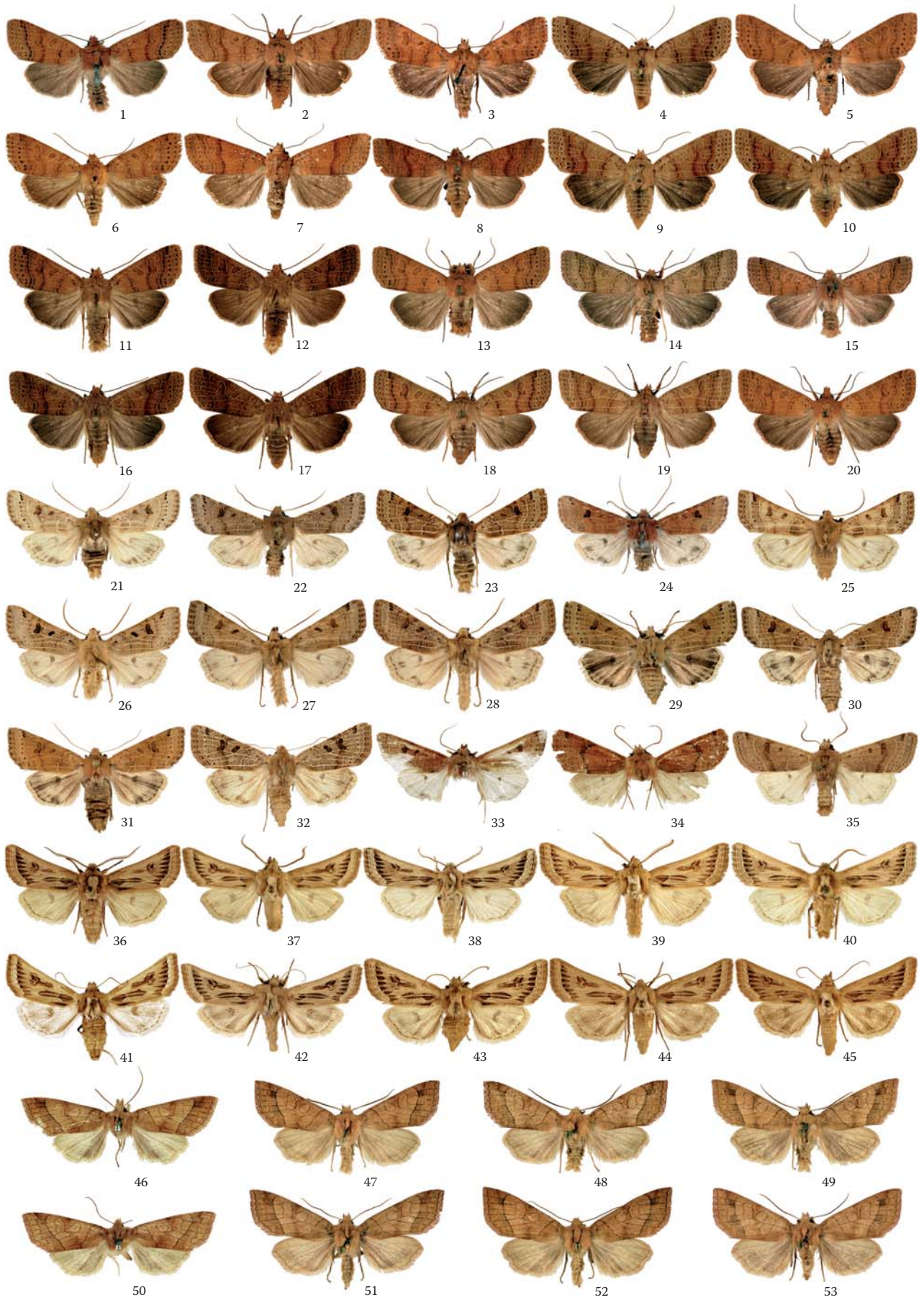
8. *Cupreobole adrienneae* Ronkay, Ronkay, Gyulai & Hacker, 2010
Holotype, male, China, Prov. Hunan

Natural-sized images

1. *Agrochola lychnidis*, m. – Italy, Prov. Verona, Monte, 300 m, 10.X.1988, K. Burmann (coll. TLM)
2. *Agrochola lychnidis*, m. – Bulgaria, Samokov, 5.X.1961, E. Vartian (coll. NHMW)
3. *Agrochola lychnidis*, m. – France, Bonson, 18XI.1974, R. Strobino (coll. TLM)
4. *Agrochola lychnidis*, m. – Italy, Prov. Verona, Monte, 300 m, 21.X.1986, K. Burmann (coll. TLM)
5. *Agrochola lychnidis*, m. – Turkmenistan, 80 km SE of Tedjen, 2-300 m, 17.XI.1991, M. Hreblay & G. Ronkay (coll. G. Ronkay)
6. *Agrochola lychnidis*, m. – France, Basses Alpes, Sisteron, 12-23.X.1962, G. Friedel (coll. NHMW)
7. *Agrochola lychnidis*, m. – France, Basses Alpes, Sisteron, 12-23.X.1962, G. Friedel (coll. NHMW)
8. *Agrochola lychnidis*, m. – Italy, Prov. Verona, Monte, 300 m, 18.X.1988, K. Burmann (coll. TLM)
9. *Agrochola lychnidis*, f. – Austria, Tyrol, Innsbruck, 3.X.1951, K. Burmann (coll. TLM)
10. *Agrochola lychnidis*, f. – Austria, Wienerwald, Gumpoldskirchen, 12.X.1959, E. Vartian (coll. NHMW)
11. *Agrochola lychnidis*, f. – Turkmenistan, 80 km SE of Tedjen, 2-300 m, 17.XI.1991, M. Hreblay & G. Ronkay (coll. G. Ronkay)
12. *Agrochola lychnidis*, f. – Pakistan, Kashmir, Himalaya Mts, valley of Indus, between Chilas and Dassu, Motel Barseen, 1100 m, XI.1998, F. Hussein, slide No.: RL6783 (coll. G. Ronkay)
13. *Agrochola lychnidis*, f. – Italy, Monfalcone, 100 m, 21.X.1987, H. Deutsch (coll. TLM)
14. *Agrochola lychnidis*, f. – Cyprus, Limassol, 3.I.1929, Mavroustakis (coll. NHMW)
15. *Agrochola lychnidis*, f. – Italy, Prov. Verona, Monte, 300 m, 21.X.1986, K. Burmann (coll. TLM)
16. *Agrochola lychnidis*, f. – Spain, Toledo, Campus F. Armas, 23.X.-2.XI.2008, M. Tóth & L. Ronkay (coll. G. Ronkay)
17. *Agrochola orejoni orejoni*, m. – Spain, Burgos, 6 km E of Arlanzon, 1000 m, 10.X.1992, B. Goater (coll. BMNH)
18. *Agrochola orejoni orejoni*, m. – Spain, Burgos, 6 km E of Arlanzon, 1000 m, 10.X.1992, B. Goater (coll. BMNH)
19. *Agrochola orejoni orejoni*, m. – Spain, Burgos, Urrez, 1150 m, 9.X.2005, T. Molina (coll. HNHM)
20. *Agrochola orejoni orejoni*, m. – Spain, Burgos, Urrez, 1150 m, 9.X.2005, T. Molina (coll. HNHM)
21. *Agrochola orejoni orejoni*, m. – Spain, Burgos, 6 km E of Arlanzon, 1000 m, 10.X.1992, B. Goater (coll. G. Ronkay)
22. *Agrochola orejoni orejoni*, m. – Spain, Prov. Madrid, Guadarrama, 1600 m, R. Agenjo (coll. ZMHU)
23. *Agrochola orejoni orejoni*, f. – Spain, “Rodrigatos de las Regueras (Leon)”, 1.XI.1985, C. Suarez, slide No.: RL11818 (coll. HNHM)
24. *Agrochola orejoni terranova*, m. – Italy, Navacerrada, 1800 m, ex larva, E.VI.2000, Bech, slide No.: RL8095 (coll. S. Beshkov; Photo S. Beshkov)
25. *Agrochola orejoni terranova*, f. – Italy, Vulture Mt., Basilicata, 900 m, ex ovo, 29.VIII-9.IX.2003, H. Wegner (coll. S. Beshkov; Photo S. Beshkov)
26. *Agrochola orejoni terranova*, f. – Italy, Vulture Mt., Basilicata, 900 m, ex ovo, 29.VIII-9.IX.2003, H. Wegner (coll. S. Beshkov; Photo S. Beshkov)
27. *Anchoscelis prolai*, m. – Italy, Abruzzo, Cocullo, 1000 m, 9.X.1990 (coll. G. Ronkay)
28. *Anchoscelis prolai*, m. – Italy, Abruzzo, Cocullo, 1000 m, 9.X.1990 (coll. BMNH)
29. *Anchoscelis prolai*, f. – Italy, Abruzzo, Cocullo, 1100 m, 10.X.1992 (coll. G. Ronkay)
30. *Anchoscelis prolai*, f. – Italy, Abruzzo, Cocullo, 1100 m, 10.X.1990 (coll. G. Ronkay)
31. *Anchoscelis prolai*, f. – Italy, Abruzzo, Cocullo, 1100 m, 10.X.1990 (coll. G. Ronkay)
32. *Anchoscelis deleta*, m. – Lectotype, [Turkey] Amasia, Man(isadjan), (18)89 (coll. ZMHU)
33. *Anchoscelis deleta*, m. – Turkey, Prov. Ankara, Kizilcahamam, 7-9.X.1968, G. Friedel (coll. NHMW)
34. *Anchoscelis deleta*, m. – Turkey, Prov. Ankara, Kizilcahamam, X.1969, R. Pinker (coll. NHMW)
35. *Anchoscelis deleta*, m. – Turkey, Prov. Ankara, Kizilcahamam, 7-9.X.1968, G. Friedel (coll. NHMW)
36. *Anchoscelis deleta*, m. – Turkey, Prov. Sivas, 13 km W of Imranli, 1300 m, 18.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
37. *Anchoscelis deleta*, f. – Paralectotype, [Turkey] Amasia (coll. ZMHU).
38. *Anchoscelis deleta*, f. – Turkey, Prov. Ankara, Kizilcahamam, 7-9.X.1968, G. Friedel (coll. NHMW)
39. *Anchoscelis deleta*, f. – Turkey, Prov. Ankara, Kizilcahamam, 7-9.X.1968, G. Friedel (coll. NHMW)
40. *Anchoscelis deleta*, f. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
41. *Anchoscelis deleta*, f. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
42. *Anchoscelis thurneri*, m. – Makedonia, Drenovo near Kavadar, 25.IX.-5.X.1960, F. Kasy (coll. NHMW)
43. *Anchoscelis thurneri*, m. – Makedonia, Drenovo near Kavadar, 25.IX.-5.X.1960, F. Kasy (coll. NHMW)
44. *Anchoscelis thurneri*, m. – Makedonia, Ochrid, ex ovo, X.1955, R. Pinker (coll. NHMW)
45. *Anchoscelis thurneri*, m. – Makedonia, Ochrid, 1-15.X.1954, R. Pinker (coll. NHMW)
46. *Anchoscelis thurneri*, m. – Makedonia, Drenovo, X.1959, R. Pinker (coll. NHMW)
47. *Anchoscelis thurneri*, f. – Makedonia, Drenovo near Kavadar, 25.IX.-5.X.1960, F. Kasy (coll. NHMW)
48. *Anchoscelis thurneri*, f. – Makedonia, Ochrid, Petrina Planina, 1800 m, 25-30.X.1954, R. Pinker (coll. NHMW)
49. *Anchoscelis thurneri*, f. – Greece, Thessaly, 15 km N of Kalampaka, 19-20.X.2003, G. Ronkay (coll. G. Ronkay)
50. *Anchoscelis thurneri*, f. – Makedonia, Ochrid, Petrina Planina, 1800 m, 25-30.X.1954, R. Pinker (coll. NHMW)
51. *Anchoscelis imitata*, m. – Holotype, Iraq, Zawita Dohuk, 1-3.XII.1977, Gy. Topál, slide No.: RL412 (coll. HNHM)



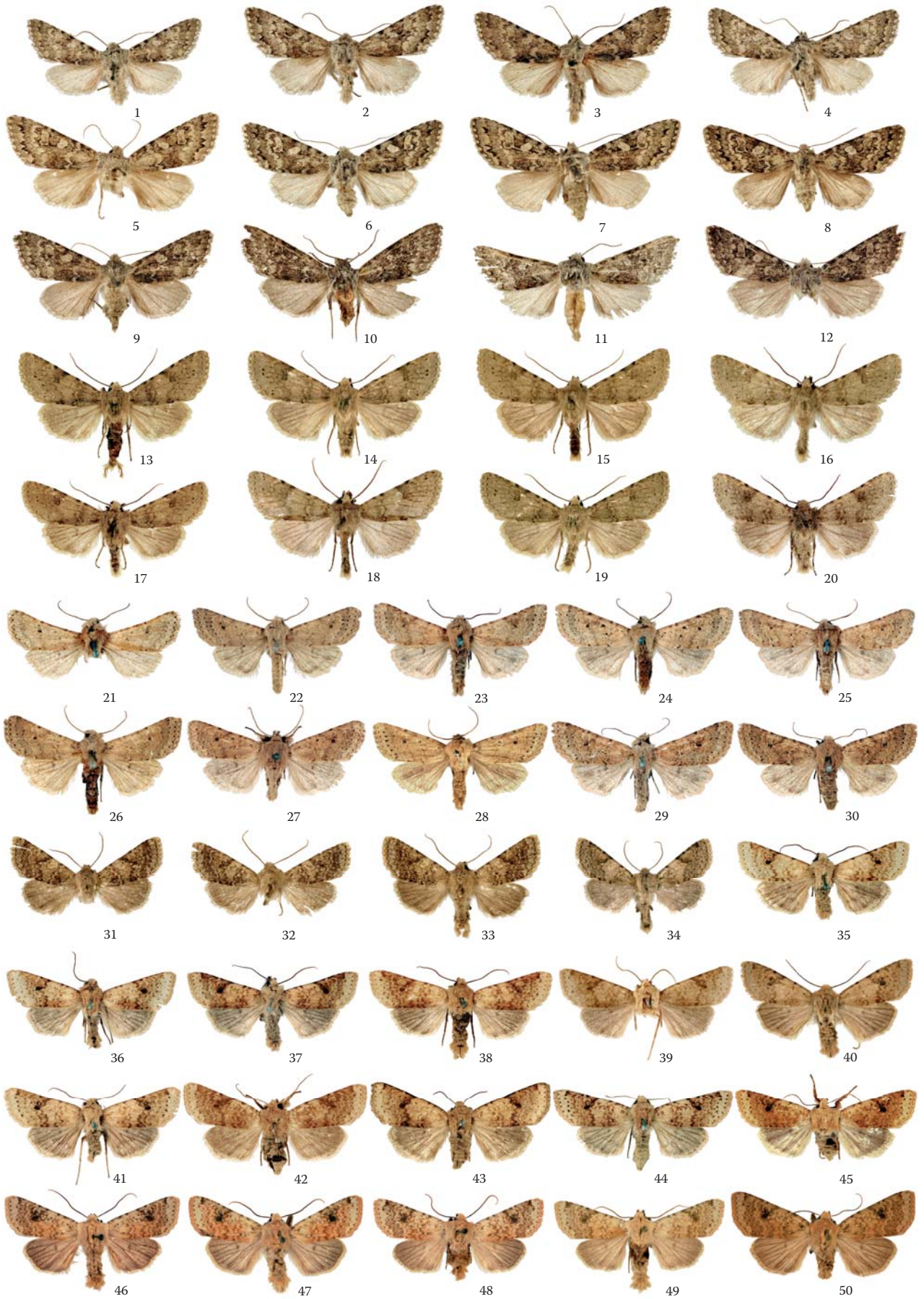
1. *Anchoscelis pistacinooides*, m. – France (coll. ZMHU)
2. *Anchoscelis pistacinooides*, m. – Italy, Sicily, Mistretta, 13-27.IX.1938, R. Lunak (coll. NHMW)
3. *Anchoscelis pistacinooides*, m. – France, Echiré, Deux-Sèvres, 24.IX.1929, Paratype of *Agrochola dujardini* (coll. TLM)
4. *Anchoscelis pistacinooides*, m. – France, Dessaignes, 470 m, 8.IX.1999 (coll. HNHM)
5. *Anchoscelis pistacinooides*, f. – France, Echiré, Deux-Sèvres, 24.IX.1929, Paratype of *Agrochola dujardini* (coll. TLM)
6. *Anchoscelis pistacinooides*, f. – France, Echiré, Deux-Sèvres, 24.IX.1929 (coll. BMNH)
7. *Anchoscelis pistacinooides*, f. – Italy, Piemont, Midsino, 10.X.1981, E.v. Mentzer (coll. NRS)
8. *Anchoscelis pistacinooides*, f. – Italy, Sicily, Mistretta, 13-27.IX.1938, R. Lunak (coll. NHMW)
9. *Anchoscelis pistacinooides*, f. – France, Isère, La Pisse, Vallée de la Romanche, 1128 m, ex ovo, 8.VII.2004, Forster (coll. G. Ronkay)
10. *Anchoscelis pistacinooides*, f. – France, Isère, La Pisse, Vallée de la Romanche, 1128 m, ex ovo, 7.VII.2004, Forster (coll. G. Ronkay)
11. *Anchoscelis nitida*, m. – Hungary, Fejér County, Szár, Űrgehegy, 200 m, 7.IX.2004 (coll. G. Ronkay)
12. *Anchoscelis nitida*, m. – Hungary, Fejér County, Szár, Naphegy, 200 m, 10.IX.2004, G. Ronkay (coll. G. Ronkay)
13. *Anchoscelis nitida*, m. – Austria, Tyrol, Auer, 20.IX.1958, K. Burmann (coll. TLM)
14. *Anchoscelis nitida*, m. – Italy, South Tyrol, Schluderns, Etschnau, 800 m, P. Huemer (coll. TLM)
15. *Anchoscelis nitida*, m. – Armenia, Geghard, 40 km E of Yerevan, 1700 m, 3-11.IX.1975, E. Vartian (coll. NHMW)
16. *Anchoscelis nitida*, f. – Hungary, Fejér County, Szár, Űrgehegy, 200 m, 7.IX.2004 (coll. G. Ronkay)
17. *Anchoscelis nitida*, f. – Hungary, Fejér County, Szár, Naphegy, 200 m, 10.IX.2004, G. Ronkay (coll. G. Ronkay)
18. *Anchoscelis nitida*, f. – Austria, Tyrol, Auer, 23.IX.1957, K. Burmann (coll. TLM)
19. *Anchoscelis nitida*, f. – Austria, Tyrol, Auer, 20.IX.1958, K. Burmann (coll. TLM)
20. *Anchoscelis nitida*, f. – Austria, Tyrol, Auer, 18.IX.1971, K. Burmann (coll. TLM)
21. *Anchoscelis lunosa*, m. – France, Bouchanières, 1400 m, 7.X.1967, F. Dujardin (coll. TLM)
22. *Anchoscelis lunosa*, m. – France, Col de Braus, 1000 m, 22.X.1968, F. Dujardin (coll. TLM)
23. *Anchoscelis lunosa*, m. – Germany, Leverkusen, 10.IX.1975, Swoboda (coll. A.E. Rau)
24. *Anchoscelis lunosa*, m. – England, Pembroke, 27.IX.1907, J.W.H. Harrison (coll. ZMHU)
25. *Anchoscelis lunosa*, m. – Morocco, Middle Atlas Mts, Ifrane, 15-1600 m, 9-22.X.1973, Friedel (coll. NHMW)
26. *Anchoscelis lunosa*, m. – Morocco, Middle Atlas Mts, 13 km E of Azrou, near Mischliffen, 1920 m, 24.IX.2005, Gy.M. László & G. Ronkay (coll. G. Ronkay)
27. *Anchoscelis lunosa*, m. – Morocco, Middle Atlas Mts, 13 km E of Azrou, near Mischliffen, 1920 m, 24.IX.2005, Gy.M. László & G. Ronkay (coll. G. Ronkay)
28. *Anchoscelis lunosa*, m. – Morocco, Middle Atlas Mts, 13 km E of Azrou, near Mischliffen, 1920 m, 24.IX.2005, Gy.M. László & G. Ronkay (coll. G. Ronkay)
29. *Anchoscelis lunosa*, f. – Spain, Prov. Gerona, Puig de Ventos, Vidreras, 60 m, 2.XI.1989, A.E. Rau (coll. A.E. Rau)
30. *Anchoscelis lunosa*, f. – Germany, Rheine-Pfalz, Mainz, ex ovo, 24.III.1992, Deutsch (coll. TLM)
31. *Anchoscelis lunosa*, f. – Germany, Rheine-Pfalz, Mainz, ex ovo, 24.III.1992, Deutsch (coll. TLM)
32. *Anchoscelis lunosa*, f. – Morocco, Middle Atlas Mts, Ifrane, 15-1600 m, 9-22.X.1973, Friedel (coll. NHMW)
33. *Anchoscelis tripolensis*, m. – Holotype, Libya, Cyrene, Tripoli, 4.XI.1910, A.F.S. Sladden, slide No.: Tams1936/196 (coll. BMNH)
34. *Anchoscelis tripolensis*, m. – Libya, El-Beida, X.1990, M. El-Ghariani, slide No.: RL3862 (coll. HNHM)
35. *Anchoscelis tripolensis*, m. – Libya, Cyrenaica, Ain Mara, November (coll. BMNH) (Photo A. Zilli)
36. *Anchoscelis polybela*, m. – Algeria, Prov. Constantine, Batna (coll. HNHM)
37. *Anchoscelis polybela*, m. – Algeria, Prov. Constantine, Batna, X.1910, V. Faroult (coll. BMNH)
38. *Anchoscelis polybela*, m. – Algeria, Batna (coll. BMNH)
39. *Anchoscelis polybela*, m. – Algeria, Prov. Constantine, Batna, X.1910, V. Faroult (coll. BMNH)
40. *Anchoscelis polybela*, m. – “NordAfrika” (coll. ZFMK)
41. *Anchoscelis polybela*, f. – Holotype, Algeria, Philippeville (coll. MNHNP)
42. *Anchoscelis polybela*, f. – Algeria, Prov. Constantine, Batna (coll. ZMHU)
43. *Anchoscelis polybela*, f. – Algeria, Lambèse, X.1913, H. Powell (coll. BMNH)
44. *Anchoscelis polybela*, f. – Algeria, Prov. Constantine, Batna, X.1910, V. Faroult (coll. BMNH)
45. *Anchoscelis polybela*, f. – Algeria, Prov. Constantine, Batna, X.1910, V. Faroult (coll. BMNH)
46. *Anchoscelis approximata*, m. – Lectotype, [Pakistan] Dugi Pass, 12500 feet, IX.1890, Thompson, slide No.: RL3978 (coll. BMNH)
47. *Anchoscelis approximata*, m. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
48. *Anchoscelis approximata*, m. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
49. *Anchoscelis approximata*, m. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
50. *Anchoscelis approximata*, f. – Paralectotype, [Pakistan] Dugi Pass, 12500 feet, IX.1890, Thompson, slide No.: RL3978 (coll. BMNH)
51. *Anchoscelis approximata*, f. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
52. *Anchoscelis approximata*, f. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
53. *Anchoscelis approximata*, f. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)



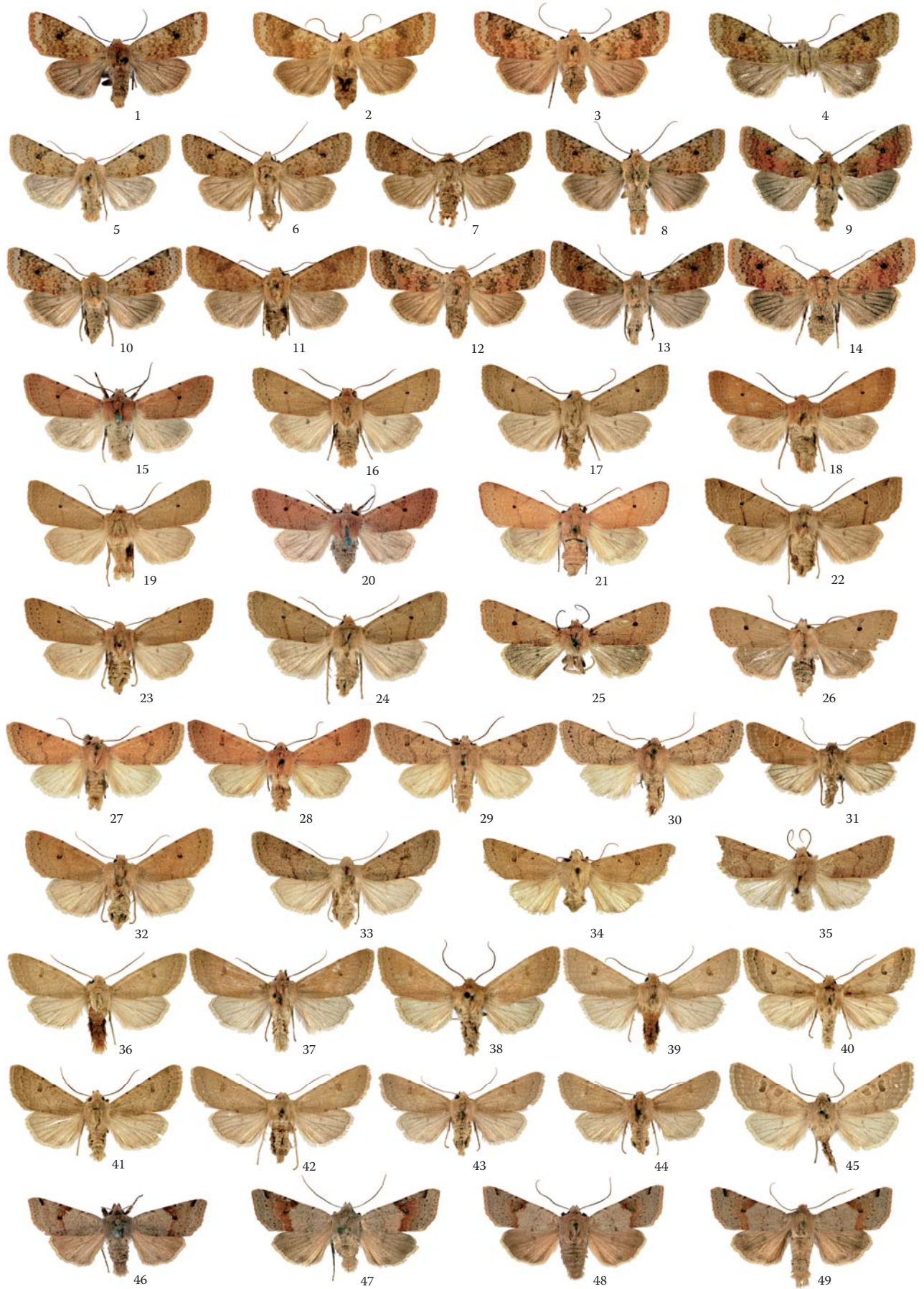
1. *Anchoscelis deosaiensis*, m. – Holotype, Pakistan, Himalaya Mts, Deosai Plains, Bubin valley, 3300 m, 15-17.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
2. *Anchoscelis deosaiensis*, m. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin valley, 3300 m, 15-17.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
3. *Anchoscelis deosaiensis*, m. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin valley, 3300 m, 15-17.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
4. *Anchoscelis deosaiensis*, m. – Paratype, Pakistan, Himalaya Mts, Kashmir, Deosai National Park, 6.IX.1997, Gy. Fábrián & G. Ronkay (coll. G. Ronkay)
5. *Anchoscelis deosaiensis*, m. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 3150 m, 24.IX.1998, F. Hussein (coll. G. Ronkay)
6. *Anchoscelis deosaiensis*, f. – Paratype, Pakistan, Karakoram Mts, 40 km N of Gilgit near Juglot village, 2400 m, 26.VII.2001, G. Ronkay (coll. G. Ronkay)
7. *Anchoscelis deosaiensis*, f. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
8. *Anchoscelis deosaiensis*, f. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin valley, 3300 m, 15-17.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
9. *Anchoscelis deosaiensis*, f. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin valley, 3300 m, 15-17.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
10. *Anchoscelis nekrasovi*, m. – Paratype, Tadjikistan, Hissar Mts, Anzob Pass (coll. ZMH; Photo Lauri Kaila)
11. *Anchoscelis nekrasovi*, m. – Tadjikistan, Hissar Mts, Anzob Pass (coll. ZMH; Photo Lauri Kaila)
12. *Anchoscelis pamiricola*, m. – Tadjikistan, Pamir Mts, Khorog, 8.IX.1986, Shchetkin, slide No.: RL11916 (coll. SMNK)
13. *Anchoscelis pamiricola*, m. – Kazakhstan, Prov. Almaty, 8 km NW of Kok-Pek, 1000 m, 28.IX.-1.X.1994, Gy.M. László & Gy. Fábrián, slide No.: RL5122 (coll. Gy. Fábrián)
14. *Anchoscelis pamiricola*, f. – Tadjikistan, Pamir Mts, Khorog, 3.X.1969, J. Wojtusiak (coll. HNHM)
15. *Anchoscelis pamiricola*, f. – Paratype, Tadjikistan, Pamir Mts, Khorog, 2200 m, 3.X.1982, M.L. Zaprjagaev (coll. HNHM)
16. *Anchoscelis pamiricola*, f. – Paratype, Tadjikistan, Pamir Mts, Khorog, Botanical Garden, 2300 m, 20.X.1978, M.L. Zaprjagaev (coll. G. Ronkay)
17. *Anchoscelis trapezoides trapezoides*, m. – Lectotype, [Uzbekistan] Lepsa, slide No.: Boursin MB88 (coll. ZMHU)
18. *Anchoscelis trapezoides trapezoides*, m. – “Asia centr., Alexander-Gebirge, Rückbeil” (coll. ZMHU)
19. *Anchoscelis trapezoides trapezoides*, m. – Paralectotype, [Uzbekistan] Lepsa (coll. ZMHU)
20. *Anchoscelis trapezoides trapezoides*, m. – Paralectotype, [Uzbekistan] Lepsa (coll. ZMHU)
21. *Anchoscelis trapezoides trapezoides*, f. – Paralectotype, [Uzbekistan] Lepsa (coll. ZMHU)
22. *Anchoscelis trapezoides trapezoides*, f. – Kazakhstan, Prov. Almaty, Zailiskiy Alatau, 15 km S of Issyk village, 1710 m, 23.IX.2002, T. Csövári (coll. HNHM)
23. *Anchoscelis trapezoides naumanni*, m. – Holotype, Afghanistan, Prov. Kunar, Nuristan, Lindai-Sin valley, Barg-e-Matal, 2200 m, 22.X.1970, C. Naumann, slide No.: RL2493 (coll. SMNK)
24. *Anchoscelis trapezoides naumanni*, m. – Paratype, Afghanistan, Prov. Kunar, Nuristan, Lindai-Sin valley, 21 km S of Barg-e-Matal, 2200 m, 25.X.1970, C. Naumann, slide No.: RL3786 (coll. SMNK)
25. *Anchoscelis trapezoides naumanni*, m. – Tadjikistan, Pamir Mts, Ishkatinskiy Mt., Barvoz, 2800 m, 6.X.1985, A.V. Nekrasov, slide No.: RL6684 (coll. HNHM)
26. *Anchoscelis trapezoides naumanni*, m. – Tadjikistan, Hissar Mts, Gushary, 1400 m, 1-10.X.1965, Shchetkin (coll. G. Ronkay)
27. *Anchoscelis trapezoides naumanni*, m. – Afghanistan, Safed Koh, Kotkai, 2350 m, 29.VII.1967, M. Müller, slide No.: RL11917 (coll. SMNK)
28. *Anchoscelis trapezoides naumanni*, f. – Tadjikistan, Pamir Mts, Ishkatinskiy Mt., Barvoz, 2800 m, 6.X.1985, A.V. Nekrasov (coll. G. Ronkay)
29. *Anchoscelis statira*, m. – Holotype, Afghanistan, Khinjan valley, Ferush Tagan, 1900 m, 25.IX.1952, J. Klapperich (coll. ZSM)
30. *Anchoscelis statira*, m. – Afghanistan, Hindukush Mts, Salang valley, Ejan, 2050 m, 11.X.1952, J. Klapperich, slide No.: RL11914 (coll. SMNK)
31. *Anchoscelis statira*, m. – Afghanistan, Khinjan valley, Ferush Tagan, 1900 m, 25.IX.1952, J. Klapperich (coll. SMNK)
32. *Anchoscelis statira*, m. – Afghanistan, Prov. Kunar, Nuristan, Lindai-Sin valley, Barg-e-Matal, 2200 m, 22.X.1970, C. Naumann, slide No.: VZ4691 (coll. SMNK)
33. *Anchoscelis statira*, f. – Afghanistan, Hindukush Mts, Salang valley, Ejan, 2050 m, 11.X.1952, J. Klapperich (coll. ZFMK)
34. *Anchoscelis statira*, f. – Paratype, Afghanistan, Hindukush Mts, Salang valley, Ejan, 2050 m, 11.X.1952, J. Klapperich, slide No.: RL3525 (coll. ZSM)
35. *Anchoscelis statira*, f. – Afghanistan, Khinjan valley, Ferush Tagan, 1900 m, 25.IX.1952, J. Klapperich, slide No.: RL11915 (coll. SMNK)
36. *Anchoscelis statira*, f. – Paratype, Afghanistan, Hindukush Mts, Salang valley, Ejan, 2050 m, 11.X.1952, J. Klapperich, slide No.: RL3525 (coll. ZSM)
37. *Anchoscelis zoltanus*, m. – Holotype, Pakistan, Himalaya Mts, Deosai Plains, Bubin valley, 3300 m, 15-17.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
38. *Anchoscelis zoltanus*, m. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
39. *Anchoscelis zoltanus*, m. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
40. *Anchoscelis zoltanus*, m. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
41. *Anchoscelis zoltanus*, f. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
42. *Anchoscelis zoltanus*, f. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
43. *Anchoscelis zoltanus*, f. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
44. *Anchoscelis zoltanus*, f. – Paratype, Pakistan, Himalaya Mts, Deosai Plains, Bubin village, 31500 m, 12.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)



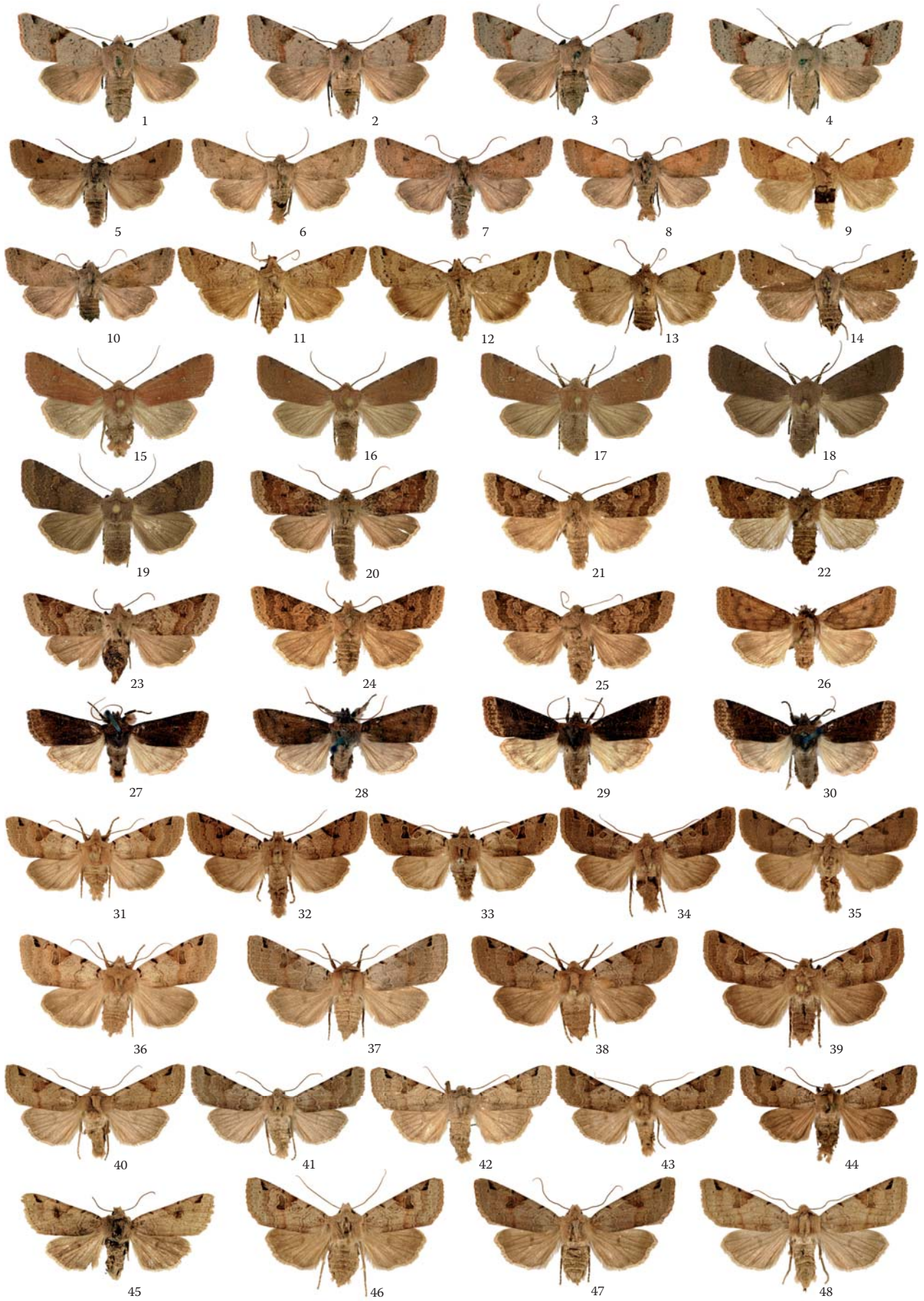
1. *Anchoscelis griseovariegata*, m. – Paratype, Tadjikistan, Hissar Mts, Gushary, 1400 m, 12.X.1965, Shchetkin (coll. P. Gyulai)
2. *Anchoscelis griseovariegata*, m. – Paratype, Tadjikistan, Hissar Mts, Gushary, 1400 m, 19.X.1965, Shchetkin (coll. P. Gyulai)
3. *Anchoscelis griseovariegata*, m. – Paratype, Tadjikistan, Hissar Mts, Gushary, 1300-1400 m, 4.X.1965, Shchetkin (coll. P. Gyulai)
4. *Anchoscelis griseovariegata*, m. – Paratype, Tadjikistan, Hissar Mts, Gushary, 1400 m, 19.X.1965, Shchetkin (coll. P. Gyulai)
5. *Anchoscelis griseovariegata*, f. – Holotype, Tadjikistan, Hissar Mts, Kondara valley, 1100 m, 29.X.1954, Shchetkin, slide No.: RL6652 (coll. P. Gyulai)
6. *Anchoscelis griseovariegata*, f. – Paratype, Tadjikistan, Hissar Mts, Maihura gorge, Charamkul, 1400 m, 28.IX.1968, Shchetkin (coll. P. Gyulai)
7. *Anchoscelis griseovariegata*, f. – Paratype, Tadjikistan, Hissar Mts, Gushary, 1400 m, 12.X.1965, Shchetkin (coll. P. Gyulai)
8. *Anchoscelis griseovariegata*, f. – Paratype, Tadjikistan, Hissar Mts, Maihura gorge, Charamkul, 1400 m, 28.IX.1968, Shchetkin (coll. P. Gyulai)
9. *Anchoscelis griseovariegata*, f. – Paratype, Tadjikistan, Hissar Mts, Gushary, 1400 m, 12.X.1965, Shchetkin (coll. P. Gyulai)
10. *Anchoscelis spectabilis*, m. – Uzbekistan, Chatkal Mts, near Yanghiabad, 2200-2500 m, 20-30.XI.2007, V. Gurko, slide No.: GYP2215 (coll. P. Gyulai)
11. *Anchoscelis spectabilis*, m. – Uzbekistan, Chatkal Mts, near Yanghiabad, 2200-2500 m, 20-30.XI.2007, V. Gurko, slide No.: GYP2238 (coll. P. Gyulai)
12. *Anchoscelis spectabilis*, f. – Holotype, Uzbekistan, Alai Mts, Dugobo, 2200 m, 18-20.IX.1984, Z. Varga, slide No.: RL2563 (coll. HNHM)
13. *Frivaldszkyola elami*, m. – Holotype, Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 7.XI.2000, Gy. Fábián (coll. Gy. Fábián)
14. *Frivaldszkyola elami*, m. – Paratype, Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 7.XI.2000, Gy. Fábián (coll. G. Ronkay)
15. *Frivaldszkyola elami*, m. – Paratype, Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 7.XI.2000, Gy. Fábián (coll. G. Ronkay)
16. *Frivaldszkyola elami*, m. – Paratype, Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 7.XI.2000, Gy. Fábián (coll. P. Gyulai)
17. *Frivaldszkyola elami*, m. – Paratype, Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 7.XI.2000, Gy. Fábián (coll. HNHM)
18. *Frivaldszkyola elami*, m. – Paratype, Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 7.XI.2000, Gy. Fábián (coll. P. Gyulai)
19. *Frivaldszkyola elami*, m. – Paratype, Iran, Prov. Lorestan, Zagros Mts, 25 km SE of Nehavand, 1900 m, 7.XI.2000, Gy. Fábián (coll. G. Ronkay)
20. *Frivaldszkyola elami*, m. – Turkey, Prov. Bitlis, Bitlis, 1500 m, 22.X.1991, P. Kuhna (coll. ZFMK)
21. *Anchoscelis scabra*, m. – Lectotype, [Israel] Jerusalem, (18)91, Paulus, slide No.: Dufay4008 (coll. ZMHU)
22. *Anchoscelis scabra*, m. – [Israel] Palaestina (coll. BMNH)
23. *Anchoscelis scabra*, m. – Paralectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
24. *Anchoscelis scabra*, m. – Paralectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
25. *Anchoscelis scabra*, m. – Paralectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
26. *Anchoscelis scabra*, m. – Paralectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
27. *Anchoscelis scabra*, m. – [Israel] Palaestina, Jerusalem, 1900, Paulus (coll. ZMHU)
28. *Anchoscelis scabra*, m. – [Israel] Palaestina (coll. BMNH)
29. *Anchoscelis scabra*, f. – Paralectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
30. *Anchoscelis scabra*, f. – [Israel] Palaestina, Jerusalem, 1900, Paulus (coll. ZMHU)
31. *Anchoscelis fuscomixta*, m. – Holotype, Iran, Prov. Azerbaijan, E-Sharqi, 7 km NW Miyane, 30-31.X.2002, P. Gyulai & A. Garai, slide No.: RL8141 (coll. P. Gyulai)
32. *Anchoscelis fuscomixta*, m. – Paratype, Iran, Prov. Azerbaijan, E-Sharqi, 7 km NW Miyane, 30-31.X.2002, P. Gyulai & A. Garai, slide No.: RL8115 (coll. P. Gyulai)
33. *Anchoscelis fuscomixta*, m. – Paratype, Iran, Prov. Azerbaijan, E-Sharqi, 7 km NW Miyane, 30-31.X.2002, P. Gyulai & A. Garai (coll. G. Ronkay)
34. *Anchoscelis fuscomixta*, m. – Paratype, Iran, Prov. Azerbaijan, E-Sharqi, 7 km NW Miyane, 30-31.X.2002, P. Gyulai & A. Garai (coll. P. Gyulai)
35. *Anchoscelis pauli*, m. – [Israel] Palaestina, Jerusalem, (18)95, Paulus (coll. ZMHU)
36. *Anchoscelis pauli*, m. – Lectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
37. *Anchoscelis pauli*, m. – Paralectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
38. *Anchoscelis pauli*, m. – [Israel] Palaestina, Jerusalem, 1896, Paulus (coll. ZMHU)
39. *Anchoscelis pauli*, m. – [Israel] Palaestina, slide No.: RL426 (coll. HNHM)
40. *Anchoscelis pauli*, m. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábián, Herczig, László & Szeőke (coll. G. Ronkay)
41. *Anchoscelis pauli*, f. – Paralectotype, [Israel] Jerusalem, (18)91, Paulus (coll. ZMHU)
42. *Anchoscelis pauli*, f. – [Israel] Palaestina, Jerusalem, 1899, Paulus (coll. ZMHU)
43. *Anchoscelis pauli*, f. – [Israel] Palaestina, Jerusalem, 1899, Paulus (coll. ZMHU)
44. *Anchoscelis pauli*, f. – [Israel] Palaestina (coll. BMNH)
45. *Anchoscelis pauli*, f. – Lebanon, Luize, 16.XII.1934, E.P. Wiltshire (coll. BMNH)
46. *Anchoscelis kindermanni*, m. – Makedonia, Ochrid, Petrina Planina, 1400 m, 3.X.1954, F. Kasy (coll. NHMW)
47. *Anchoscelis kindermanni*, m. – Makedonia, Ochrid, Petrina Planina, 4.X.1937 (coll. NHMW)
48. *Anchoscelis kindermanni*, m. – Makedonia, Ochrid, Petrina Planina, 1400 m, 4.X.1954, F. Kasy (coll. NHMW)
49. *Anchoscelis kindermanni*, m. – Makedonia, Ochrid, Petrina Planina, 1400 m, 3.X.1954, F. Kasy (coll. NHMW)
50. *Anchoscelis kindermanni*, m. – Makedonia, Ochrid, Petrina Planina, 4.X.1937 (coll. NHMW)



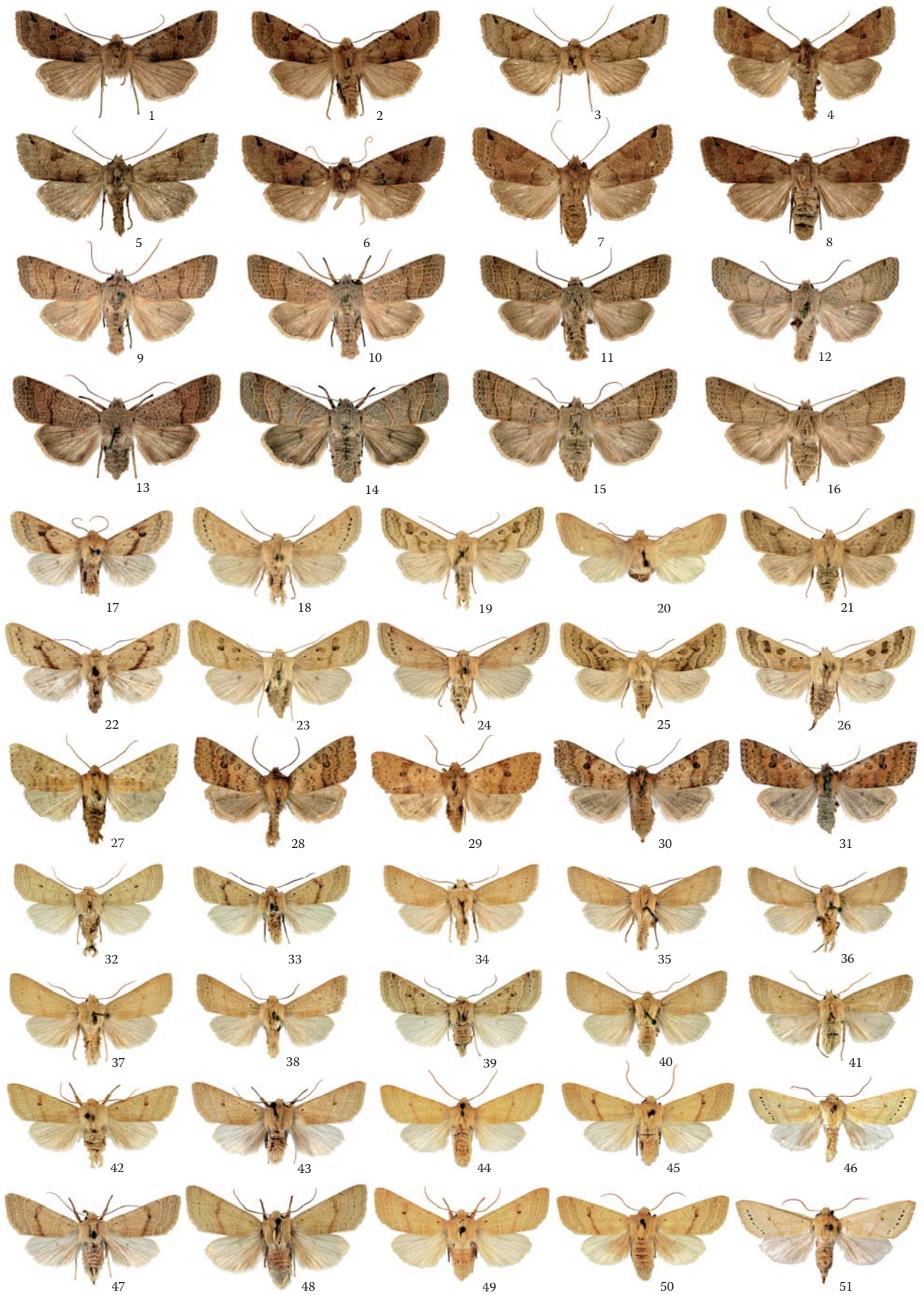
1. *Anchoscelis kindermanni*, f. – Makedonia, Ochrid, X.1938, Wolf-schläger (coll. ZFMK)
2. *Anchoscelis kindermanni*, f. – Makedonia, Ochrid, Petrina Planina, 1400 m, 4.X.1954, F. Kasy (coll. NHMW)
3. *Anchoscelis kindermanni*, f. – Makedonia, Ochrid, Petrina Planina, 4.X.1937 (coll. NHMW)
4. *Anchoscelis kindermanni*, f. – Italy, Sicily, Madonie, Piano Battaglia, 1500 m, 17.X.1990, A. Bischof, slide No.: Hacker8073 (coll. ZSM)
5. *Anchoscelis consueta*, m. – Turkey, Prov. Sivas, 5 km W of Gürün, 1500 m, 17-19.X.1989, G. Ronkay & G. Csorba (coll. G. Ronkay)
6. *Anchoscelis consueta*, m. – Turkey, Prov. Kütahya, 23 km SE of Kütahya, 1000 m, 23.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
7. *Anchoscelis consueta*, m. – Turkey, Prov. Ankara, Dutözü köyü, 1000 m, 16.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
8. *Anchoscelis consueta*, m. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
9. *Anchoscelis consueta*, m. – Greece, Samos, 2 km NE of Kamara, 100 m, 17.XI.2009, G. Jeppesen, M. Top-Jensen & K. Bech (coll. G. Ronkay)
10. *Anchoscelis consueta*, f. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
11. *Anchoscelis consueta*, f. – Turkey, Prov. Elazig, 30 km SE of Elazig, Hazar Lake, 23.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
12. *Anchoscelis consueta*, f. – Turkey, Prov. Ankara, Kizilcahamam, 15-30.X.1969, R. Pinker (coll. NHMW)
13. *Anchoscelis consueta*, f. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
14. *Anchoscelis consueta*, f. – Greece, Samos, 1 km N of Spatharei, 700 m, 19.XI.2009, G. Jeppesen, M. Top-Jensen & K. Bech (coll. G. Ronkay)
15. *Anchoscelis rupicapra rupicapra*, m. – Lectotype, [Turkey] “Taurus Hbhr.” (Haberhauer) (coll. ZMHU)
16. *Anchoscelis rupicapra rupicapra*, m. – Turkey, Prov. Elazig, 30 km SE of Elazig, Hazar Lake, 23.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
17. *Anchoscelis rupicapra rupicapra*, m. – Turkey, Prov. Elazig, 30 km SE of Elazig, Hazar Lake, 23.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
18. *Anchoscelis rupicapra rupicapra*, m. – Turkey, Prov. Elazig, 30 km SE of Elazig, Hazar Lake, 23.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
19. *Anchoscelis rupicapra rupicapra*, m. – Turkey, Prov. Elazig, 30 km SE of Elazig, Hazar Lake, 23.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
20. *Anchoscelis rupicapra rupicapra*, f. – Paralectotype, [Turkey] Taurus Hbhr. (Haberhauer) (coll. ZMHU)
21. *Anchoscelis rupicapra rupicapra*, f. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.X.1969, R. Pinker (coll. NHMW)
22. *Anchoscelis rupicapra rupicapra*, f. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
23. *Anchoscelis rupicapra rupicapra*, f. – Turkey, Prov. Elazig, 30 km SE of Elazig, Hazar Lake, 23.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
24. *Anchoscelis rupicapra rupicapra*, f. – Turkey, Prov. Erzincan, 5 km S of Dalav, 18.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
25. *Anchoscelis rupicapra kresnaensis*, m. – Holotype, Bulgaria, Struma valley, Kresna gorge, 22.X.1981, Z. Mészáros & Cs. Szabóky, slide No.: RL402 (coll. HNHM)
26. *Anchoscelis rupicapra kresnaensis*, f. – Paratype, Bulgaria, Struma valley, Kresna gorge, 22.X.1981, Z. Mészáros & Cs. Szabóky (coll. HNHM)
27. *Anchoscelis oropotamica oropotamica*, m. – Iran, Elburs Mts, Derbend, 25 km N of Teheran, 2000 m, 5-17.X.1963, F. Kasy & E. Vartian (coll. NHMW)
28. *Anchoscelis oropotamica oropotamica*, m. – Iran, Elburs Mts, Derbend, 25 km N of Teheran, 2000 m, 15-27.X.1964, F. Kasy & E. Vartian (coll. NHMW)
29. *Anchoscelis oropotamica oropotamica*, m. – Iran, Elburs Mts, Derbend, 25 km N of Teheran, 2000 m, 15-27.X.1964, F. Kasy & E. Vartian (coll. NHMW)
30. *Anchoscelis oropotamica oropotamica*, m. – Iran, Elburs Mts, Derbend, 25 km N of Teheran, 2000 m, 5-17.X.1963, F. Kasy & E. Vartian (coll. NHMW)
31. *Anchoscelis oropotamica oropotamica*, m. – Iran, Prov. Azerbaijan, vicinity of Miyane, 1500 m, 23.X.2000, Gy. Fábíán (coll. P. Gyulai)
32. *Anchoscelis oropotamica oropotamica*, f. – Iran, Prov. Azerbaijan, vicinity of Miyane, 1500 m, 23.X.2000, Gy. Fábíán (coll. G. Ronkay)
33. *Anchoscelis oropotamica oropotamica*, f. – Iran, Prov. Azerbaijan, vicinity of Miyane, 1500 m, 23.X.2000, Gy. Fábíán (coll. G. Ronkay)
34. *Anchoscelis oropotamica oropotamica*, f. – Holotype, SW Iran, Prov. Fars, Sineh Safid, 6500 feet, 27.X.1940, E.P. Wiltshire (coll. BMNH)
35. *Anchoscelis oropotamica oropotamica*, m. – SW Iran, Prov. Fars, Shapur, 20.XI.1940, E.P. Wiltshire, Holotype of *Amathes oropotamica thermopotamica* (coll. BMNH)
36. *Anchoscelis oropotamica archar*, m. – Paratype, Turkmenistan, Kopet-Dagh, Firyuza, 400-600 m, 8-13.XI.1991, G. Ronkay & M. Hreblay (coll. G. Ronkay)
37. *Anchoscelis oropotamica archar*, m. – Iran, Prov. Khorasan, Binaloud Mts, 10 km N of Harv, 1620 m, 29.X.2000, Gy. Fábíán (coll. G. Ronkay)
38. *Anchoscelis oropotamica archar*, m. – Iran, Prov. Khorasan, Golestan NP, Sulgerd, 1260 m, 29-30.X.2003, Ch. Wieser (coll. P. Gyulai)
39. *Anchoscelis oropotamica archar*, m. – Paratype, Turkmenistan, 80 km SE of Serahs, 600 m, 19.XI.1991, G. Ronkay & M. Hreblay (coll. G. Ronkay)
40. *Anchoscelis oropotamica archar*, m. – Paratype, Turkmenistan, 80 km SE of Tedjen, 200-300 m, 17.XI.1991, G. Ronkay & M. Hreblay (coll. G. Ronkay)
41. *Anchoscelis oropotamica archar*, m. – Paratype, Turkmenistan, 80 km SE of Serahs, 600 m, 19.XI.1991, G. Ronkay & M. Hreblay (coll. G. Ronkay)
42. *Anchoscelis oropotamica archar*, f. – Paratype, Turkmenistan, 80 km SE of Serahs, 600 m, 19.XI.1991, G. Ronkay & M. Hreblay (coll. G. Ronkay)
43. *Anchoscelis oropotamica archar*, f. – Paratype, Turkmenistan, 80 km SE of Serahs, 600 m, 19.XI.1991, G. Ronkay & M. Hreblay (coll. G. Ronkay)
44. *Anchoscelis oropotamica archar*, f. – Paratype, Turkmenistan, Kopet-Dagh, Firyuza, 400-600 m, 8-13.XI.1991, G. Ronkay & M. Hreblay (coll. G. Ronkay)
45. *Anchoscelis oropotamica ssp.*, m. – Kirghisia, “Nuratay Chasatsaj”, 4.IX.1993, Krejcbberg (coll. Srnka)
46. *Anchoscelis meridionalis meridionalis*, m. – Lectotype, [France] Ardèche (coll. ZMHU)
47. *Anchoscelis meridionalis meridionalis*, m. – France, St. Barnabé, 950 m, 5.X.1969, F. Dujardin (coll. TLM)
48. *Anchoscelis meridionalis meridionalis*, m. – France, Sisteron, Du-rance, ex ovo, VII.1956 (coll. NHMW)
49. *Anchoscelis meridionalis meridionalis*, m. – France, Sisteron, Du-rance, ex ovo, VII.1956 (coll. NHMW)



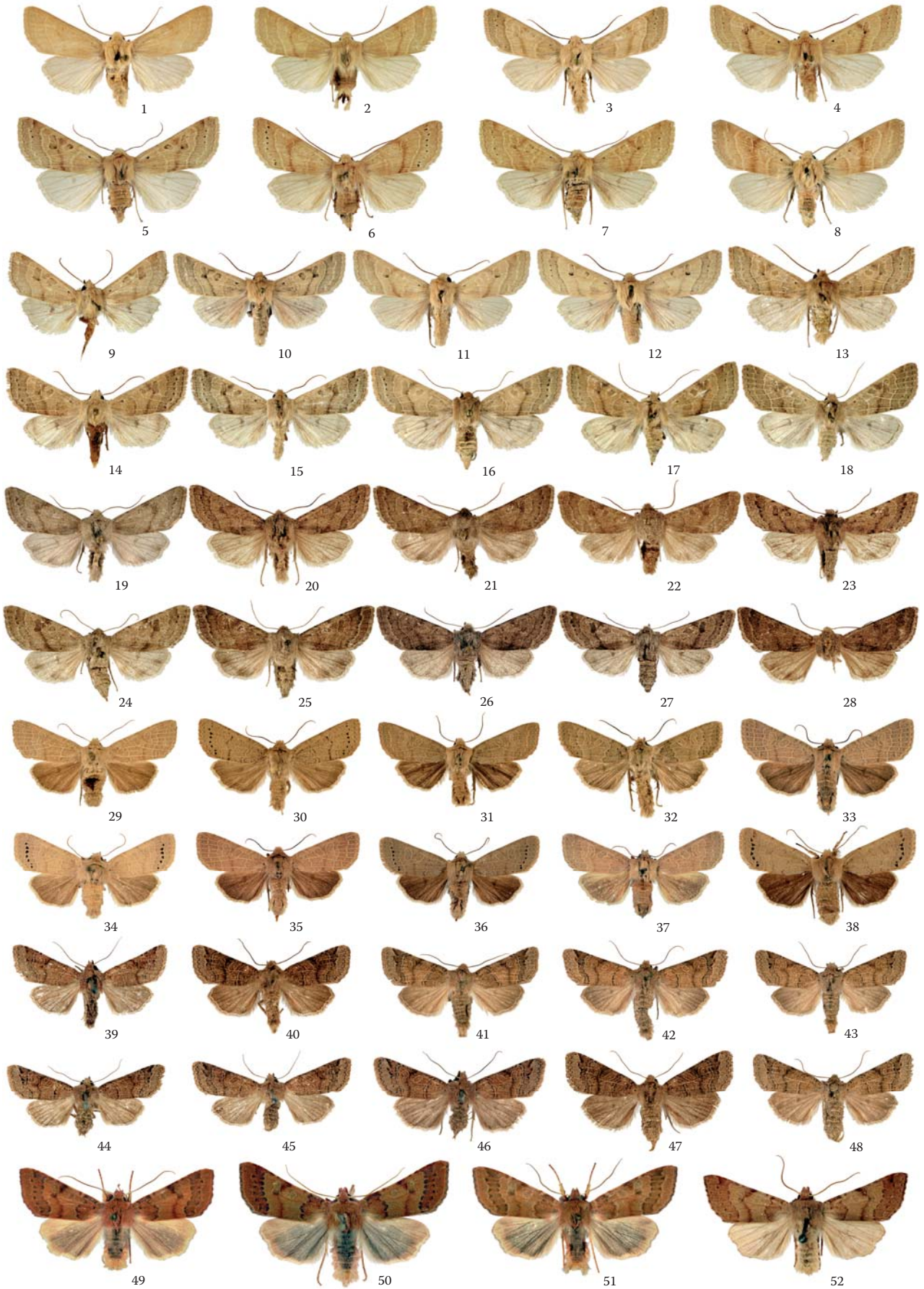
1. *Anchoscelis meridionalis meridionalis*, f. – Spain, Castilia, Cuenca, 1896, M. Korb (coll. ZMHU)
2. *Anchoscelis meridionalis meridionalis*, f. – France, Sisteron, Durance, ex ovo, VII.1956 (coll. NHMW)
3. *Anchoscelis meridionalis meridionalis*, f. – France, Esterel, 1960 (coll. TLM)
4. *Anchoscelis meridionalis meridionalis*, f. – France, Basses Alpes, 22.IX.1960, A. Richter (coll. TLM)
5. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, m. – Paratype, Morocco, High Atlas Mts, Oukaimeden, 2700 m, 5.X.1996, M. Petersen (coll. P. Gyulai)
6. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, m. – Paratype, Morocco, Middle Atlas Mts, Ifrane, 1700 m, R. Pinker (coll. NHMW)
7. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, m. – Paratype, Morocco, Middle Atlas Mts, Ifrane, 15-1600 m, 9-22.X.1973, Friedel (coll. NHMW)
8. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, m. – Paratype, Morocco, Middle Atlas Mts, Ifrane, 1700 m, R. Pinker (coll. NHMW)
9. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, m. – Paratype, Algeria, Lambèse, XI.1912, H. Powell (coll. BMNH)
10. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, f. – Paratype, Morocco, Middle Atlas Mts, Ifrane, 1700 m, R. Pinker (coll. NHMW)
11. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, f. – Paratype, Algeria, Lambèse, X.1913, H. Powell (coll. BMNH)
12. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, f. – Paratype, Algeria, Lambèse, X.1913, H. Powell (coll. BMNH)
13. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, f. – Paratype, Algeria, Lambèse, XI.1912, H. Powell (coll. BMNH)
14. *Anchoscelis meridionalis maghrebianus* **ssp. n.**, f. – Morocco, Marrakesh, 1800 m, 13.XII.1990, C. Eliasson (coll. G. Ronkay)
15. *Anchoscelis orientalis*, m. – Cyprus centr., Troodos, Chandria, Adelfoi, 1580 m, 3.XI.2012, E. Friedrich (Photo and coll. Egbert Friedrich)
16. *Anchoscelis orientalis*, m. – Cyprus occ., vicinity of Paphos, NW of Pegeia, 300 m, ex ovo, 26.XII.2000/25.VII.2001, E. Friedrich (Photo and coll. Egbert Friedrich)
17. *Anchoscelis orientalis*, f. – Cyprus occ., vicinity of Paphos, NW of Pegeia, 300 m, ex ovo, 26.XII.2000/14.VII.2001, E. Friedrich (Photo and coll. Egbert Friedrich)
18. *Anchoscelis orientalis*, f. – Cyprus occ., NE of Polis, SE of Gialia, 250 m, 11.XI.2012, E. Friedrich (Photo and coll. Egbert Friedrich)
19. *Anchoscelis orientalis*, f. – Cyprus occ., vicinity of Paphos, NW of Pegeia, 300 m, 26.XII.2000, E. Friedrich (Photo and coll. Egbert Friedrich)
20. *Anchoscelis agnorista*, m. – Morocco, Middle Atlas Mts, Ifrane, 15-1600 m, 9-22.X.1973, Friedel (coll. NHMW)
21. *Anchoscelis agnorista*, m. – Morocco, Middle Atlas Mts, Ifrane, 1700 m, X.1974, R. Pinker (coll. NHMW)
22. *Anchoscelis agnorista*, f. – Morocco, Ifrane, 12.XI.1949, P. Buckwell (coll. MNHNP)
23. *Anchoscelis agnorista*, f. – Morocco, Middle Atlas Mts, Ifrane, 1700 m, X.1974, R. Pinker (coll. NHMW)
24. *Anchoscelis agnorista*, f. – Morocco, Middle Atlas Mts, Ifrane, 1700 m, X.1974, R. Pinker (coll. NHMW)
25. *Anchoscelis agnorista*, f. – Morocco, Middle Atlas Mts, Ifrane, 1700 m, X.1974, R. Pinker (coll. NHMW)
26. *Anchoscelis hypotaenia*, m. – Holotype, Lebanon, Beirut, dissected, but without slide number (coll. SMNK)
27. *Anchoscelis hypotaenia*, m. – Lebanon, Arayah, 16.XII.1934, E.P. Wiltshire, Paratype of *Amathes hypotaenia wiltshirei* (coll. BMNH)
28. *Anchoscelis hypotaenia*, m. – Lebanon, Arayah, 16.XII.1934, E.P. Wiltshire (coll. BMNH)
29. *Anchoscelis hypotaenia*, f. – Lebanon, Arayah, 16.XII.1934, E.P. Wiltshire, Paratype of *Amathes hypotaenia wiltshirei* (coll. BMNH)
30. *Anchoscelis hypotaenia*, f. – Lebanon, Arayah, 16.XII.1934, E.P. Wiltshire, Allotype of *Amathes hypotaenia wiltshirei* (coll. BMNH)
31. *Anchoscelis litura*, m. – Austria, Wienerwald, Gumpoldskirchen, 23.IX.1959, E. Vartian (coll. NHMW)
32. *Anchoscelis litura*, m. – Hungary, Fejér County, Szár, Naphegy, 200 m, 10.IX.2004, G. Ronkay (coll. G. Ronkay)
33. *Anchoscelis litura*, m. – Hungary, Pest County, Fót, 17.IX.1949, L. Kovács (coll. HNHM)
34. *Anchoscelis litura*, m. – Hungary, Vértes Mts, Csákvár, Haraszt-hegy, 250 m, 19.IX.2003, G. Ronkay (coll. G. Ronkay)
35. *Anchoscelis litura*, m. – Hungary, Budakeszi, Hársborkorhegy, 14.IX.1974, Ronkay (coll. G. Ronkay)
36. *Anchoscelis litura*, f. – Italy, Monte Baldo, Prada, 900-1100 m, 15-30.IX.1967, K. Burmann (coll. TLM)
37. *Anchoscelis litura*, f. – Italy, South Tyrol, Taufers, 1300 m, 22.IX.1976, K. Burmann (coll. TLM)
38. *Anchoscelis litura*, f. – Italy, South Tyrol, Laatsch, 1000 m, ex larva, 7.IX.1994, Erlebach (coll. TLM)
39. *Anchoscelis litura*, f. – Hungary, Fejér County, Szár, Űrgehegy, 200 m, 1.X.2004 (coll. G. Ronkay)
40. *Anchoscelis luteogrisea*, m. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
41. *Anchoscelis luteogrisea*, m. – Turkey, Prov. Agri, 5 km E of Sarican, 1800 m, 19-21.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
42. *Anchoscelis luteogrisea*, m. – Turkey, Prov. Ankara, Kizilcahamam, 15-30.X.1969, R. Pinker (coll. NHMW)
43. *Anchoscelis luteogrisea*, m. – Turkey, Prov. Agri, 5 km E of Sarican, 1800 m, 19-21.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
44. *Anchoscelis luteogrisea*, m. – Bulgaria, Samokov, 5.X.1961, E. Vartian (coll. NHMW)
45. *Anchoscelis luteogrisea*, f. – Holotype, [Turkey] Amasia (coll. BMNH)
46. *Anchoscelis luteogrisea*, f. – Turkey, Prov. Antalya, 5 km S of Cevizli, 1000 m, 22.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
47. *Anchoscelis luteogrisea*, f. – Turkey, Prov. Malatya, 2 km S of Erkenek, 1300 m, 16.X.1989, G. Csorba & G. Ronkay (coll. G. Ronkay)
48. *Anchoscelis luteogrisea*, f. – Turkey, Prov. Bitlis, Kuskunkiran Pass, 2350-2450 m, 14.X.1989, G. Csorba & G. Ronkay (coll. G. Ronkay)



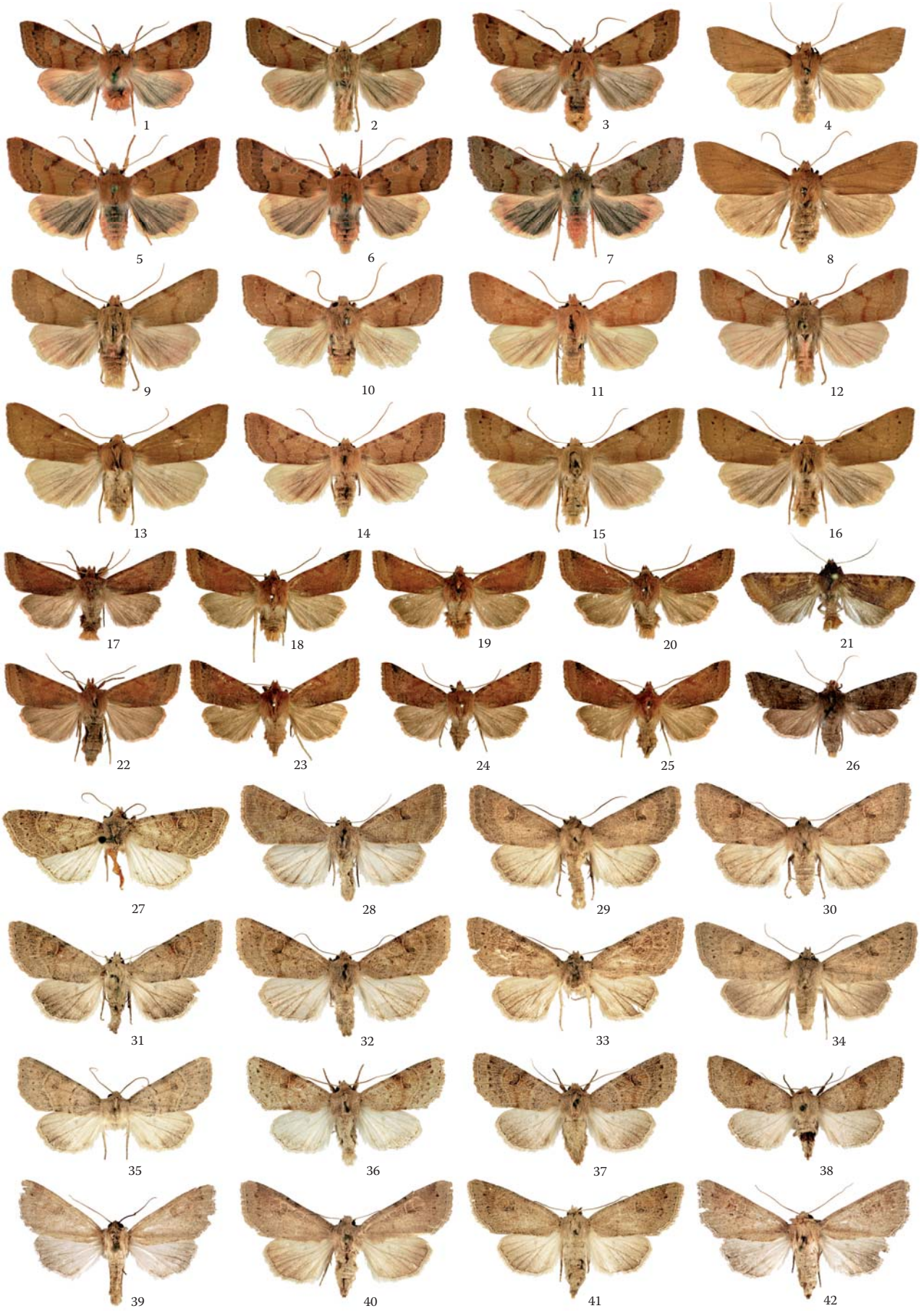
1. *Anchoscelis turcomanica*, m. – Holotype, Turkmenistan, Kopet-Dagh Mts, Sayvana valley, 10 km SW of Sayvana, 1300 m, 11.X.1992, L. Ronkay, A. Podlussány & Z. Varga, slide No.: RL4065 (coll. HNHM)
2. *Anchoscelis turcomanica*, m. – Paratype, Turkmenistan, Kopet-Dagh Mts, Sayvana valley, 10 km SW of Sayvana, 1300 m, 11.X.1992, L. Ronkay, A. Podlussány & Z. Varga (coll. HNHM)
3. *Anchoscelis turcomanica*, m. – Paratype, Turkmenistan, Kopet-Dagh, Firyuza, 400-600 m, 8-13.XI.1991, G. Ronkay & M. Hreblay, slide No.: RL6001 (coll. G. Ronkay)
4. *Anchoscelis turcomanica*, m. – Iran, Prov. Khorassan, Golestan NP, Almehr, 1750 m, 26.X.2003, G. Stangelmaier (coll. P. Gyulai)
5. *Anchoscelis turcomanica*, f. – Paratype, Turkmenistan, Kopet-Dagh Mts, Karayalchi valley, 15 km SE of Nochur, 1300-1400 m, 13-14.XI.1991, G. Ronkay & P. Gyulai (coll. P. Gyulai)
6. *Anchoscelis turcomanica*, f. – Iran, Prov. Khorassan, Golestan NP, Almehr, 1750 m, 26.X.2003, G. Stangelmaier, slide No.: 8105 (coll. G. Ronkay)
7. *Anchoscelis turcomanica*, f. – Iran, Prov. Khorassan, Golestan NP, Jahan Nama, 1800 m, 19-20.X.2003, G. Stangelmaier (coll. P. Gyulai)
8. *Anchoscelis turcomanica*, f. – Iran, Prov. Khorassan, Golestan NP, Jahan Nama, 1800 m, 19-20.X.2003, G. Stangelmaier (coll. G. Ronkay)
9. *Anchoscelis humilis*, m. – Bulgaria, Samokov, 5.X.1961, E. Vartian (coll. NHMW)
10. *Anchoscelis humilis*, m. – Austria, Wien, Mauer, 10.IX.1936, E. Jahn (coll. TLM)
11. *Anchoscelis humilis*, m. – Hungary, Nagykovácsi, Nagyszénás, 24.IX.1977, L. Ronkay (coll. G. Ronkay)
12. *Anchoscelis humilis*, m. – Turkey, Prov. Agri, Tasligüney, Karasu-Aras Mts, 2100 m, 30.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
13. *Anchoscelis humilis*, f. – Hungary, Budapest, Farkasvölgy, 20.IX.1929, Uhrík (coll. HNHM)
14. *Anchoscelis humilis*, f. – Greece, Makedonia, Florina, Vatochorion, 1000 m, ex ovo, IX.1987, A.E. Rau (coll. A.E. Rau)
15. *Anchoscelis humilis*, f. – Hungary, Villány Mts, Szársomlyó, 12.X.1985, L. Ronkay (coll. G. Ronkay)
16. *Anchoscelis humilis*, f. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
17. *Anchoscelis egorovi*, m. – Lectotype, [Russia] Dagestan, Khodzhal Makhi, 3200 m, 23.IX.1933, M. Rjabov (coll. NHMW)
18. *Anchoscelis egorovi*, m. – Turkey, Prov. Sivas, 5 km W of Gürün, 1500 m, 17-19.X.1989, G. Ronkay & G. Csorba (coll. G. Ronkay)
19. *Anchoscelis egorovi*, m. – Turkey, Prov. Tokat, Camlibel Pass, 1650 m, 19.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
20. *Anchoscelis egorovi*, m. – Iraq, Rayat, Haj Omran, 5-6000 feet, ex larva, 18.X.1956, E.P. Wiltshire, Holotype of *Agrochola egorovi laciniatae* (coll. BMNH)
21. *Anchoscelis egorovi*, m. – Turkey, Prov. Bitlis, Kuskunkiran Pass, 2300 m, 22.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
22. *Anchoscelis egorovi*, f. – Paralectotype, [Russia] Dagestan, Khodzhal Makhi, 3200 m, 25.IX.1933, M. Rjabov (coll. NHMW)
23. *Anchoscelis egorovi*, f. – Turkey, Prov. Agri, Tasligüney, Karasu-Aras Mts, 2100 m, 30.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
24. *Anchoscelis egorovi*, f. – Iran, Prov. Zanjan, 20 km E of Zanjan, 2300 m, 24-25.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
25. *Anchoscelis egorovi*, f. – Turkey, Prov. Bitlis, Kuskunkiran Pass, 2300 m, 22.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
26. *Anchoscelis egorovi*, f. – Turkey, Prov. Sivas, 13 km W of Imranli, 1300 m, 18.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
27. *Anchoscelis azerica*, m. – Holotype, Azerbaijan, Talysh Mts, Masallynskiy district, Ysty-Su, 27X.1988, Kazarjan (coll. P. Gyulai)
28. *Anchoscelis azerica*, m. – Iran, Prov. Mazandaran, Elburs Mts, Chalus-Yush road crossing, 18.X.2003, A. Garai & P. Gyulai (coll. P. Gyulai)
29. *Anchoscelis azerica*, m. – Iran, Elburs Mts, 2000 m, 16.IX.1973, N. Flauger (coll. G. Ronkay)
30. *Anchoscelis azerica*, f. – Iran, Elburs Mts, 2000 m, 16.IX.1973, N. Flauger (coll. W. Speidel)
31. *Anchoscelis azerica*, f. – Iran, Prov. Mazandaran, Elburs Mts, 20 km E of Valiabad, 3190 m, 26.X.2000 (coll. HNHM)
32. *Anchoscelis lactiflora lactiflora*, m. – Turkey, Prov. Malatya, 2 km S of Erkenek, 1300 m, 16.X.1989, G. Csorba & G. Ronkay (coll. G. Ronkay)
33. *Anchoscelis lactiflora lactiflora*, m. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csővári (coll. G. Ronkay)
34. *Anchoscelis lactiflora lactiflora*, m. – Turkey, Prov. Askale, 15 km E of Askale, 1950 m, 21.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
35. *Anchoscelis lactiflora lactiflora*, m. – Turkey, Prov. Askale, 15 km E of Askale, 1950 m, 21.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
36. *Anchoscelis lactiflora lactiflora*, m. – Turkey, Prov. Agri, Tasligüney, Karasu-Aras Mts, 2100 m, 30.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
37. *Anchoscelis lactiflora lactiflora*, m. – Turkey, Prov. Askale, 15 km E of Askale, 1950 m, 21.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
38. *Anchoscelis lactiflora lactiflora*, m. – Turkey, Prov. Askale, 15 km E of Askale, 1950 m, 21.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
39. *Anchoscelis lactiflora lactiflora*, f. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csővári (coll. HNHM)
40. *Anchoscelis lactiflora lactiflora*, f. – Turkey, Prov. Askale, 15 km E of Askale, 1950 m, 21.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
41. *Anchoscelis lactiflora lactiflora*, f. – Turkey, Prov. Malatya, Sarihaci, 18.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
42. *Anchoscelis lactiflora wautieri*, m. – Makedonia, Drenovo, X.1959, R. Pinker (coll. HNHM)
43. *Anchoscelis lactiflora wautieri*, m. – Makedonia, Drenovo, X.1959, R. Pinker (coll. NHMW)
44. *Anchoscelis lactiflora wautieri*, m. – Makedonia, Drenovo near Kavadar, 25.IX.-5.X.1960, F. Kasy (coll. NHMW)
45. *Anchoscelis lactiflora wautieri*, m. – Makedonia, Drenovo near Kavadar, 25.IX.-5.X.1960, F. Kasy (coll. NHMW)
46. *Anchoscelis lactiflora wautieri*, m. – Greece, Chelmos, 4.X.1984, E. v. Mentzer (coll. NRS)
47. *Anchoscelis lactiflora wautieri*, f. – Makedonia, Drenovo, X.1959, R. Pinker (coll. NHMW)
48. *Anchoscelis lactiflora wautieri*, f. – Makedonia, Drenovo, X.1959, R. Pinker (coll. NHMW)
49. *Anchoscelis lactiflora wautieri*, f. – Makedonia, Ochrid, ex ovo, VII.1955, F. Kasy (coll. NHMW)
50. *Anchoscelis lactiflora wautieri*, f. – Makedonia, Ochrid, Petrina Planina, 1400 m, 3.X.1954, F. Kasy (coll. NHMW)
51. *Anchoscelis lactiflora wautieri*, f. – Greece, Chelmos, 4.X.1984, E. v. Mentzer (coll. NRS)



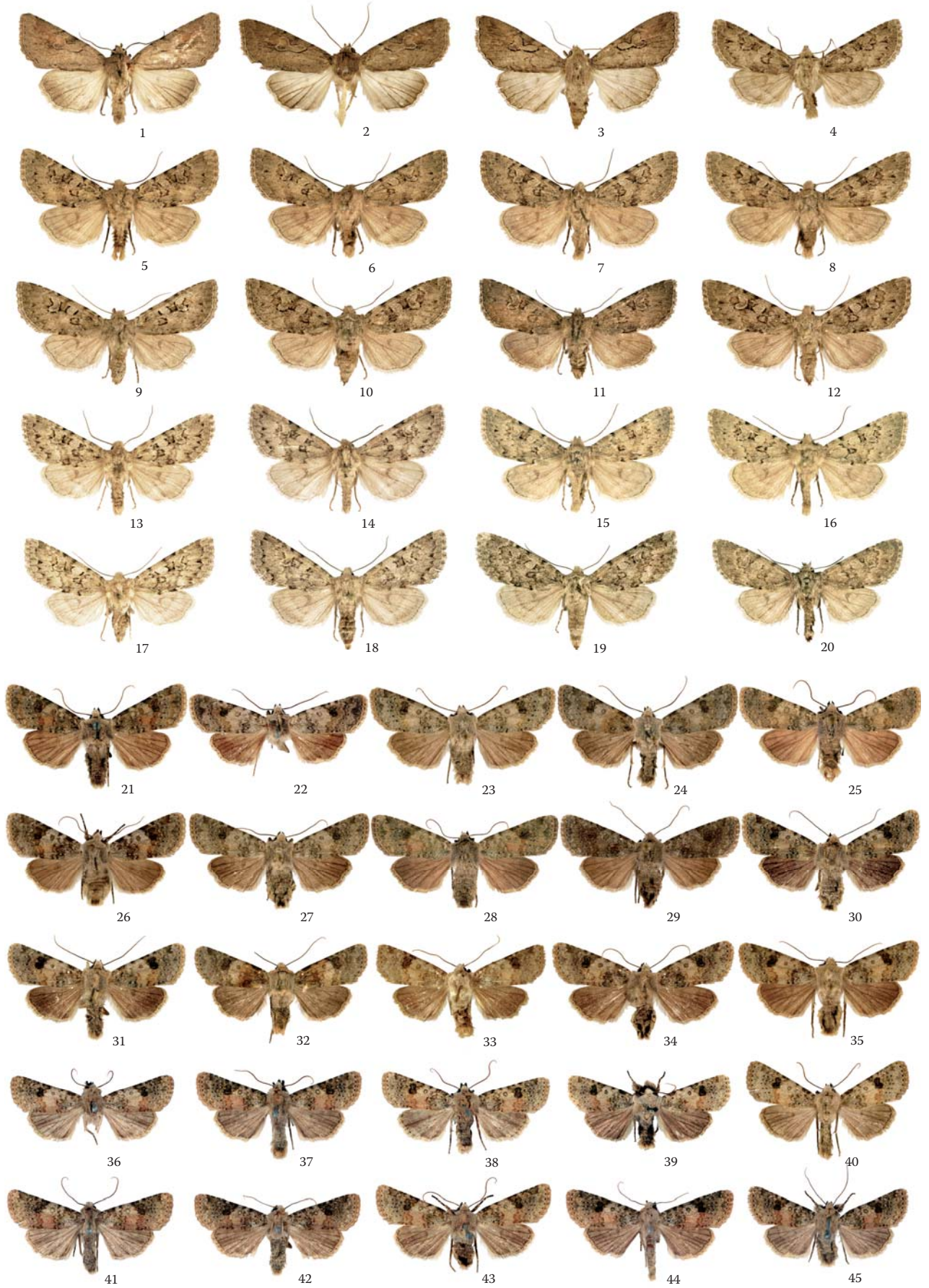
1. *Anchoscelis janhillmanni*, m. – Turkey, Prov. Agri, Tasligüney, Karasu-Aras Mts, 2100 m, 22.IX.2000, G. Csorba, B. Herczig & G. Ronkay (coll. G. Ronkay)
2. *Anchoscelis janhillmanni*, m. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csövári (coll. G. Ronkay)
3. *Anchoscelis janhillmanni*, m. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csövári (coll. G. Ronkay)
4. *Anchoscelis janhillmanni*, m. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csövári (coll. G. Ronkay)
5. *Anchoscelis janhillmanni*, f. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csövári (coll. G. Ronkay)
6. *Anchoscelis janhillmanni*, f. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csövári (coll. G. Ronkay)
7. *Anchoscelis janhillmanni*, f. – Turkey, Prov. Hakkari, 30 km E of Hakkari, 1600 m, 4.X.2004, T. Csövári (coll. G. Ronkay)
8. *Anchoscelis janhillmanni*, f. – Turkey, Prov. Bitlis, Kuskunkiran Pass, 2350-2450 m, 14.X.1989, G. Csorba & G. Ronkay (coll. G. Ronkay)
9. *Anchoscelis elbursica*, m. – Holotype, Iran, Prov. Zanjan, Tarom valley, 20 km NE of Zanjan, 2350 m, 23-24.IX.2001, A. Garai & P. Gyulai (coll. P. Gyulai)
10. *Anchoscelis elbursica*, m. – Iran, Prov. Esfahan, Fereidun Shah, 2700 m, 13.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
11. *Anchoscelis elbursica*, m. – Iran, Prov. Boyerahmad, Zagros Mts, Vazag, 2450 m, 16-19.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
12. *Anchoscelis elbursica*, m. – Iran, Prov. Boyerahmad, Zagros Mts, Vazag, 2450 m, 16-19.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
13. *Anchoscelis elbursica*, m. – Iran, Prov. Zanjan, Sendan Mts, Zanjan-Gilvan Pass, 2200 m, 9-11.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
14. *Anchoscelis elbursica*, m. – Iran, Prov. Zanjan, Sendan Mts, Zanjan-Gilvan Pass, 2200 m, 9-11.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
15. *Anchoscelis elbursica*, m. – Iran, Prov. Zanjan, Sendan Mts, Zanjan-Gilvan Pass, 2200 m, 9-11.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
16. *Anchoscelis elbursica*, f. – Iran, Prov. Zanjan, Sendan Mts, Zanjan-Gilvan Pass, 2200 m, 9-11.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
17. *Anchoscelis elbursica*, f. – Iran, Prov. Zanjan, Sendan Mts, Zanjan-Gilvan Pass, 2200 m, 9-11.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
18. *Anchoscelis elbursica*, f. – Iran, Prov. Zanjan, Sendan Mts, Zanjan-Gilvan Pass, 2200 m, 9-11.X.2009, T. Hác & Sz. Sum (coll. P. Gyulai)
19. *Anchoscelis dubatolovi*, m. – Turkmenistan, Kopet-Dagh Mts, Dushak, 2200 m, 1-2.X.1991, L. Ronkay, A. Podlussány & Z. Varga (coll. G. Ronkay)
20. *Anchoscelis dubatolovi*, m. – Turkmenistan, Kopet-Dagh Mts, Dushak, 2200 m, 1-2.X.1991, L. Ronkay, A. Podlussány & Z. Varga (coll. HNHM)
21. *Anchoscelis dubatolovi*, m. – Iran, Prov. Khorassan, Golestan NP, Alme, 1750 m, 26-27.X.2003, Ch. Wieser (coll. P. Gyulai)
22. *Anchoscelis dubatolovi*, m. – Iran, Prov. Khorassan, Golestan NP, Alme, 1750 m, 26.X.2003, G. Stangelmaier (coll. P. Gyulai)
23. *Anchoscelis dubatolovi*, m. – Iran, Prov. Khorassan, Kopet-Dagh Mts, 80 km NE of Qucan, 1900 m, 30.X.2000, Gy. Fábán (coll. HNHM)
24. *Anchoscelis dubatolovi*, f. – Iran, Prov. Khorassan, Golestan NP, Alme, 1750 m, 26-27.X.2003, Ch. Wieser (coll. P. Gyulai)
25. *Anchoscelis dubatolovi*, f. – Iran, Prov. Khorassan, Golestan NP, Alme, 1750 m, 26-27.X.2003, Ch. Wieser (coll. P. Gyulai)
26. *Anchoscelis dubatolovi*, f. – Iran, Prov. Khorassan, Golestan NP, Alme, 1750 m, 26.X.2003, G. Stangelmaier (coll. HNHM)
27. *Anchoscelis dubatolovi*, f. – Iran, Prov. Khorassan, Golestan NP, Alme, 1750 m, 26.X.2003, G. Stangelmaier (coll. HNHM)
28. *Anchoscelis dubatolovi*, f. – Iran, Prov. Khorassan, Golestan NP, Alme, 1750 m, 26.X.2003, G. Stangelmaier, slide No.: RL8106 (coll. HNHM)
29. *Anchoscelis osthelderi*, m. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.X.1969, R. Pinker (coll. NHMW)
30. *Anchoscelis osthelderi*, m. – Turkey, Prov. Hatay, 6 km N of Yayladagi, 1100 m, 20.X.1993, Fábán, Herczig, László & Szeöke (coll. G. Ronkay)
31. *Anchoscelis osthelderi*, m. – Turkey, Prov. Hatay, 6 km N of Yayladagi, 1100 m, 20.X.1993, Fábán, Herczig, László & Szeöke (coll. G. Ronkay)
32. *Anchoscelis osthelderi*, m. – Turkey, Prov. Hatay, 6 km N of Yayladagi, 1100 m, 20.X.1993, Fábán, Herczig, László & Szeöke (coll. G. Ronkay)
33. *Anchoscelis osthelderi*, f. – Turkey, Prov. Hatay, 6 km N of Yayladagi, 1100 m, 20.X.1993, Fábán, Herczig, László & Szeöke (coll. G. Ronkay)
34. *Anchoscelis osthelderi*, f. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.IX.1969, R. Pinker (coll. NHMW)
35. *Anchoscelis osthelderi*, f. – Turkey, Prov. Ankara, Kizilcahamam, 925 m, 6-9.IX.1967, E. Vartian (coll. NHMW)
36. *Anchoscelis osthelderi*, f. – Turkey, Prov. Ankara, Kizilcahamam, 15-30.X.1969, R. Pinker (coll. NHMW)
37. *Anchoscelis osthelderi*, f. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.IX.1969, R. Pinker (coll. NHMW)
38. *Anchoscelis osthelderi*, f. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.IX.1969, R. Pinker (coll. NHMW)
39. *Anchoscelis gratiosa*, m. – Lectotype, [Turkey] “Amasia Manis.” (Manisadjian) (coll. ZMHU)
40. *Anchoscelis gratiosa*, m. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.IX.1969, R. Pinker (coll. NHMW)
41. *Anchoscelis gratiosa*, m. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.IX.1969, R. Pinker (coll. NHMW)
42. *Anchoscelis gratiosa*, m. – Turkey, Prov. Ankara, Kizilcahamam, 925 m, 6-9.IX.1967, E. Vartian (coll. NHMW)
43. *Anchoscelis gratiosa*, m. – Turkey, Prov. Ankara, Kizilcahamam, 925 m, 6-9.IX.1967, E. Vartian (coll. NHMW)
44. *Anchoscelis gratiosa*, f. – Paralectotype, [Turkey] Amasia Manis. (Manisadjian) (coll. ZMHU)
45. *Anchoscelis gratiosa*, f. – Paralectotype, [Turkey] Amasia Manis. (Manisadjian) (coll. ZMHU)
46. *Anchoscelis gratiosa*, f. – Turkey, Pontus, Amasia, 1888 (coll. ZMHU)
47. *Anchoscelis gratiosa*, f. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.IX.1969, R. Pinker (coll. NHMW)
48. *Anchoscelis gratiosa*, f. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.IX.1969, R. Pinker (coll. NHMW)
49. *Anchoscelis helvola helvola*, m. – Austria, Wienerwald, Mauer, 17.IX.1936, R. Lunak (coll. NHMW)
50. *Anchoscelis helvola helvola*, m. – Hungary, Pest County, Fót, Somlyóhegy, 200 m, 1.X.2005, L. Ronkay & M. Tóth (coll. HNHM)
51. *Anchoscelis helvola helvola*, m. – Italy, Garda lake, S. Michale-Salo, X.1971, K. Burmann (coll. TLM)
52. *Anchoscelis helvola helvola*, m. – [Russia] Altai, Kindermann, Lectotype of *Orthosia helvola* var. *sibirica* (coll. ZMHU)



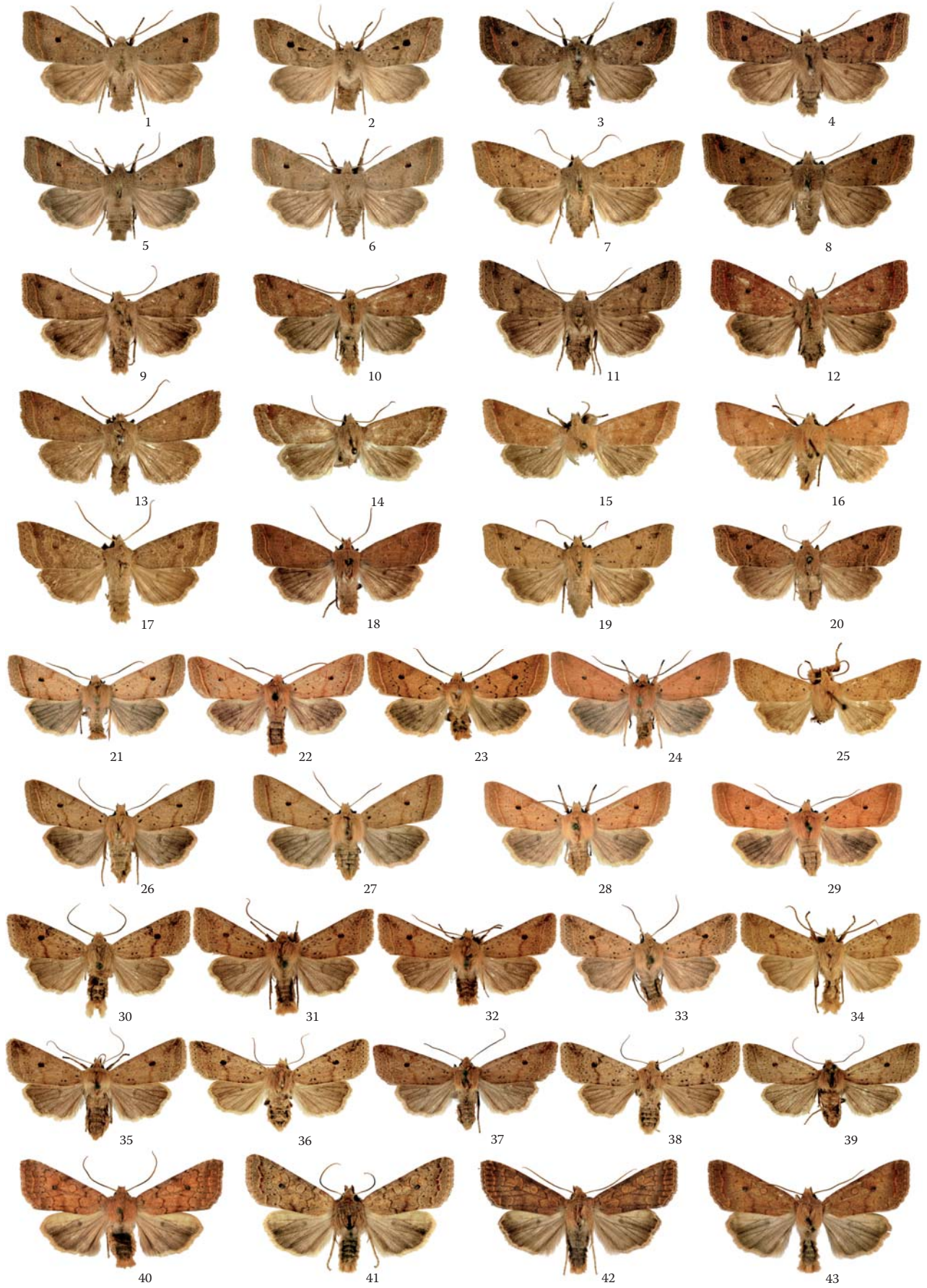
1. *Anchoscelis helvola helvola*, m. – Austria, Tyrol, Umhausen, 1200 m, ex larva, 8.IX.1951, K. Burmann (coll. TLM)
2. *Anchoscelis helvola helvola*, m. – Greece, Thessaly, 15 km N of Kalampaka, 19-20.X.2003, G. Ronkay (coll. G. Ronkay)
3. *Anchoscelis helvola helvola*, m. – Hungary, Zemplén Mts, Ros-talló, 8.X.1977, L. Ronkay & G. Ronkay (coll. G. Ronkay)
4. *Anchoscelis helvola helvola*, m. – Algeria, Lambèse, X.1913, H. Powell (coll. NHMW)
5. *Anchoscelis helvola helvola*, f. – Greece, Thessaly, 3 km N of Agio-fillo, 560 m, 23.X.2003, G. Ronkay (coll. G. Ronkay)
6. *Anchoscelis helvola helvola*, f. – Hungary, Pécs, Cserkút, 19.X.1936, R. Lunak (coll. NHMW)
7. *Anchoscelis helvola helvola*, f. – Italy, Prov. Verona, Monte, 300 m, 29.X.1987, K. Burmann (coll. TLM)
8. *Anchoscelis helvola helvola*, f. – Algeria, Lambèse, X.1913, H. Powell (coll. NHMW)
9. *Anchoscelis helvola pallescens*, m. – Turkey, Prov. Ankara, Dutözü köyü, 1000 m, 16.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
10. *Anchoscelis helvola pallescens*, m. – Turkey, Prov. Ankara, Kizilcahamam, 1-9.X.1968, G. Friedel (coll. NHMW)
11. *Anchoscelis helvola pallescens*, m. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.X.1969, R. Pinker (coll. NHMW)
12. *Anchoscelis helvola pallescens*, m. – Turkey, Prov. Erzincan, 30 km E of Erzincan, 11.X.1989, G. Ronkay & G. Csorba (coll. G. Ronkay)
13. *Anchoscelis helvola pallescens*, f. – Turkey, Prov. Erzincan, 5 km S of Dalav, 18.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
14. *Anchoscelis helvola pallescens*, f. – Turkey, Marash, 5.XI.1977, G. Friedel (coll. NHMW)
15. *Anchoscelis helvola pallescens*, f. – Turkey, Prov. Erzincan, 5 km S of Dalav, 18.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
16. *Anchoscelis helvola pallescens*, f. – Turkey, Prov. Erzincan, 5 km S of Dalav, 18.X.1992, G. Ronkay & M. Hreblay (coll. G. Ronkay)
17. *Anchoscelis haematidea*, m. – France, 2 km E of Pissos Landes, 70 m, 12.X.1992, B. Goater (coll. G. Ronkay)
18. *Anchoscelis haematidea*, m. – France, Ondres Landes, 20.X.1938, G.T. Adkin (coll. BMNH)
19. *Anchoscelis haematidea*, m. – France, Ondres Landes, 21.X.1938, G.T. Adkin (coll. BMNH)
20. *Anchoscelis haematidea*, m. – France, Ondres Landes, 22.X.1938, G.T. Adkin (coll. BMNH)
21. *Anchoscelis haematidea*, m. – Morocco, El Korimda, 520 m, 24.XI.1965, Thami, Holotype of *Agrochola haematidea rubrior* (coll. MNHNP)
22. *Anchoscelis haematidea*, f. – France, Gironde, Canejan, 27.X.1963, C. Dupont (coll. NHMW)
23. *Anchoscelis haematidea*, f. – France, Ondres Landes, 24.X.1938, G.T. Adkin (coll. BMNH)
24. *Anchoscelis haematidea*, f. – France, Ondres Landes, 23.X.1938, G.T. Adkin (coll. BMNH)
25. *Anchoscelis haematidea*, f. – France, Ondres Landes, 24.X.1938, G.T. Adkin (coll. BMNH)
26. *Anchoscelis haematidea*, f. – Tunisia, Ain Draham, 1914, Cotype of *Amathes haematidea* var. *atra* (coll. ZMHU)
27. *Maraschia grisea grisea*, m. – Holotype, [Turkey] Syria, Taurus, Marash, 7-900 m, VIII.1929, local collector, slide No.: ZSM1864 (coll. ZSM)
28. *Maraschia grisea grisea*, m. – Armenia, 40 km E of Yerevan, Geghard, 1700 m, 3-11.IX.1975, Vartian (coll. NHMW)
29. *Maraschia grisea grisea*, m. – Turkmenistan, Kopet-Dagh Mts, 6 km S of Ipay-Kala, 1600 m, 16-23.VIII.1992, M. Hreblay, Gy.M. László & G. Ronkay (coll. G. Ronkay)
30. *Maraschia grisea grisea*, f. – Turkmenistan, Kopet-Dagh Mts, 6 km S of Ipay-Kala, 1600 m, 16-23.VIII.1992, M. Hreblay, Gy.M. László & G. Ronkay (coll. G. Ronkay)
31. *Maraschia grisea grisea*, f. – Iran, Prov. Esfahan, Zagros Mts, Golestan Kuh, 10 km S of Khansar, 10-11.X.2002, P. Gyulai & A. Garai (coll. HNHM)
32. *Maraschia grisea grisea*, f. – Armenia, 40 km E of Yerevan, Geghard, 1700 m, 3-11.IX.1975, Vartian (coll. NHMW)
33. *Maraschia grisea grisea*, f. – Turkey, Prov. Hakkari, Cilo Dagi, 5 km N of Agacsiz, 12.IX.1985, H. Hacker, slide No.: RL7166 (coll. HNHM)
34. *Maraschia grisea grisea*, f. – Iran, Prov. Fars, Zagros Mts, 7 km N of Sivand, 5-6.X.2002, P. Gyulai & A. Garai (coll. G. Ronkay)
35. *Maraschia grisea balcanica* **ssp. n.**, m. – Holotype, Croatia, Velebit, Maly Alan Pass, I. Richter, slide No.: RL11824 (coll. G. Ronkay)
36. *Maraschia grisea balcanica* **ssp. n.**, m. – Paratype, Macedonia, Ochrid, 12.VIII.1955, F. Kasy (coll. NHMW)
37. *Maraschia grisea balcanica* **ssp. n.**, f. – Paratype, Macedonia, Ochrid, 24.VIII.1955, F. Kasy (coll. NHMW)
38. *Maraschia grisea balcanica* **ssp. n.**, f. – Paratype, Macedonia, Ochrid, 31.VIII.1955, F. Kasy (coll. NHMW)
39. *Maraschia hissarensis*, m. – Tadjikistan, Hissar Mts, Kondara, 19.IX.1979, I. Pljushch (coll. G. Ronkay)
40. *Maraschia hissarensis*, f. – Tadjikistan, Pamir Mts, Shugnan Mt., Sangandara, 3650 m, 23.VII.2000, Shchetkin (coll. G. Ronkay)
41. *Maraschia hissarensis*, f. – Tadjikistan, Darvaz Mts, Tavildara vil-lage, 1300 m, 9-18.VIII.2006, V. Gurko (coll. HNHM)
42. *Maraschia hissarensis*, f. – Tadjikistan, Hissar Mts, Kondara, 24.IX.1979, I. Pljushch (coll. G. Ronkay)



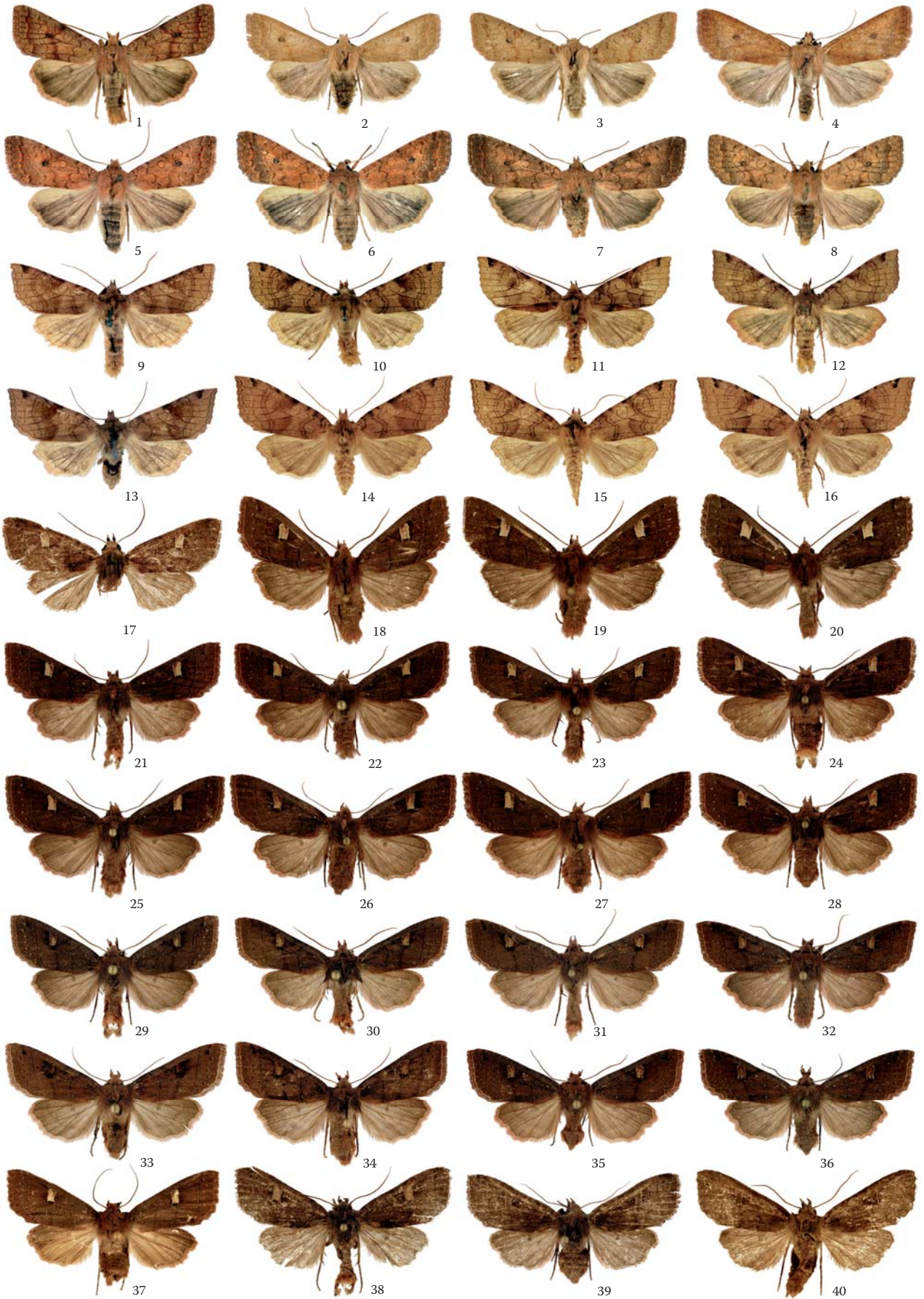
1. *Maraschia secunda*, m. – Pakistan, Kashmir, Himalaya Mts, valley of Indus, between Chilas and Dassu, Motel Barseen, 1100 m, 10.X.1998, Gy.M. László & G. Ronkay (coll. G. Ronkay)
2. *Maraschia secunda*, m. – Holotype, Pakistan, Kohistan, Indus valley, 2 km W of Pattan, 1050 m, 30.IX.1988, H. Hacker, slide No.: Hacker4869 (coll. ZSM)
3. *Maraschia secunda*, f. – Paratype, Pakistan, Hazara Kohistan, Kaghan valley, Malakandi, 1300 m, 25.IX.1988, H. Hacker (coll. ZSM)
4. *Hazaropolia hazara hazara*, m. – Holotype, Pakistan, Hazara Kohistan, Kaghan valley, Saiful Muluk, 3300 m, 26.IX.1988, H. Hacker (coll. ZSM)
5. *Hazaropolia hazara hazara*, m. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 23.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
6. *Hazaropolia hazara hazara*, m. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
7. *Hazaropolia hazara hazara*, m. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
8. *Hazaropolia hazara hazara*, m. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
9. *Hazaropolia hazara hazara*, f. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
10. *Hazaropolia hazara hazara*, f. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
11. *Hazaropolia hazara hazara*, f. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 24.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
12. *Hazaropolia hazara hazara*, f. – Pakistan, Himalaya Mts, Saiful Muluk, 3100 m, 11.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
13. *Hazaropolia hazara marmorata* **ssp. n.**, m. – Holotype, Pakistan, Himalaya Mts, Kashmir, Deosai Plains, 3650 m, 16-18.VIII.1998, G. Ronkay & Z. Varga (coll. G. Ronkay)
14. *Hazaropolia hazara marmorata* **ssp. n.**, m. – Paratype, Pakistan, Himalaya Mts, Kashmir, Deosai Plains, 3400 m, 5.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
15. *Hazaropolia hazara marmorata* **ssp. n.**, m. – Paratype, Pakistan, Hindukush Mts, Shandur Pass, 3300 m, 29-31.VIII.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
16. *Hazaropolia hazara marmorata* **ssp. n.**, m. – Paratype, Pakistan, Hindukush Mts, 5 km E of Shandur Pass, 3250 m, 23.VIII.2001, G. Ronkay (coll. G. Ronkay)
17. *Hazaropolia hazara marmorata* **ssp. n.**, f. – Paratype, Pakistan, Himalaya Mts, Kashmir, Deosai Plains, 3400 m, 5.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
18. *Hazaropolia hazara marmorata* **ssp. n.**, f. – Paratype, Pakistan, Himalaya Mts, Kashmir, Deosai Plains, 3400 m, 5.IX.1997, Gy. Fábíán & G. Ronkay (coll. G. Ronkay)
19. *Hazaropolia hazara marmorata* **ssp. n.**, f. – Paratype, Pakistan, Kashmir, Deosai Plains, Bubin village, 3300 m, 14.VIII.2001, B. Benedek & G. Ronkay (coll. G. Ronkay)
20. *Hazaropolia hazara marmorata* **ssp. n.**, f. – Paratype, Pakistan, Hindukush Mts, 5 km E of Shandur Pass, 3750 m, 21-22.VIII.2001, G. Ronkay (coll. G. Ronkay)
21. *Frivaldszkyola mansueta mansueta*, m. – Lectotype, [Turkey] Smyrna (coll. HNHM)
22. *Frivaldszkyola mansueta mansueta*, m. – [Turkey] Amasia, 1888, K.O., slide No.: RL1009, Lectotype of *Orthosia mansueta* var. *pontica* (coll. ZMHU)
23. *Frivaldszkyola mansueta mansueta*, m. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
24. *Frivaldszkyola mansueta mansueta*, m. – Turkey, Prov. Antalya, 5 km S of Cevizli, 1000 m, 22.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
25. *Frivaldszkyola mansueta mansueta*, m. – Turkey, Marash, 5.XI.1977, G. Friedel (coll. NHMW)
26. *Frivaldszkyola mansueta mansueta*, f. – Turkey, Prov. Ankara, Kizilcahamam, 1-15.X.1970, R. Pinker (coll. NHMW)
27. *Frivaldszkyola mansueta mansueta*, f. – Turkey, Prov. Icel, 7 km NW of Kayaci, 1000 m, 21.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
28. *Frivaldszkyola mansueta mansueta*, f. – Turkey, Marash, 5.XI.1977, G. Friedel (coll. NHMW)
29. *Frivaldszkyola mansueta mansueta*, f. – Turkey, Marash, 5.XI.1977, G. Friedel (coll. NHMW)
30. *Frivaldszkyola mansueta mansueta*, f. – Greece, Samos, 1 km N of Spatharei, 700 m, 19.XI.2009, G. Jeppesen, M. Top-Jensen & K. Bech (coll. G. Ronkay)
31. *Frivaldszkyola mansueta sphakiota*, m. – Paratype, Greece, Crete, Ida Mt., Idaeon Andron, 28 km SW Heraklion 6.XI.1991, M. Fibiger (coll. G. Ronkay)
32. *Frivaldszkyola mansueta sphakiota*, m. – Paratype, Greece, Crete, Ida Mt., Idaeon Andron, 28 km SW Heraklion 6.XI.1991, M. Fibiger (coll. G. Ronkay)
33. *Frivaldszkyola mansueta sphakiota*, m. – Paratype, Greece, Crete, Ida Mt., Idaeon Andron, 12 km W Heraklion 5.XI.1991, M. Fibiger (coll. NRS)
34. *Frivaldszkyola mansueta sphakiota*, f. – Paratype, Greece, Crete, Ida Mt., Idaeon Andron, 28 km SW Heraklion 6.XI.1991, M. Fibiger (coll. G. Ronkay)
35. *Frivaldszkyola mansueta sphakiota*, f. – Paratype, Greece, Crete, Ida Mt., Idaeon Andron, 28 km SW Heraklion 6.XI.1991, M. Fibiger (coll. G. Ronkay)
36. *Frivaldszkyola staudingeri*, m. – Holotype, [Israel] Jerusalem, 1891, Paulus, slide No.: RL1010 (coll. ZMHU)
37. *Frivaldszkyola staudingeri*, m. – [Israel] Jerusalem, 1890, Paulus (coll. ZMHU)
38. *Frivaldszkyola staudingeri*, m. – [Israel] Palaestina, Jerusalem, Paulus (coll. ZMHU)
39. *Frivaldszkyola staudingeri*, m. – Lebanon, Beirut, 6.XII.1933, E.P. Wiltshire (coll. BMNH)
40. *Frivaldszkyola staudingeri*, m. – Turkey, Prov. Hatay, 6 km N of Yayladagi, 1100 m, 20.X.1993, Fábíán, Herczig, László & Szeőke (coll. G. Ronkay)
41. *Frivaldszkyola staudingeri*, f. – [Israel] Jerusalem, 1891, Paulus (coll. ZMHU)
42. *Frivaldszkyola staudingeri*, f. – [Israel] Jerusalem, 1891, Paulus (coll. ZMHU)
43. *Frivaldszkyola staudingeri*, f. – [Israel] Palaestina, Jerusalem, Paulus (coll. ZMHU)
44. *Frivaldszkyola staudingeri*, f. – [Israel] Jerusalem, 1891, Paulus (coll. ZMHU)
45. *Frivaldszkyola staudingeri*, f. – [Israel] Palaestina, Jerusalem, Paulus (coll. ZMHU)



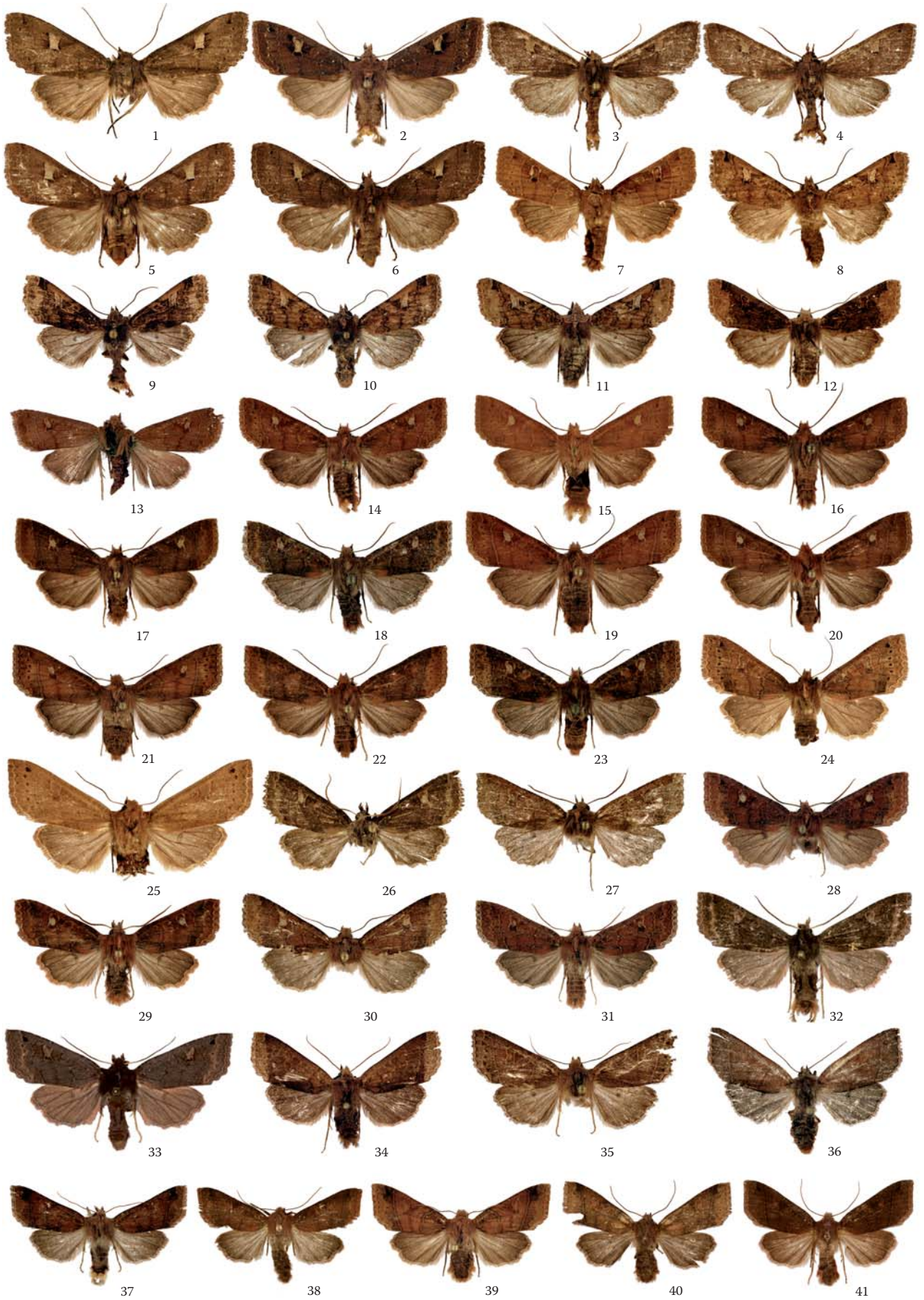
1. *Leptologia lota*, m. – Austria, Tyrol, Umhausen, 19.IX.1951, K. Burmann (coll. TLM)
2. *Leptologia lota*, m. – Austria, Tyrol, Umhausen, 19.IX.1951, K. Burmann (coll. TLM)
3. *Leptologia lota*, m. – Germany, Southern Bavaria, Gaden near Freising, 425 m, 24.VII.1976, A.E. Rau (coll. A.E. Rau)
4. *Leptologia lota*, m. – Hungary, Vörs 14.X.1950, L. Kovács (coll. HNHM)
5. *Leptologia lota*, f. – Austria, North Tyrol, Weißenbach, Feldele, 910 m, 25.VIII.1989, Kahlen (coll. TLM)
6. *Leptologia lota*, f. – Italy, South Tyrol, Prad, Prederfeld, 9.X.1991, P. Huemer & K. Burmann (coll. TLM)
7. *Leptologia lota*, f. – France, Pyrenees, Ferme d'Ambollas, 1909 (coll. BMNH)
8. *Leptologia lota*, f. – Hungary, Vörs 14.X.1950, L. Kovács (coll. HNHM)
9. *Leptologia lota*, m. – Turkey, East Anatolia, Gürün, 17.X.1977, R. Pinker (coll. NHMW)
10. *Leptologia lota*, m. – Turkey, East Anatolia, Gürün, 17.X.1977, R. Pinker (coll. NHMW)
11. *Leptologia lota*, f. – Turkey, Prov. Erzincan, 30 km E of Erzincan, 11.X.1989, G. Ronkay & G. Csorba (coll. G. Ronkay)
12. *Leptologia lota*, f. – Turkey, East Anatolia, Gürün, 17.X.1977, R. Pinker (coll. NHMW)
13. *Leptologia lota*, m. – Turkey, Amasia, Holotype of *Amathes lota* ab. *subdita* (coll. BMNH)
14. *Leptologia lota*, m. – Iran, Shapur gorge, Tang-Chugan, 3000 m, 20.XI.1940, Holotype of *Amathes macilenta plumbea*, slide No.: Boursin W567 (coll. BMNH)
15. *Leptologia lota*, m. – Iran, Kermanshah, 4.XI.1939, E.P. Wiltshire, Holotype of *Anchoscelis plumbea convergens*, slide No.: Wiltshire26 (coll. BMNH)
16. *Leptologia lota*, f. – Syria, Shtorah, 25.XI.1933, Paratype of *Amathes macilenta rubrescens* (coll. BMNH)
17. *Leptologia lota*, m. – Algeria, Lambèse, X.1912, H. Powell (coll. NHMW)
18. *Leptologia lota*, m. – Algeria, Prov. Oran, Geryville, X.1910, H. Powell (coll. NHMW)
19. *Leptologia lota*, f. – Algeria, Lambèse, XI.1912, H. Powell (coll. NHMW)
20. *Leptologia lota*, f. – Algeria, Prov. Oran, Geryville, 5.XI.1910, H. Powell (coll. NHMW)
21. *Leptologia macilenta*, m. – Italy, Monte Baldo, Bocca di Navene, 1500 m, 16.IX.1992, K. Burmann (coll. TLM)
22. *Leptologia macilenta*, m. – Austria, Deutsch-Altenburg, 22.VIII.1936, R. Lunak (coll. NHMW)
23. *Leptologia macilenta*, m. – Germany, Oberpfalz, Beratzhausen, 18.IX.1976, A.E. Rau (coll. A.E. Rau)
24. *Leptologia macilenta*, m. – Italy, Monte Baldo, Bocca di Navene, 1500 m, 23.IX.1992, K. Burmann (coll. TLM)
25. *Leptologia macilenta*, m. – Lebanon, Luize, 16.XII.1934, E.P. Wiltshire, slide No.: Boursin W524, Holotype of *Amathes macilenta rubrescens* (coll. BMNH)
26. *Leptologia macilenta*, f. – Hungary, Fejér County, Szár, Üргеhegy, 200 m, 7.IX.2004 (coll. G. Ronkay)
27. *Leptologia macilenta*, f. – Hungary, Pest County, Pilis Mts, Piliscsaba, Vöröshegy, 8.X.1981, L. Ronkay (coll. G. Ronkay)
28. *Leptologia macilenta*, f. – Austria, Deutsch-Altenburg, 1-15.X.1937, R. Lunak (coll. NHMW)
29. *Leptologia macilenta*, f. – Austria, Deutsch-Altenburg, 22.VIII.1936, R. Lunak (coll. NHMW)
30. *Leptologia blidaensis*, m. – France, East Pyrenees, Vernet les Bains, 28.X.1931 (coll. HNHM)
31. *Leptologia blidaensis*, m. – France, Gironde, Canejan, 27.X.1963, C. Dupont (coll. NHMW)
32. *Leptologia blidaensis*, m. – France, Gironde, Canejan, 27.X.1963, C. Dupont (coll. NHMW)
33. *Leptologia blidaensis*, m. – France, Gironde, Canejan, 23.X.1961 (coll. NHMW)
34. *Leptologia blidaensis*, m. – France, East Pyrenees, Vernet les Bains, 26.X.1938, G.T. Adkin (coll. BMNH)
35. *Leptologia blidaensis*, f. – France, Gironde, Canejan, 27.X.1963, C. Dupont (coll. NHMW)
36. *Leptologia blidaensis*, f. – Italy, Sardinia, Belvi, 700 m, 8.XI.1975, F. Hartig (coll. BMNH)
37. *Leptologia blidaensis*, f. – France, East Pyrenees, Vernet les Bains, 12.XI.1938 (coll. NHMW)
38. *Leptologia blidaensis*, f. – Italy, Sardinia, Belvi, 700 m, 8.XI.1975, F. Hartig (coll. BMNH)
39. *Leptologia blidaensis*, f. – France, Col de L'oullat, 781 m, 8.XII.1982, C. Lutran (coll. HNHM)
40. *Sunira circellaris*, m. – Austria, Wienerwald, Gumpoldskirchen, 24.IX.1959, E. Vartian (coll. NHMW)
41. *Sunira circellaris*, m. – Hungary, Kis-Balaton, Vörs, 30.IX.1985, G. Ronkay & L. Ronkay (coll. HNHM)
42. *Sunira circellaris*, m. – Hungary, Szigetköz, Patkányospuszta, 14.IX.2003, G. Ronkay (coll. G. Ronkay)
43. *Sunira circellaris*, m. – Hungary, Pest County, Fót, Somlyóhegy, 7.IX.1974, L. Ronkay & G. Ronkay (coll. G. Ronkay)



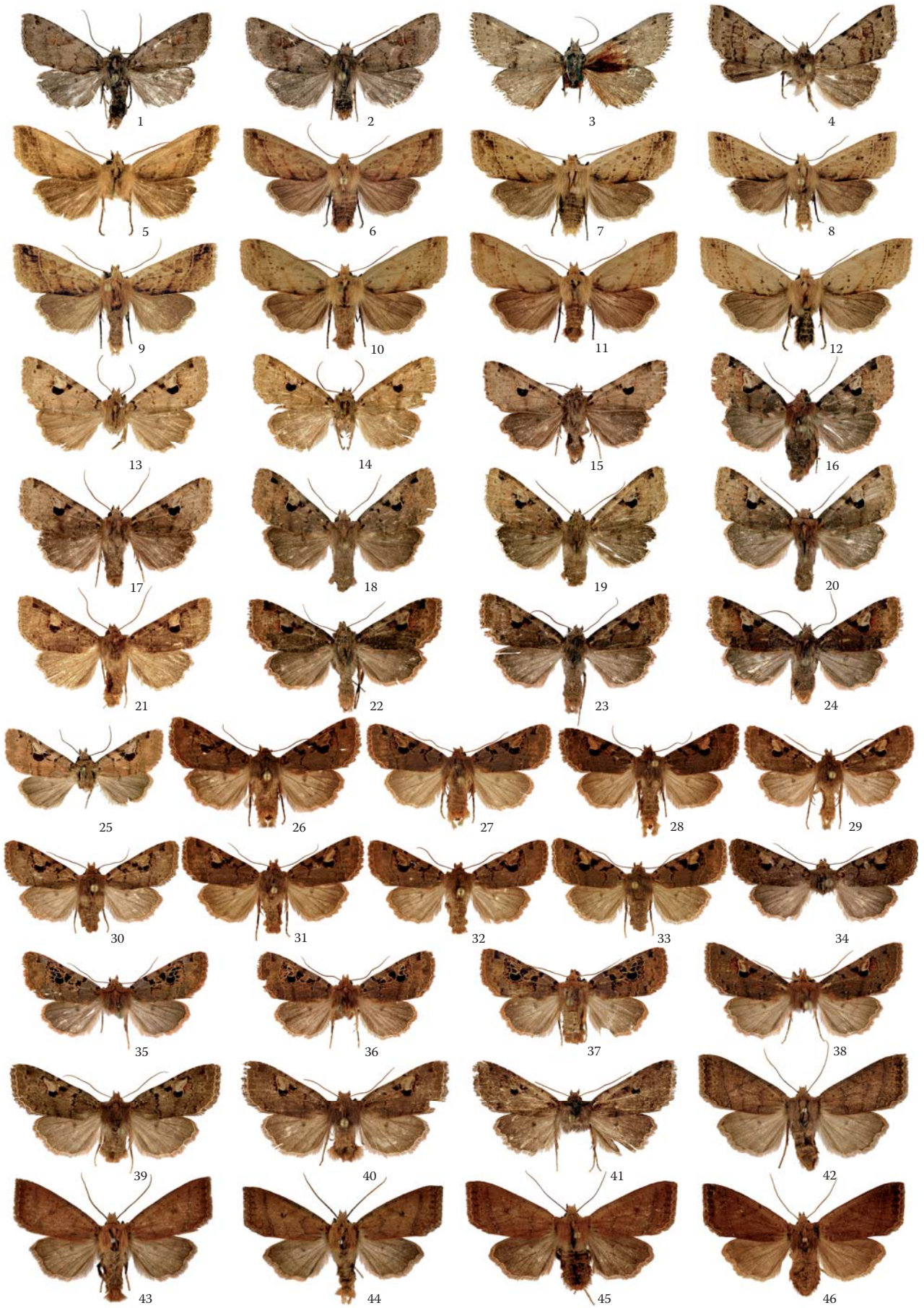
1. *Sunira circellaris*, m. – Hungary, Szigetköz, Patkányospuszta, 14.IX.2003, G. Ronkay (coll. G. Ronkay)
2. *Sunira circellaris*, m. – Kazakhstan, Prov. Almaty, Zailiskiy Alatau, 15 km S of Issyk, 1750-1950 m, 3-4.X.1994, Gy. Fábíán & Gy.M. László (coll. G. Ronkay)
3. *Sunira circellaris*, f. – Kazakhstan, Prov. Almaty, Zailiskiy Alatau, 15 km S of Issyk, 1750-1950 m, 20-22.IX.1994, Gy. Fábíán & Gy.M. László (coll. G. Ronkay)
4. *Sunira circellaris*, f. – Iran, Prov. Gilan, 15 km SW of Rast, Disku, 200 m, 17-18.XI.2000, Gy. Fábíán (coll. G. Ronkay)
5. *Sunira circellaris*, f. – Austria, Theresienfeld im Steinfeld, 23.IX.191, E. Vartian (coll. NHMW)
6. *Sunira circellaris*, f. – Italy, Prov. Verona, Monte, 300 m, 10.X.1988, K. Burmann (coll. TLM)
7. *Sunira circellaris*, f. – Italy, South Tyrol, Eisack valley, Bolzano, 265 m, ex larva, 10.VIII.1988, B. Bosin (coll. TLM)
8. *Sunira circellaris*, f. – Austria, Tyrol, Rettenbach valley, 2600 m, 21.IX.1987, K. Burmann (coll. TLM)
9. *Vulpechola vulpecula*, m. – Lectotype, [Russia] Altai (Mts), Lederer (coll. ZMHU)
10. *Vulpechola vulpecula*, m. – Russia, Yenisey region, Minusinsk, 29.VIII.1928, Kozhanchikov (coll. HNHM)
11. *Vulpechola vulpecula*, m. – South Korea, Prov. S Kangwon, Soraksan 700 m, 12.X.2001, A. Kun & L. Ronkay (coll. HNHM)
12. *Vulpechola vulpecula*, m. – Mongolia, Tövaimak, 18 km N of Bayanchadmani, 1276 m, 23.VIII.2010, K. Székely (coll. P. Gyulai)
13. *Vulpechola vulpecula*, f. – Cotype, [Russia] Altai (Mts), Lederer (coll. ZMHU)
14. *Vulpechola vulpecula*, f. – North Korea Prov. Kangwon, Kumgangsan, Onjong-ri, 23.X.1987, L. Ronkay & Z. Korsós (coll. HNHM)
15. *Vulpechola vulpecula*, f. – North Korea, Prov. Hwanghae, Haeju, Suyong-san, 17.X.1987, L. Ronkay & Z. Korsós (coll. HNHM)
16. *Vulpechola vulpecula*, f. – North Korea Prov. Kangwon, Kumgangsan, Onjong-ri, 23.X.1987, L. Ronkay & Z. Korsós (coll. HNHM)
17. *Agrocholorta albirena albirena*, m. – Holotype, Southern China, Canton, 14.I.1924, slide No.: Boursin Hö472 (coll. ZFMK)
18. *Agrocholorta albirena albirena*, m. – China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 21-30.XI.2006, V. Sinjaev (coll. P. Gyulai)
19. *Agrocholorta albirena albirena*, m. – China, Prov. Guangxi, Dayao Shan, Jingxiu, 1700 m, 1-15.XI.2006, V. Sinjaev (coll. P. Gyulai)
20. *Agrocholorta albirena albirena*, f. – China, Prov. Guangxi, Dayao Shan, Jingxiu, 1700 m, 1-15.XI.2006, V. Sinjaev (coll. P. Gyulai)
21. *Agrocholorta albirena annamica*, m. – Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 2100 m, 17.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
22. *Agrocholorta albirena annamica*, m. – Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 2100 m, 17.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
23. *Agrocholorta albirena annamica*, m. – Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 2100 m, 17.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
24. *Agrocholorta albirena annamica*, m. – Paratype, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km W of Sa Pa, 1900-2000 m, 8.XII.1997, L. Ronkay & L. Peregovits (coll. HNHM)
25. *Agrocholorta albirena annamica*, f. – Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 2100 m, 17.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
26. *Agrocholorta albirena annamica*, f. – Paratype, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km W of Sa Pa, 1900-2000 m, 8.XII.1997, L. Ronkay & L. Peregovits (coll. G. Ronkay)
27. *Agrocholorta albirena annamica*, f. – Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 2100 m, 17.XI.1999, A. Kun & L. Ronkay (coll. HNHM)
28. *Agrocholorta albirena annamica*, f. – Paratype, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km W of Sa Pa, 1900-2000 m, 8.XII.1997, L. Ronkay & L. Peregovits (coll. HNHM)
29. *Agrocholorta albirena chihtuana*, m. – Taiwan, Nantou County, Yuanfeng, 2900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
30. *Agrocholorta albirena chihtuana*, m. – Taiwan, Nantou County, Yuanfeng, 2900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
31. *Agrocholorta albirena chihtuana*, m. – Taiwan, Taitung County, Hsiangyang, Police station, 2320 m, 3-4.XII.1997, Gy. Fábíán (coll. G. Ronkay)
32. *Agrocholorta albirena chihtuana*, m. – Taiwan, Taitung County, Anmashan, Hooping, 2000 m, 1-2.XII.1998, Gy. Fábíán & Z. Korsós (coll. Gy. Fábíán)
33. *Agrocholorta albirena chihtuana*, f. – Taiwan, Nantou County, Yuanfeng, 2900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
34. *Agrocholorta albirena chihtuana*, f. – Taiwan, Nantou County, Shihshan, Tzuchung, 2400 m, 12.XII.2004, L. Ronkay, C.M. Fu & H.R. Tzuoo (coll. G. Ronkay)
35. *Agrocholorta albirena chihtuana*, f. – Taiwan, Hualien County, Taroko NP, 2000 m, 2-5.XII.1998, Gy. Fábíán & Z. Korsós (coll. Gy. Fábíán)
36. *Agrocholorta albirena chihtuana*, f. – Taiwan, Hualien County, Taroko NP, 2000 m, 2-5.XII.1998, Gy. Fábíán & Z. Korsós (coll. Gy. Fábíán)
37. *Agrocholorta albirena doiinthanoni*, m. – Holotype, Thailand, Prov. Chiang Mai, Doi Inthanon NP, 2300 m, T. Csóvári & L. Mikus, 11.XI.1998, slide No.: Hreblay11242 (coll. HNHM)
38. *Agrocholorta albirena doiinthanoni*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 22-25.I.2004, A. Szabó (coll. G. Ronkay)
39. *Agrocholorta albirena doiinthanoni*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 22-25.I.2004, A. Szabó (coll. G. Ronkay)
40. *Agrocholorta albirena doiinthanoni*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2000 m, 15.I.2004, A. Szabó (coll. G. Ronkay)



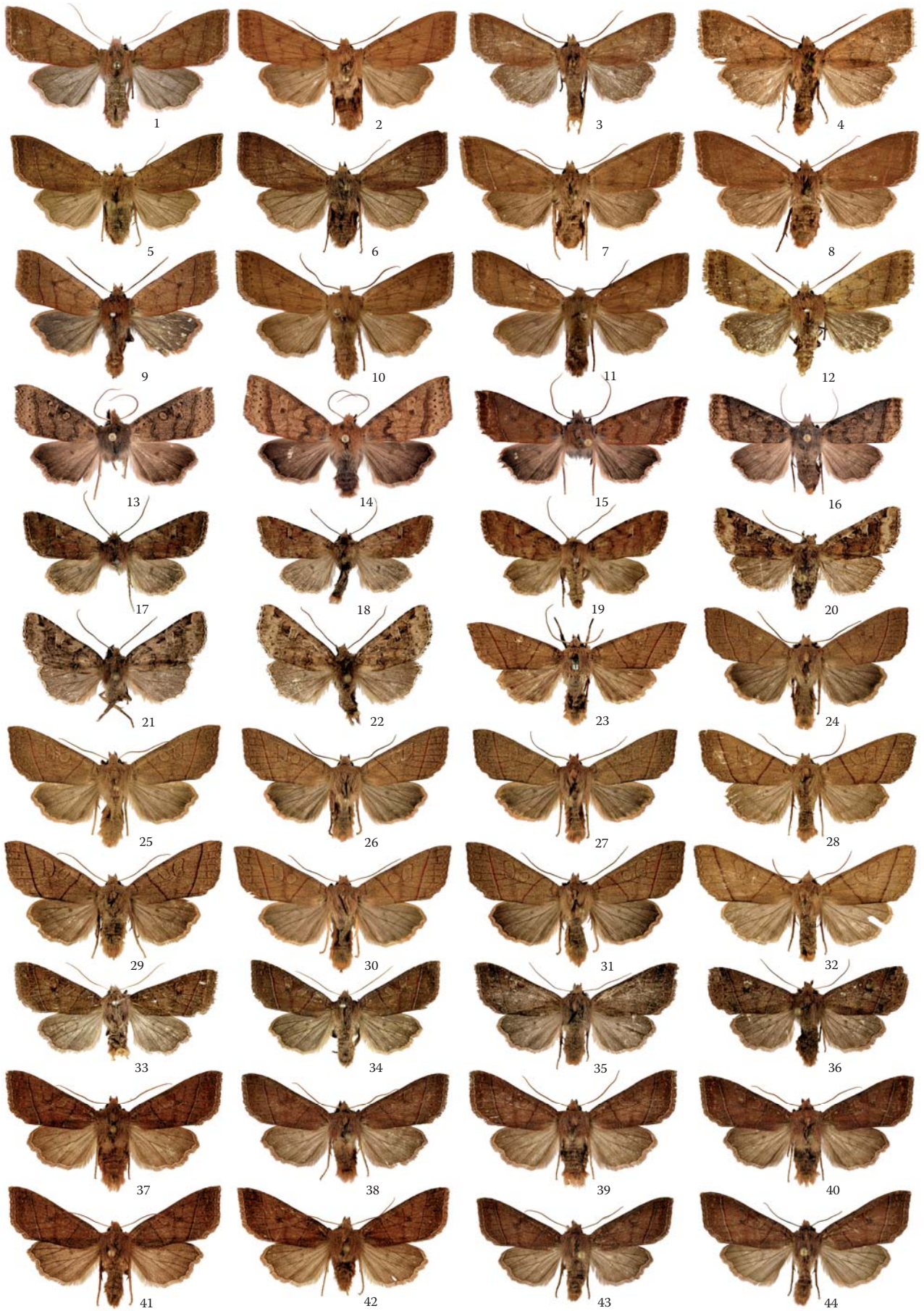
1. *Agrocholorta karma*, f. – Holotype, West Nepal, 20 km N of Dailekh, 3000 m, 20.I.1998, K. Sherpa, slide No.: Hreblay11003 (coll. HNHM)
2. *Agrocholorta karma*, m. – Paratype, Nepal, Koshi, Terhathum area, above Gorja, Tshisopani 2600 m, 5.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
3. *Agrocholorta karma*, m. – West Nepal, 13 km N of Dailekh, 2450 m, 26-27.I.2011 (coll. P Gyulai)
4. *Agrocholorta karma*, m. – West Nepal, Bheri, 11 km N of Dailekh, 2380 m, 24-25.I.2011 (coll. P Gyulai)
5. *Agrocholorta karma*, f. – West Nepal, 13 km N of Dailekh, 2450 m, 26-27.I.2011 (coll. P Gyulai)
6. *Agrocholorta karma*, f. – West Nepal, 13 km N of Dailekh, 2450 m, 26-27.I.2011 (coll. P Gyulai)
7. *Agrocholorta zita*, m. – Holotype, Thailand, Prov. Nan, 30 km E of Pua, 1700 m, 22-23.I.1999, Z. Czere & A. Szabó, slide No.: Hreblay11996 (coll. HNHM)
8. *Agrocholorta attila*, m. – Holotype, Thailand, Prov. Nan, 30 km E of Pua, 1700 m, 12-13.I.1999, Z. Czere & A. Szabó, slide No.: Hreblay11993 (coll. HNHM)
9. *Agrocholorta attila*, m. – Paratype, Thailand, Prov. Nan, 30 km E of Pua, 1700 m, 22-23.I.1999, Z. Czere & A. Szabó (coll. HNHM)
10. *Agrocholorta attila*, f. – Paratype, Thailand, Prov. Nan, 30 km E of Pua, 1700 m, 22-23.I.1999, Z. Czere & A. Szabó (coll. HNHM)
11. *Agrocholorta attila*, f. – Thailand, Prov. Nan, 30 km E of Pua, 1700 m, 20-21.I.2004, A. Szabó (coll. G. Ronkay)
12. *Agrocholorta attila*, f. – Thailand, Prov. Nan, 30 km E of Pua, 1700 m, 20-21.I.2004, A. Szabó (coll. G. Ronkay)
13. *Agrocholorta flavirena*, m. – Holotype, [India, Sikkim] Darjeeling, slide No.: Boursin MB97 (coll. ZMHU)
14. *Agrocholorta flavirena*, m. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
15. *Agrocholorta flavirena*, m. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
16. *Agrocholorta flavirena*, m. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
17. *Agrocholorta flavirena*, m. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
18. *Agrocholorta flavirena*, m. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
19. *Agrocholorta flavirena*, f. – Nepal, Koshi, Terhathum area, Tinjure Phedi, 2900 m, 07.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
20. *Agrocholorta flavirena*, f. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
21. *Agrocholorta flavirena*, f. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
22. *Agrocholorta flavirena*, f. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
23. *Agrocholorta flavirena*, f. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
24. *Agrocholorta punctilinea*, f. – Holotype, East Nepal, Deorali Danda, 1 km N of Yamphudin, 1850 m, 26.XI.1997, K. Sherpa, slide No.: Hreblay10578 (coll. HNHM)
25. *Agrocholorta gorza*, f. – Holotype, West Nepal, 11 km N of Dailekh, 2350 m, 11-13.I.1999, K. Sherpa, slide No.: Hreblay12309 (coll. HNHM)
26. *Agrocholorta antiqua antiqua*, m. – Holotype, Thailand, Doi Inthanon, 2300 m, 6.I.1990, Chantaramongkol & H. Malicky, slide No.: Hacker5711 (coll. ZSM)
27. *Agrocholorta antiqua antiqua*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 22-25.I.2004, A. Szabó, slide No.: RL8757 (coll. G. Ronkay)
28. *Agrocholorta antiqua kosagezai*, m. – Holotype, Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 8.XII.1997, L. Peregovits & L. Ronkay, slide No.: RL6040 (coll. HNHM)
29. *Agrocholorta antiqua kosagezai*, m. – Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 4-6.XII.1997, L. Peregovits & L. Ronkay (coll. G. Ronkay)
30. *Agrocholorta antiqua kosagezai*, f. – China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, XI-XII.2005, Local collector, slide No.: RL8810 (coll. G. Ronkay)
31. *Agrocholorta stoyani* **sp. n.**, m. – Holotype, Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 8.XII.1997, L. Peregovits & L. Ronkay (coll. HNHM)
32. *Agrocholorta magarorum*, m. – Holotype, West Nepal, Bheri, 11 km N of Dailekh, 2380 m, 24-25.I.2011 (coll. HNHM)
33. *Agrocholorta magarorum*, f. – Paratype, West Nepal, Bheri, 11 km N of Dailekh, 2380 m, 24-25.I.2011 (coll. HNHM)
34. *Agrocholorta parki*, m. – Holotype, China, Prov. Fujian, Wui shan, 1400 m, 1-31.III.2006, V. Sinjaev (coll. P. Gyulai)
35. *Agrocholorta telortoides*, f. – Holotype, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 26-29.I.1999, L. Peregovits, L. Ronkay & G. Ronkay (coll. G. Ronkay)
36. *Agrocholorta fibigeri*, f. – Holotype, China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 1-10.XII.2005, V. Sinjaev, slide No.: RL8810 (coll. P. Gyulai)
37. *Agrocholorta atrifusa*, m. – Taiwan, Nantou County, Hohuan-shan, 2 km SW of Meifeng, 2400 m, 2.I.2002, L. Ronkay, slide No.: RL11814 (coll. HNHM)
38. *Agrocholorta atrifusa*, m. – Taiwan, Taitung County, Hsiunyang, 2000 m, 18.XI.2015, S. Wu (coll. TFRI)
39. *Agrocholorta atrifusa*, f. – Taiwan, Nantou County, Shihshan, Tzuchung, 2400 m, 12.XII.2004, L. Ronkay, C.M. Fu & H.R. Tzuoo (coll. G. Ronkay)
40. *Agrocholorta atrifusa*, f. – Taiwan, Nantou County, Tsuifeng, 2200 m, 27.I.2015, S. Wu (coll. TFRI)
41. *Agrocholorta atrifusa*, f. – Taiwan, Hualien County, Ci'en, 1995 m, 21.XI.2011, S. Wu (coll. TFRI)



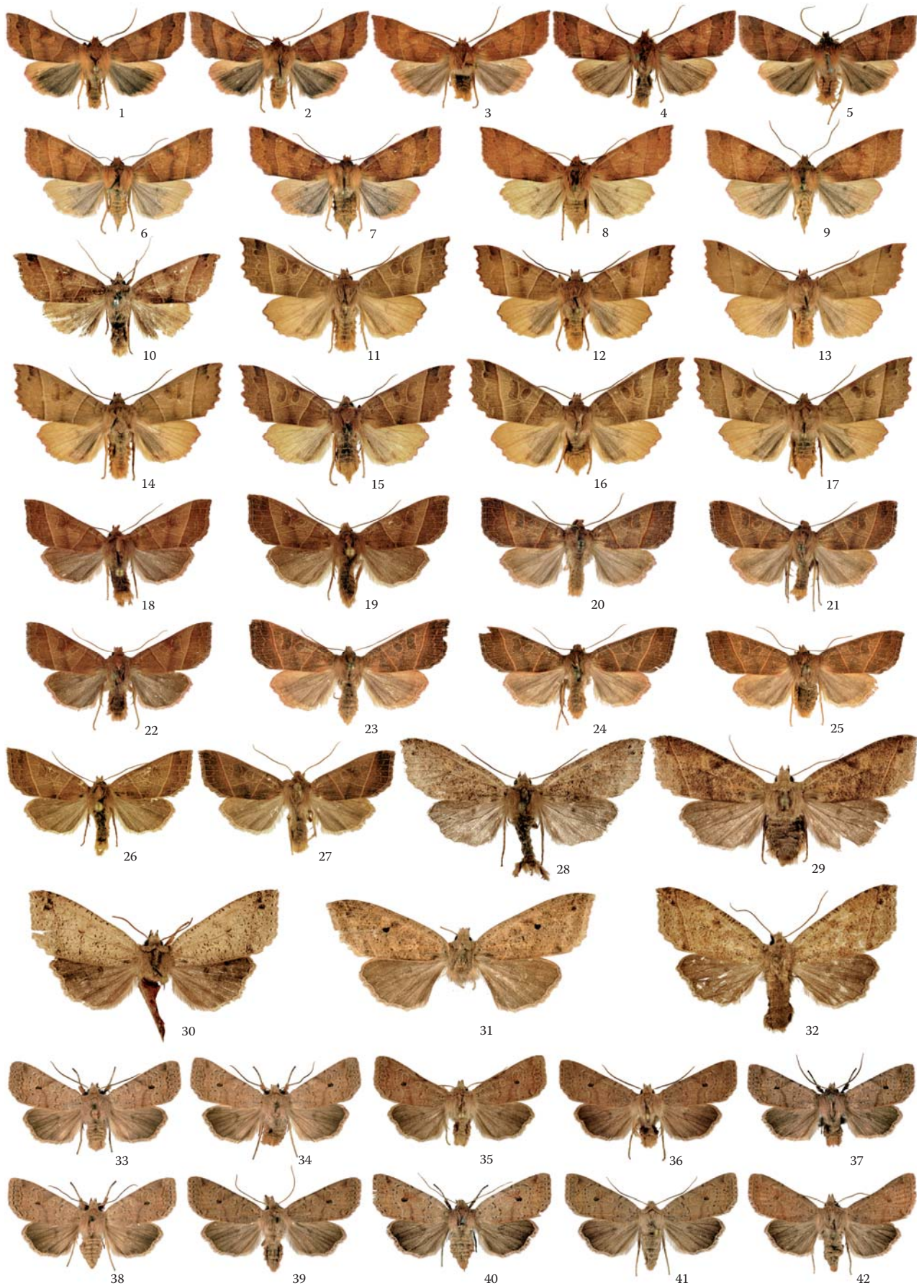
1. *Agrocholorta humidalis*, m. – Holotype, China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 15-30.XI.2003, Local collector (coll. G. Ronkay)
2. *Agrocholorta humidalis*, m. – Paratype, China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, XI.2003, Local collector (coll. HNHM)
3. *Agrocholorta humidalis*, f. – Paratype, [China] Prov. Yunnan, Li-kiang, 3000 m, 14.XI.1934, H. Höne, slide No.: RL4443 (coll. ZFMK)
4. *Agrocholorta humidalis*, f. – Paratype, China, Prov. Shaanxi, Tsingling Mts, Taibaishan, Dudamen village, 1500 m, 15-23.X.2005, V. Sinjaev (coll. P. Gyulai)
5. *Agrocholorta pallidilinea*, m. – Holotype, Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 8.XII.1997, L. Peregovits & L. Ronkay, slide No.: RL6038 (coll. HNHM)
6. *Agrocholorta pallidilinea*, m. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 18.XI.1999, A. Kun & L. Ronkay (coll. HNHM)
7. *Agrocholorta pallidilinea*, m. – Vietnam, Fan-si-pan Mts, Shin Chai, 2550 m, 12.XI.2003, M. Földvári, Á. Kőrösi & L. Peregovits (coll. HNHM)
8. *Agrocholorta pallidilinea*, m. – Vietnam, Fan-si-pan Mts, 6 km NW of Sa Pa, 2100 m, 17.XI.1999, A. Kun & L. Ronkay (coll. HNHM)
9. *Agrocholorta pallidilinea*, m. – Vietnam, Fan-si-pan Mts, Shin Chai, 2550 m, 12.XI.2003, M. Földvári, Á. Kőrösi & L. Peregovits (coll. HNHM)
10. *Agrocholorta pallidilinea*, f. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 18.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
11. *Agrocholorta pallidilinea*, f. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2550 m, 19.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
12. *Agrocholorta pallidilinea*, f. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 18.XI.1999, A. Kun & L. Ronkay (coll. HNHM)
13. *Agrocholorta semirena*, m. – Holotype, China, Prov. Chekiang, West Tien-mu-shan, 1600 m, 22.X.1932, H. Höne, slide No.: Boursin Hö143 (coll. ZFMK)
14. *Agrocholorta semirena*, m. – China, Prov. Hunan, Hoengshan, 6.XI.1933, H. Höne, slide No.: Hreblay12040 (coll. ZFMK)
15. *Agrocholorta semirena*, m. – China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 4-21.XI.2006, V. Sinjaev (coll. A. Becher)
16. *Agrocholorta semirena*, m. – China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 25.X.-7.XI.2003, V. Sinjaev (coll. P. Gyulai)
17. *Agrocholorta semirena*, f. – China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 4-21.XI.2006, V. Sinjaev (coll. A. Becher)
18. *Agrocholorta semirena*, f. – China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 25.X.-7.XI.2003, V. Sinjaev (coll. P. Gyulai)
19. *Agrocholorta semirena*, f. – China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 1-30.XI.2006, V. Sinjaev (coll. P. Gyulai)
20. *Agrocholorta semirena*, f. – China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 13-20.X.2006, V. Sinjaev (coll. P. Gyulai)
21. *Agrocholorta siamica*, m. – Holotype, Thailand, Prov. Chiang Mai, Doi Phahompok, 18 km NW of Fang, 2100 m, M. Hreblay, slide No.: Hreblay11262 (coll. HNHM)
22. *Agrocholorta siamica*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 2000 m, 10-12.XI.2004, T. Ihle (coll. A. Becher)
23. *Agrocholorta siamica*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 2000 m, 10-12.XI.2004, T. Ihle (coll. A. Becher)
24. *Agrocholorta siamica*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 2000 m, 10-12.XI.2004, T. Ihle (coll. A. Becher)
25. *Agrocholorta minorata*, m. – Holotype, Southern China, Leping, 29.IX.1924, H. Höne, slide No.: Hreblay12039 (coll. HNHM)
26. *Agrocholorta csoevarii*, m. – Holotype, Thailand, Prov. Chiang Mai, 4 km S of Kop Dong, 1800 m, 29-30.X.2002, B. Herczig & G. Ronkay (coll. G. Ronkay)
27. *Agrocholorta csoevarii*, m. – Paratype, Thailand, Fang, Mae Fang NP, Doi Phahompok, 2000 m, 20.XI.2003, M. Földvári, Á. Kőrösi & L. Peregovits (coll. HNHM)
28. *Agrocholorta csoevarii*, m. – Paratype, Thailand, Prov. Chiang Mai, 4 km S of Kop Dong, 1800 m, 11.XI.2002, B. Herczig & G. Ronkay (coll. G. Ronkay)
29. *Agrocholorta csoevarii*, m. – Paratype, Thailand, Prov. Chiang Mai, 4 km S of Kop Dong, 1800 m, 29-30.X.2002, B. Herczig & G. Ronkay (coll. G. Ronkay)
30. *Agrocholorta csoevarii*, f. – Paratype, Thailand, Prov. Chiang Mai, 4 km S of Kop Dong, 1800 m, 11.XI.2002, B. Herczig & G. Ronkay (coll. G. Ronkay)
31. *Agrocholorta csoevarii*, f. – Paratype, Thailand, Prov. Chiang Mai, 4 km S of Kop Dong, 1800 m, 29-30.X.2002, B. Herczig & G. Ronkay (coll. G. Ronkay)
32. *Agrocholorta csoevarii*, f. – Paratype, Thailand, Prov. Chiang Mai, 4 km S of Kop Dong, 1800 m, 29-30.X.2002, B. Herczig & G. Ronkay (coll. G. Ronkay)
33. *Agrocholorta csoevarii*, f. – Paratype, Thailand, Fang, Mae Fang NP, Doi Phahompok, 2000 m, 20.XI.2003, M. Földvári, Á. Kőrösi & L. Peregovits (coll. HNHM)
34. *Agrocholorta csoevarii*, f. – Vietnam, Prov. Lao Cai, Fan-si-pan Mts, Frontier Satellite Camp, 2240 m, 18-22.VIII.1998, A. Kun, slide No.: RL6283 (coll. HNHM)
35. *Agrocholorta kunandrasii*, m. – Holotype, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, Frontier Satellite Camp, 2240 m, 18-22.VIII.1998, A. Kun, slide No.: RL6284 (coll. HNHM)
36. *Agrocholorta kunandrasii*, f. – Paratype, Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900 m, 29-30.VIII.1998, A. Kun, slide No.: RL6282 (coll. HNHM)
37. *Agrocholorta kunandrasii*, f. – Paratype, Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900 m, 29-30.VIII.1998, A. Kun (coll. HNHM)
38. *Agrocholorta emilia*, m. – Holotype, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 2100 m, 17.XI.1999, A. Kun & L. Ronkay, slide No.: RL6959 (coll. HNHM)
39. *Agrocholorta plumbitincta*, f. – Holotype, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 14 km W of Sa Pa, 1900-2000 m, 8.XII.1997, L. Ronkay & L. Peregovits (coll. HNHM)
40. *Agrocholorta plumbitincta*, f. – Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 4-6.XII.1997, L. Peregovits & L. Ronkay (coll. G. Ronkay)
41. *Agrocholorta plumbitincta*, f. – Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 4-6.XII.1997, L. Peregovits & L. Ronkay, slide No.: RL6047 (coll. HNHM)
42. *Agrocholorta nawae*, f. – Japan, Nagoya, Aichi, Heiwakouen, 3.I.1996, T. Takamura (coll. G. Ronkay)
43. *Agrocholorta nawae*, m. – Japan, Nagoya, Aichi, Heiwakouen, 5.I.1996, T. Takamura (coll. G. Ronkay)
44. *Agrocholorta nawae*, m. – Japan, Nagoya, Aichi, Heiwakouen, 5.I.1996, T. Takamura (coll. G. Ronkay)
45. *Agrocholorta nawae*, f. – Japan, Nagoya, Aichi, Heiwakouen, 1.III.1996, T. Takamura (coll. HNHM)
46. *Agrocholorta nawae*, f. – Japan, Toyota, Aichi, Ogyujyousi, 12.II.1995, T. Takamura (coll. HNHM)



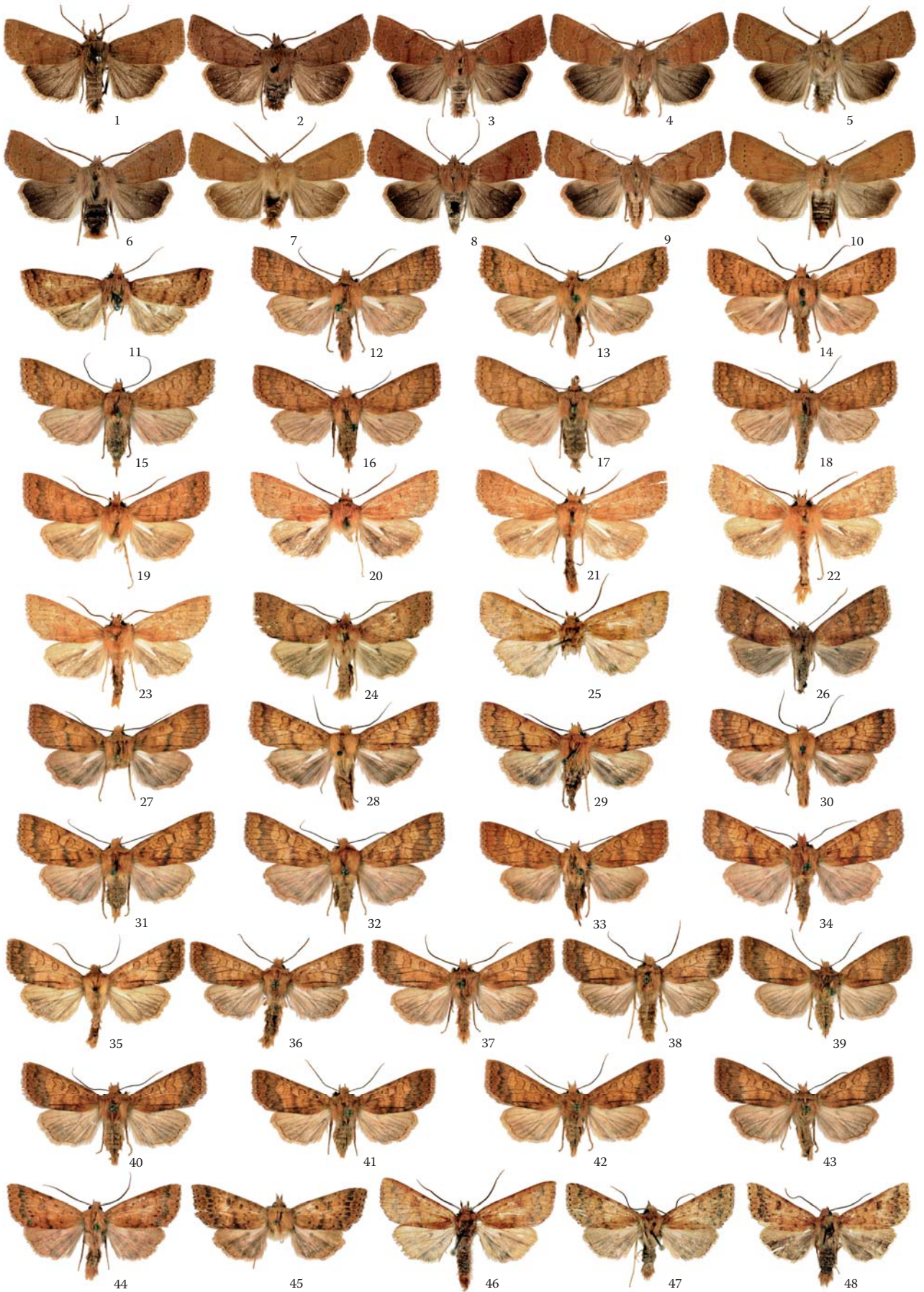
1. *Agrocholorta taiwanawae* sp. n., f. – Paratype, Taiwan, Xicun, 14.I.2013, S. Wu (coll. TFR1)
2. *Agrocholorta taiwanawae* sp. n., m. – Paratype, Taiwan, Nantou county, Koa-Lung-Dye, vic. Meifeng, 2100 m, 19.I.2002, L. Ronkay (coll. HNHM)
3. *Agrocholorta taiwanawae* sp. n., m. – Paratype, Taiwan, Taitung County, 2 km E of Hsiangyang, 2200 m, 11-13.III.1996, Gy. Fábíán & L. Németh (coll. G. Ronkay)
4. *Agrocholorta taiwanawae* sp. n., m. – Paratype, Taiwan, Nantou County, Tayuling, 2550 m, 16.III.1996, Gy. Fábíán & L. Németh (coll. Gy. Fábíán)
5. *Agrocholorta taiwanawae* sp. n., f. – Holotype, Taiwan, Taichung County, Anmashan, Tashueshan Forest Recreation Area, 2650 m, 26.I.2002, L. Ronkay (coll. HNHM)
6. *Agrocholorta taiwanawae* sp. n., f. – Paratype, Taiwan, Kaohsiung County, 15 km NE of Taoyuan, 1850 m, 16.III.1996, Gy. Fábíán & L. Németh (coll. Gy. Fábíán)
7. *Agrocholorta taiwanawae* sp. n., f. – Paratype, Taiwan, Kaohsiung County, 15 km NE of Taoyuan, 1850 m, 16.III.1996, Gy. Fábíán & L. Németh (coll. Gy. Fábíán)
8. *Agrocholorta taiwanawae* sp. n., f. – Paratype, Taiwan, Kaohsiung County, 15 km NE of Taoyuan, 1850 m, 16.III.1996, Gy. Fábíán & L. Németh (coll. Gy. Fábíán)
9. *Agrocholorta taiwanawae* sp. n., m. – Paratype, Taiwan, Kaohsiung City, Tianchi, 2170 m, 10.III.2015, leg. C. M. Fu & W. H. Chen (coll. C. M. Fu)
10. *Agrocholorta taiwanawae* sp. n., f. – Paratype, Taiwan, Kaohsiung County, Zhongzhiguan, 1930 m, 20-22.I.2015, M. Owada & C. M. Fu (coll. NSMT)
11. *Agrocholorta taiwanawae* sp. n., f. – Paratype, Taiwan, Kaohsiung County, Zhongzhiguan, 1930 m, 11-13.II.2015, M. Owada & C. M. Fu (coll. NSMT)
12. *Agrocholorta taiwanawae* sp. n., f. – Paratype, Taiwan, Kaohsiung City, Tianchi, 2170 m, 10.III.2015, leg. C. M. Fu & W. H. Chen (coll. C. M. Fu)
13. *Agrocholorta amamiensis*, m. – Holotype, Japan, Kagoshima Pref., Amami-oshima Island, Sumiyo river, 240 m, 13-14.I.1991, K. Horie (coll. NSMT, Photo Kei-ichiro Shikata)
14. *Agrocholorta amamiensis*, f. – Paratype, Japan, Kagoshima Pref., Amami-oshima Island, Sumiyo river, 240 m, 13-14.I.1991, K. Horie (coll. NSMT, Photo Kei-ichiro Shikata)
15. *Agrocholorta kimurai*, m. – Holotype, Japan, Okinawa Island, Nishime Mt., Chinufuku forest road, Yambaru, 250 m, 15.I.2002, H. Kobayashi (coll. NSMT, Photo Kei-ichiro Shikata)
16. *Agrocholorta kimurai*, f. – Paratype, Japan, Okinawa Island, Nishime Mt., Chinufuku forest road, Yambaru, 250 m, 15.I.2002, H. Kobayashi (coll. NSMT, Photo Kei-ichiro Shikata)
17. *Suginistra sakabei sakabei*, m. – Japan, Gifu, Yamagata-gun, Miyama-cho, Ijuudo, 3.XI.2001, T. Takamura, slide No.: RL8308 (coll. HNHM)
18. *Suginistra sakabei sakabei*, m. – Japan, Gifu, Yamagata-gun, Miyama-cho, Ijuudo, 3.XI.2001, T. Takamura (coll. P. Gyulai)
19. *Suginistra sakabei sakabei*, f. – Japan, Gifu, Yamagata-gun, Miyama-cho, Ijuudo, 3.XI.2001, T. Takamura (coll. G. Ronkay)
20. *Suginistra sakabei continentalis*, m. – Holotype, China, Prov. Hunan, Nanling Mts, 1500 m, XI.2003, Local collector (coll. G. Ronkay)
21. *Suginistra sakabei continentalis*, m. – Paratype, China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 1-10.XII.2005, V. Sinjaev, slide No.: GYP1919 (coll. P. Gyulai)
22. *Suginistra sakabei continentalis*, m. – Paratype, China, Prov. Hunan, Nanling Mts, Shikenkong Mt., 1500 m, 1-10.XII.2005, V. Sinjaev, slide No.: GYP1919 (coll. P. Gyulai)
23. *Telorta divergens*, m. – Holotype, Japan, Yokohama, Pryer (coll. BMNH)
24. *Telorta divergens*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
25. *Telorta divergens*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 1-6.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
26. *Telorta divergens*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
27. *Telorta divergens*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
28. *Telorta divergens*, m. – China, Prov. Shaanxi, Tsinling Mts, Houzhenzi, 1900 m, 15.VI.-15.X.1999, local collector (coll. G. Ronkay)
29. *Telorta divergens*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
30. *Telorta divergens*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
31. *Telorta divergens*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 1-6.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
32. *Telorta divergens*, f. – China, Prov. Shaanxi, Tsinling Mts, Houzhenzi, 1900 m, 15.VI.-15.X.1999, local collector (coll. G. Ronkay)
33. *Telorta obscura*, m. – Taiwan, Nantou County, Tayuling, 2570 m, 9.XI.2012, C. M. Fu (coll. C. M. Fu)
34. *Telorta obscura*, f. – Taiwan, Kaohsiung City, Tianchi, 2280 m, 18.XI.2014, leg. C. M. Fu & W. H. Chen (coll. C. M. Fu)
35. *Telorta obscura*, f. – Taiwan, Taitung County, Yakou, 2600 m, 1-3.XI.1996, Gy. Fábíán & F. Nemes (coll. Gy. Fábíán)
36. *Telorta obscura*, f. – Taiwan, Taitung County, Hsiangyang, Police Station, 2320 m, 2.XI.1996, Gy. Fábíán & F. Nemes (coll. Gy. Fábíán)
37. *Telorta yazakii*, m. – Taiwan, Nantou County, Hohuachi, 1900 m, 28.XI.1999, A. Kun, L. Peregovits & L. Ronkay (coll. HNHM)
38. *Telorta yazakii*, m. – Taiwan, Nantou County, Hohuachi, 1900 m, 28.XI.1999, A. Kun, L. Peregovits & L. Ronkay (coll. HNHM)
39. *Telorta yazakii*, m. – Taiwan, Nantou County, Hohuachi, 1900 m, 28.XI.1999, A. Kun, L. Peregovits & L. Ronkay (coll. G. Ronkay)
40. *Telorta yazakii*, m. – Taiwan, Nantou County, Hohuachi, 1900 m, 28.XI.1999, A. Kun, L. Peregovits & L. Ronkay (coll. G. Ronkay)
41. *Telorta yazakii*, f. – Taiwan, Nantou County, Yushan Mts, Shishan, near Tatachia, 2400 m, 23.XI.2002, L. Ronkay & O. Merkl (coll. HNHM)
42. *Telorta yazakii*, f. – Taiwan, Nantou County, Hohuachi, 1900 m, 28.XI.1999, A. Kun, L. Peregovits & L. Ronkay (coll. HNHM)
43. *Telorta yazakii*, f. – Taiwan, Nantou County, Yuanfeng SW of Hohuan Pass, 2760 m, 20.XI.2004, L. Ronkay & H.R. Tzuoo (coll. G. Ronkay)
44. *Telorta yazakii*, f. – Taiwan, Nantou County, Hohuachi, 1900 m, 28.XI.1999, A. Kun, L. Peregovits & L. Ronkay (coll. G. Ronkay)



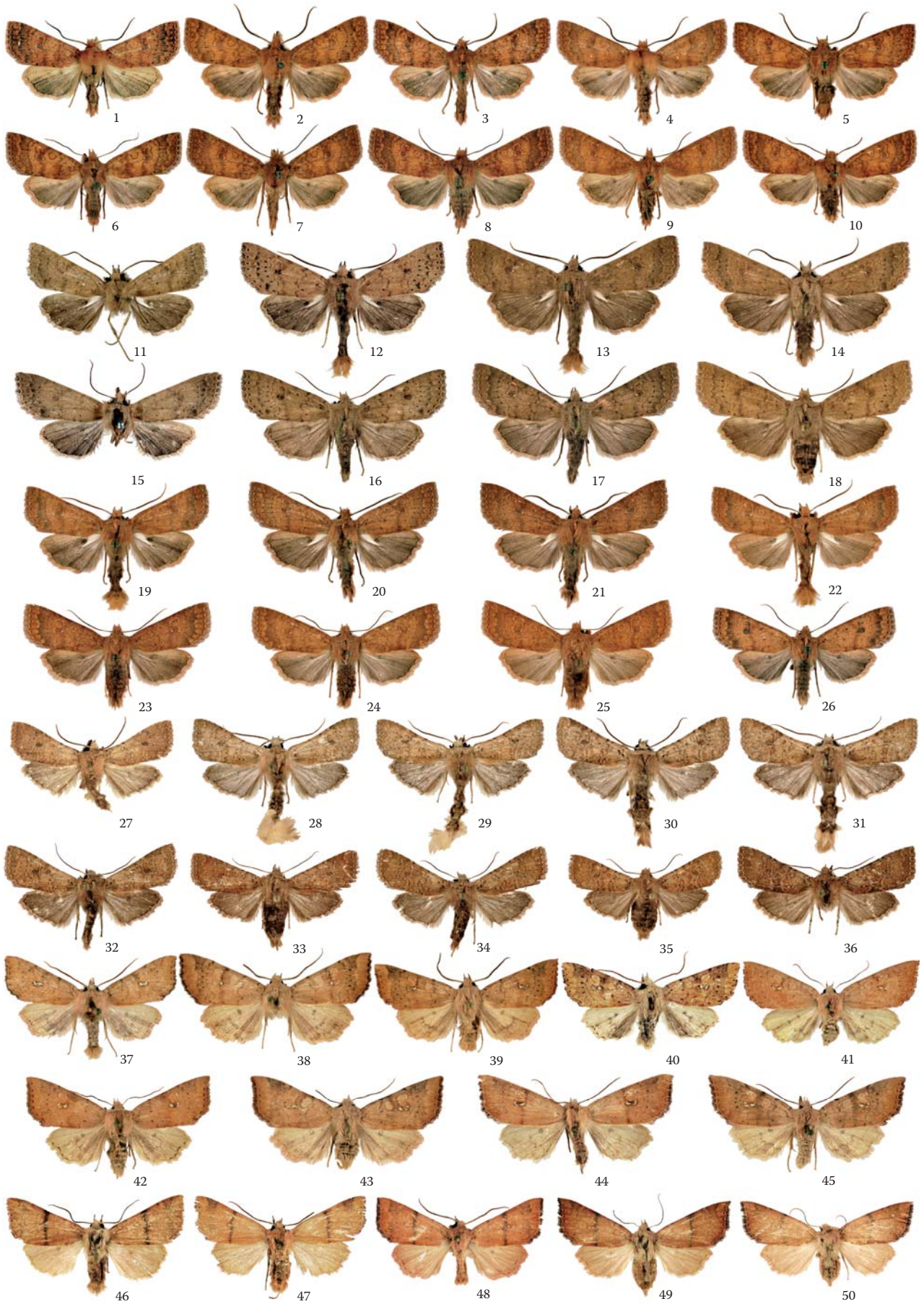
1. *Edentelorta edentata*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 24-30.X.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
2. *Edentelorta edentata*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
3. *Edentelorta edentata*, m. – North Korea, Prov. Kangwon, Mt Kungang-san, 450 m, 24.IX.-3.X.1994, L. Lőkös & T. Szerdahelyi (coll. G. Ronkay)
4. *Edentelorta edentata*, m. – Korea, Prov. S. Cholla, Paekun-san, at the vicinity of Nonshil, 550-600 m, 1.XI.1993, L. Ronkay (coll. G. Ronkay)
5. *Edentelorta edentata*, m. – Japan, W. Blüthgen (coll. ZMHU)
6. *Edentelorta edentata*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.X.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
7. *Edentelorta edentata*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.X.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
8. *Edentelorta edentata*, f. – North Korea Prov. Kangwon, Kungang-san, Onjong-ri, 24.X.1987, L. Ronkay & Z. Korsós (coll. G. Ronkay)
9. *Edentelorta edentata*, f. – Korea, Prov. S. Cholla, Paekun-san Mt., 600 m, 18.X.2001, L. Ronkay & A. Kun (coll. HNHM)
10. *Telorta acuminata*, m. – Holotype, Japan, Yokohama, Jonas (coll. BMNH)
11. *Telorta acuminata*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 24-30.X.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
12. *Telorta acuminata*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 1-6.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
13. *Telorta acuminata*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 1-6.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
14. *Telorta acuminata*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 1-6.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
15. *Telorta acuminata*, f. – Korea, Prov. S. Cholla, Chiri-san Mt., 600 m, 19.X.2001, L. Ronkay & A. Kun (coll. HNHM)
16. *Telorta acuminata*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 1-6.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
17. *Telorta acuminata*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
18. *Telorta shenhornnyi*, m. – Taiwan, Nantou County, Meifeng, 2100 m, 20.XI.2004, L. Ronkay & H.R. Tzuoo (coll. G. Ronkay)
19. *Telorta shenhornnyi*, m. – Taiwan, Nantou County, Meifeng, 2100 m, 20.XI.2004, L. Ronkay & H.R. Tzuoo (coll. HNHM)
20. *Telorta shenhornnyi*, m. – Paratype, Taiwan, Taitung County, Hsiangyang, Police station, 2320 m, 19-20.X.1996, Gy. Fábíán (coll. Gy. Fábíán)
21. *Telorta shenhornnyi*, m. – Paratype, Taiwan, Taitung County, Hsiangyang, Police station, 2320 m, 25-26.X.1996, Gy. Fábíán (coll. HNHM)
22. *Telorta shenhornnyi*, f. – Taiwan, Nantou County, Hohuachi, 1900 m, 28.XI.1999, A. Kun, L. Peregovits & L. Ronkay (coll. G. Ronkay)
23. *Telorta shenhornnyi*, f. – Paratype, Taiwan, Taitung County, Hsiangyang, Police station, 2320 m, 19-20.X.1996, Gy. Fábíán (coll. Gy. Fábíán)
24. *Telorta shenhornnyi*, f. – Paratype, Taiwan, Taitung County, Hsiangyang, Police station, 2320 m, 25-26.X.1996, Gy. Fábíán (coll. Gy. Fábíán)
25. *Telorta shenhornnyi*, f. – Paratype, Taiwan, Taitung County, Hsiangyang, Police station, 2320 m, 19-20.X.1996, Gy. Fábíán (coll. Gy. Fábíán)
26. *Telorta shenhornnyi*, m. – Taiwan, Nantou County, Meifeng, 2100 m, 20.XI.2004, L. Ronkay & H.R. Tzuoo (coll. G. Ronkay)
27. *Telorta shenhornnyi*, m. – Paratype, Taiwan, Taitung County, Hsiangyang, Police station, 2320 m, 19-20.X.1996, Gy. Fábíán (coll. HNHM)
28. *Gigatelorta herois*, m. – Taiwan, Taipei County, Pihu, 450 m, 12.II.1999, L. Peregovits & G. Ronkay (coll. HNHM)
29. *Gigatelorta herois*, f. – Taiwan, Taipei County, Wulai, 300 m, 13.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
30. *Gigatelorta falcipennis*, m. – China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 15-30.II.2005, V. Sinjaev, slide No.: GYP1914 (coll. P. Gyulai)
31. *Gigatelorta falcipennis*, f. – Holotype, China, Prov. Kwangtung, Canton, 11.I.1924, H. Höne, slide No.: Hreblay8996 (coll. ZFMK)
32. *Gigatelorta falcipennis*, f. – China, Prov. Guangxi, Yuecheng Ling, 750 m, 12-15.XII.2007, V. Sinjaev, (coll. P. Gyulai)
33. *Propenistra laevis*, m. – Austria, Dürnstein am Donau, ex ovo, 1.IX.1980, Hentschölek (coll. TLM)
34. *Propenistra laevis*, m. – Austria, Dürnstein am Donau, ex ovo, 4.IX.1980, Hentschölek (coll. TLM)
35. *Propenistra laevis*, m. – Hungary, Budapest, Káposztásmegyer, 150 m, 15.IX.2011, L. Ronkay & M. Tóth (coll. G. Ronkay)
36. *Propenistra laevis*, m. – Hungary, Budapest, Káposztásmegyer, 150 m, 15.IX.2011, L. Ronkay & M. Tóth (coll. G. Ronkay)
37. *Propenistra laevis*, m. – Makedonia, Triklarion, Oros near Kotas, 1200 m, 15-17.IX.1988, A.E. Rau (coll. A.E. Rau)
38. *Propenistra laevis*, f. – Austria, Dürnstein am Donau, ex ovo, 4.IX.1980, Hentschölek (coll. TLM)
39. *Propenistra laevis*, f. – Hungary, Budakeszi, Hársborkorhagy, 12.X.1974, L. Ronkay (coll. G. Ronkay)
40. *Propenistra laevis*, f. – Makedonia, Thessalon, Vertiskos, 3 km S of Vertisko, 300 m, 13.X.1990, A.E. Rau (coll. A.E. Rau)
41. *Propenistra laevis*, f. – Hungary, Heves County, Mátra Mts, Gyöngyös, Sárhegy, 18.IX.2003, T. Csóvári & G. Ronkay (coll. G. Ronkay)
42. *Propenistra laevis*, f. – Greece, Sterea Hellas, 10 km E of Amfissa, 650 m, 22.X.2003, G. Ronkay (coll. G. Ronkay)



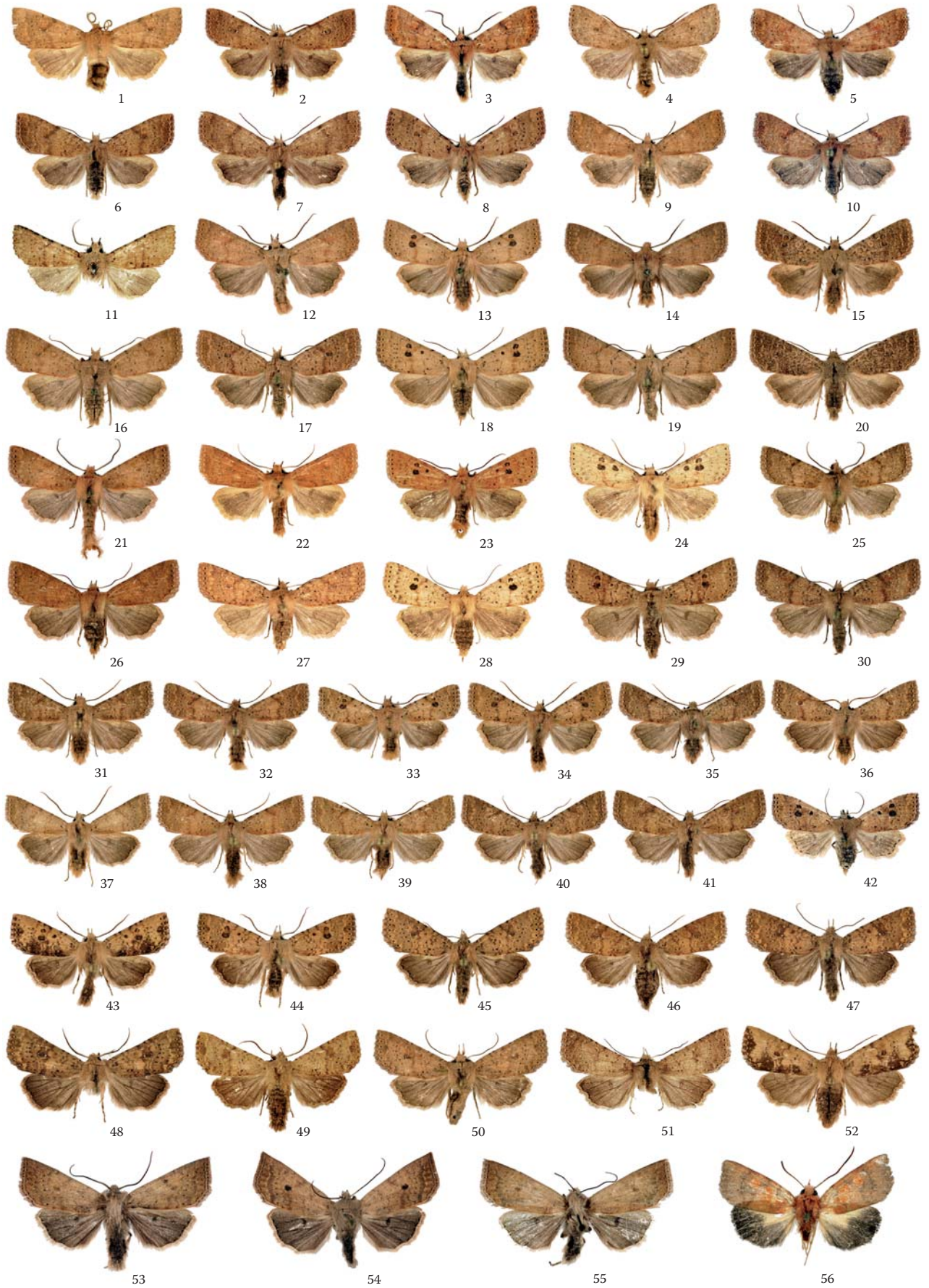
1. *Incertobole evelina*, m. – Holotype, Japan, Yokohama, Pryer (coll. BMNH)
2. *Incertobole evelina*, m. – [Russian Far East] Nikolskaya, Suifun, 1876, Paralectotype of *Orrhodia ciliata* (coll. ZMHU)
3. *Incertobole evelina*, m. – South Korea, Prov. S. Kangwon, Chuncheon, University Campus, 300 m, 27.X.2001, L. Ronkay & A. Kun (coll. HNHM)
4. *Incertobole evelina*, m. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 8-14.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
5. *Incertobole evelina*, m. – Korea, Prov. S. Cholla, Paekunsan, at the vicinity of Nonshil, 550-600 m, 1.XI.1993, L. Ronkay (coll. G. Ronkay)
6. *Incertobole evelina*, m. – Korea, Prov. S. Kangwon, Chuncheon, University Campus, 300 m, 27.X.2001, L. Ronkay & A. Kun (coll. HNHM)
7. *Incertobole evelina*, m. – Japan, Nagoya, Aichi, Heiwakouen, 20.I.2002, T. Takamura (coll. G. Ronkay)
8. *Incertobole evelina*, f. – Japan, Nagoya, Aichi, Heiwakouen, 3.I.1996, T. Takamura (coll. HNHM)
9. *Incertobole evelina*, f. – South Korea, Prov. Chollanam, Mokpo, Seungdal-san Mt., 200-250 m, 1-6.XI.2012, L. Ronkay & M. Tóth (coll. G. Ronkay)
10. *Incertobole evelina*, f. – Korea, Prov. S. Kangwon, Chuncheon, University Campus, 300 m, 27.X.2001, L. Ronkay & A. Kun (coll. G. Ronkay)
11. *Hyalobole orthosioides orthosioides*, m. – Lectotype, [India, Sikkim] Darjeeling, Pilcher, slide No.: BMNoct15240 (coll. BMNH)
12. *Hyalobole orthosioides orthosioides*, m. – Nepal, Koshi, Terhathum area, above Gorja, Tshisopani, 2600 m, 20.X.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
13. *Hyalobole orthosioides orthosioides*, m. – Nepal, Koshi, Terhathum area, above Gorja, Tshisopani, 2600 m, 20.X.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
14. *Hyalobole orthosioides orthosioides*, m. – Nepal, Ganesh Himal, near Godlang, 2520 m, 13.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
15. *Hyalobole orthosioides orthosioides*, f. – Nepal, Koshi, Terhathum area, Tinjure Phedi, 2900 m, 07.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
16. *Hyalobole orthosioides orthosioides*, f. – Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
17. *Hyalobole orthosioides orthosioides*, f. – Nepal, Mechi, Taplejung area, above Gorja, Tshisopani 2600 m, 20.X.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
18. *Hyalobole orthosioides orthosioides*, f. – Nepal, Koshi, Terhathum area, Deorali, 5 km NE of Suketar, 2700 m, 3.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
19. *Hyalobole orthosioides hyalbre*, m. – Vietnam, Fan-si-pan Mts, Shin Chai, 2550 m, 12.XI.2003, M. Földvári, Á. Kőrösi & L. Peregovits, slide No.: RL8330 (coll. HNHM)
20. *Hyalobole orthosioides hyalbre*, m. – Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 4-6.XII.1997, L. Peregovits & L. Ronkay, slide No.: RL6040 (coll. G. Ronkay)
21. *Hyalobole orthosioides hyalbre*, m. – Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 4-6.XII.1997, L. Peregovits & L. Ronkay (coll. G. Ronkay)
22. *Hyalobole orthosioides hyalbre*, m. – Vietnam, Lao Cai, Fan-si-pan Mts, Hoang Lien NP, Tram Ton, 1900 m, 16-17.XII.2008, L. Papp, L. Peregovits & L. Ronkay (coll. HNHM)
23. *Hyalobole orthosioides hyalbre*, m. – Vietnam, Lao Cai, Fan-si-pan Mts, Hoang Lien NP, Tram Ton, 1900 m, 16-17.XII.2008, L. Papp, L. Peregovits & L. Ronkay (coll. HNHM)
24. *Hyalobole orthosioides hyalbre*, m. – China, Prov. Sichuan, Erlang Shan, road Ya'an/Kangding, 2100 m, 11.X.2009, A. Floriani & A. Saldaitis (coll. A. Floriani)
25. *Hyalobole orthosioides hyalbre*, m. – China, Prov. Hunan, Nanling Mts, 1500 m, XI.2003, Local collector, slide No.: RL8763 (coll. G. Ronkay)
26. *Hyalobole orthosioides hyalbre*, f. – China, Prov. Sichuan, Qingchengshan, 1500-1800 m, 1-30.IX.2006, V. Sinjaev (coll. P. Gyulai)
27. *Hyalobole variegata*, m. – Paratype, Nepal, Langtang Himal, 3 km SE Syabru, 2820 m, 27.IX.1994, G. Csorba & L. Ronkay, slide No.: RL5023 (coll. G. Ronkay)
28. *Hyalobole variegata*, m. – Paratype, Nepal, Ganesh Himal, 7 km W of Godlang, 2950 m, 20.IX.1995, B. Herczig & Gy.M. László (coll. G. Ronkay)
29. *Hyalobole variegata*, m. – Paratype, Nepal, Langtang Himal, 3 km SE Syabru, 2820 m, 27.IX.1994, G. Csorba & L. Ronkay, slide No.: RL4900 (coll. HNHM)
30. *Hyalobole variegata*, m. – Paratype, Nepal, Ganesh Himal, 7 km W of Godlang, 2950 m, 20.IX.1995, B. Herczig & Gy.M. László (coll. G. Ronkay)
31. *Hyalobole variegata*, f. – Nepal, Ganesh Himal, Godlang village, 3150 m, 20.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
32. *Hyalobole variegata*, f. – Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
33. *Hyalobole variegata*, f. – Paratype, Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
34. *Hyalobole variegata*, f. – Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
35. *Hyalobole marginalis*, m. – Holotype, Nepal, 6 km NNE of Muldi, 2835 m, M. Hrebly & L. Bódi, slide No.: Hrebly8504 (coll. HNHM)
36. *Hyalobole marginalis*, m. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
37. *Hyalobole marginalis*, m. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
38. *Hyalobole marginalis*, m. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
39. *Hyalobole marginalis*, f. – Paratype, Nepal, Ganesh Himal, 8 km W of Godlang village, 3050 m, 14.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
40. *Hyalobole marginalis*, f. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
41. *Hyalobole marginalis*, f. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
42. *Hyalobole marginalis*, f. – Paratype, Nepal, Ganesh Himal, near Godlang village, 2520 m, 13.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
43. *Hyalobole marginalis*, f. – Paratype, Nepal, Ganesh Himal, 8 km W of Godlang village, 3050 m, 14.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
44. *Hyalobole medvegymihalyi*, m. – Paratype, China, Prov. Shaanxi, Tsinling Mts, South Taibaishan, Houzhenzi, 1900 m, 15.VIII.-15.X.1999, local collector (coll. G. Ronkay)
45. *Hyalobole medvegymihalyi*, m. – Paratype, China, Prov. Shaanxi, Tsinling Mts, South Taibaishan, Houzhenzi, 1900 m, 15.VIII.-15.X.1999, local collector, slide No.: RL6906 (coll. G. Ronkay)
46. *Hyalobole medvegymihalyi*, m. – China, Prov. Hunan, Nanling Mts, 1500 m, XI.2003, local collector (coll. G. Ronkay)
47. *Hyalobole medvegymihalyi*, m. – Paratype, China, Prov. Shaanxi, Tsinling Mts, Taibaishan Mt., 1900 m, X.2004, local collector (coll. A. Becher)
48. *Hyalobole medvegymihalyi*, m. – Paratype, China, Prov. Shaanxi, Tsinling Mts, Taibaishan Mt., 1900 m, X.2004, local collector (coll. A. Becher)



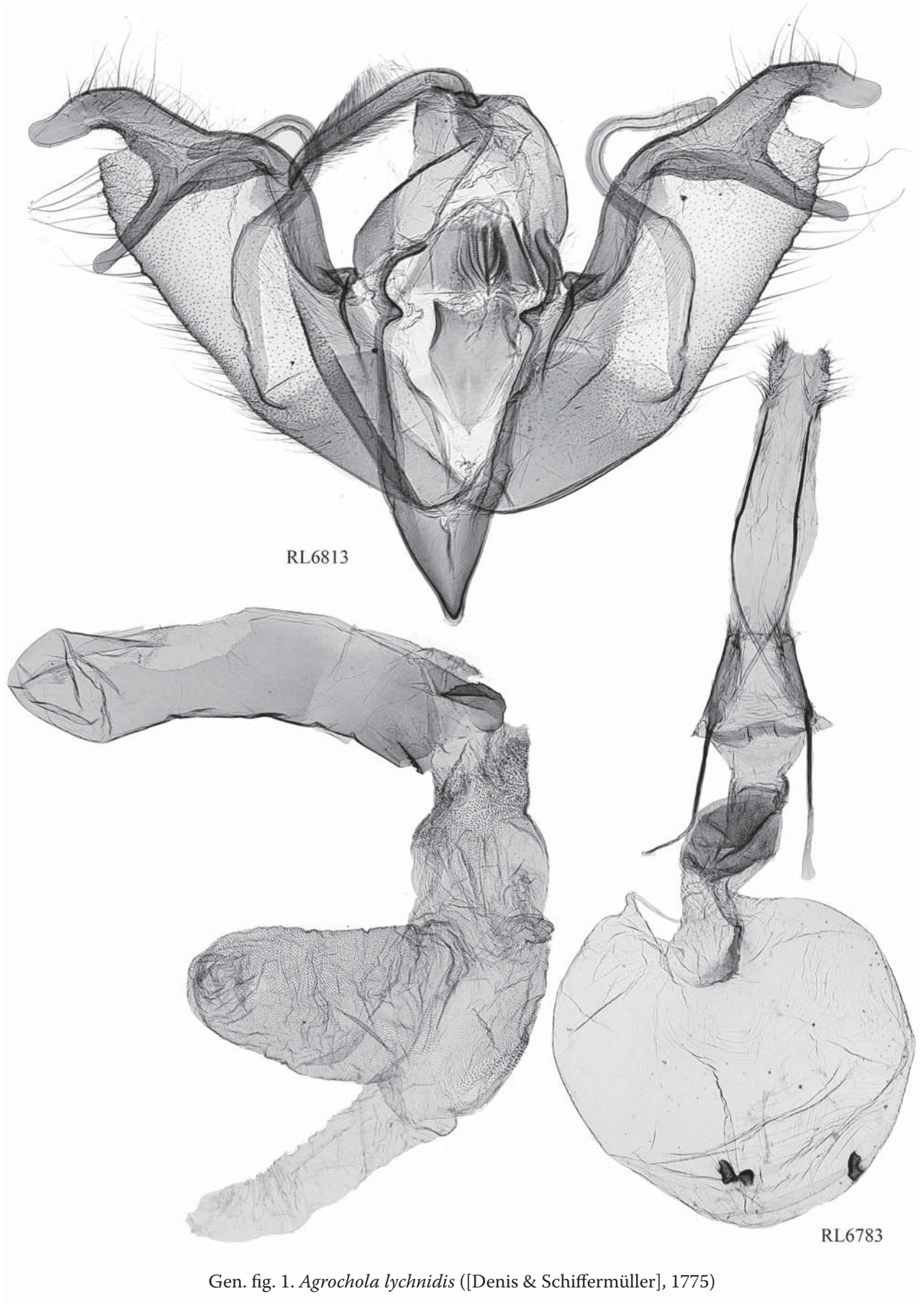
1. *Hyalobole infenestra*, m. – Holotype, Nepal, Annapurna Himal, 2 km E of Ghorepani, 2900 m, 7.X.1994, G. Csorba & L. Ronkay (coll. G. Ronkay)
2. *Hyalobole infenestra*, m. – Paratype, Nepal, Ganesh Himal, near Godlang village, 2520 m, 13.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
3. *Hyalobole infenestra*, m. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 20.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
4. *Hyalobole infenestra*, m. – Paratype, Nepal, Annapurna Himal, 2 km E of Ghorepani, 2900 m, 7.X.1994, G. Csorba & L. Ronkay (coll. G. Ronkay)
5. *Hyalobole infenestra*, m. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
6. *Hyalobole infenestra*, f. – Paratype, Nepal, Ganesh Himal, near Godlang village, 2520 m, 13.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
7. *Hyalobole infenestra*, f. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
8. *Hyalobole infenestra*, f. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 15-16.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
9. *Hyalobole infenestra*, f. – Paratype, Nepal, Ganesh Himal, Khurpudanda Pass, W slope, 3700 m, 18-19.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
10. *Hyalobole infenestra*, f. – Paratype, Nepal, Ganesh Himal, Godlang village, 3150 m, 20.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
11. *Hyalobole phaeosoma*, m. – India, Himachal Pradesh, 15 km W of Shimla, 1800 m, Holotype of *Hyalobole apicalis*, slide No.: Hacker 6074 (coll. ZSM)
12. *Hyalobole phaeosoma*, m. – Pakistan, Kashmir, Himalaya Mts, 30 km N of Murree, Ayubia, 2600 m, 22-25.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
13. *Hyalobole phaeosoma*, m. – Pakistan, Kashmir, Himalaya Mts, 30 km N of Murree, Ayubia, 2600 m, 22-25.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
14. *Hyalobole phaeosoma*, m. – Pakistan, Kashmir, Himalaya Mts, 30 km N of Murree, Ayubia, 2600 m, 8-9.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
15. *Hyalobole phaeosoma*, f. – Holotype, [India, Himachal Pradesh] Sultanpur, G. Young, slide No.: BMNoct14905 (coll. BMNH)
16. *Hyalobole phaeosoma*, f. – Pakistan, Kashmir, Himalaya Mts, 30 km N of Murree, Ayubia, 2650 m, XI.1998, F. Hussein (coll. G. Ronkay)
17. *Hyalobole phaeosoma*, f. – Pakistan, Kashmir, Himalaya Mts, 30 km N of Murree, Ayubia, 2600 m, 22-25.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
18. *Hyalobole phaeosoma*, f. – Pakistan, Kashmir, Himalaya Mts, 30 km N of Murree, Ayubia, 2600 m, 22-25.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
19. *Hyalobole subapicalis*, m. – Paratype, Nepal, Koshi, Terhathum area, Tinjure Phedi, 2900 m, 07.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
20. *Hyalobole subapicalis*, m. – Paratype, Nepal, Ganesh Himal, 2300 m, above Nesim, 23.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
21. *Hyalobole subapicalis*, m. – Paratype, Nepal, Ganesh Himal, 2720 m, between Godlang and Nesim, 22.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
22. *Hyalobole subapicalis*, m. – Paratype, Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
23. *Hyalobole subapicalis*, f. – Paratype, Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
24. *Hyalobole subapicalis*, f. – Paratype, Nepal, Koshi, Terhathum area, Tinjure Phedi, 2900 m, 07.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
25. *Hyalobole subapicalis*, f. – Paratype, Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
26. *Hyalobole subapicalis*, f. – Paratype, Nepal, Koshi, Terhathum area, Sirumani, 2950 m, 6.XI.1996, Gy.M. László & G. Ronkay (coll. G. Ronkay)
27. *Hyalobole subtropica*, m. – Holotype, Thailand, Prov. Chiang Mai, Doi Inthanon NP, 2300 m, 14.XII.1998, M. Hreblay, slide No.: Hreblay11276 (coll. HNHM)
28. *Hyalobole subtropica*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 28-29.I.2004, A. Szabó (coll. G. Ronkay)
29. *Hyalobole subtropica*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 22-25.I.2004, A. Szabó (coll. G. Ronkay)
30. *Hyalobole subtropica*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2000 m, 15.I.2004, A. Szabó (coll. G. Ronkay)
31. *Hyalobole subtropica*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 28-29.I.2004, A. Szabó (coll. G. Ronkay)
32. *Hyalobole subtropica*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 28-29.I.2004, A. Szabó (coll. G. Ronkay)
33. *Hyalobole subtropica*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 28-29.I.2004, A. Szabó (coll. G. Ronkay)
34. *Hyalobole subtropica*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 28-29.I.2004, A. Szabó (coll. G. Ronkay)
35. *Hyalobole subtropica*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2000 m, 15.I.2004, A. Szabó (coll. G. Ronkay)
36. *Hyalobole subtropica*, f. – Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 6 km W of Sa Pa, 2100 m, 31.I.1999, L. Peregovits & G. Ronkay, slide No.: RL6632 (coll. G. Ronkay)
37. *Hyalobole albimacula albimacula*, m. – South Korea, Prov. S. Kangwon, 8 km SW of Chuncheon city, 400 m, 15.X.2001, L. Ronkay & A. Kun (coll. HNHM)
38. *Hyalobole albimacula albimacula*, m. – China, Prov. Shaanxi, Tsinling Mts, Houzhenzi, 1400 m, IX.1999, local collector, slide No.: RL6914 (coll. G. Ronkay)
39. *Hyalobole albimacula albimacula*, m. – Paratype, Russian Far East, Primorye, Khasanskiy district, Kedrovaja Pjad, 27.IX.1977, V. Kononenko (coll. BMNH)
40. *Hyalobole albimacula albimacula*, m. – China, Prov. Shaanxi, Tsinling Mts, Houzhenzi, 1400 m, IX.1999, local collector (coll. G. Ronkay)
41. *Hyalobole albimacula albimacula*, f. – Korea, Prov. N. Pyongan, Myohyang-san, 11.X.1987, Korsós & Ronkay (coll. G. Ronkay)
42. *Hyalobole albimacula albimacula*, f. – South Korea, Prov. S. Kangwon, Sorak-san, 700 m, 12.X.2001, A. Kun & L. Ronkay (coll. G. Ronkay)
43. *Hyalobole albimacula albimacula*, f. – China, Prov. Shaanxi, Tsinling Mts, Houzhenzi, 1400 m, IX.1999, local collector (coll. G. Ronkay)
44. *Hyalobole albimacula albimacula*, f. – China, Prov. Shaanxi, Tsinling Mts, Houzhenzi, 1600 m, 15.VIII.-15.X.1999, local collector (coll. G. Ronkay)
45. *Hyalobole albimacula albimacula*, f. – China, Prov. Shaanxi, Tsinling Mts, Houzhenzi, 1600 m, 15.VIII.-15.X.1999, local collector (coll. G. Ronkay)
46. *Hyalobole albimacula nigrizonata*, m. – Holotype, China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 4-21.XI.2006, V. Sinjaev (coll. A. Becher)
47. *Hyalobole albimacula nigrizonata*, m. – Paratype, China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 21-30.XI.2006, V. Sinjaev (coll. G. Ronkay)
48. *Hyalobole albimacula nigrizonata*, m. – Paratype, China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 21-30.XI.2006, V. Sinjaev (coll. G. Ronkay)
49. *Hyalobole albimacula nigrizonata*, f. – Paratype, China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 4-21.XI.2006, V. Sinjaev (coll. A. Becher)
50. *Hyalobole albimacula nigrizonata*, f. – Paratype, China, Prov. Fujian, Dai Mao Shan, 60 km NW of Longyan, 1300 m, 4-21.XI.2006, V. Sinjaev (coll. A. Becher)



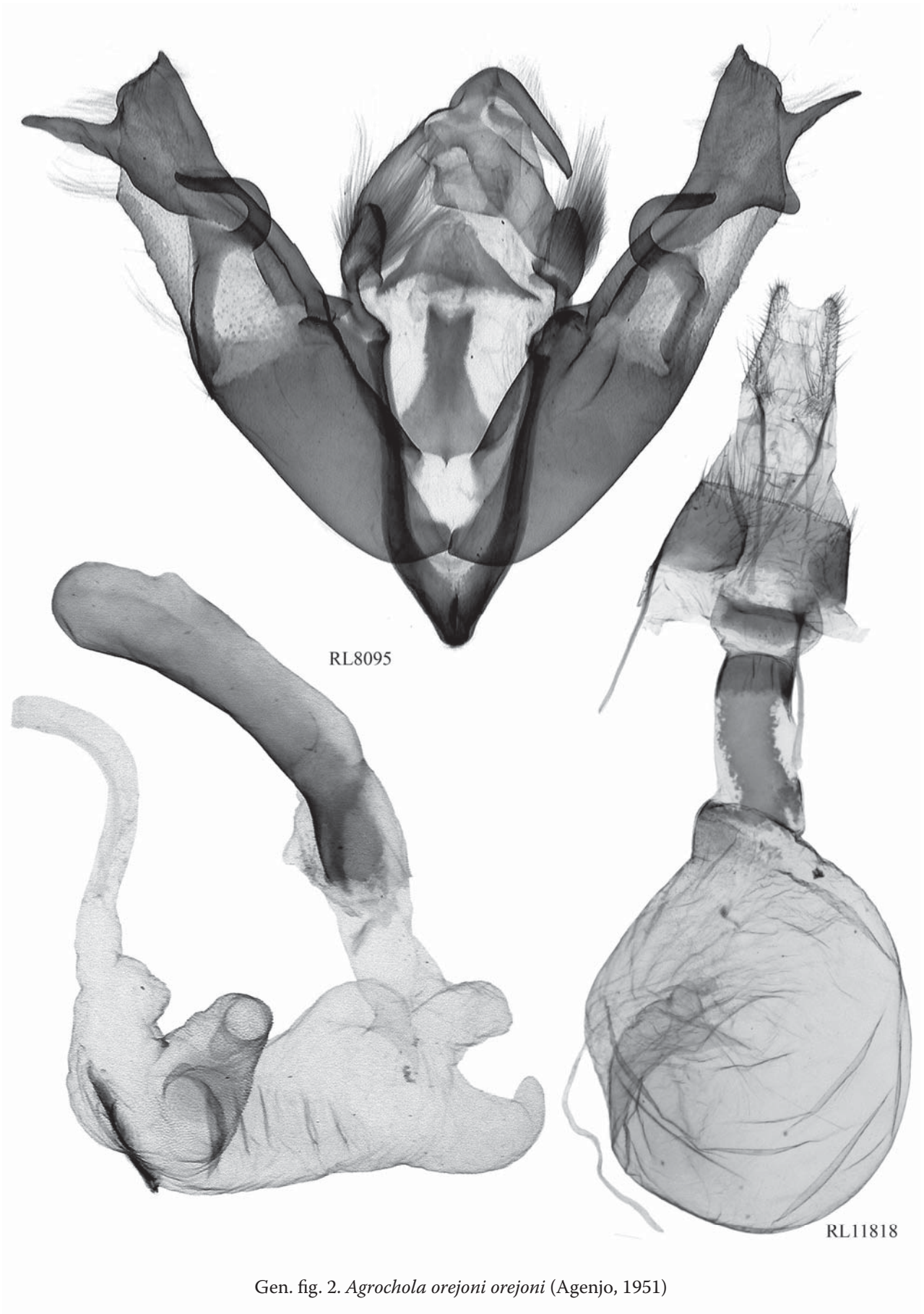
1. *Hyalobole kononenkoi*, m. – Holotype, Taiwan, Nantou County, 5 km SW of Tayuling, 2900 m, 9.X.1995, T. Csövári & P. Stéger, slide No.: Hreblay7943 (coll. HNHM)
2. *Hyalobole kononenkoi*, m. – Taiwan, Taichung County, Anmashan Mts, 2650 m, 22.X.200, L. Ronkay & L. Peregovits (coll. HNHM)
3. *Hyalobole kononenkoi*, m. – Paratype, Taiwan, Miaoli County, 49 km E of Tungshih, 2490 m, 28.X.1996, T. Csövári & Cs. Szabóky (coll. G. Ronkay)
4. *Hyalobole kononenkoi*, m. – Taiwan, Nantou County, Yuanfeng, 2900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
5. *Hyalobole kononenkoi*, f. – Paratype, Taiwan, Nantou County, 5 km SW of Tayuling, 2900 m, 1.XI.1996, T. Csövári & Cs. Szabóky (coll. G. Ronkay)
6. *Hyalobole kononenkoi*, f. – Taiwan, Taichung County, Anmashan Mts, 2650 m, 22.X.200, L. Ronkay & L. Peregovits (coll. HNHM)
7. *Hyalobole kononenkoi*, f. – Taiwan, Nantou County, Shihshan, Tzuchung, 2400 m, 12.XII.2004, L. Ronkay, C.M. Fu & H.R. Tzuoo (coll. G. Ronkay)
8. *Hyalobole kononenkoi*, f. – Taiwan, Taichung County, Anmashan Mts, 2650 m, 22.X.200, L. Ronkay & L. Peregovits (coll. HNHM)
9. *Hyalobole kononenkoi*, f. – Taiwan, Nantou County, Yuanfeng, 2900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
10. *Hyalobole kononenkoi*, f. – Taiwan, Nantou County, Yuanfeng, 2900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. HNHM)
11. *Hyalobole nigripalpis nigripalpis*, m. – Holotype, [India, Sikkim] Darjeeling, 24.II.1889, Pilcher, slide No.: Hreblay6994 (coll. BMNH)
12. *Hyalobole nigripalpis nigripalpis*, m. – Nepal, Ganesh Himal, Khurpudanda Pass, W slope, 3700 m, 18-19.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
13. *Hyalobole nigripalpis nigripalpis*, m. – Nepal, Ganesh Himal, Godlang vilage, 3150 m, 20.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
14. *Hyalobole nigripalpis nigripalpis*, m. – Nepal, Ganesh Himal, near Godlang, 2520 m, 13.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
15. *Hyalobole nigripalpis nigripalpis*, m. – Nepal, Ganesh Himal, Khurpudanda Pass W slope, 3700 m, 18-19.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
16. *Hyalobole nigripalpis nigripalpis*, f. – Nepal, Ganesh Himal, near Godlang, 2520 m, 21.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
17. *Hyalobole nigripalpis nigripalpis*, f. – Nepal, Ganesh Himal, above Nesim, 2300 m, 23.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
18. *Hyalobole nigripalpis nigripalpis*, f. – Nepal, Ganesh Himal, between Godlang and Nesim, 2720 m, 23.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
19. *Hyalobole nigripalpis nigripalpis*, f. – Pakistan, Kashmir, Himalaya Mts, 30 km N of Murree, Ayubia, 2600 m, 22-25.X.1998, Gy. M. László & G. Ronkay (coll. G. Ronkay)
20. *Hyalobole nigripalpis nigripalpis*, f. – Nepal, Ganesh Himal, Godlang vilage, 3150 m, 20.X.1995, L. Peregovits & L. Ronkay (coll. G. Ronkay)
21. *Hyalobole nigripalpis hreblayi*, m. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 18.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
22. *Hyalobole nigripalpis hreblayi*, m. – Vietnam, Fan-si-pan Mts, Shin Chai, 2550 m, 12.XI.2003, M. Földvári, Á. Kőrösi & L. Peregovits (coll. HNHM)
23. *Hyalobole nigripalpis hreblayi*, m. – Vietnam, Fan-si-pan Mts, Shin Chai, 2550 m, 12.XI.2003, M. Földvári, Á. Kőrösi & L. Peregovits (coll. HNHM)
24. *Hyalobole nigripalpis hreblayi*, m. – Vietnam, Fan-si-pan Mts, 14 km NW of Sa Pa, 1900-2000 m, 4-6.XII.1997, L. Peregovits & L. Ronkay (coll. HNHM)
25. *Hyalobole nigripalpis hreblayi*, m. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 1-2.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
26. *Hyalobole nigripalpis hreblayi*, f. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 18.XI.1999, A. Kun & L. Ronkay (coll. G. Ronkay)
27. *Hyalobole nigripalpis hreblayi*, f. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 1-2.II.1999, L. Peregovits & G. Ronkay (coll. HNHM)
28. *Hyalobole nigripalpis hreblayi*, f. – Vietnam, Lao Cai, Fan-si-pan Mts, Hoang Lien NP, Tram Ton, 1900 m, 16-17.XII.2008, L. Papp, L. Peregovits & L. Ronkay (coll. HNHM)
29. *Hyalobole nigripalpis hreblayi*, f. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 1-2.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
30. *Hyalobole nigripalpis hreblayi*, f. – Vietnam, Fan-si-pan Mts, 7 km NW of Sa Pa, 2650 m, 1-2.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
31. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Yuanfeng, 1900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
32. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Yuanfeng, 1900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
33. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Yuanfeng, 1900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
34. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Yuanfeng SW of Hohuan Pass, 2760 m, 20.XI.2004, L. Ronkay & H.R. Tzuoo (coll. G. Ronkay)
35. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Hohuachi, 1950 m, 28.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
36. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Hohuachi, 1950 m, 28.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
37. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Hohuachi, 1950 m, 28.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
38. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Yuanfeng, 1900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
39. *Hyalobole taiwanensis*, m. – Taiwan, Nantou County, Yuanfeng, 1900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
40. *Hyalobole taiwanensis*, f. – Taiwan, Nantou County, Yuanfeng, 1900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
41. *Hyalobole taiwanensis*, f. – Taiwan, Nantou County, Yuanfeng, 1900 m, 29.XI.1999, A. Kun, L. Ronkay & L. Peregovits (coll. G. Ronkay)
42. *Hyalobole taiwanensis*, f. – Paratype, Taiwan, Miaoli County, 49 km E of Tungshih, 2490 m, 11.XI.1996, T. Csövári & Cs. Szabóky (coll. T. Csövári)
43. *Hyalobole changae changae*, m. – Taiwan, Taitung County, Hsiangyang, 2300 m, 17.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
44. *Hyalobole changae changae*, m. – Taiwan, Taitung County, Mutien, 1400 m, 16.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
45. *Hyalobole changae changae*, f. – Taiwan, Prov. Nantou, Yushan NP, Tatchia, 2610 m, 21.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
46. *Hyalobole changae changae*, f. – Taiwan, Prov. Nantou, Yushan NP, Tatchia, 2610 m, 21.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
47. *Hyalobole changae changae*, f. – Taiwan, Prov. Nantou, Yushan NP, Tatchia, 2610 m, 21.II.1999, L. Peregovits & G. Ronkay (coll. G. Ronkay)
48. *Hyalobole changae longirostris*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 22-25.I.2004, A. Szabó, slide No.: RL9244 (coll. G. Ronkay)
49. *Hyalobole changae longirostris*, m. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 28-29.I.2004, A. Szabó (coll. P. Gyulai)
50. *Hyalobole changae longirostris*, f. – Holotype, Nepal, Ganesh Himal, near Nesim, 2000 m, 23.X.1995, Gy.M. László & G. Ronkay (coll. G. Ronkay)
51. *Hyalobole changae longirostris*, f. – Paratype, Nepal, Ganesh Himal, 2 km W Gholjong, 2420 m, 17-20.X.1995, Gy.M. László & G. Ronkay (coll. G. Ronkay)
52. *Hyalobole changae longirostris*, f. – Thailand, Prov. Chiang Mai, Doi Phahompok, 20 km NW of Fang, 2150 m, 22-25.I.2004, A. Szabó (coll. G. Ronkay)
53. *Hyalobole conistroides*, m. – Paratype, China, Prov. Shaanxi, Tsinling Mts, Taibaishan, Houzhenzi village, 1500 m, X.1999 (coll. A. Becher and J. Stumpf)
54. *Hyalobole conistroides*, f. – Holotype, China, Prov. Shaanxi, Tsinling Mts, Taibaishan, Dudamen village, 1500 m, 15-23.X.2005, V. Sinjaev (coll. P. Gyulai)
55. *Hyalobole conistroides*, f. – Paratype, China, Prov. Shaanxi, Tsinling Mts, Taibaishan, Houzhenzi village, 1500 m, X.1999 (coll. A. Becher and J. Stumpf)
56. *Cuprebole adrienneae*, m. – Holotype, China, Prov. Hunan, Nanling Mts, Shikengkong Mt., 25.X.-7.XI.2003, V. Sinjaev, slide No.: RL8996 (coll. P. Gyulai)

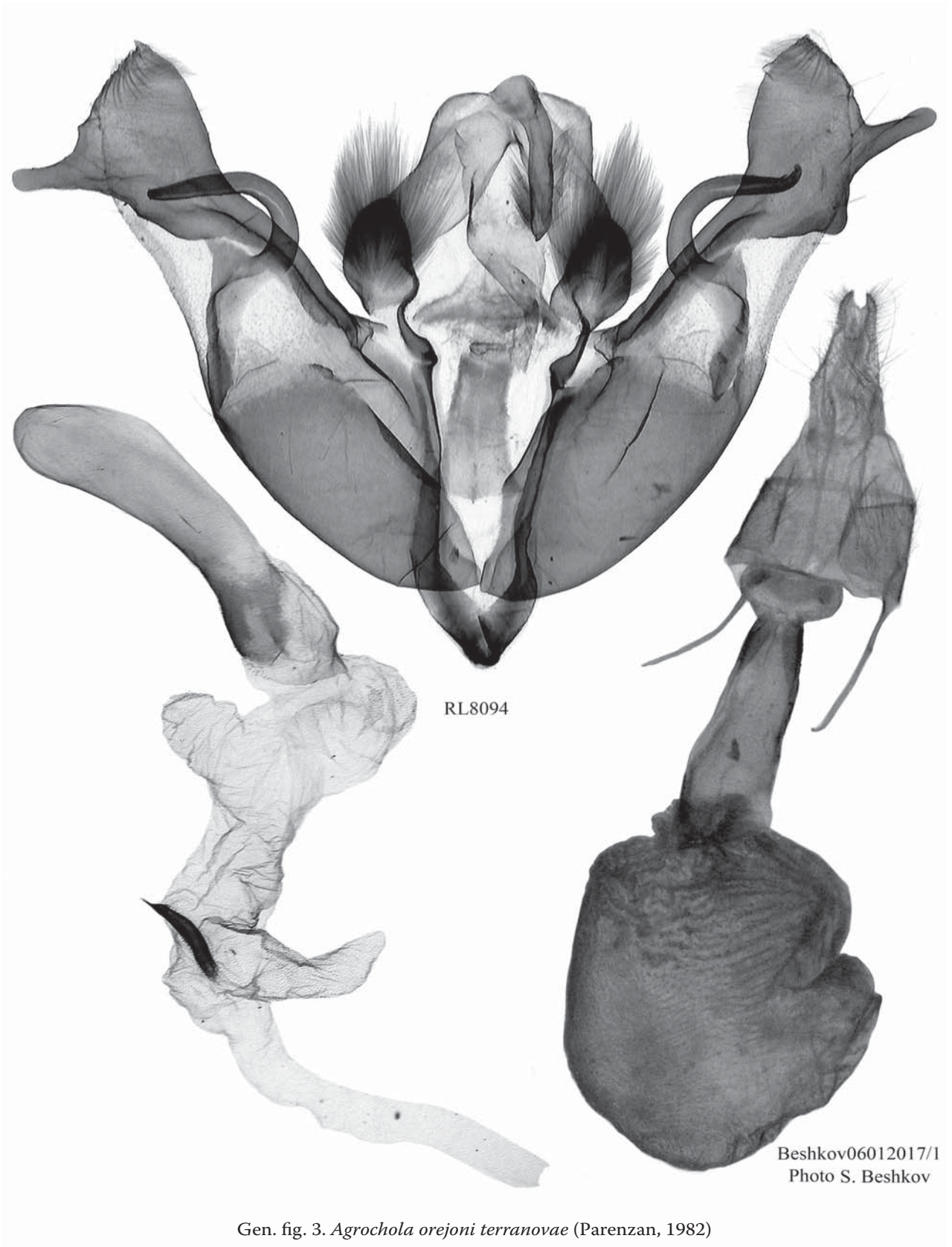


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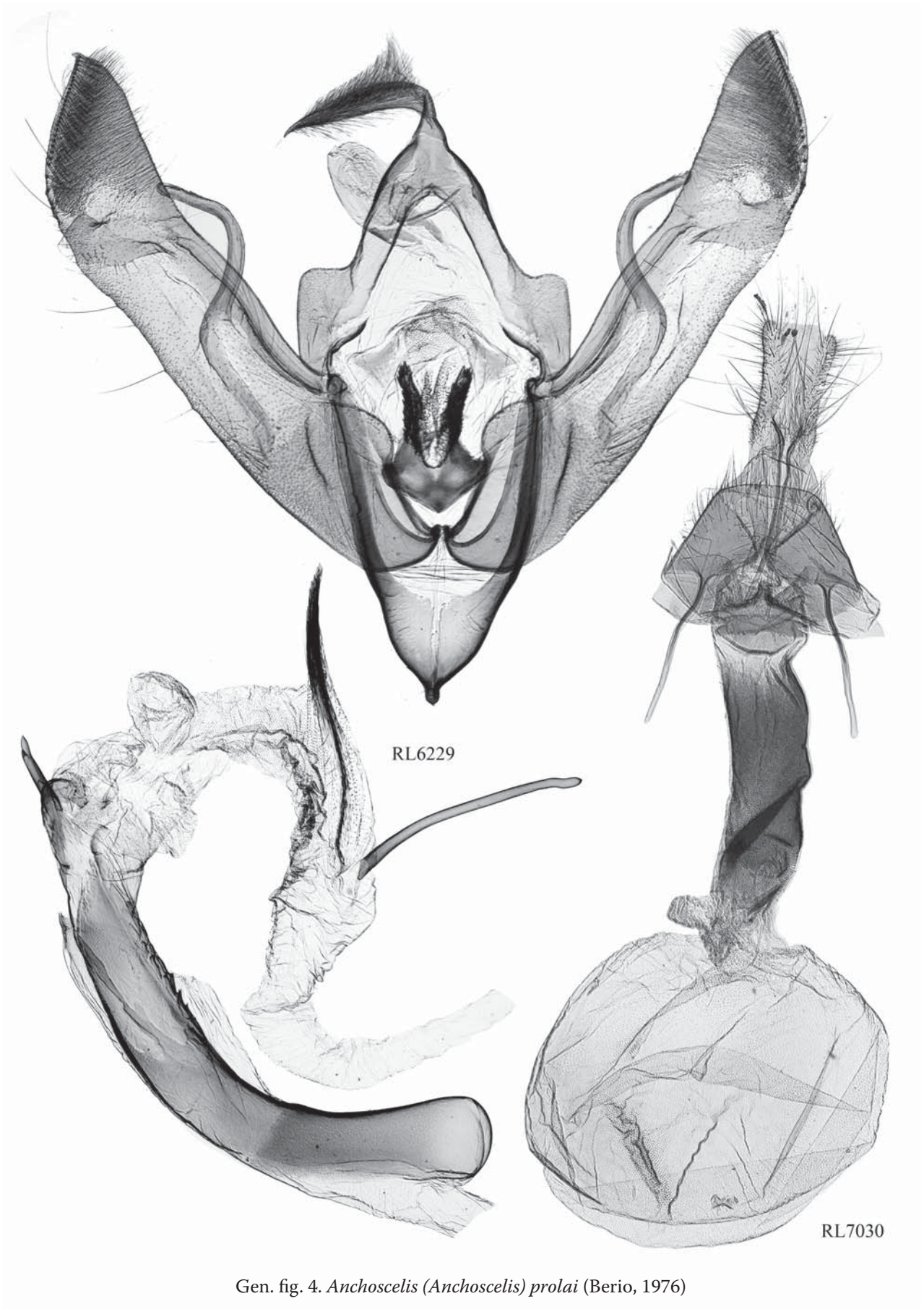


Gen. fig. 1. *Agrochola lychnidis* ([Denis & Schiffermüller], 1775)





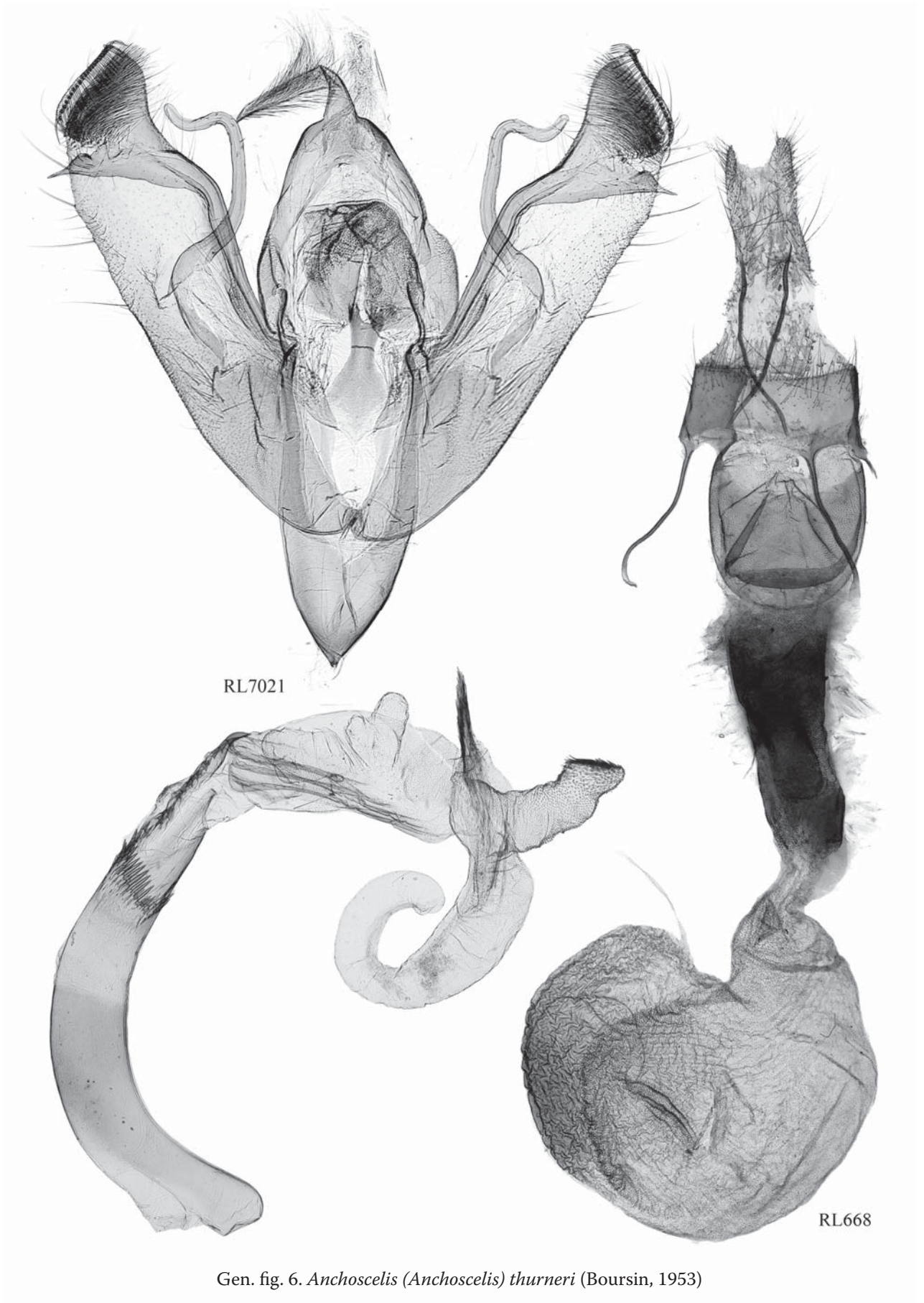
Gen. fig. 3. *Agrochola orejoni terranova* (Parenzan, 1982)

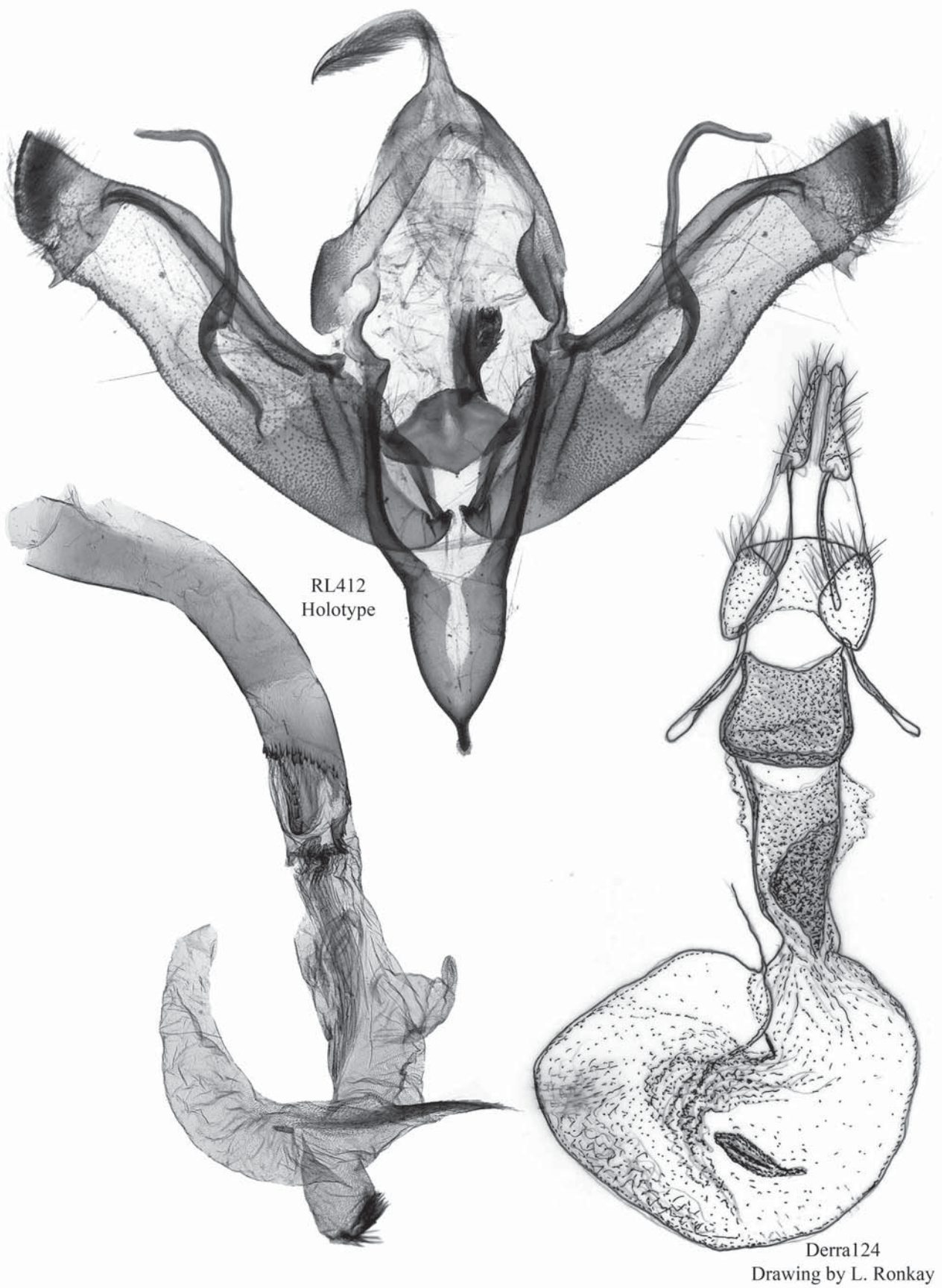


Gen. fig. 4. *Anchoscelis (Anchoscelis) prolai* (Berio, 1976)

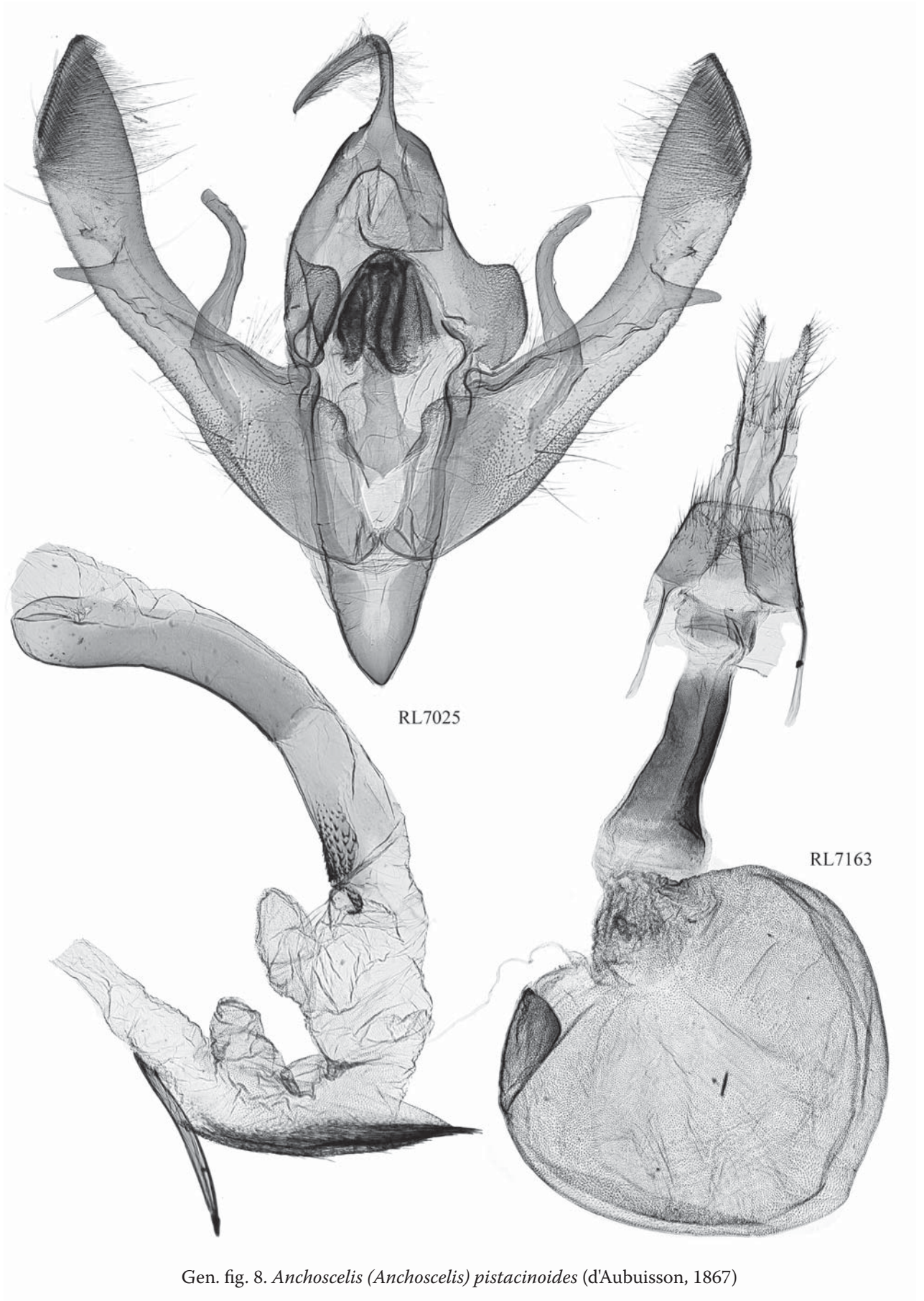


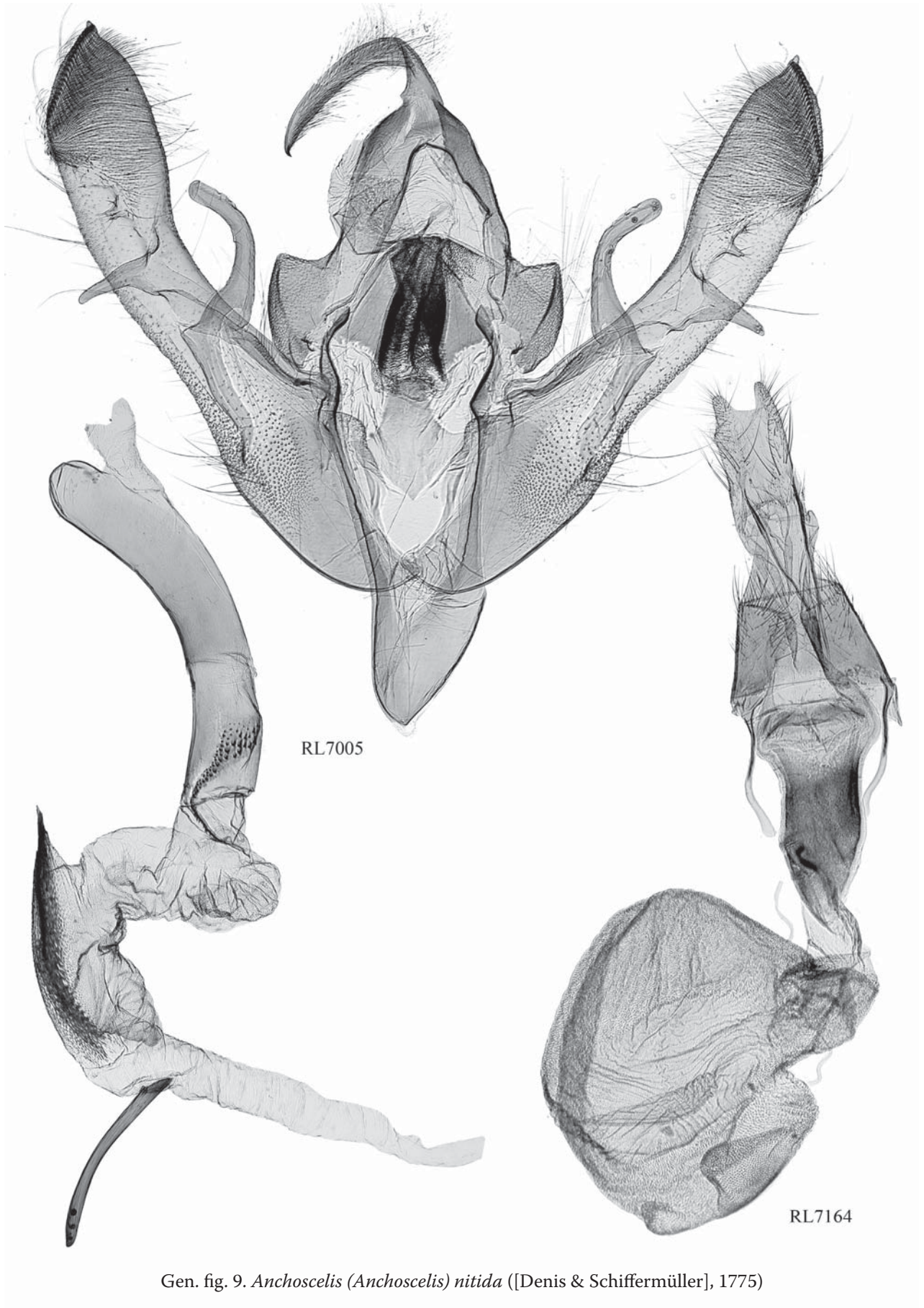
Gen. fig. 5. *Anchoscelis (Anchoscelis) deleta* (Staudinger, 1882)



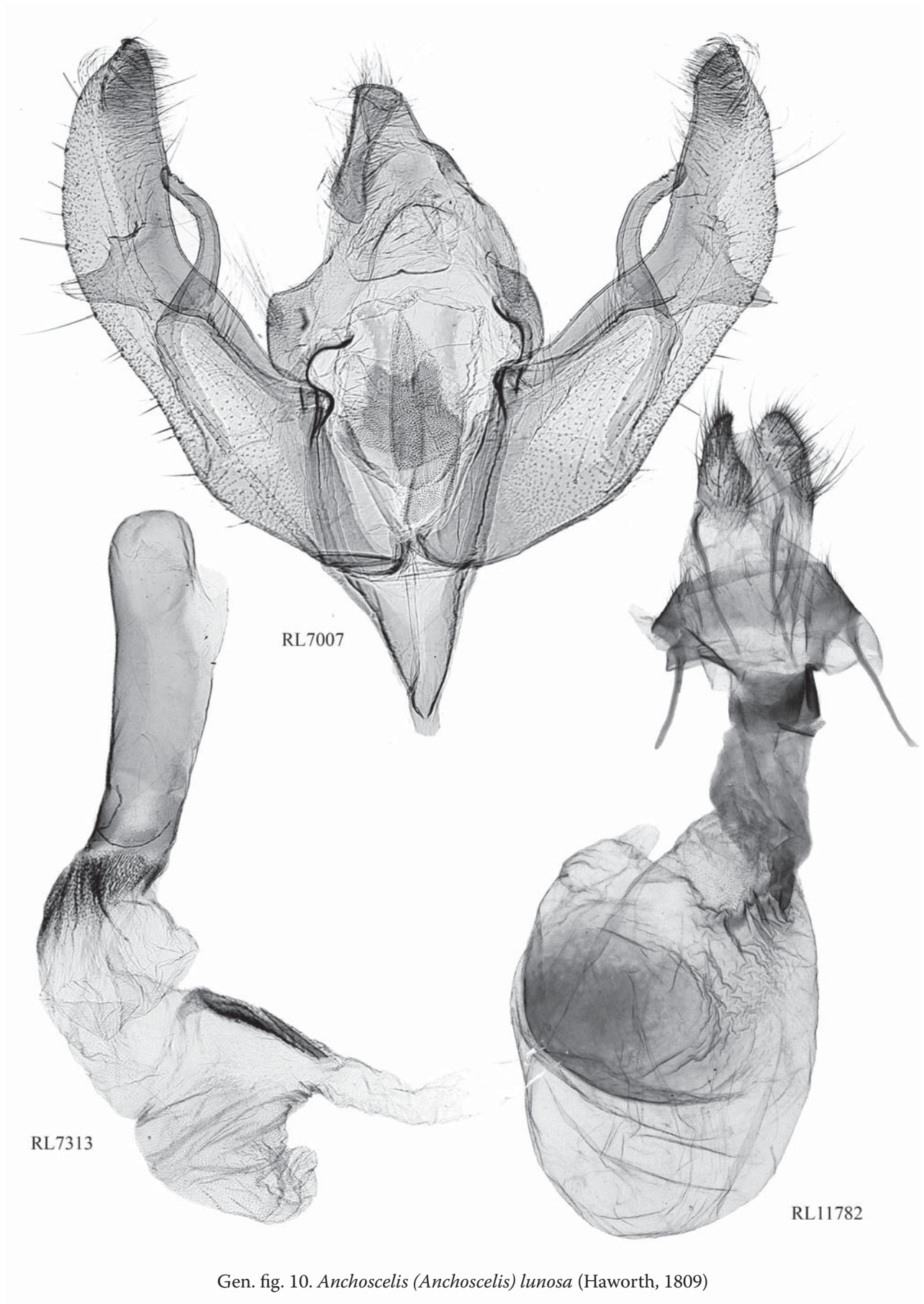


Gen. fig. 7. *Anchoscelis (Anchoscelis) imitata* (Ronkay, 1984)



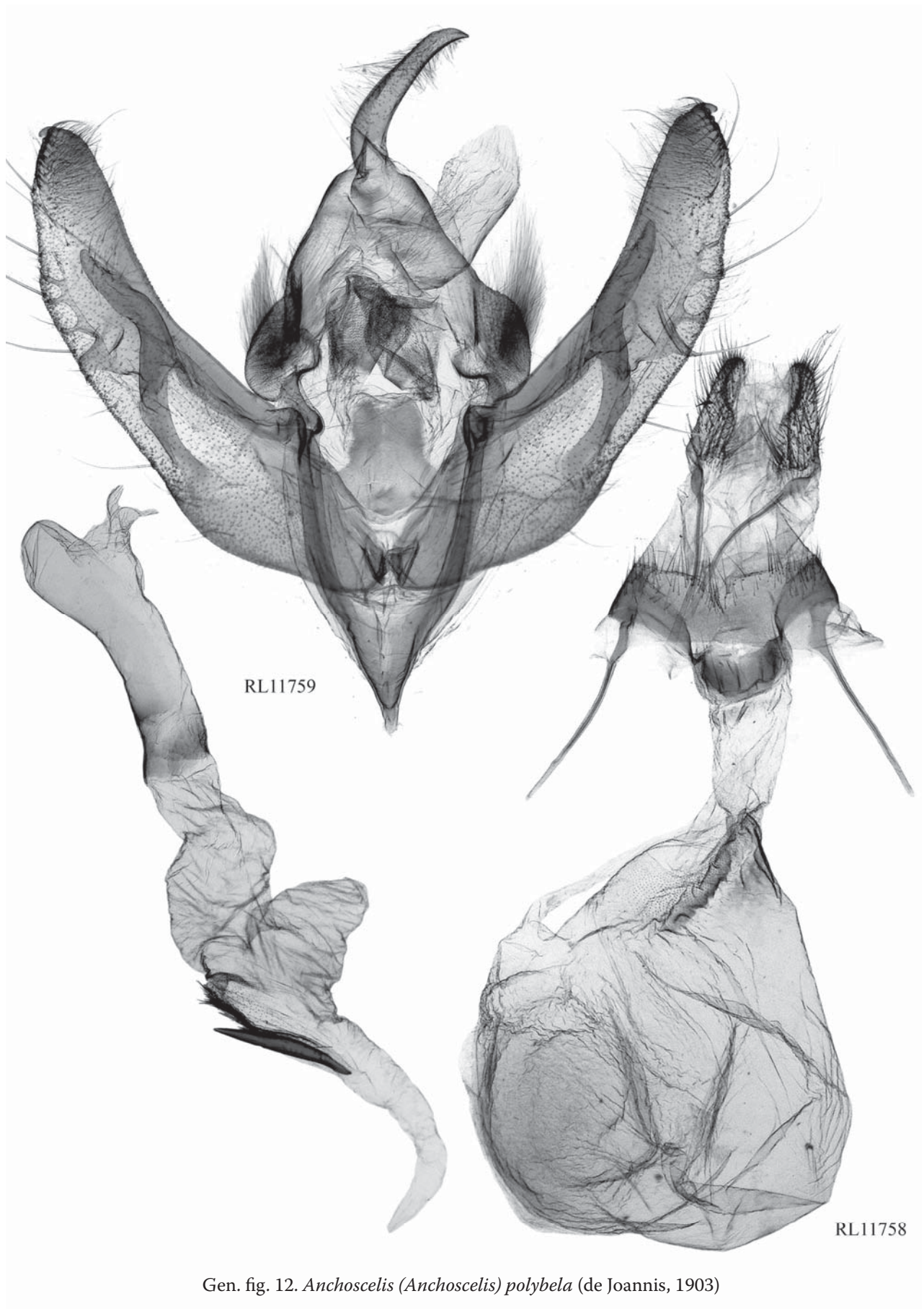


Gen. fig. 9. *Anchoscelis (Anchoscelis) nitida* ([Denis & Schiffermüller], 1775)

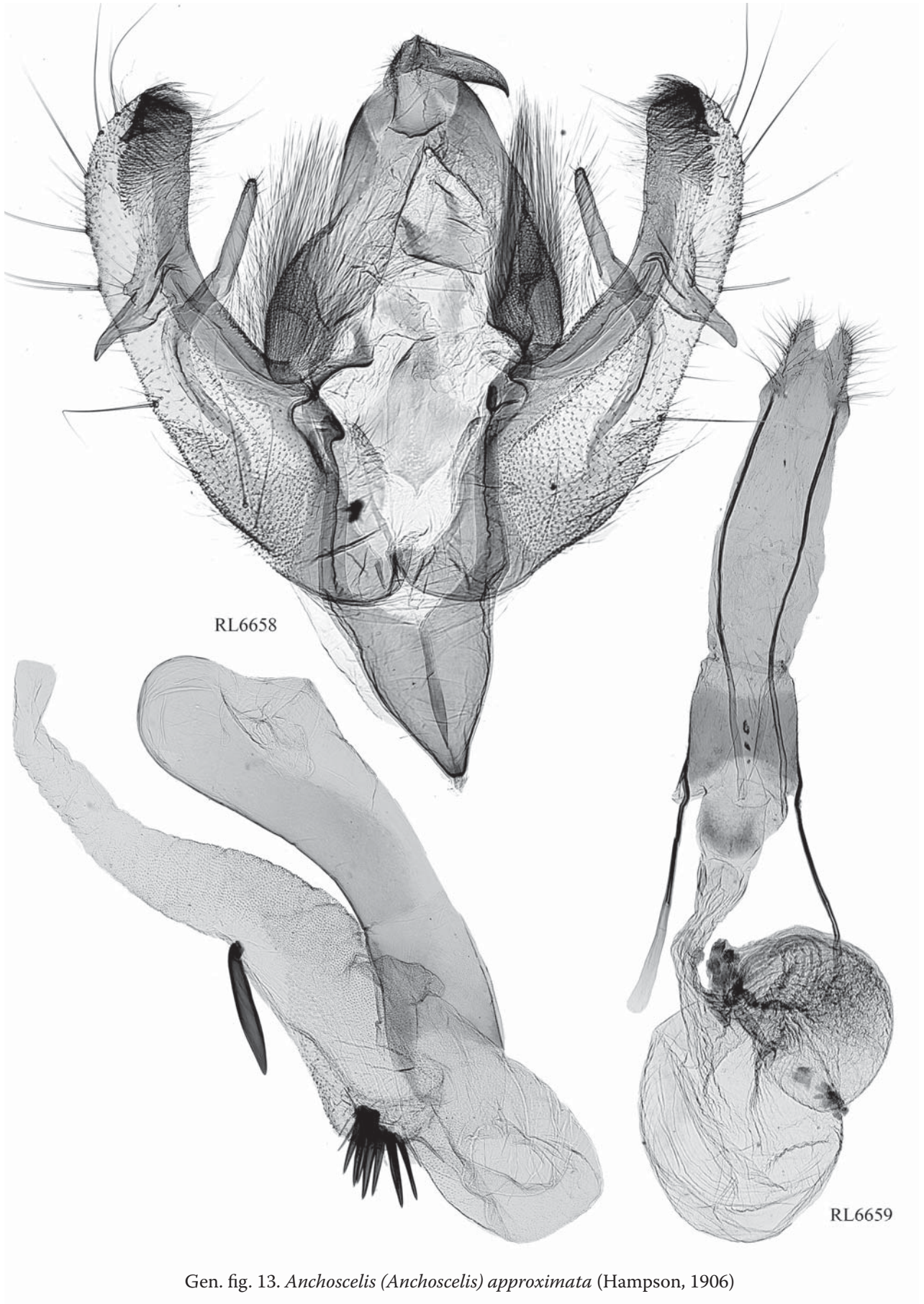


Gen. fig. 10. *Anchoscelis (Anchoscelis) lunosa* (Haworth, 1809)

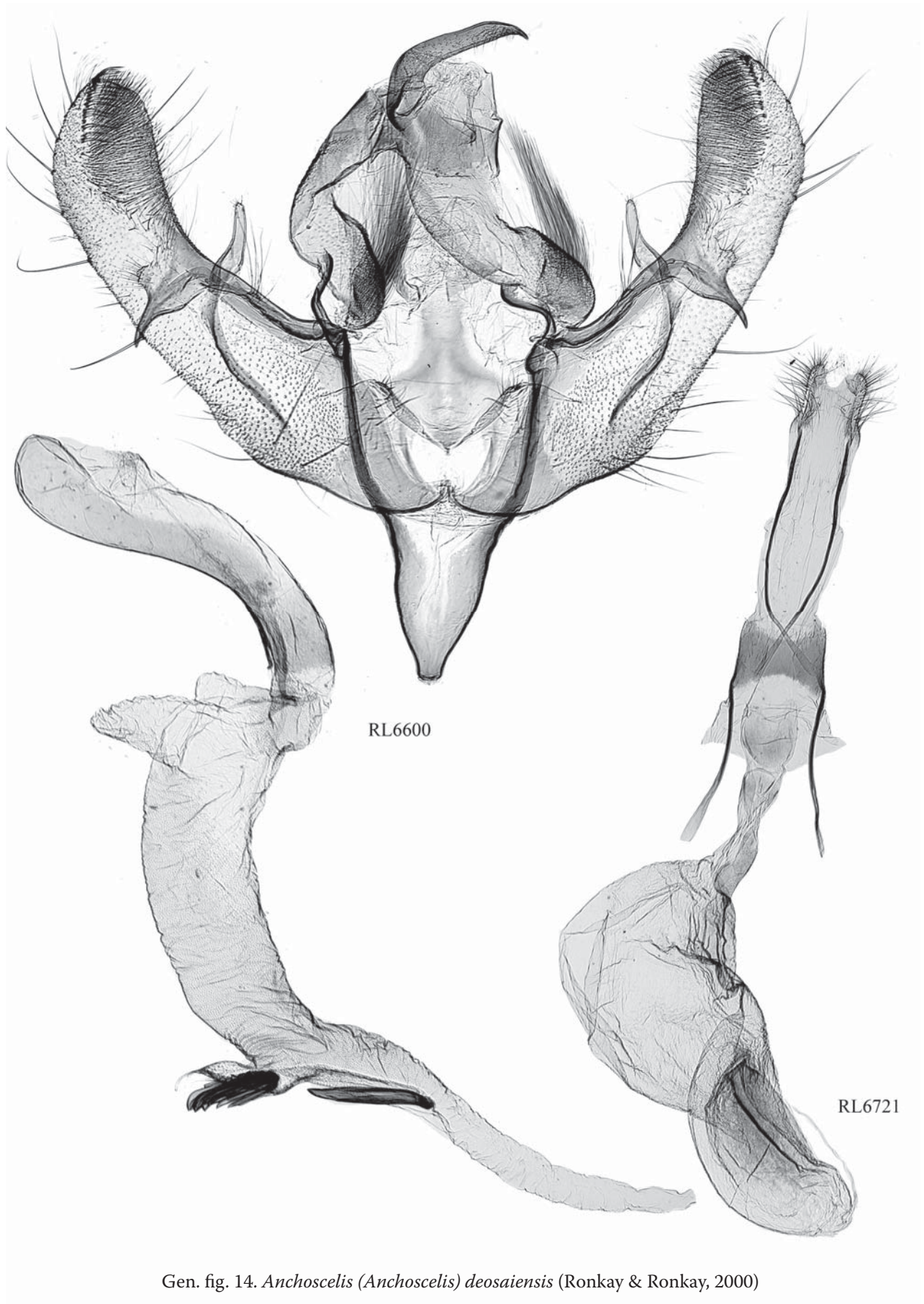




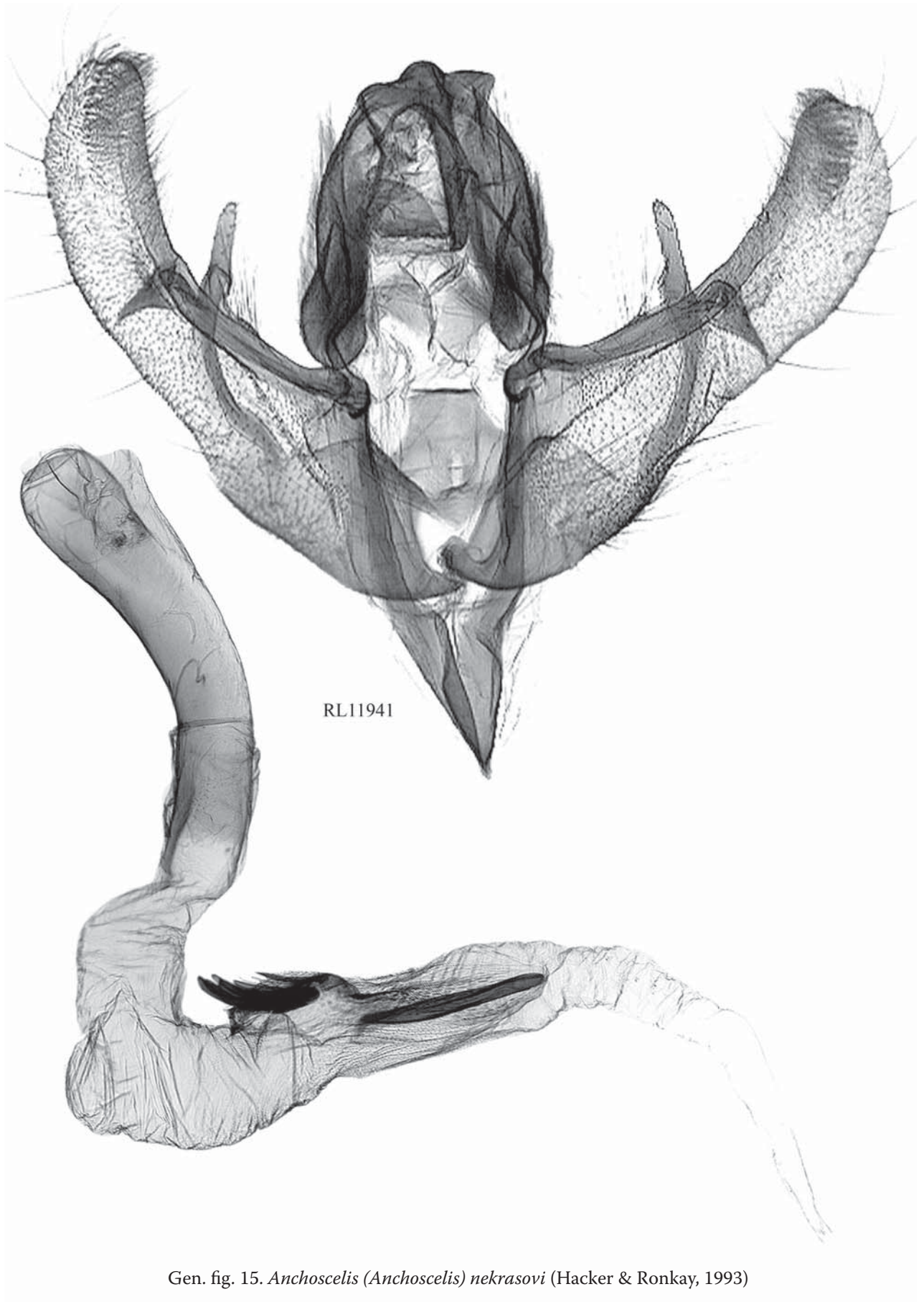
Gen. fig. 12. *Anchoscelis (Anchoscelis) polybela* (de Joannis, 1903)



Gen. fig. 13. *Anchoscelis (Anchoscelis) approximata* (Hampson, 1906)

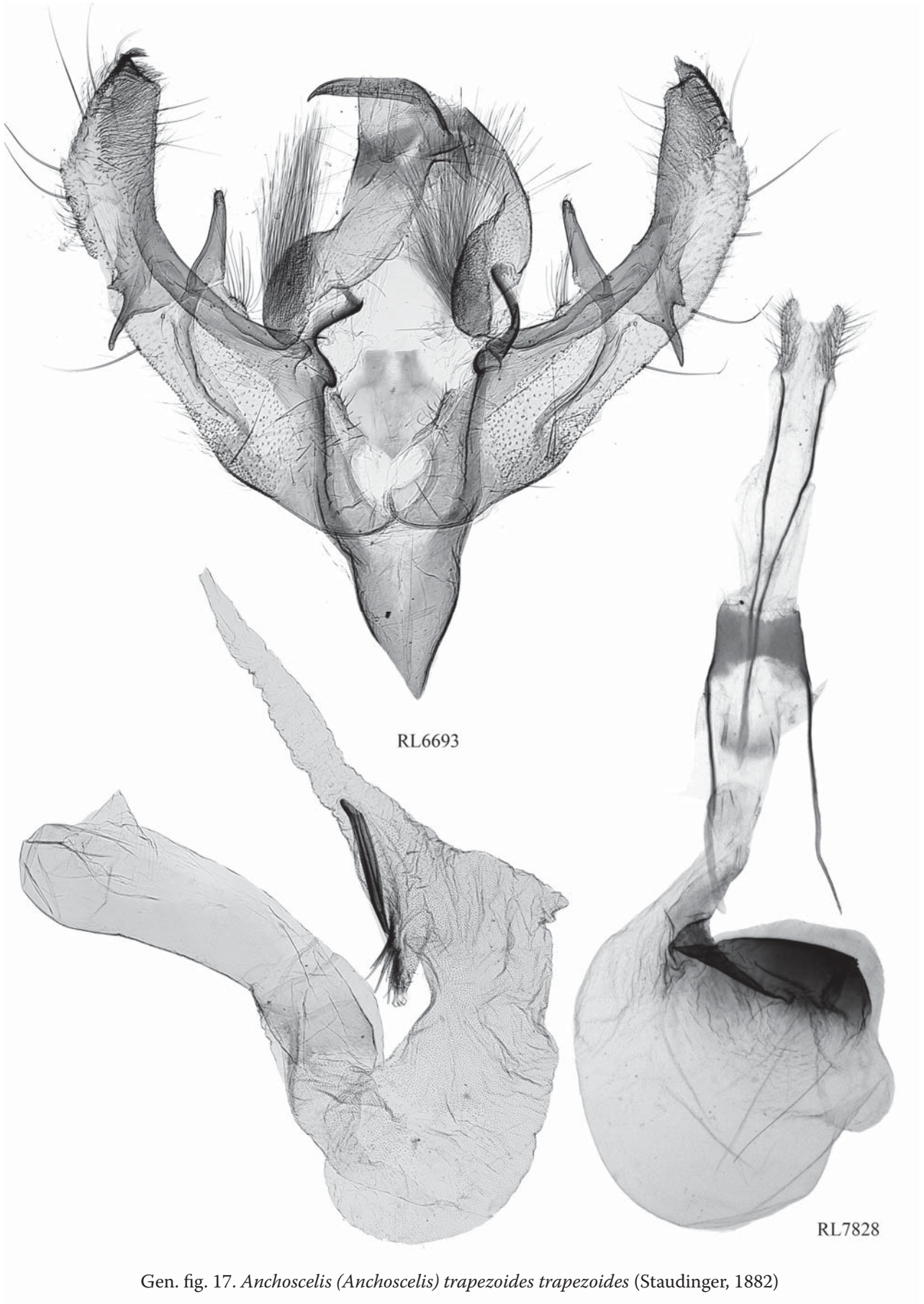


Gen. fig. 14. *Anchoscelis (Anchoscelis) deosaiensis* (Ronkay & Ronkay, 2000)

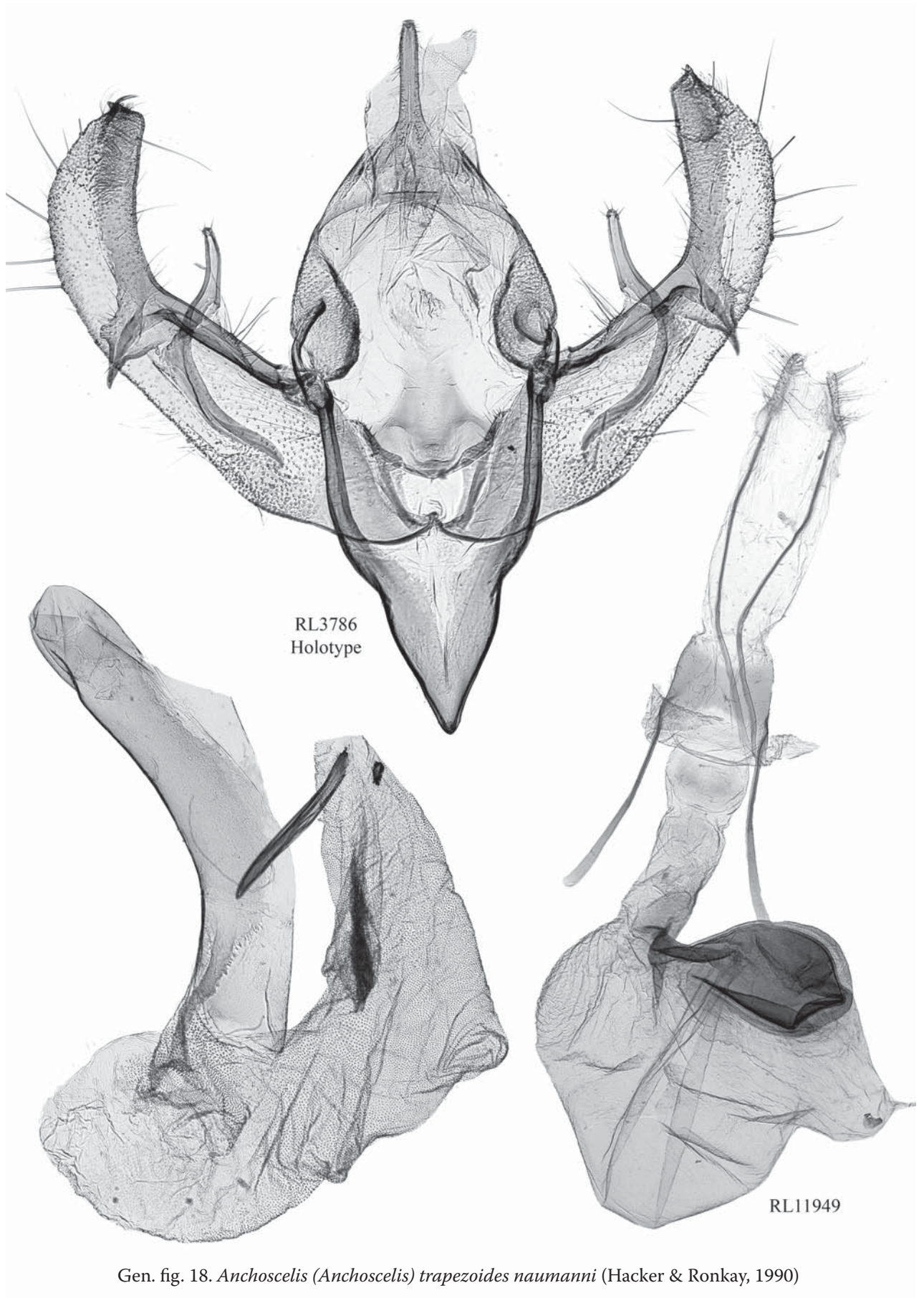


Gen. fig. 15. *Anchoscelis (Anchoscelis) nekrasovi* (Hacker & Ronkay, 1993)



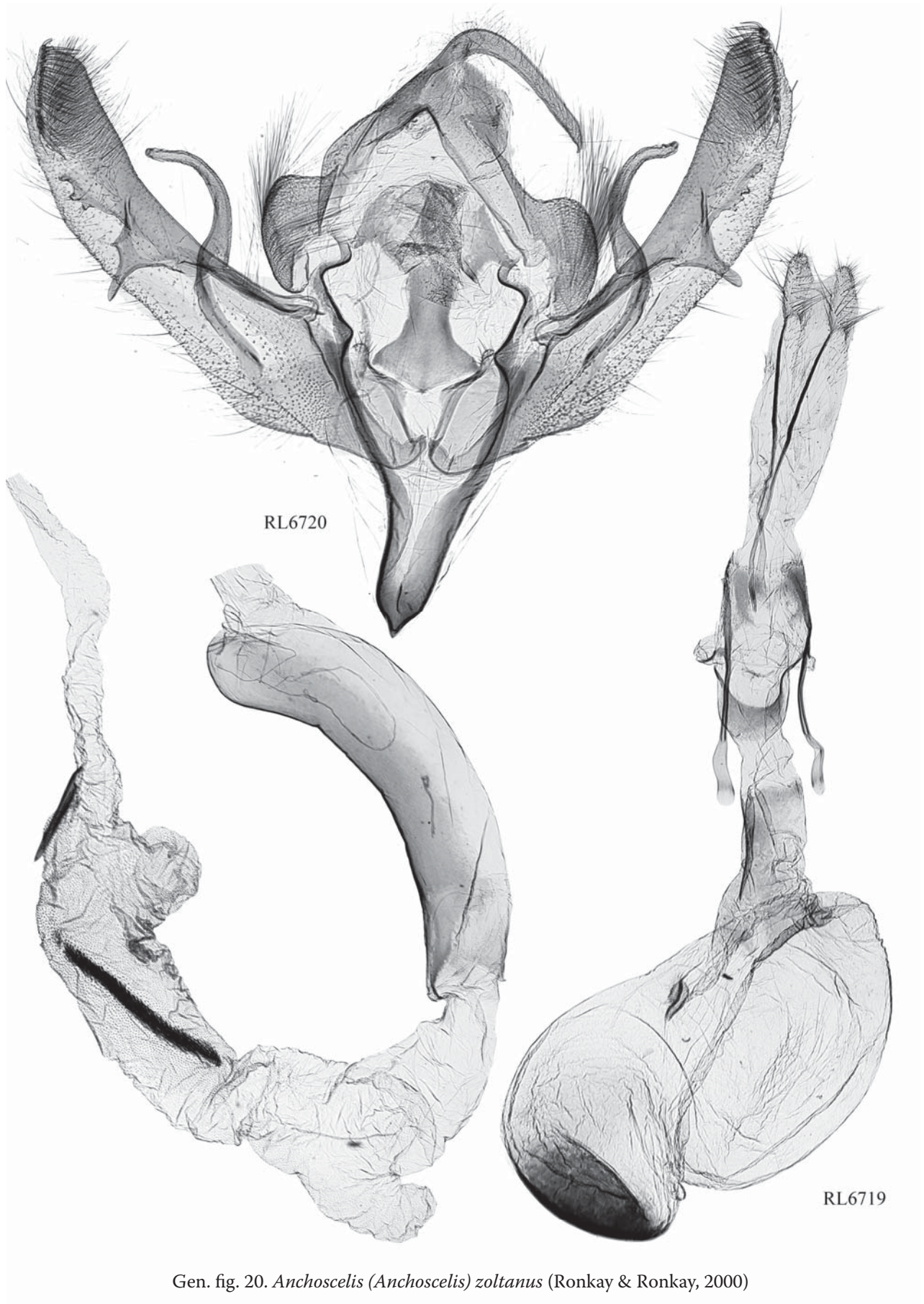


Gen. fig. 17. *Anchoscelis (Anchoscelis) trapezoides trapezoides* (Staudinger, 1882)

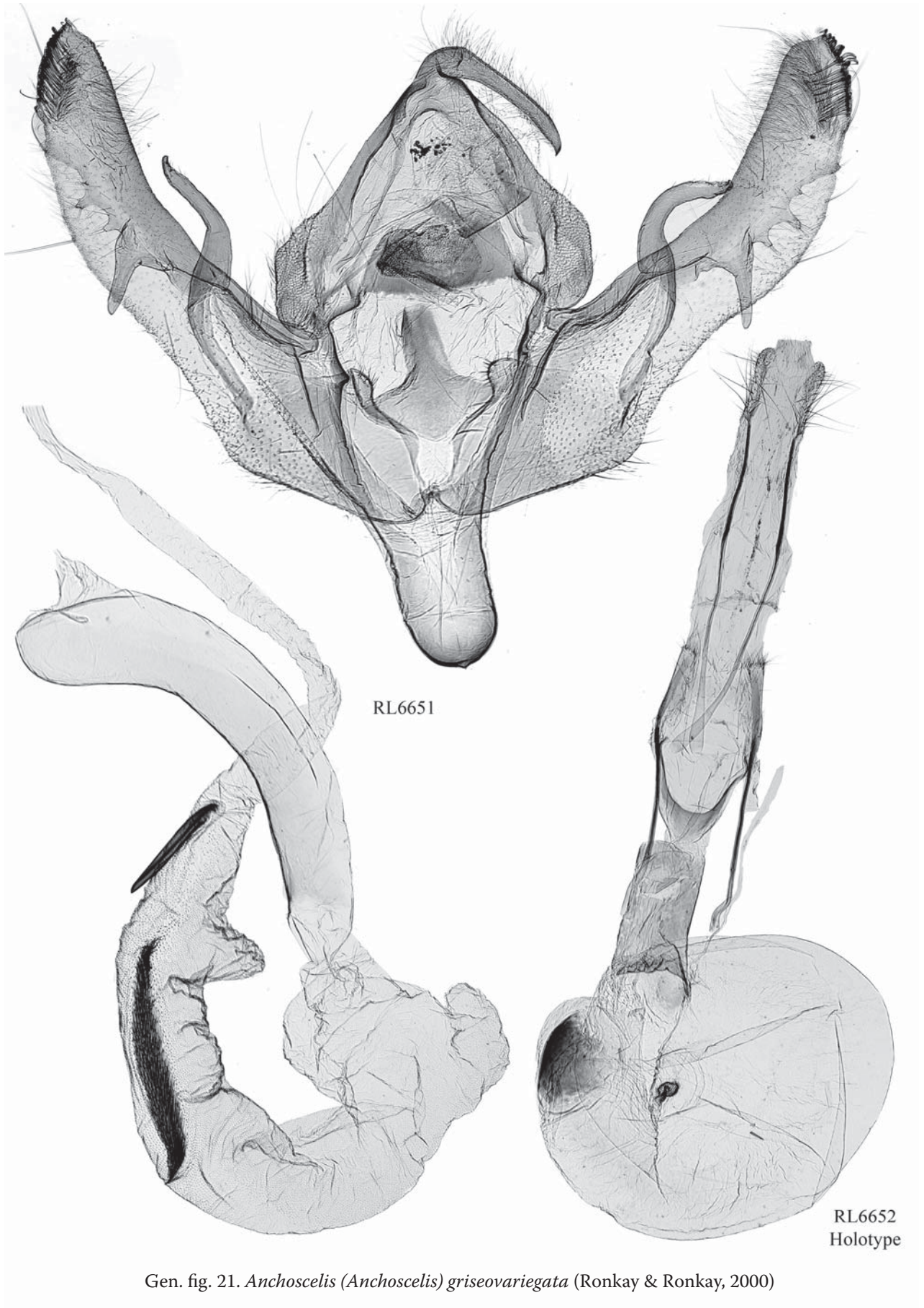


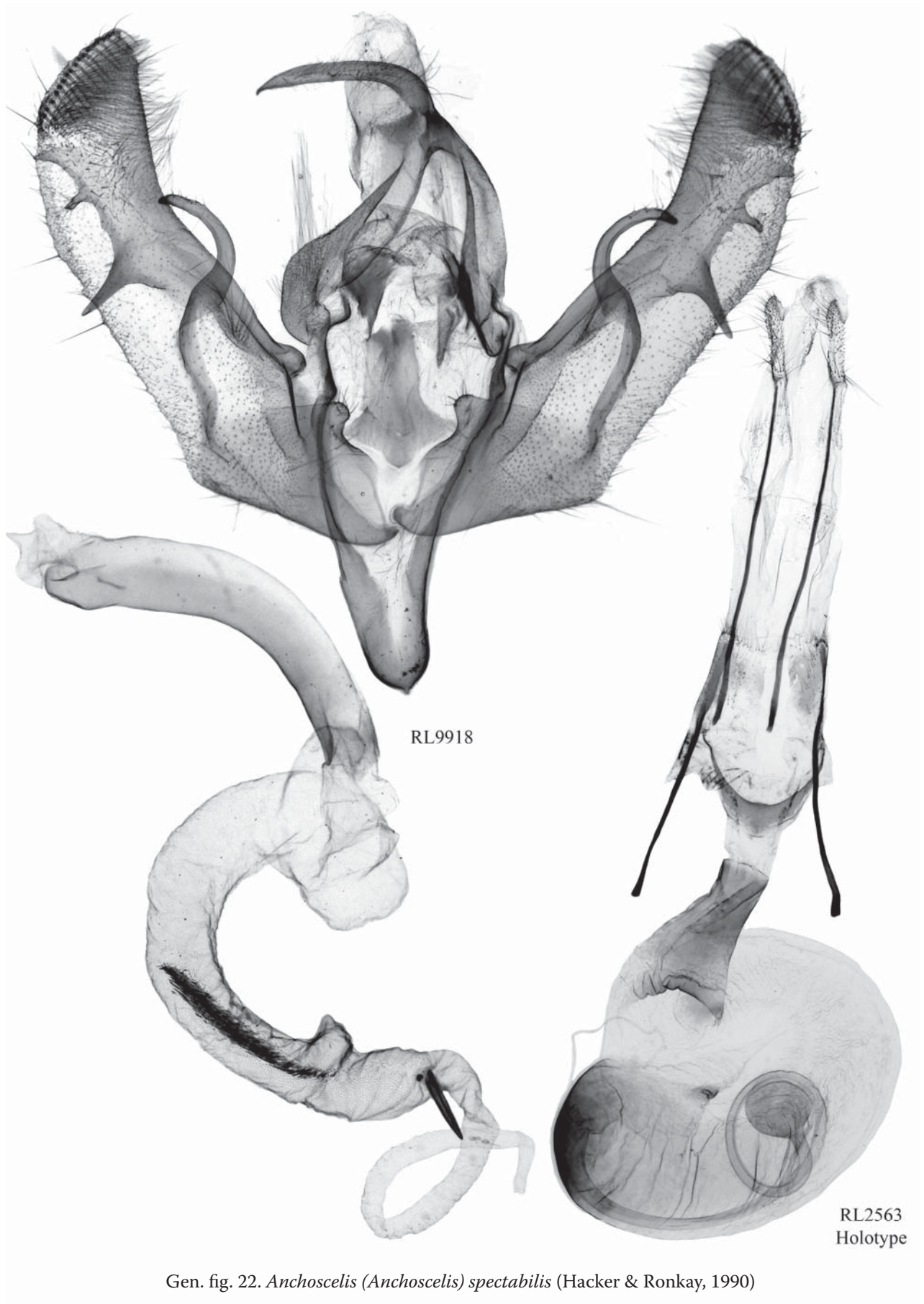


Gen. fig. 19. *Anchoscelis (Anchoscelis) statira* (Boursin, 1960)

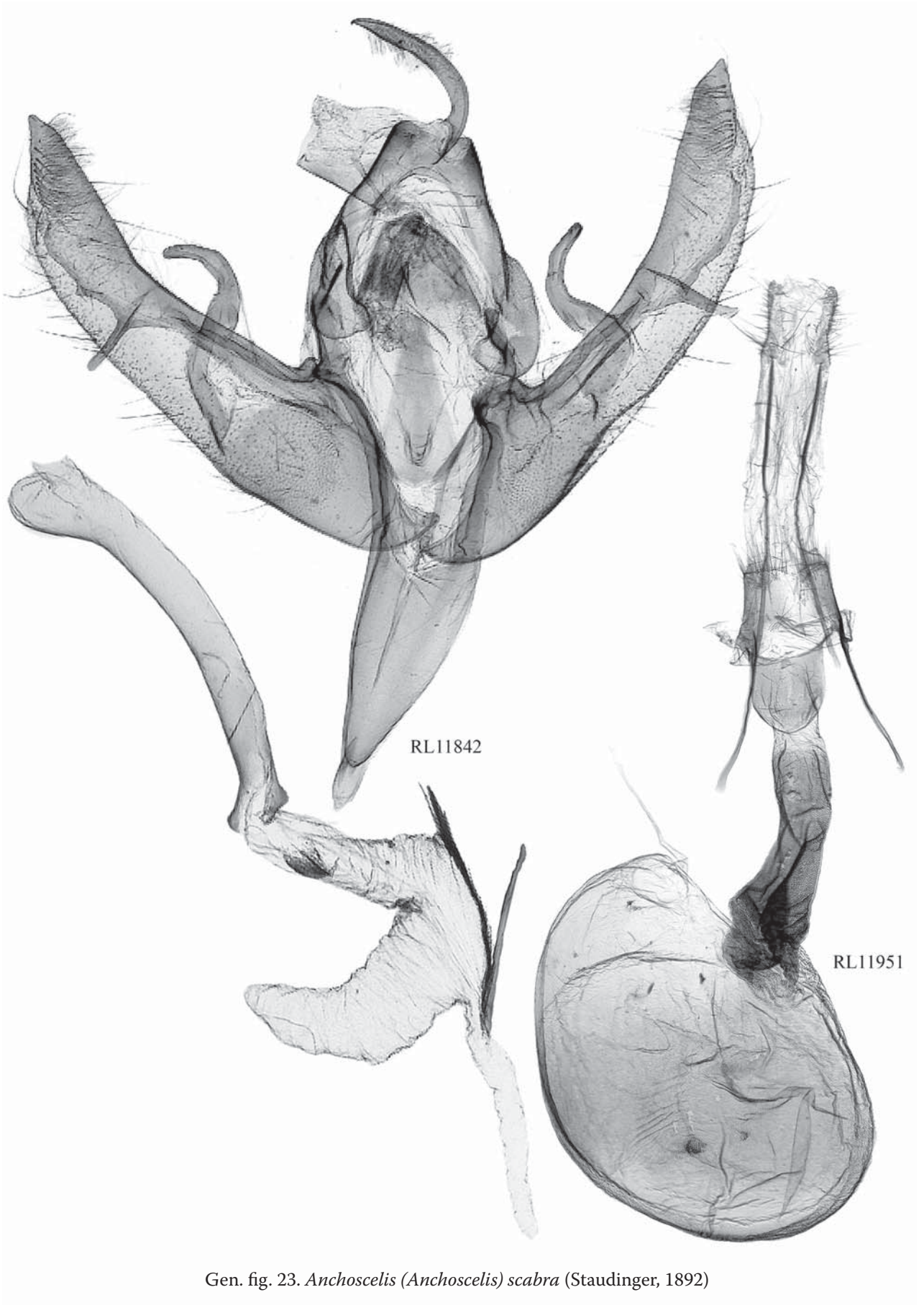


Gen. fig. 20. *Anchoscelis (Anchoscelis) zoltanus* (Ronkay & Ronkay, 2000)

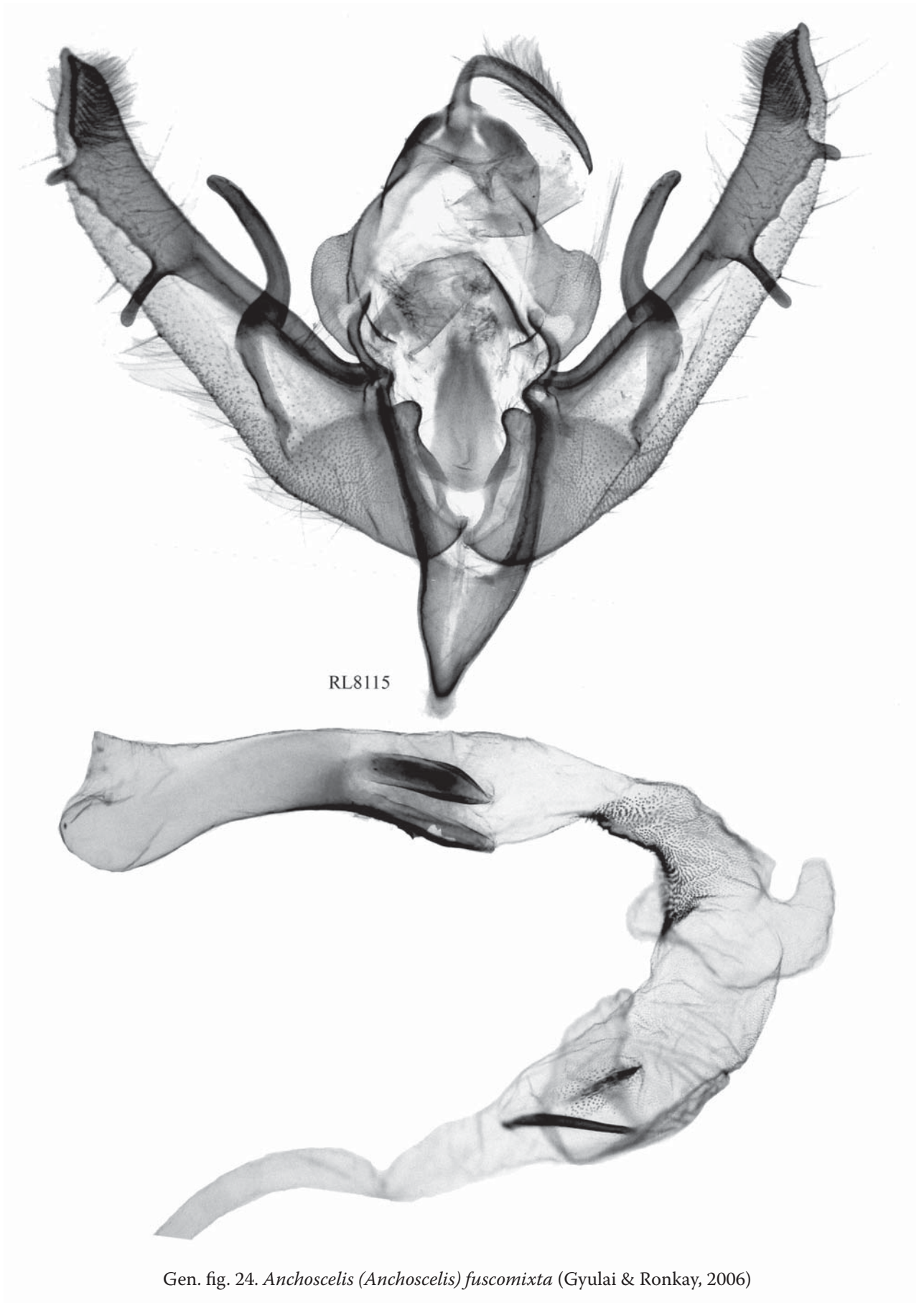




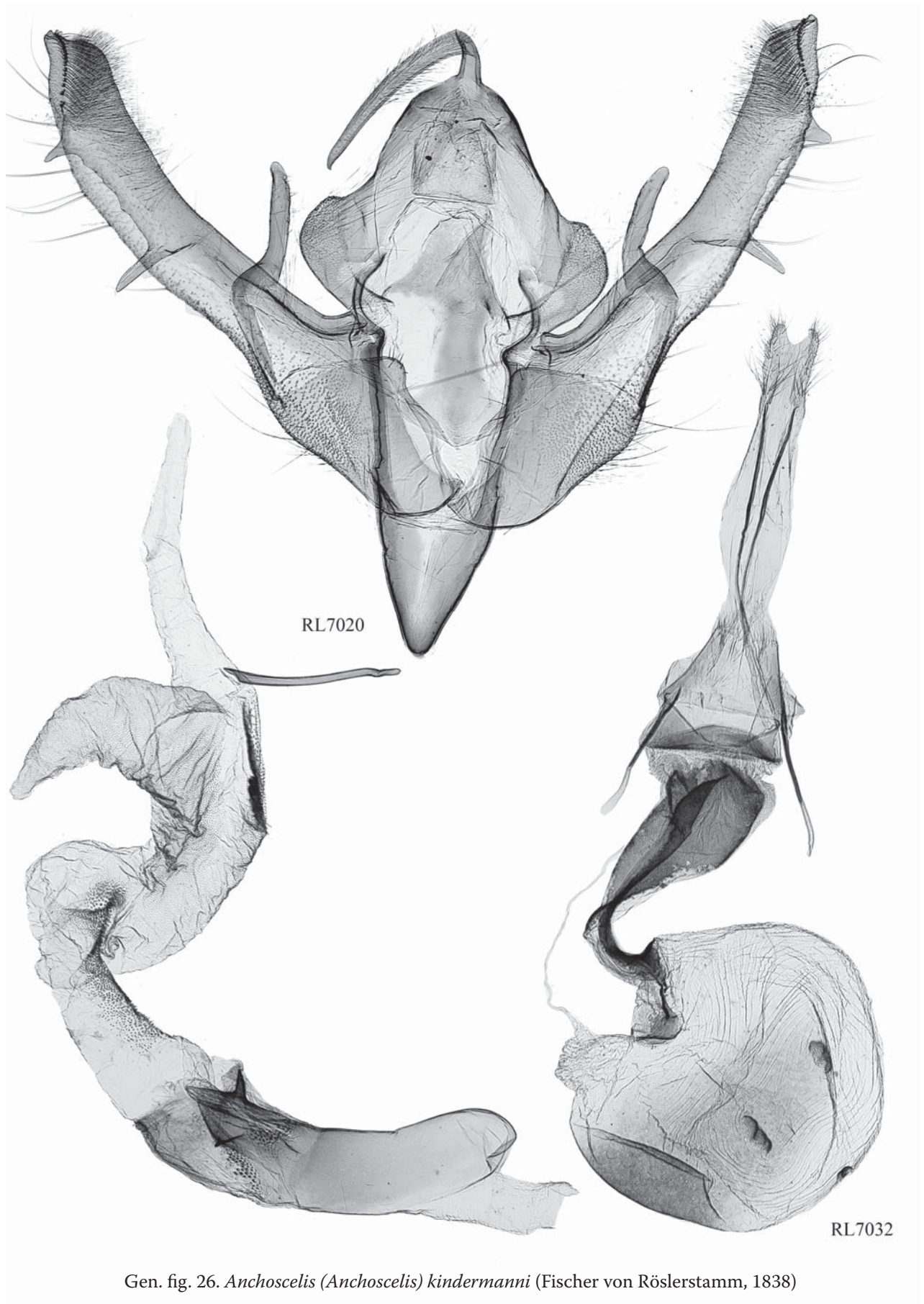
Gen. fig. 22. *Anchoscelis (Anchoscelis) spectabilis* (Hacker & Ronkay, 1990)



Gen. fig. 23. *Anchoscelis (Anchoscelis) scabra* (Staudinger, 1892)

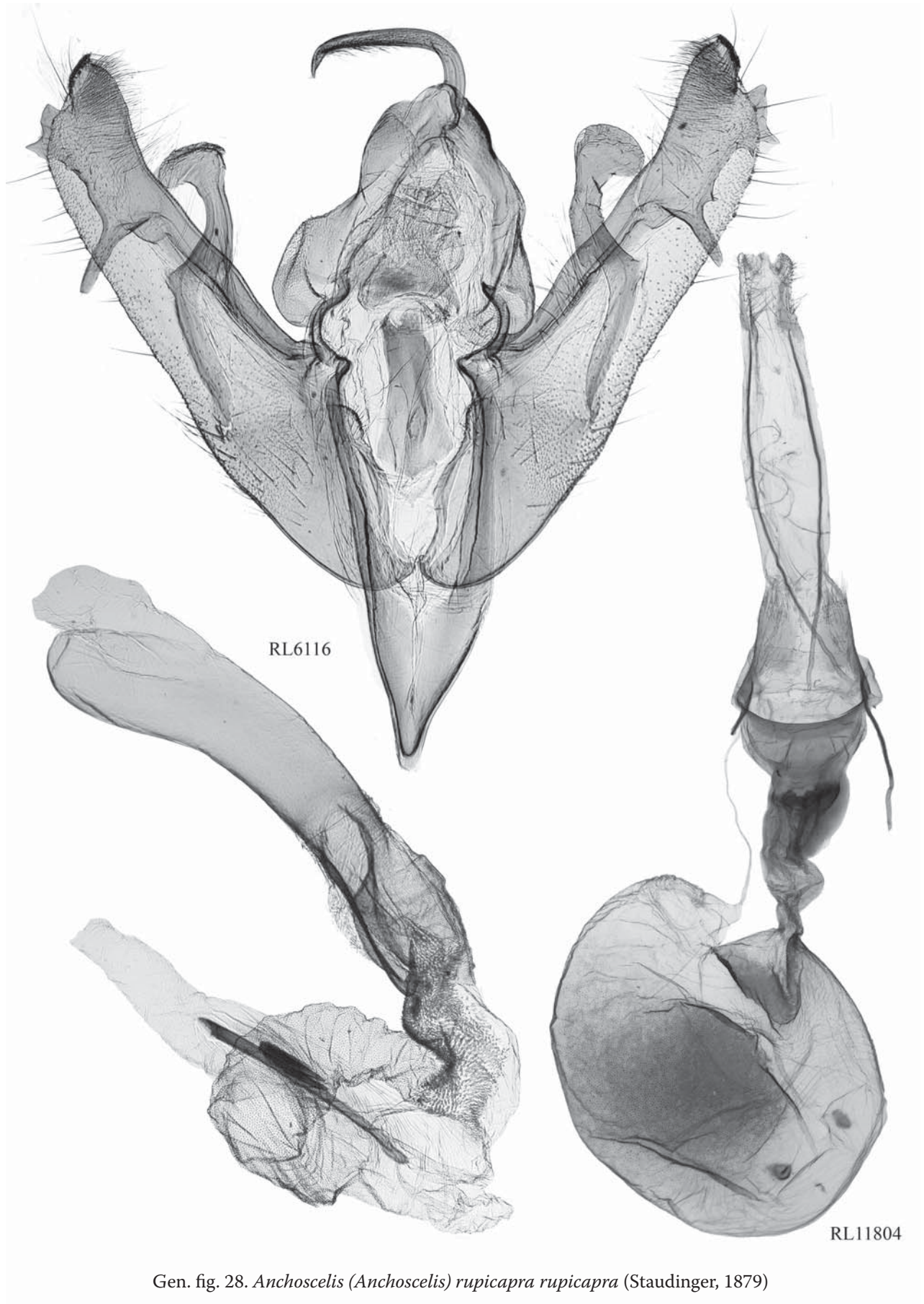




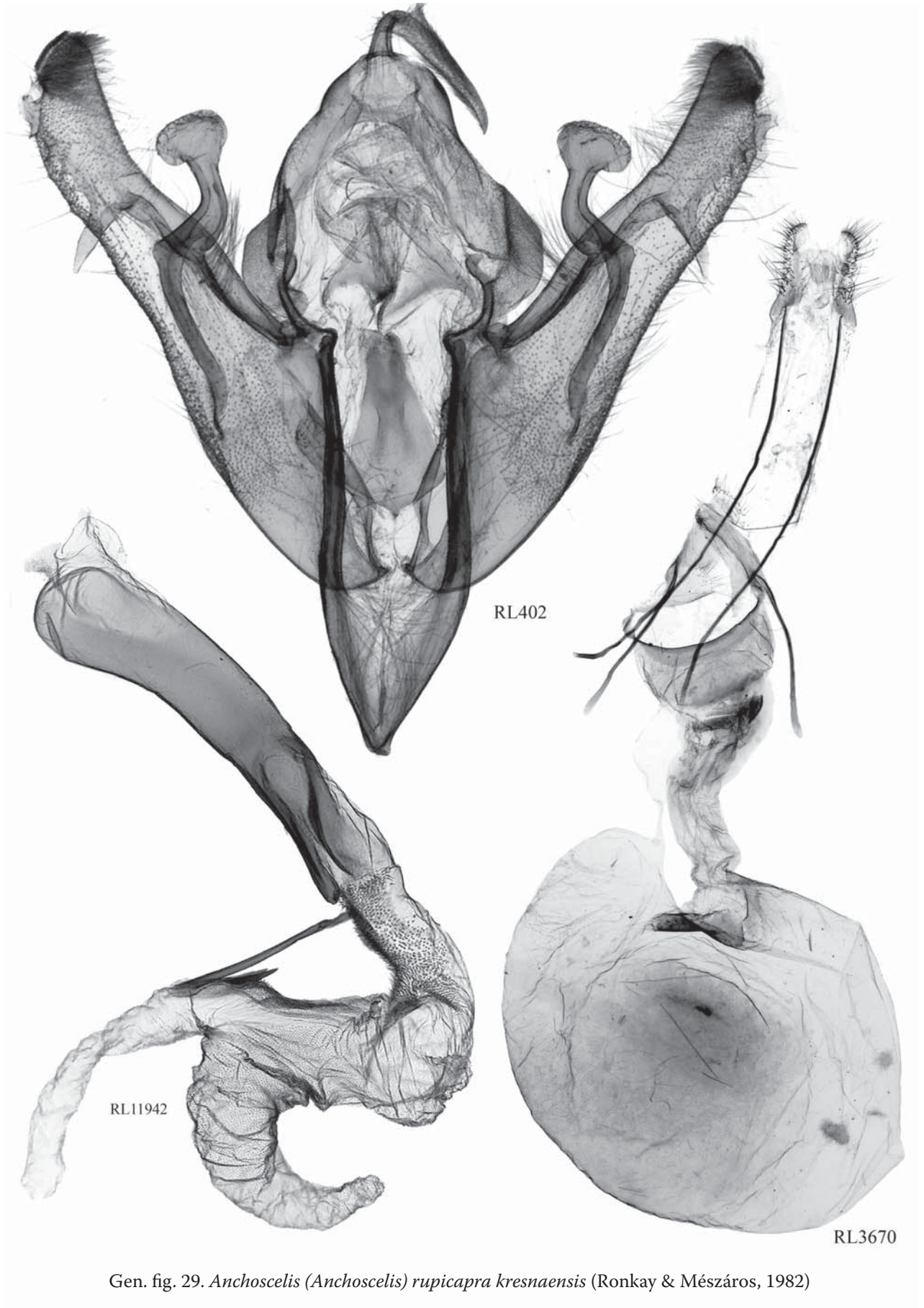


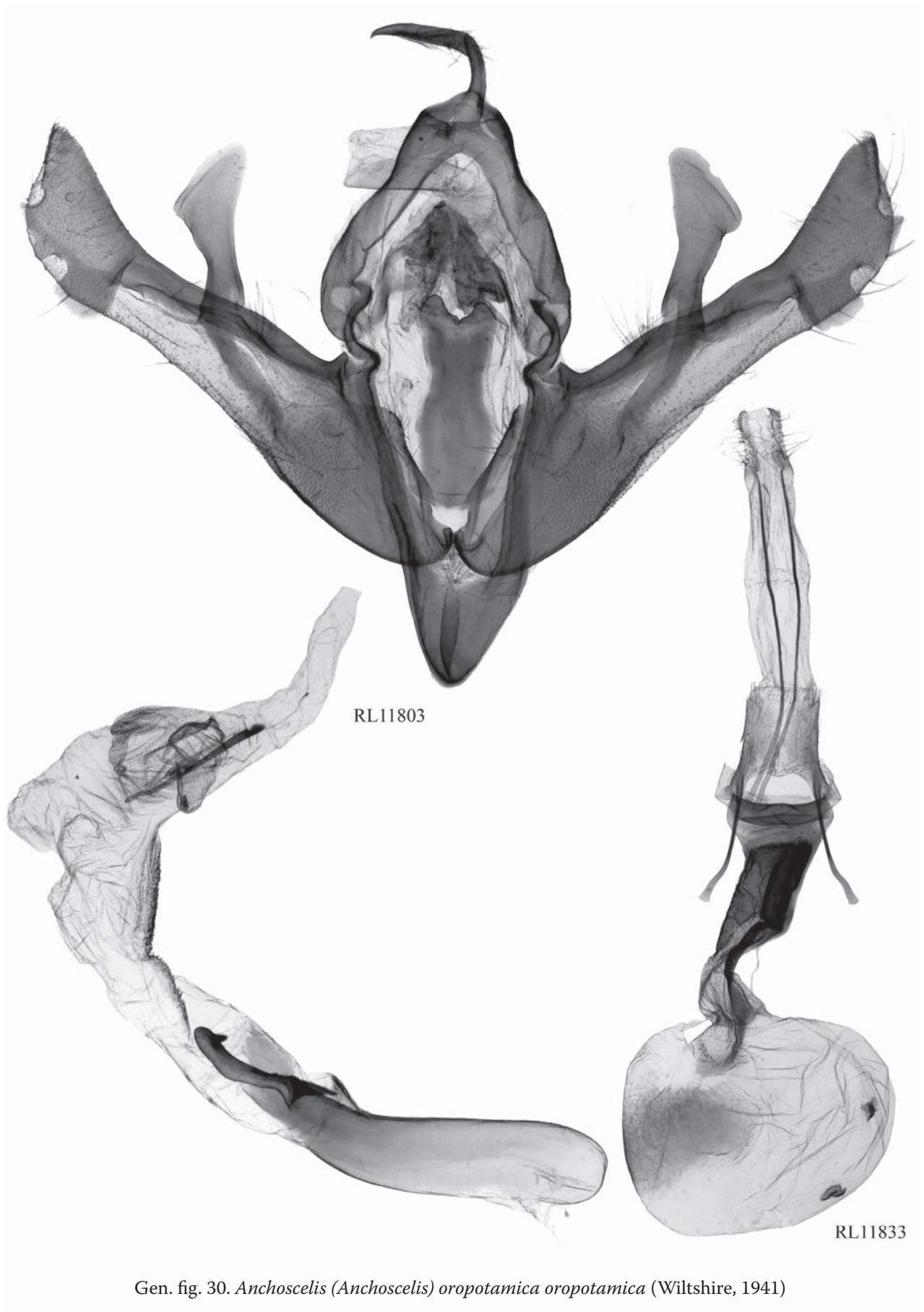
Gen. fig. 26. *Anchoscelis (Anchoscelis) kindermanni* (Fischer von Röslerstamm, 1838)

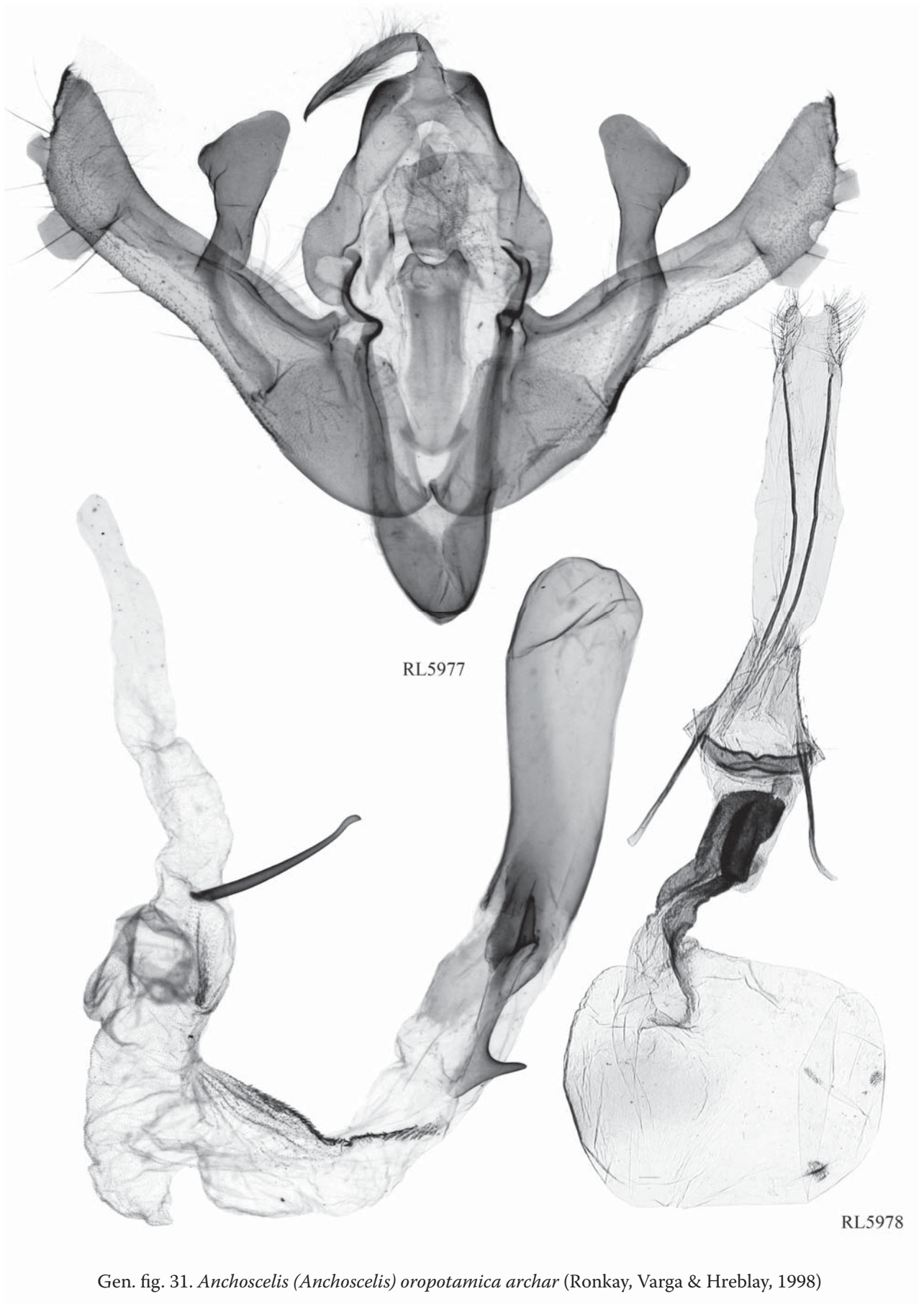


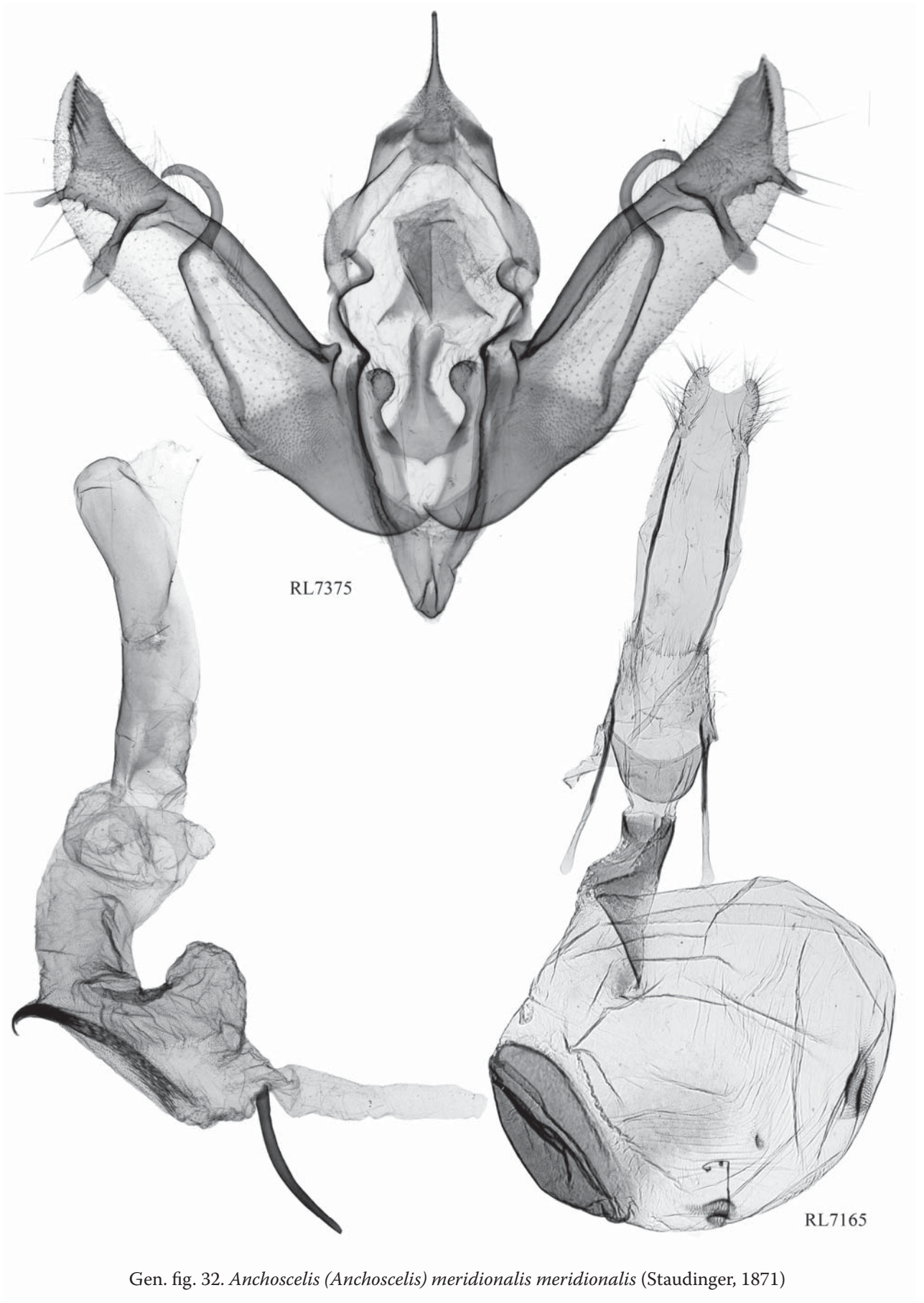


Gen. fig. 28. *Anchoscelis (Anchoscelis) rupicapra rupicapra* (Staudinger, 1879)





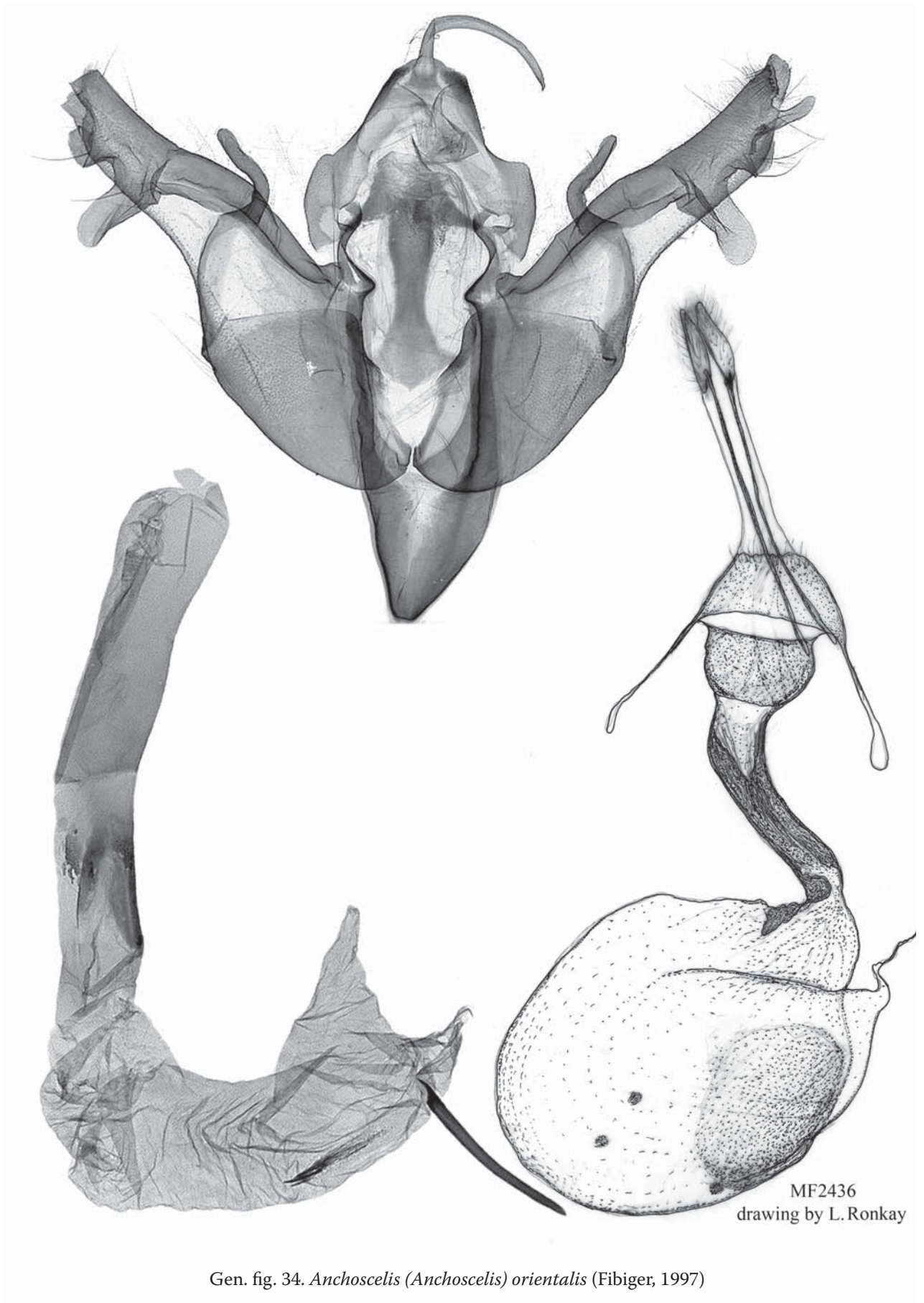


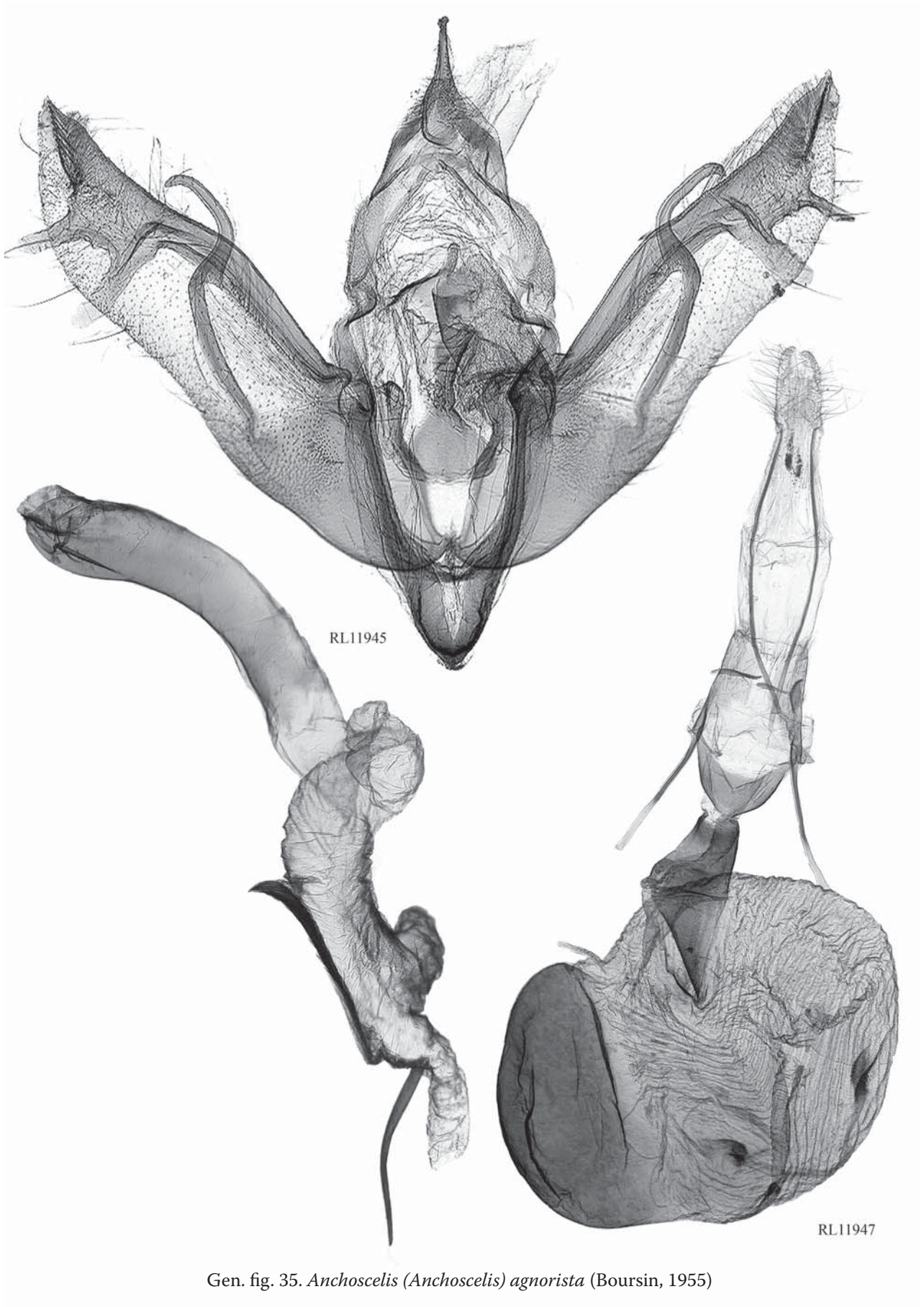


Gen. fig. 32. *Anchoscelis (Anchoscelis) meridionalis meridionalis* (Staudinger, 1871)



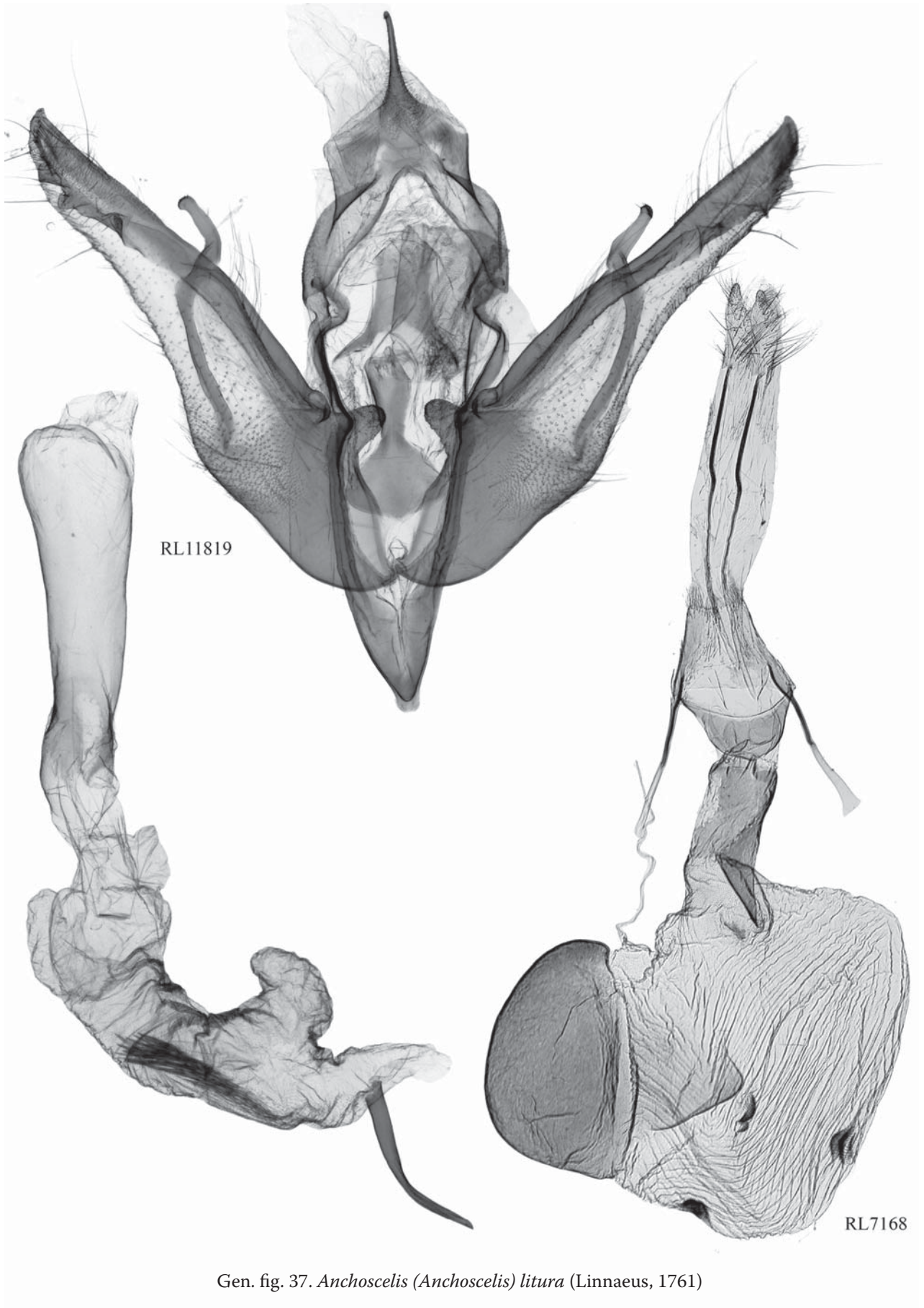
Gen. fig. 33. *Anchoscelis (Anchoscelis) meridionalis maghrebianus* ssp. n.



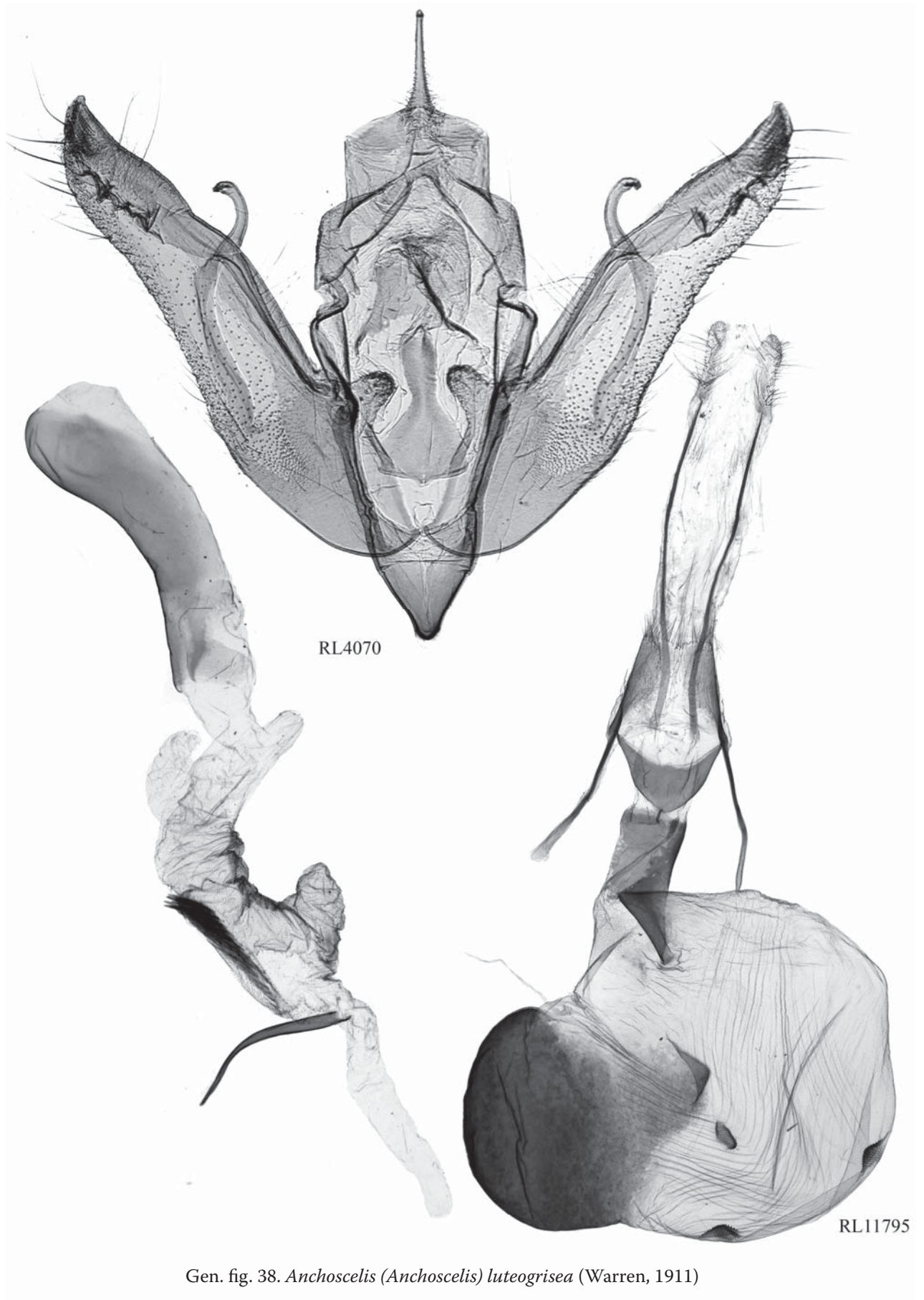


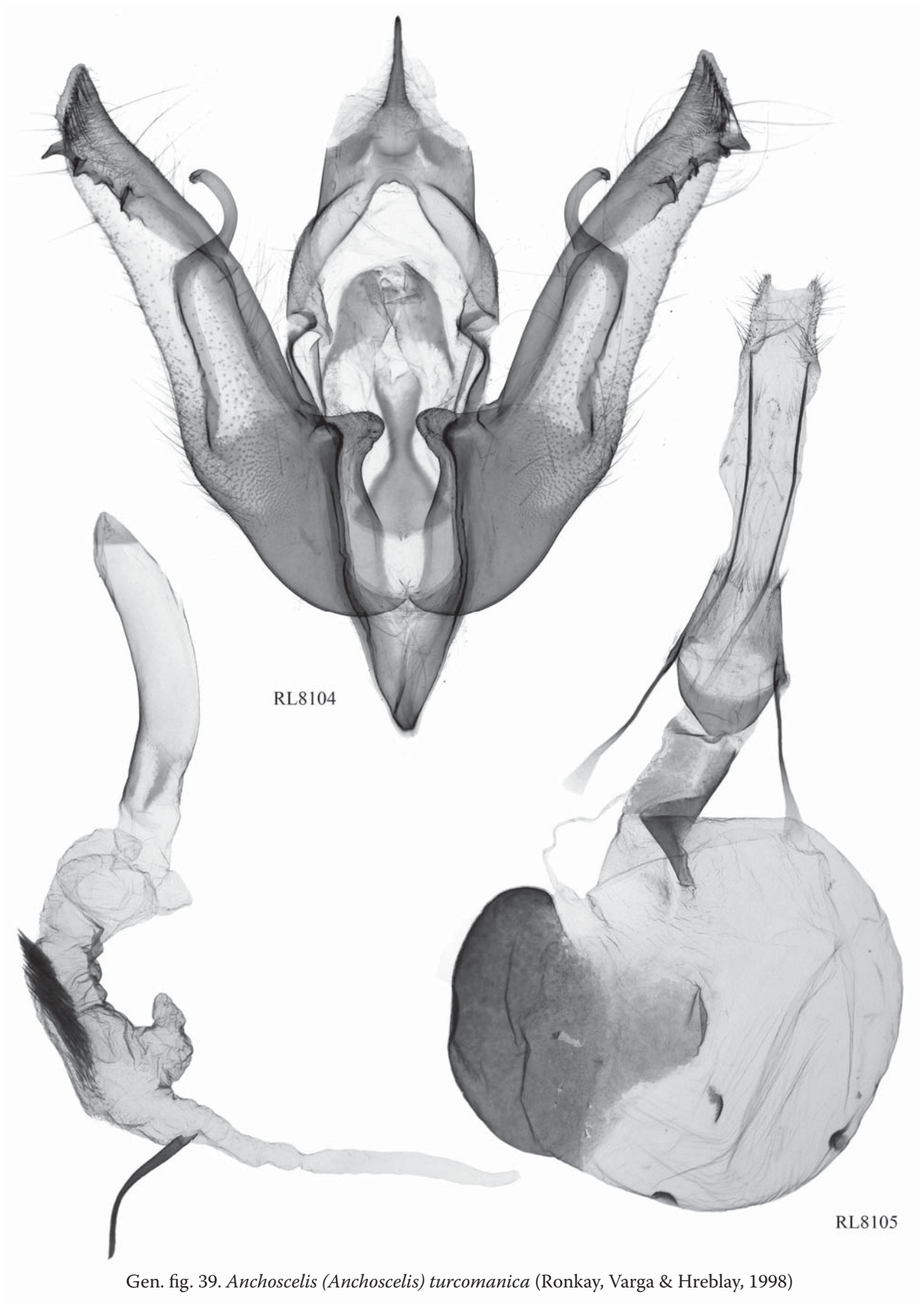
Gen. fig. 35. *Anchoscelis (Anchoscelis) agnorista* (Boursin, 1955)



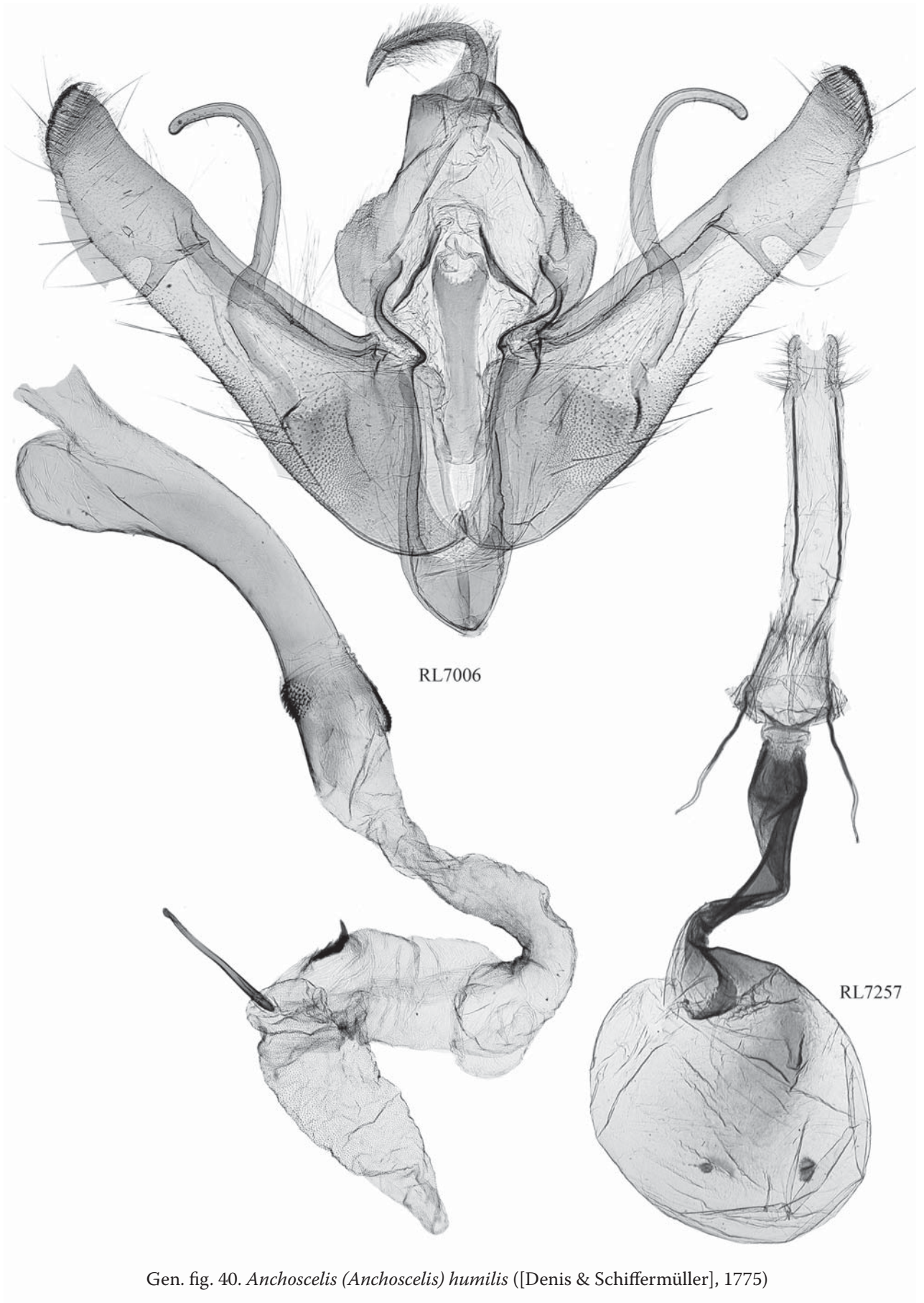


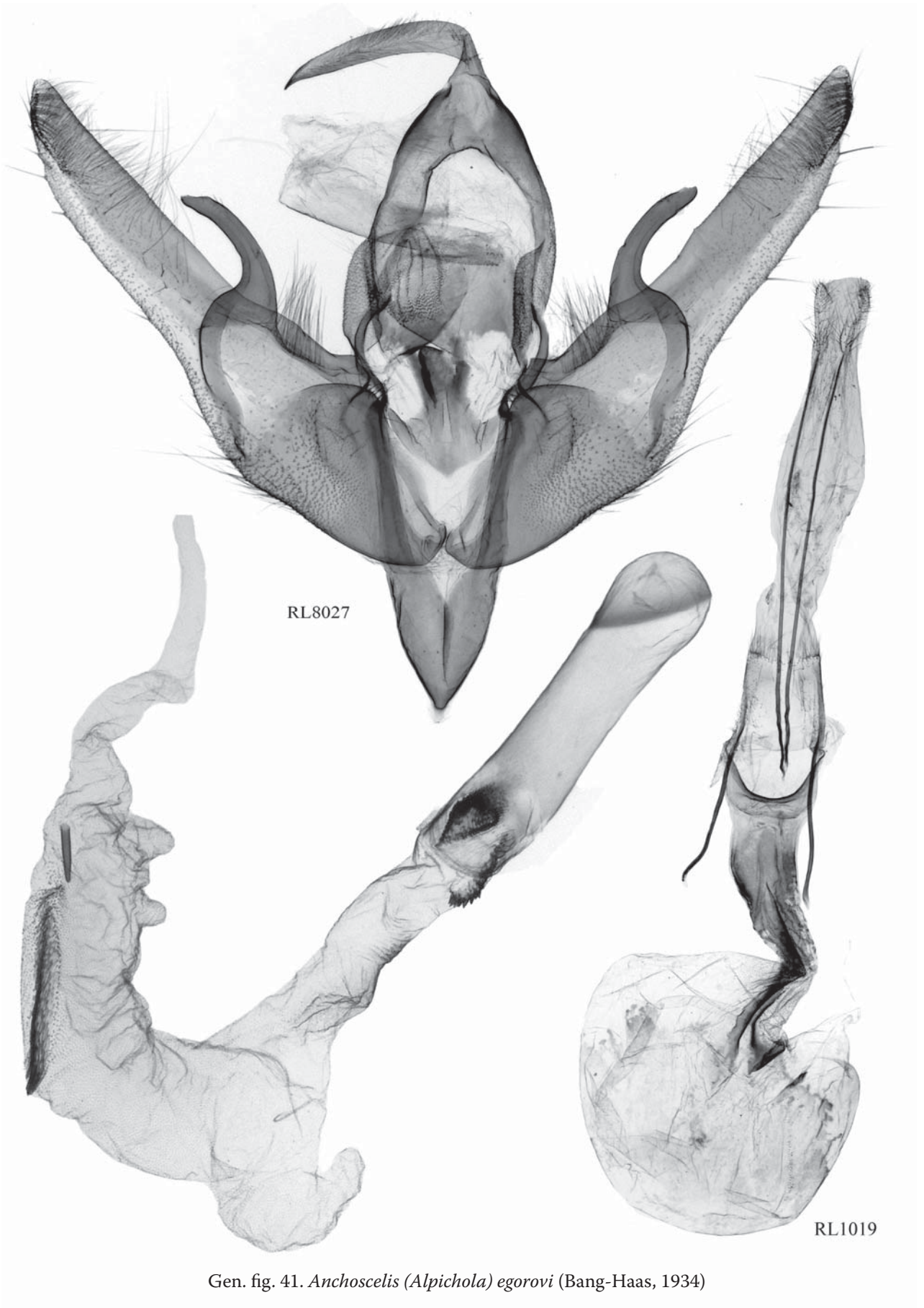
Gen. fig. 37. *Anchoscelis (Anchoscelis) litura* (Linnaeus, 1761)





Gen. fig. 39. *Anchoscelis (Anchoscelis) turcomanica* (Ronkay, Varga & Hreblay, 1998)





Gen. fig. 41. *Anchoscelis (Alpichola) egorovi* (Bang-Haas, 1934)





Gen. fig. 43. *Anchoscelis (Alpichola) lactiflora lactiflora* (Draudt, 1934)



Gen. fig. 44. *Anchoscelis (Alpichola) lactiflora wautieri* (Dufay, 1975)



Gen. fig. 45. *Anchoscelis (Alpichola) janhillmanni* (Hacker & Moberg, 1989)



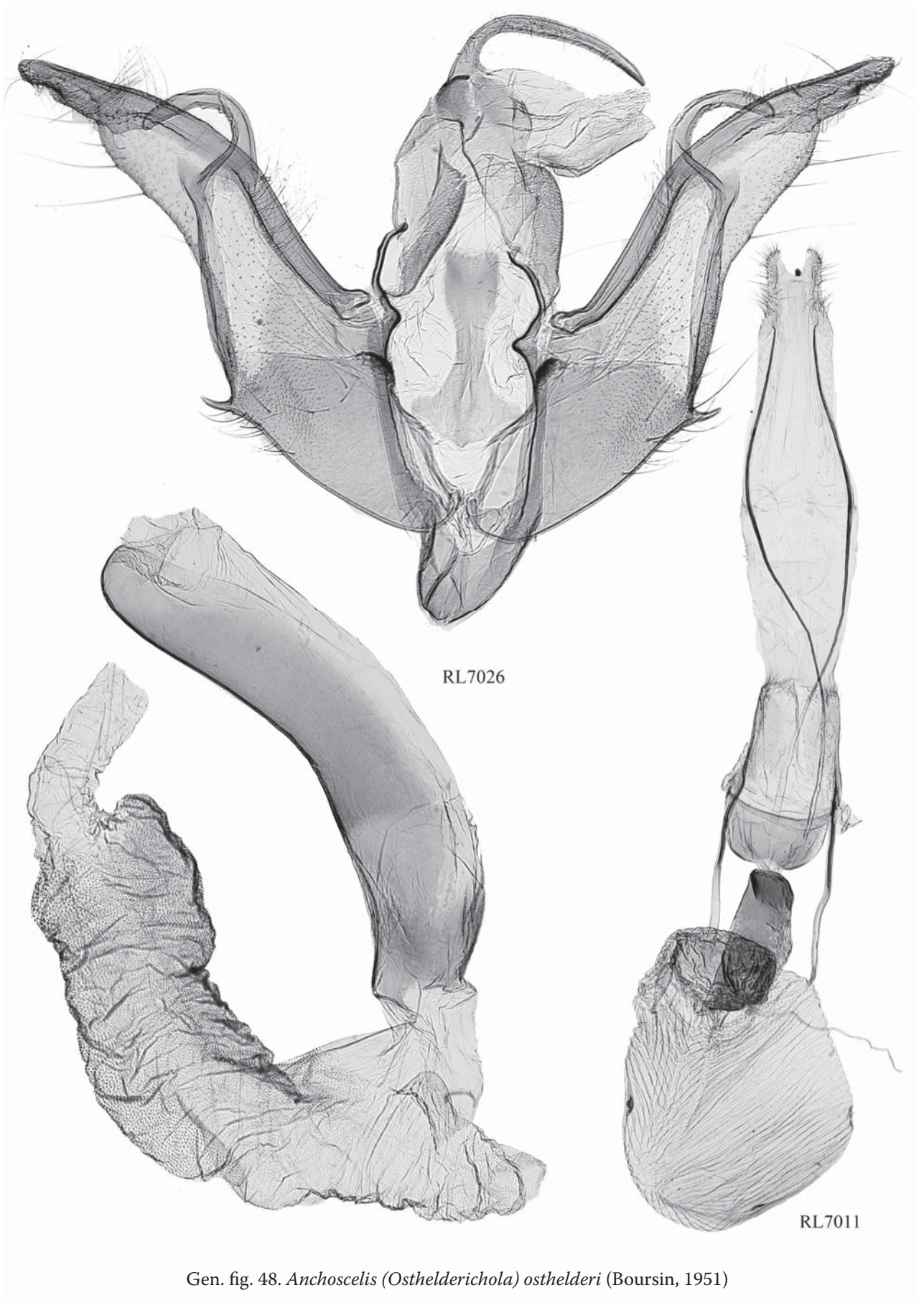
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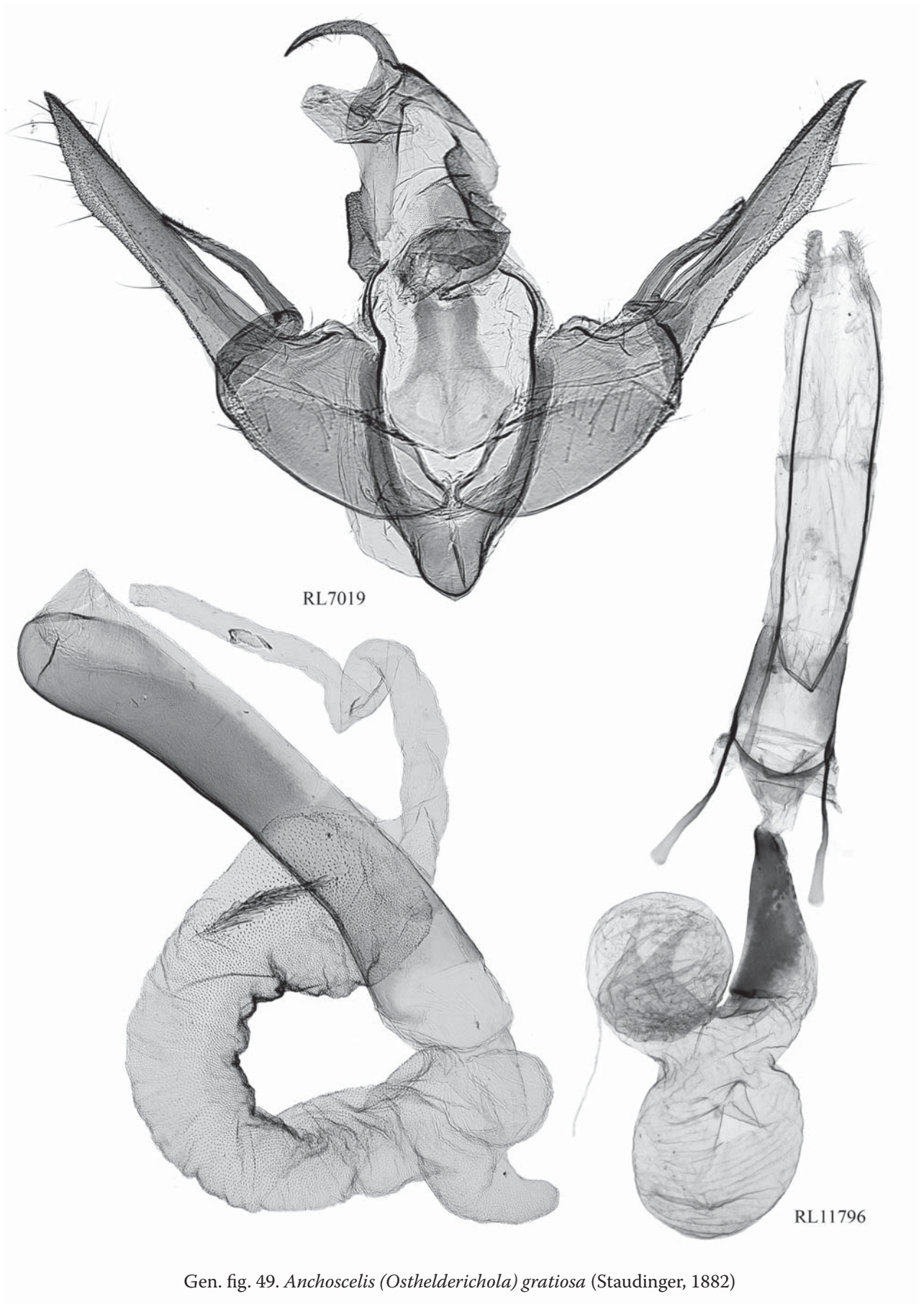
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Gen. fig. 46. *Anchoscelis (Alpichola) elbursica* (Gyulai & Ronkay, 2006)

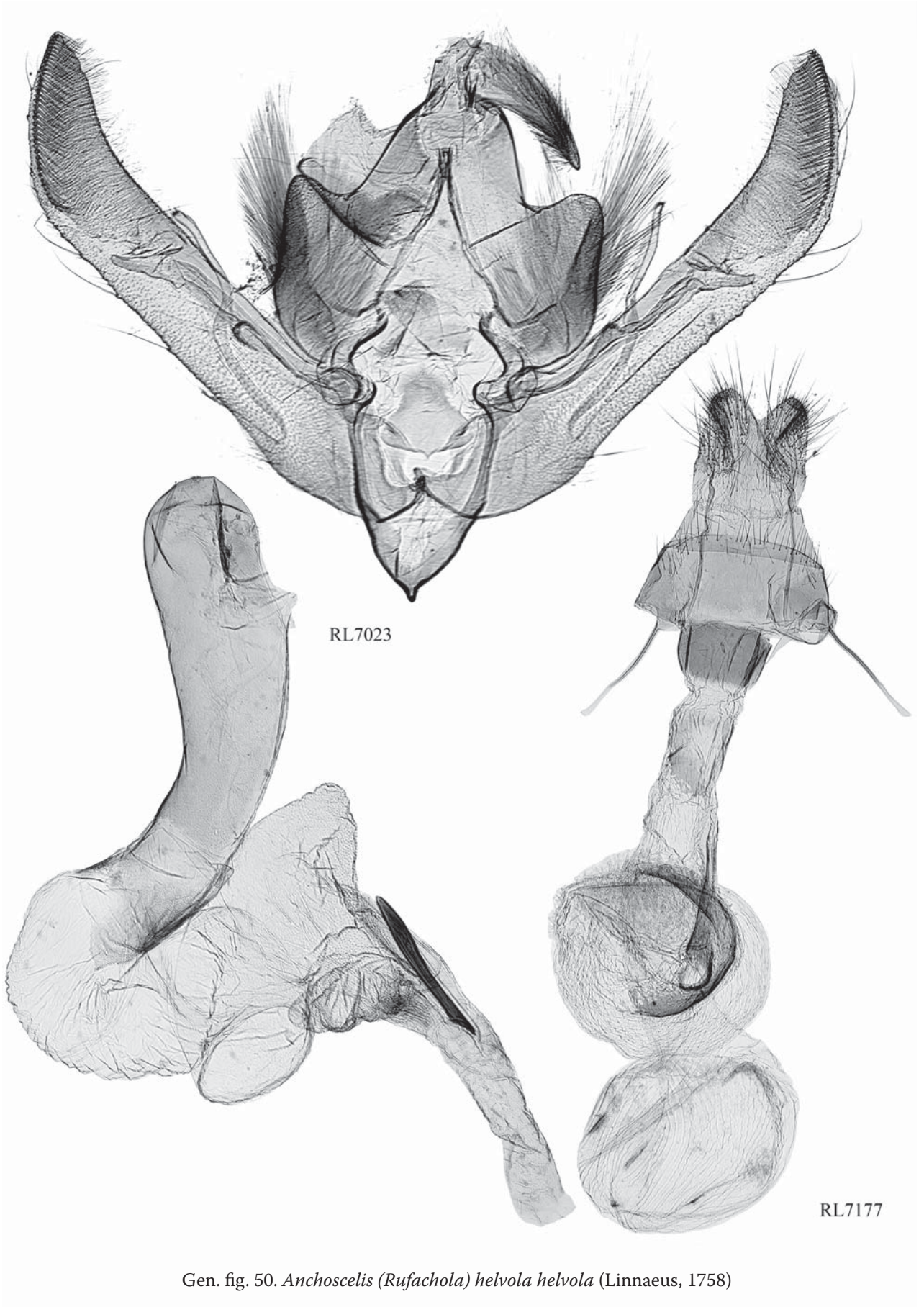


Gen. fig. 47. *Anchoscelis (Alpichola) dubatolovi* (Varga & Ronkay, 1991)

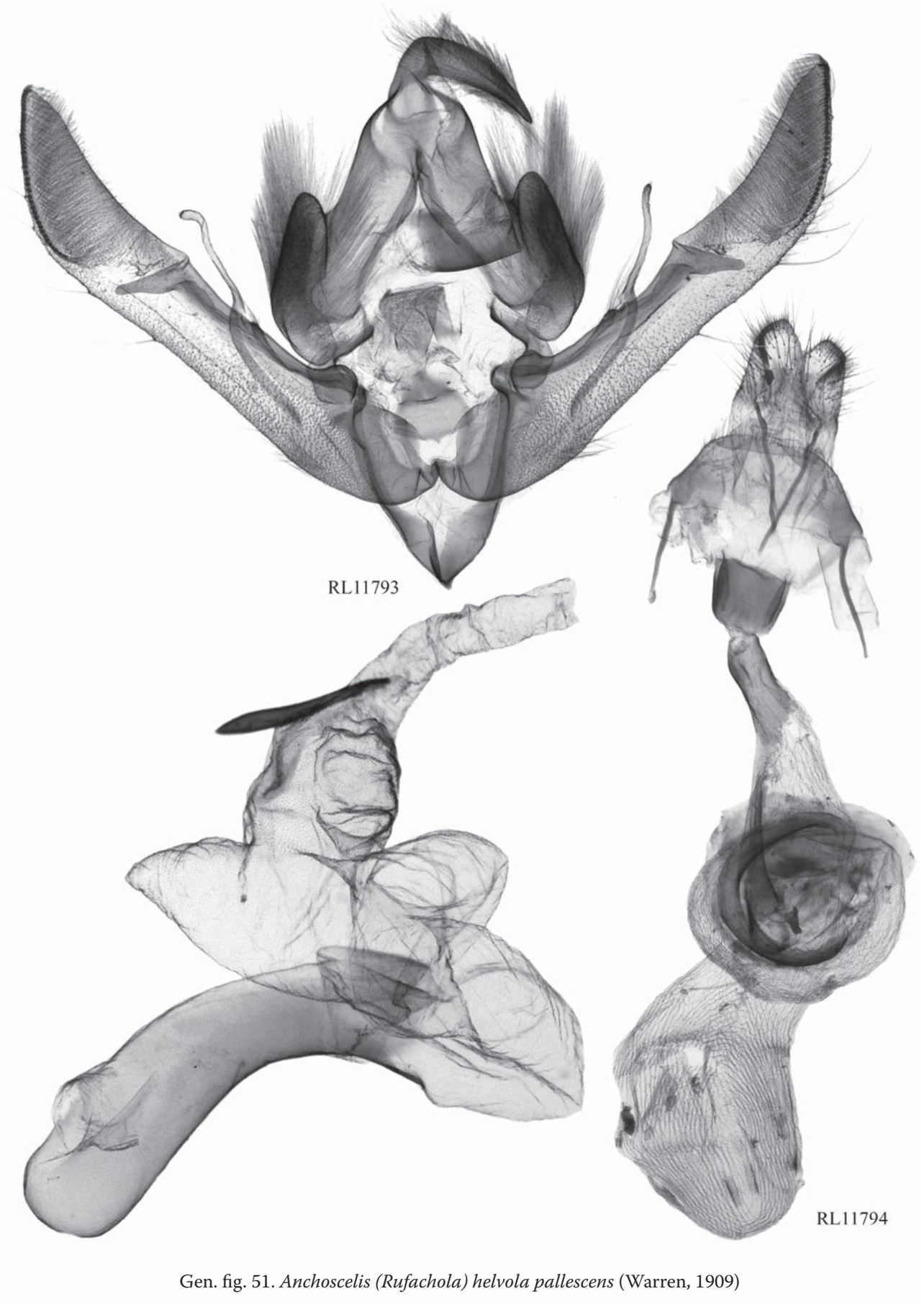




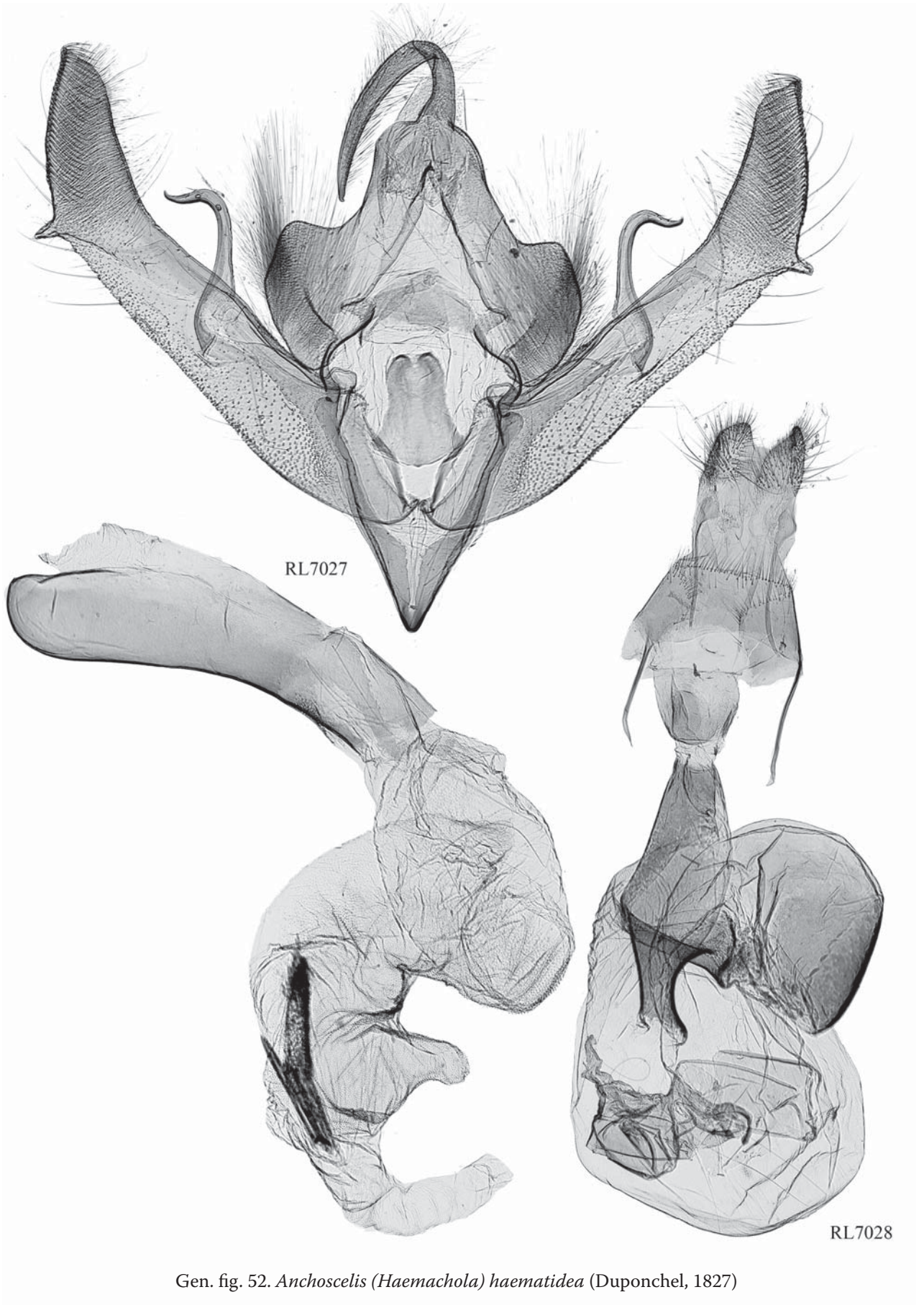
Gen. fig. 49. *Anchoscelis (Osthelderichola) gratiosa* (Staudinger, 1882)



Gen. fig. 50. *Anchoscelis (Rufachola) helvola helvola* (Linnaeus, 1758)



Gen. fig. 51. *Anchoscelis (Rufachola) helvola pallescens* (Warren, 1909)



Gen. fig. 52. *Anchoscelis (Haemachola) haematidea* (Duponchel, 1827)



Gen. fig. 53. *Maraschia grisescens grisescens* Osthelder, 1933

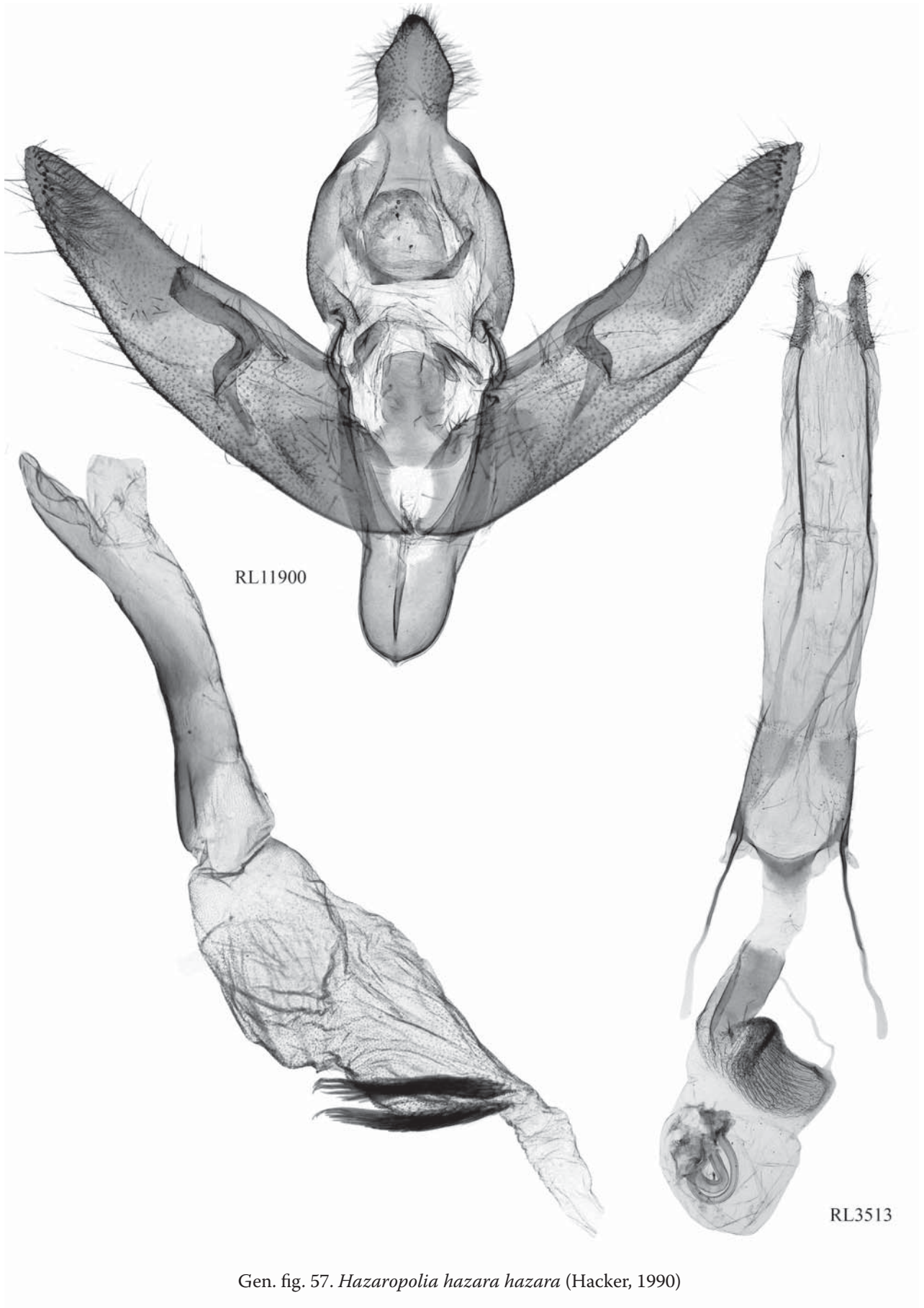


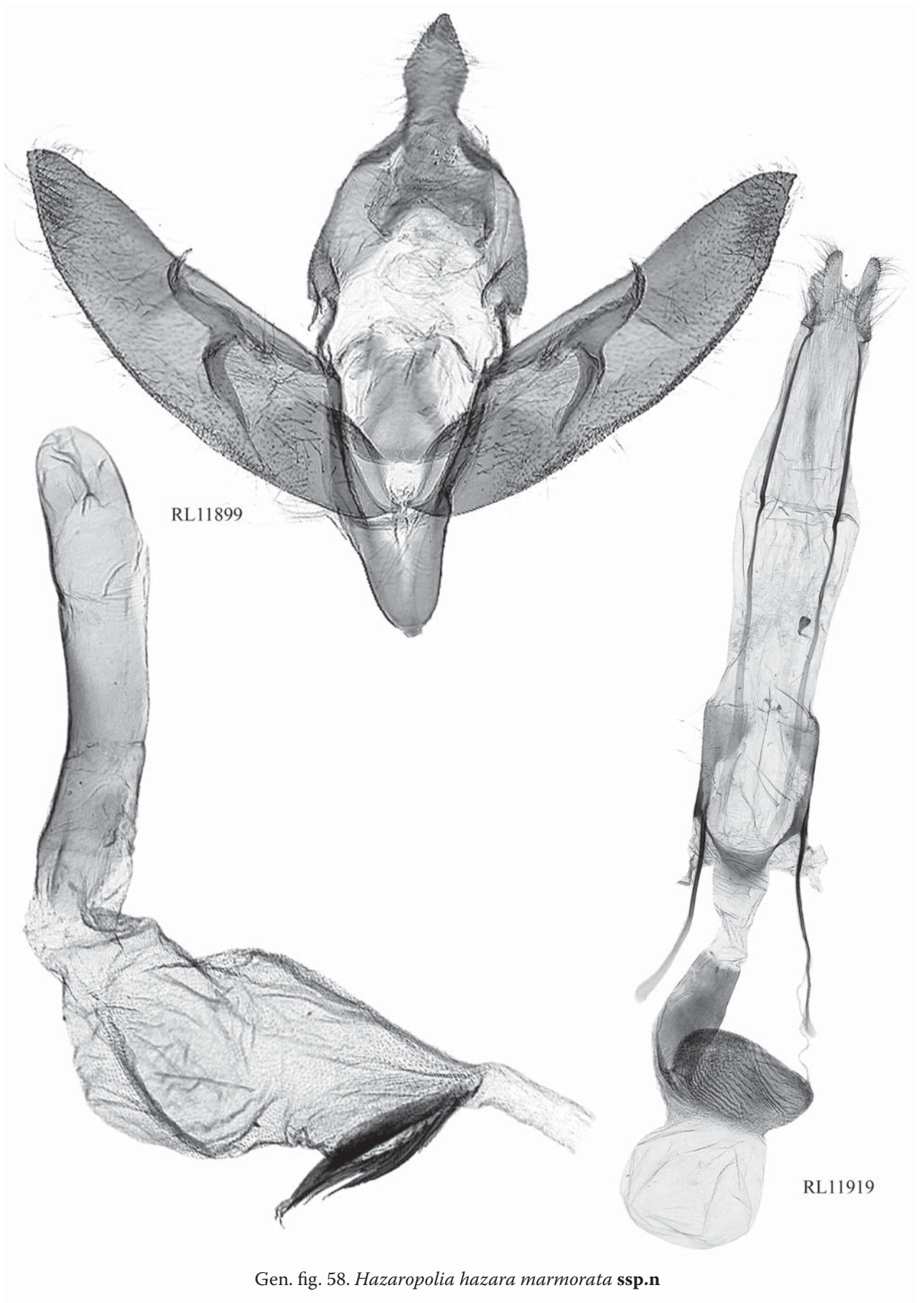


Gen. fig. 55. *Maraschia hissarensis* Varga & Ronkay, 1991



Gen. fig. 56. *Maraschia secunda* Hacker, 1990





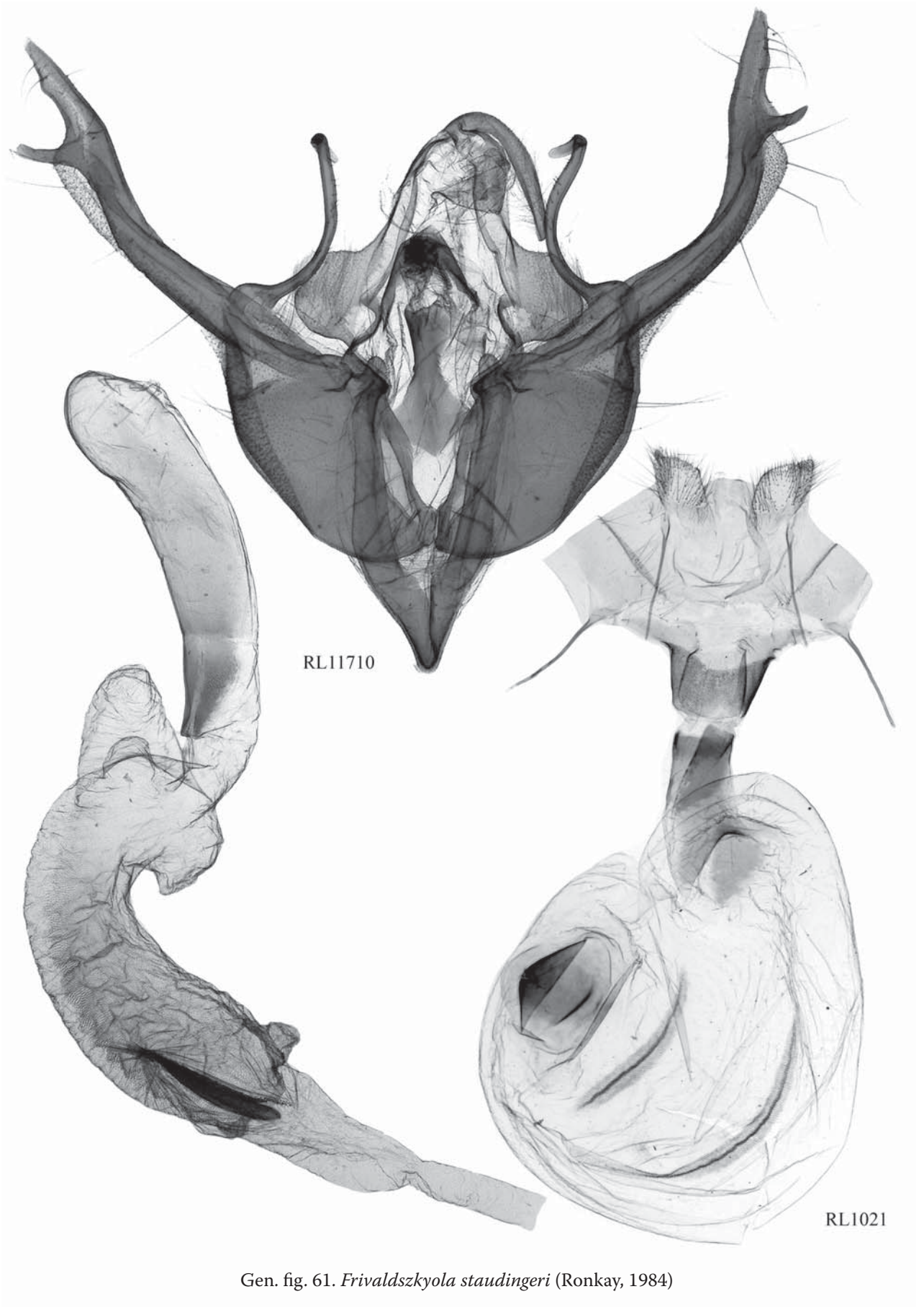
Gen. fig. 58. *Hazaropolia hazara marmorata* ssp.n



Gen. fig. 59. *Frivaldszkyola mansueta mansueta* (Herrich-Schäffer, 1850)

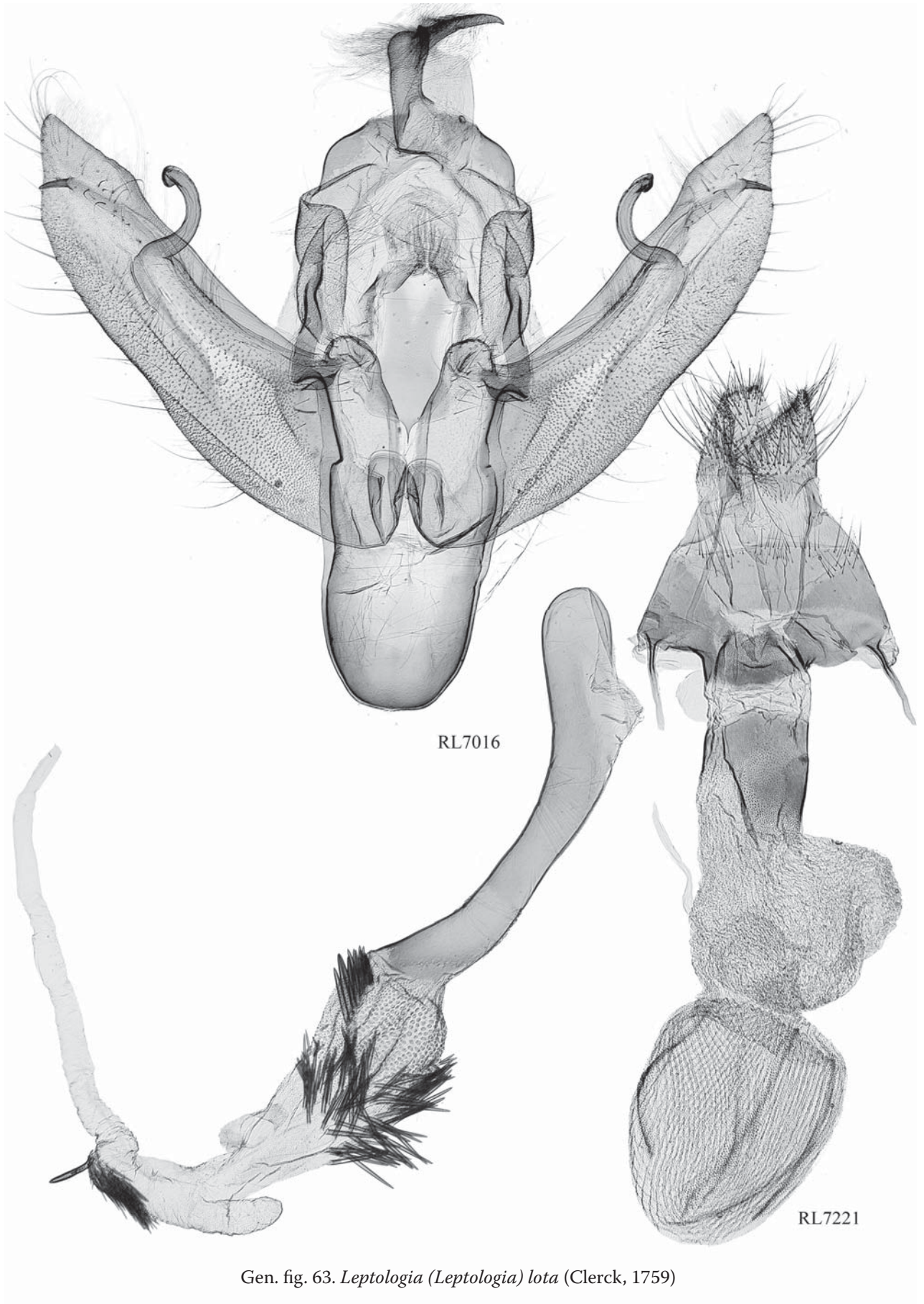


Gen. fig. 60. *Frivaldszkyola mansueta sphakiota* (Ronkay, Yela & Hreblay, 2001)

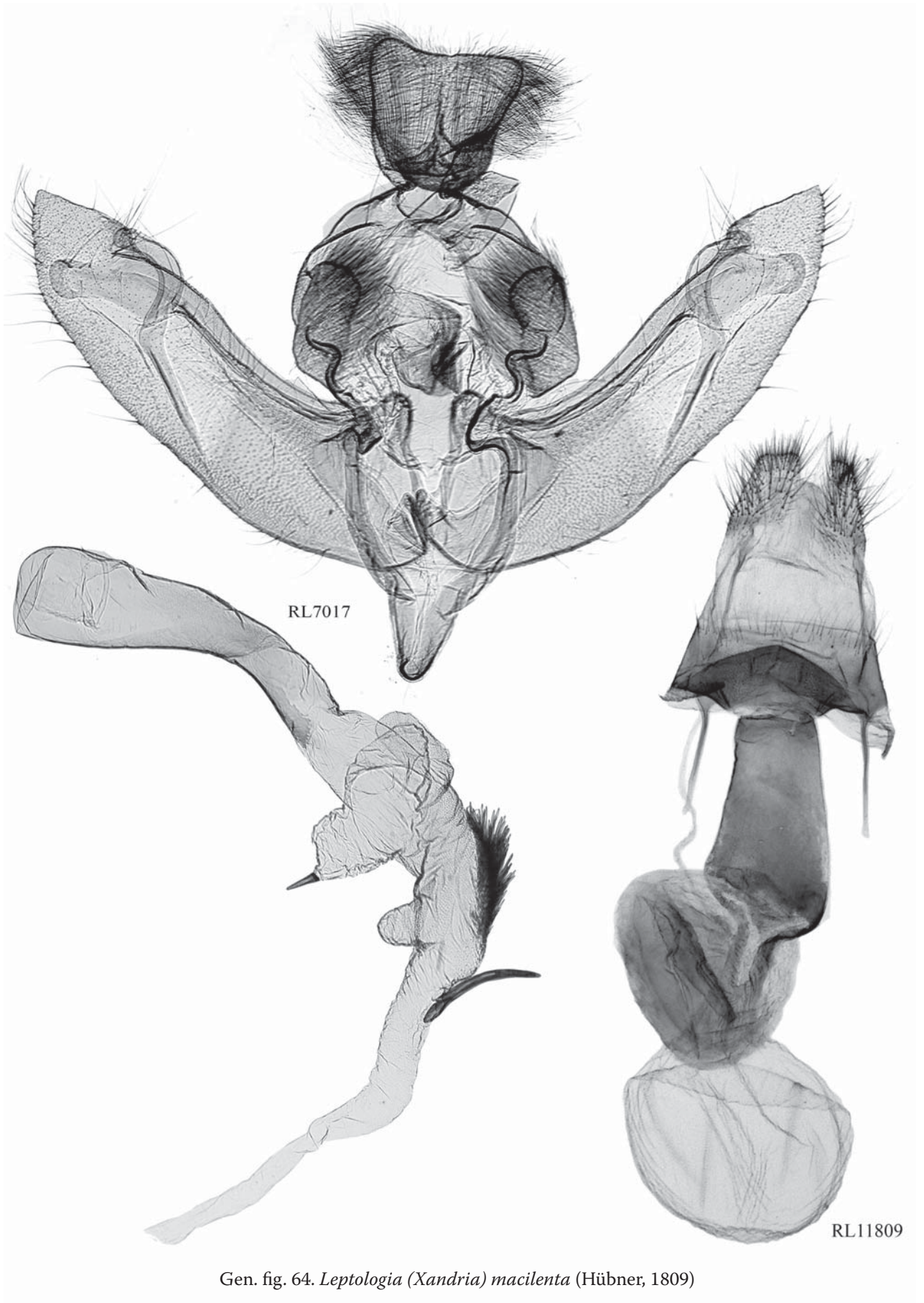




Gen. fig. 62. *Frivaldszkyola elami* (Ronkay, 2001)

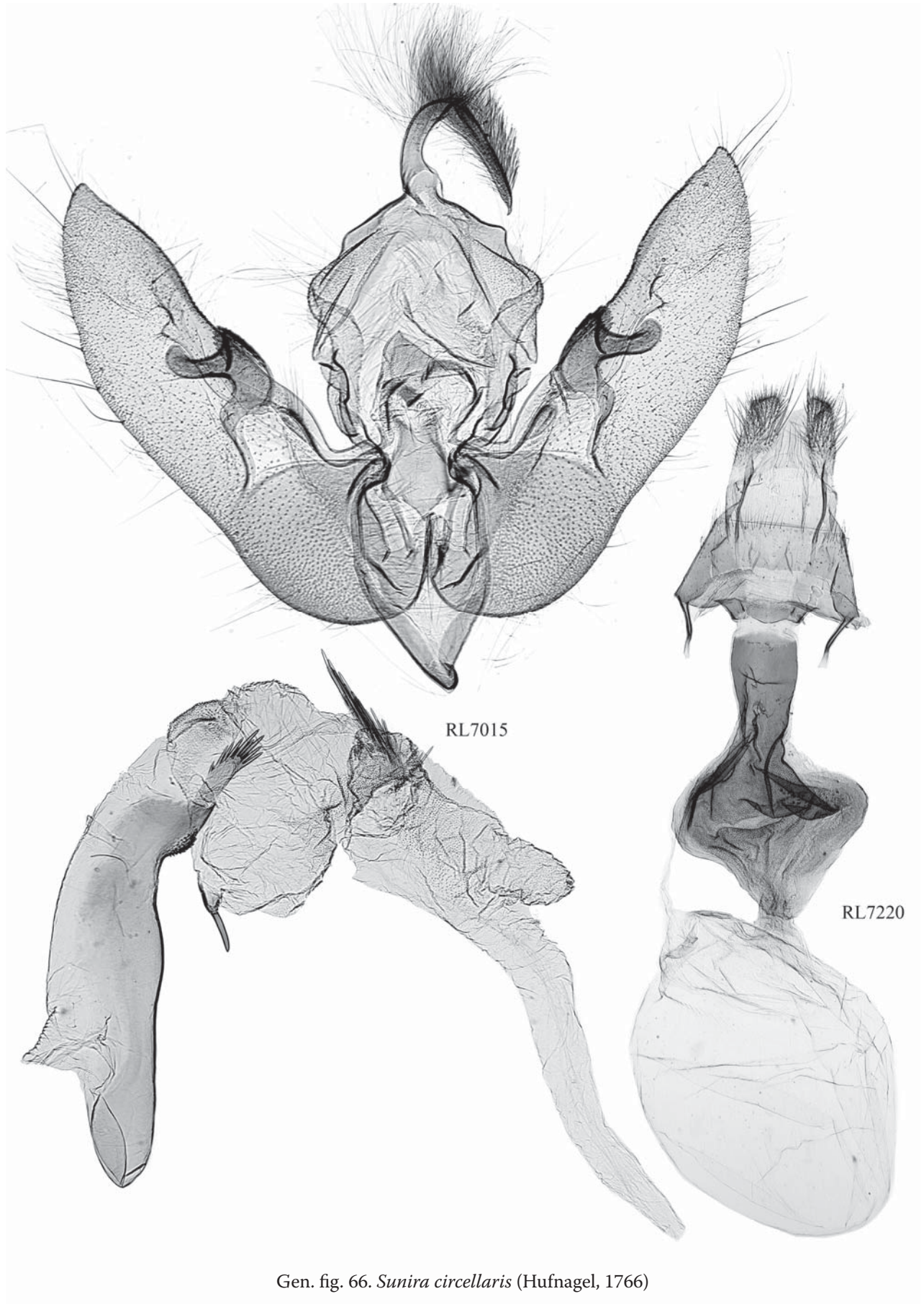


Gen. fig. 63. *Leptologia (Leptologia) lota* (Clerck, 1759)





Gen. fig. 65. *Leptologia (Xandria) blidaensis* (Stertz, 1915)

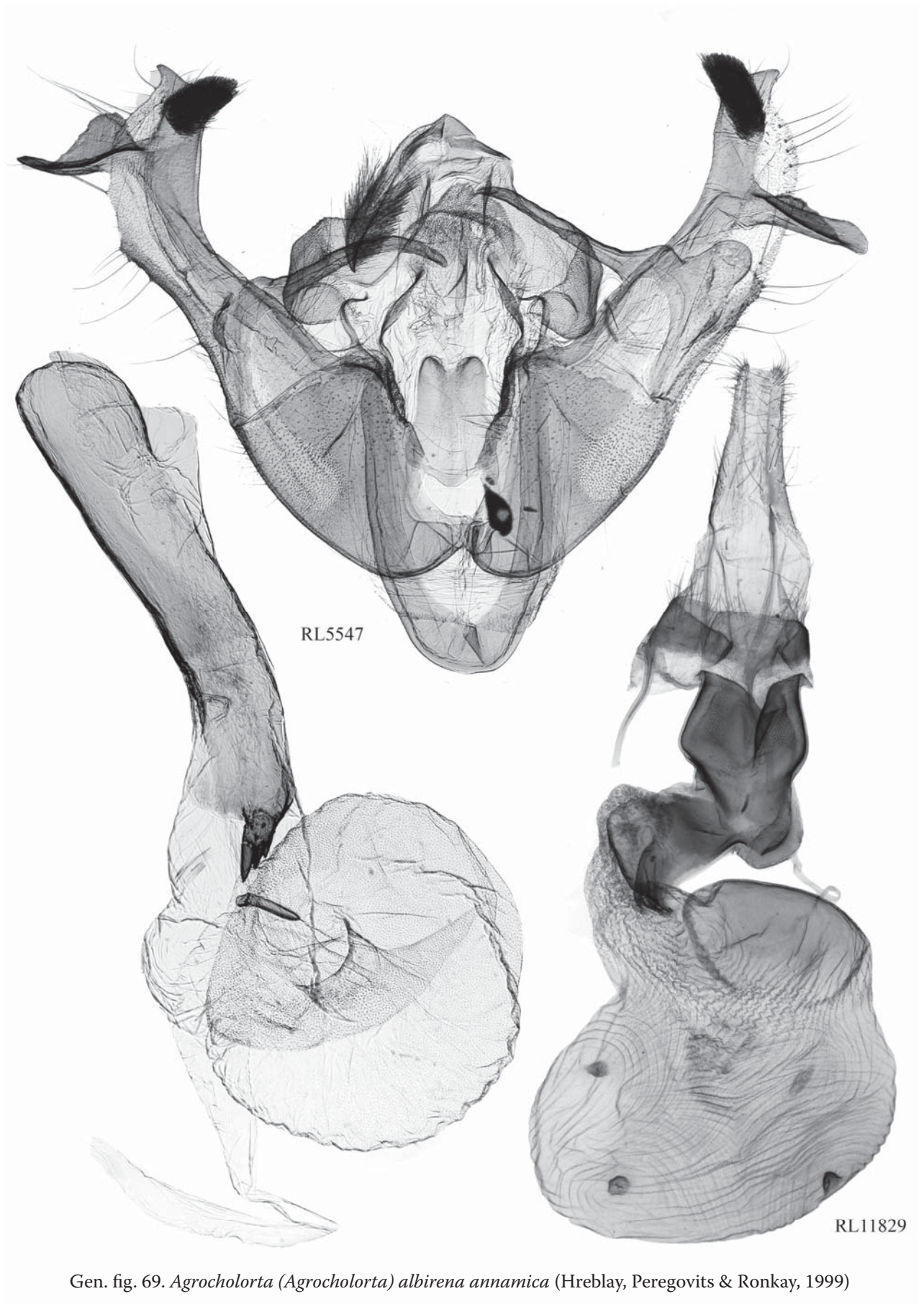


Gen. fig. 66. *Sunira circellaris* (Hufnagel, 1766)

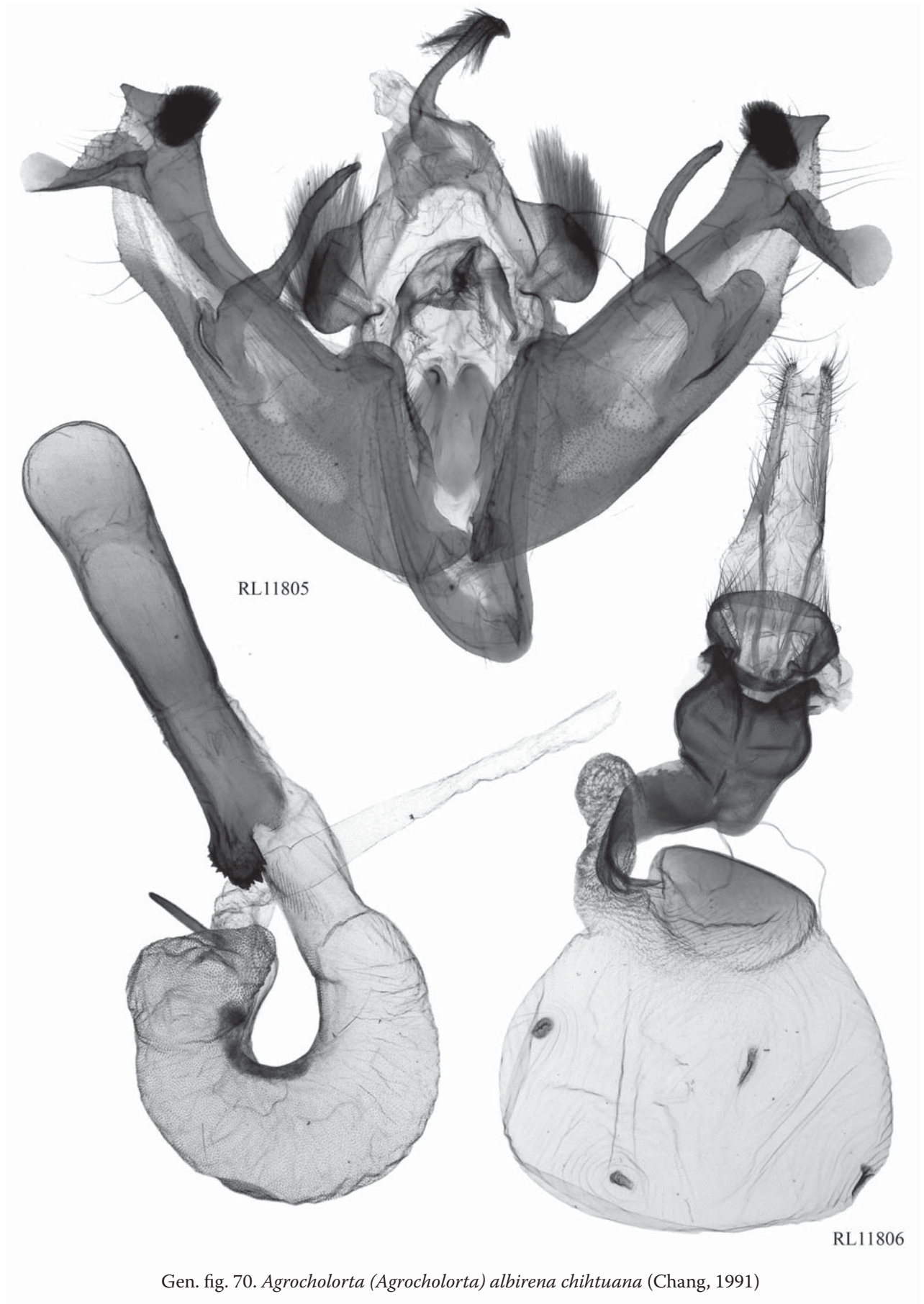


Gen. fig. 67. *Vulpechola vulpecula* (Lederer, 1853)

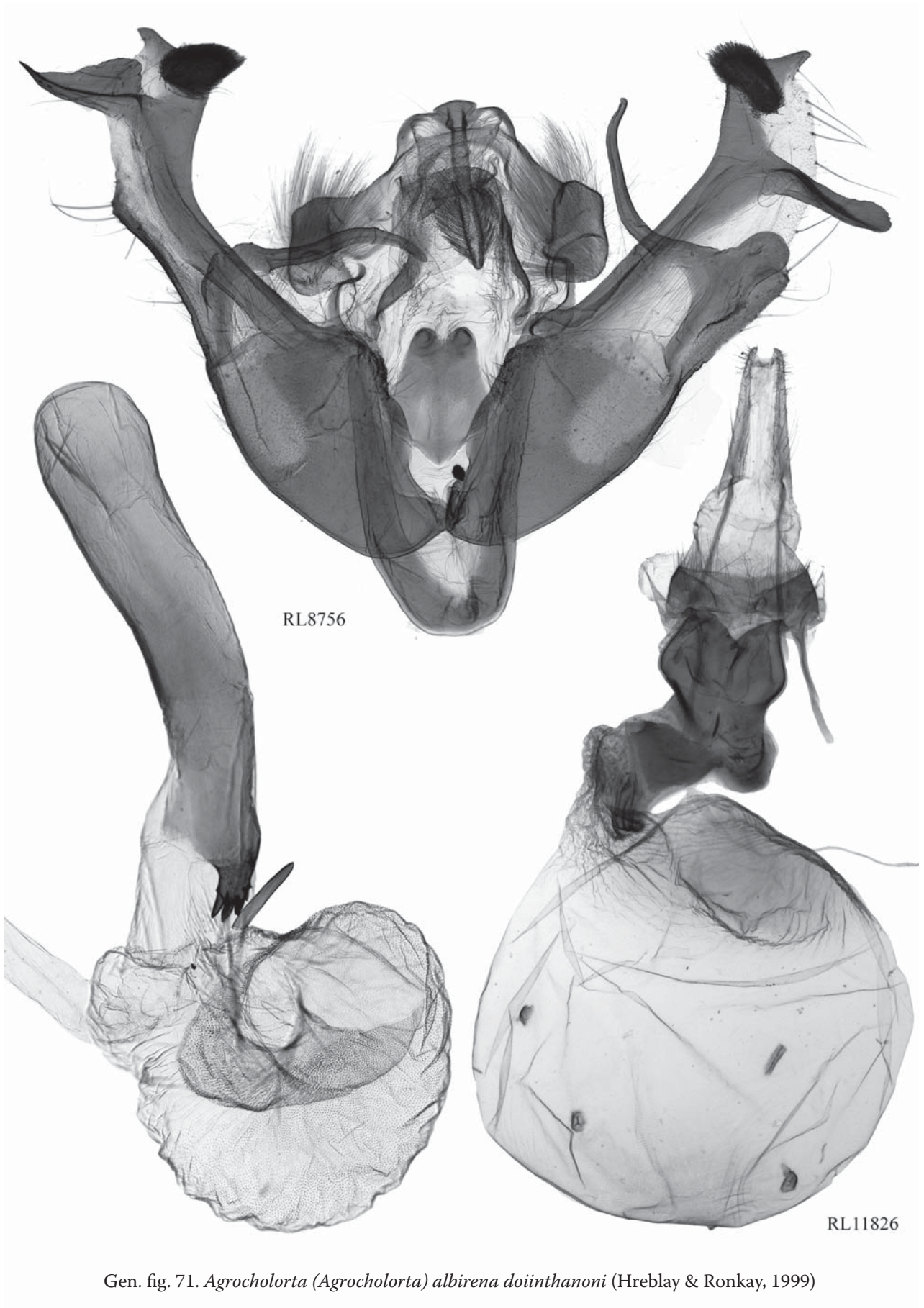




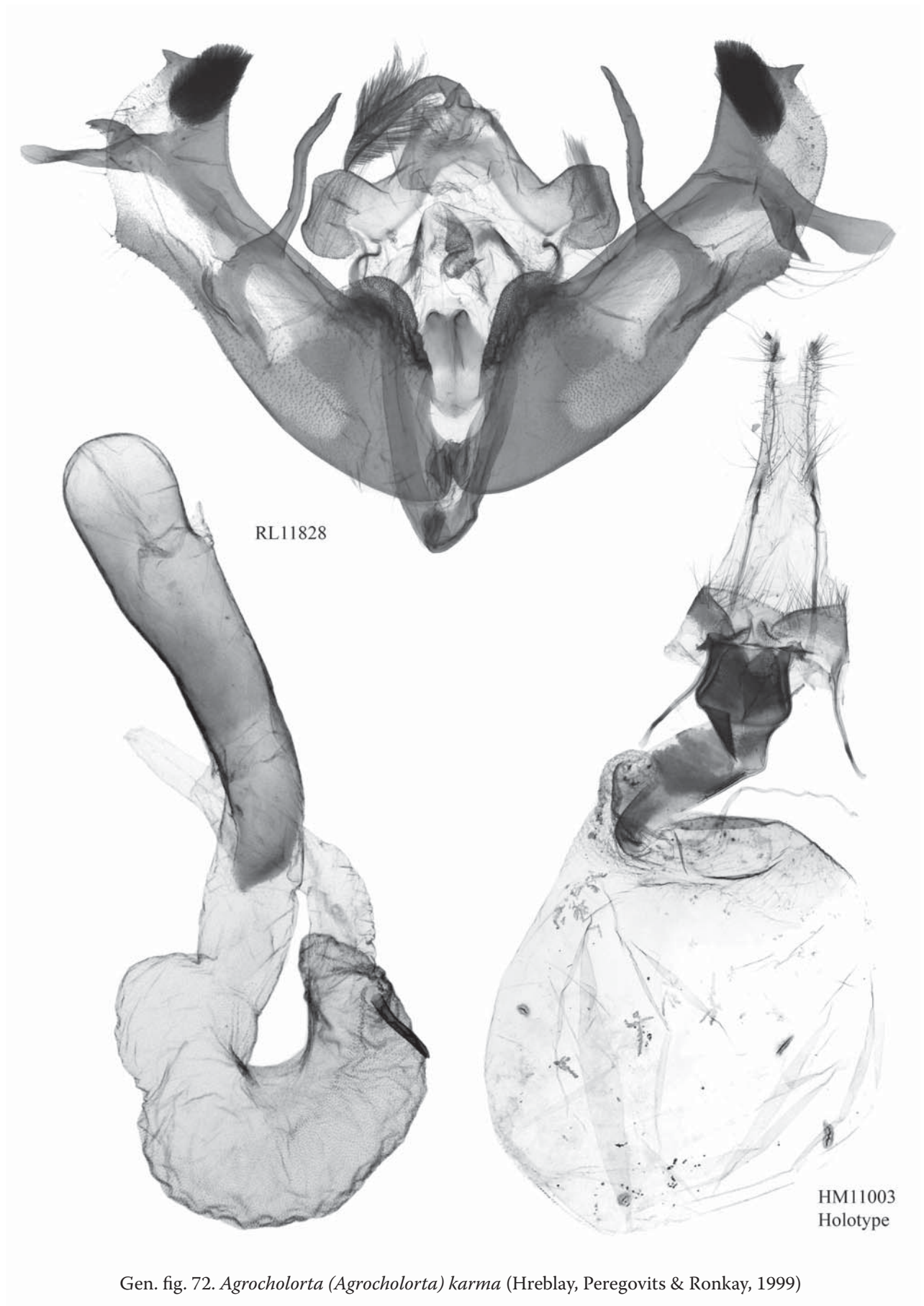
Gen. fig. 69. *Agrocholorta (Agrocholorta) albirena annamica* (Hreblay, Peregovits & Ronkay, 1999)

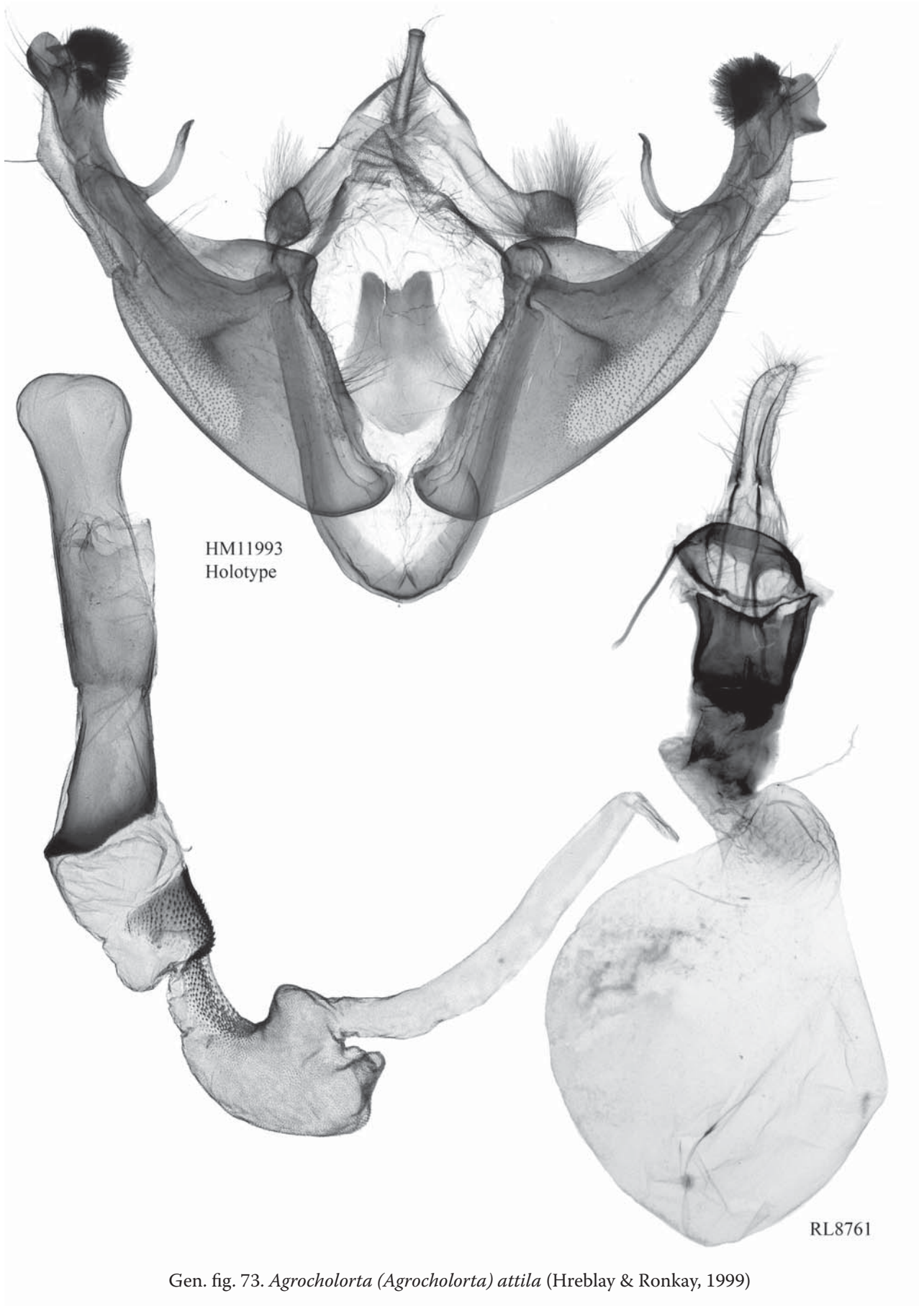


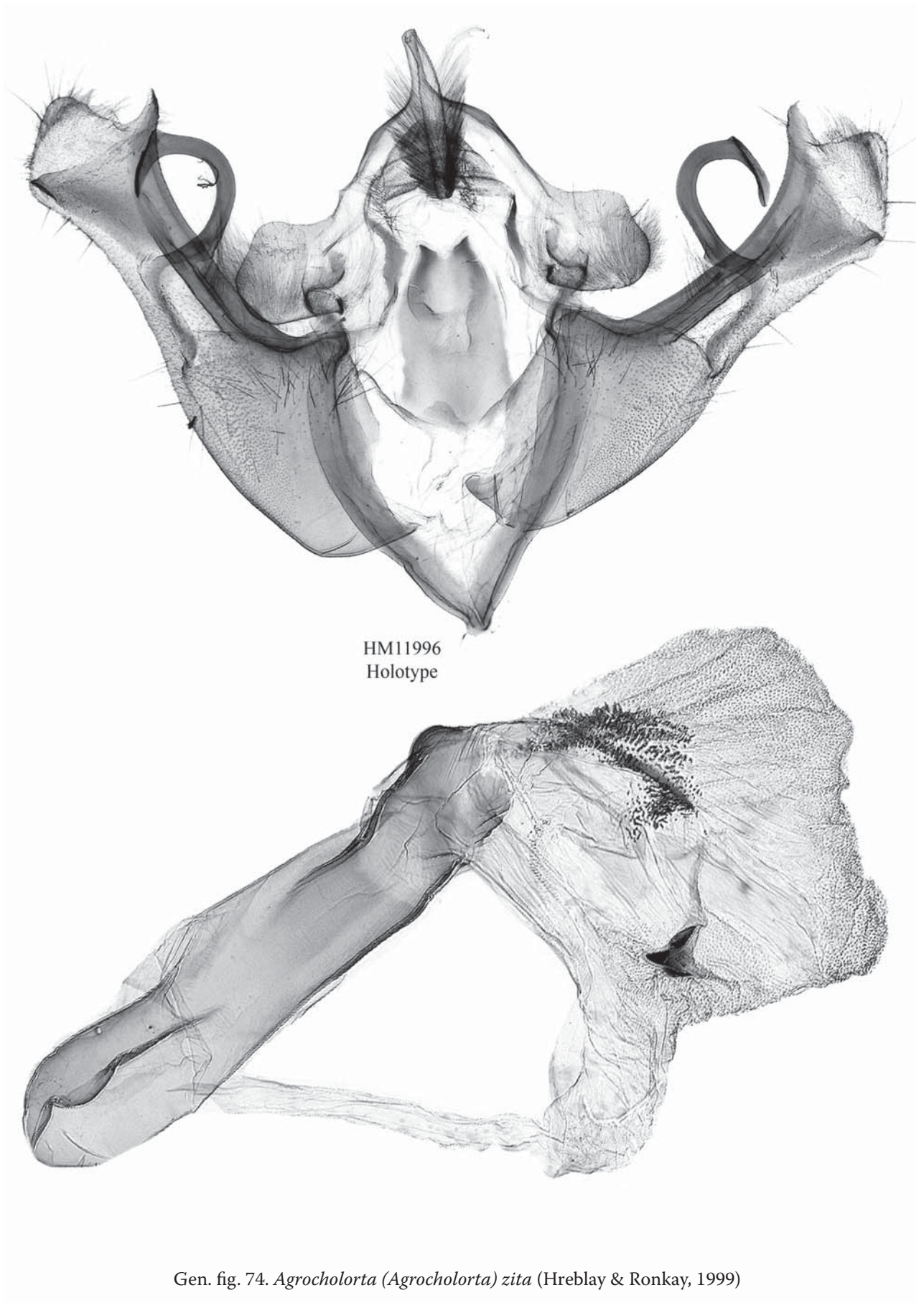
Gen. fig. 70. *Agrocholorta (Agrocholorta) albirena chihuana* (Chang, 1991)

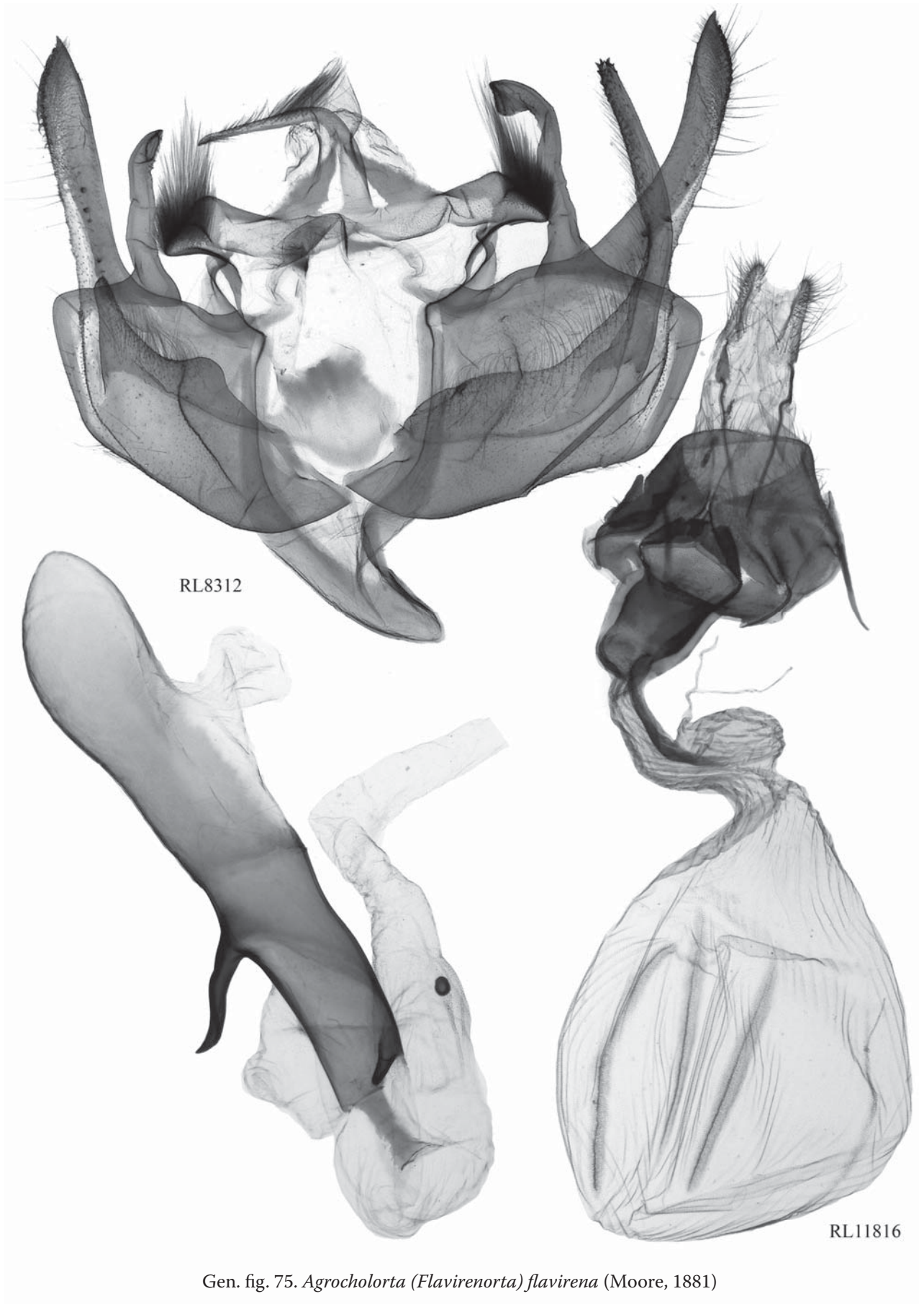


Gen. fig. 71. *Agrocholorta (Agrocholorta) albirena doiinthanoni* (Hreblay & Ronkay, 1999)

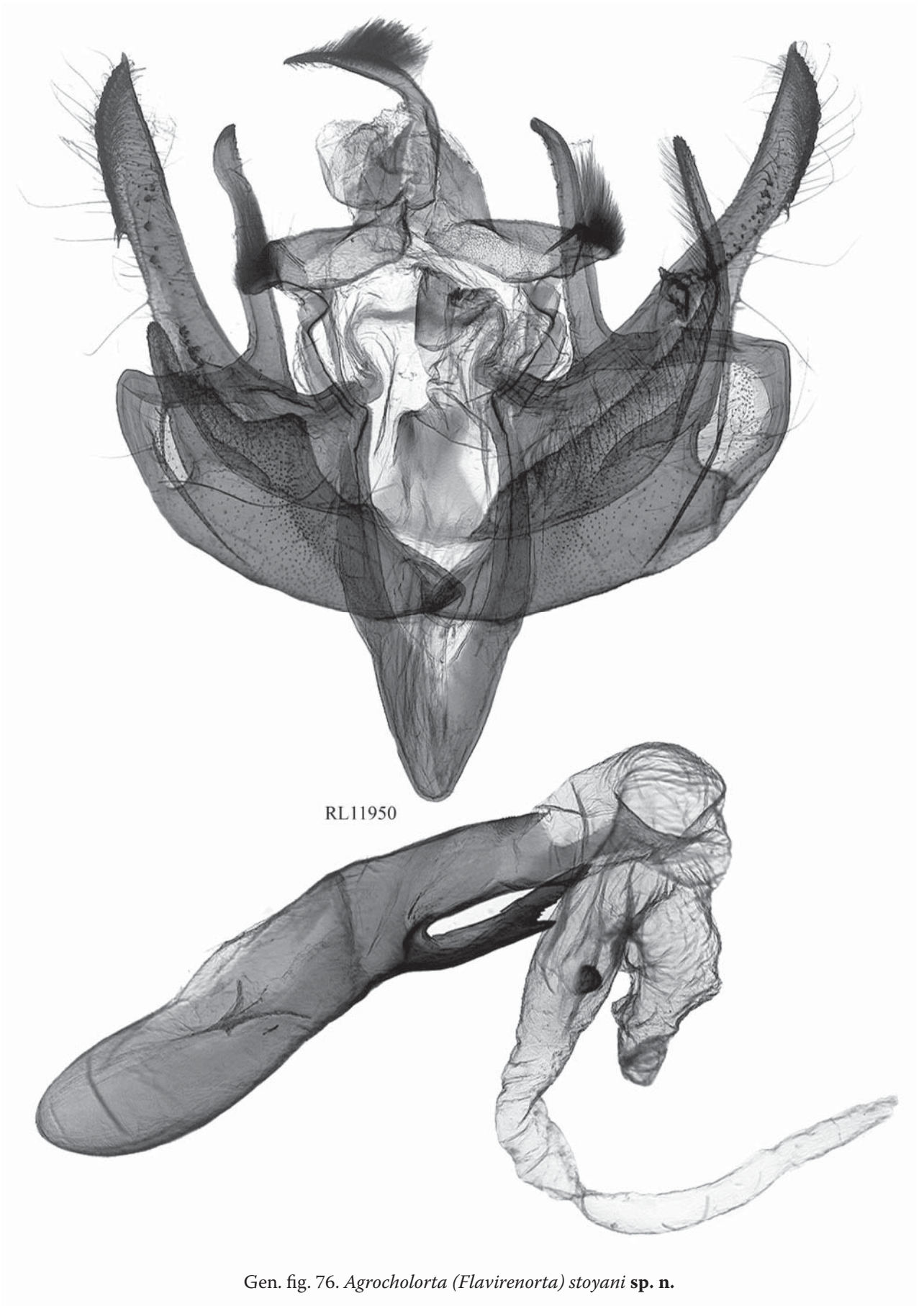


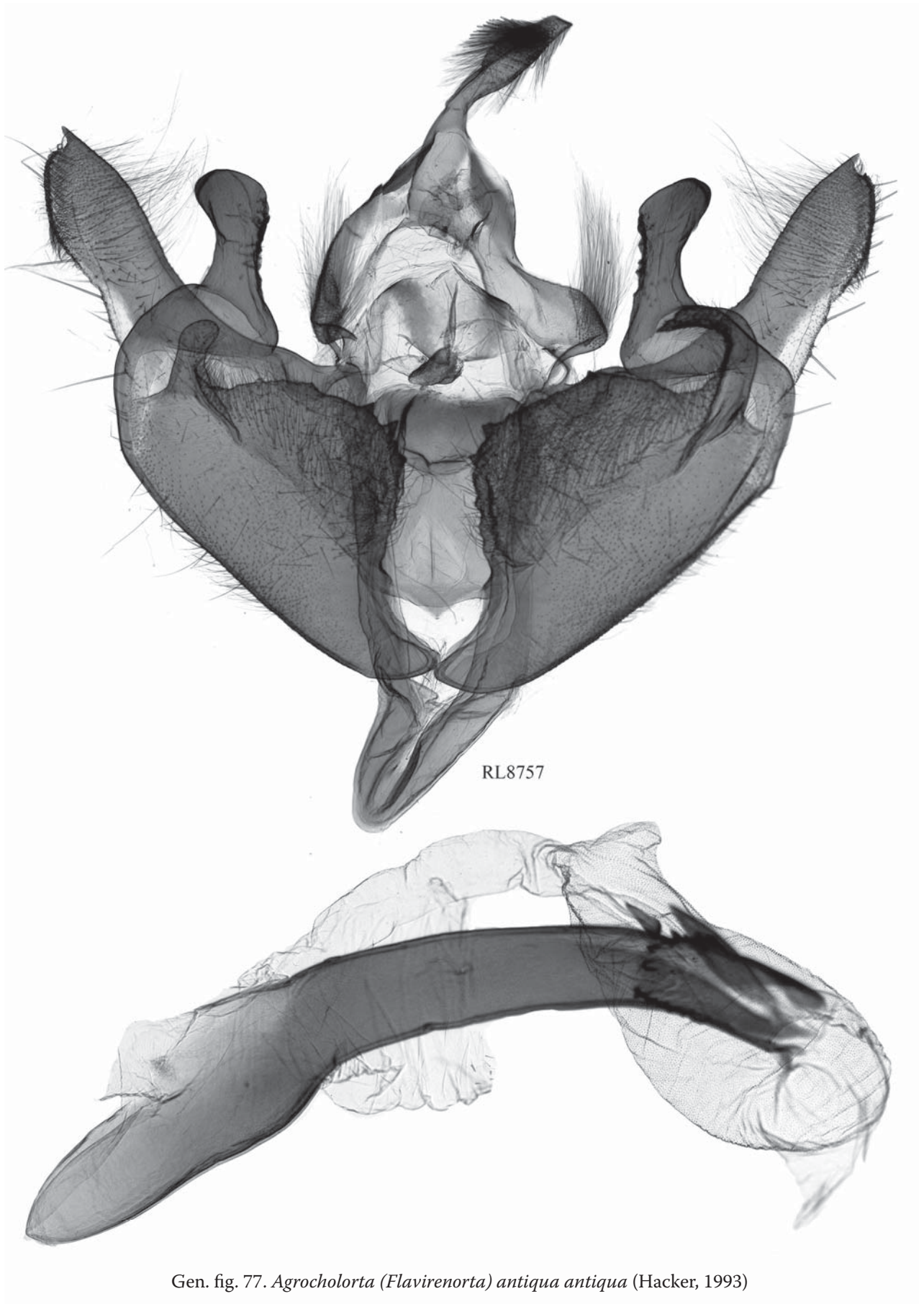






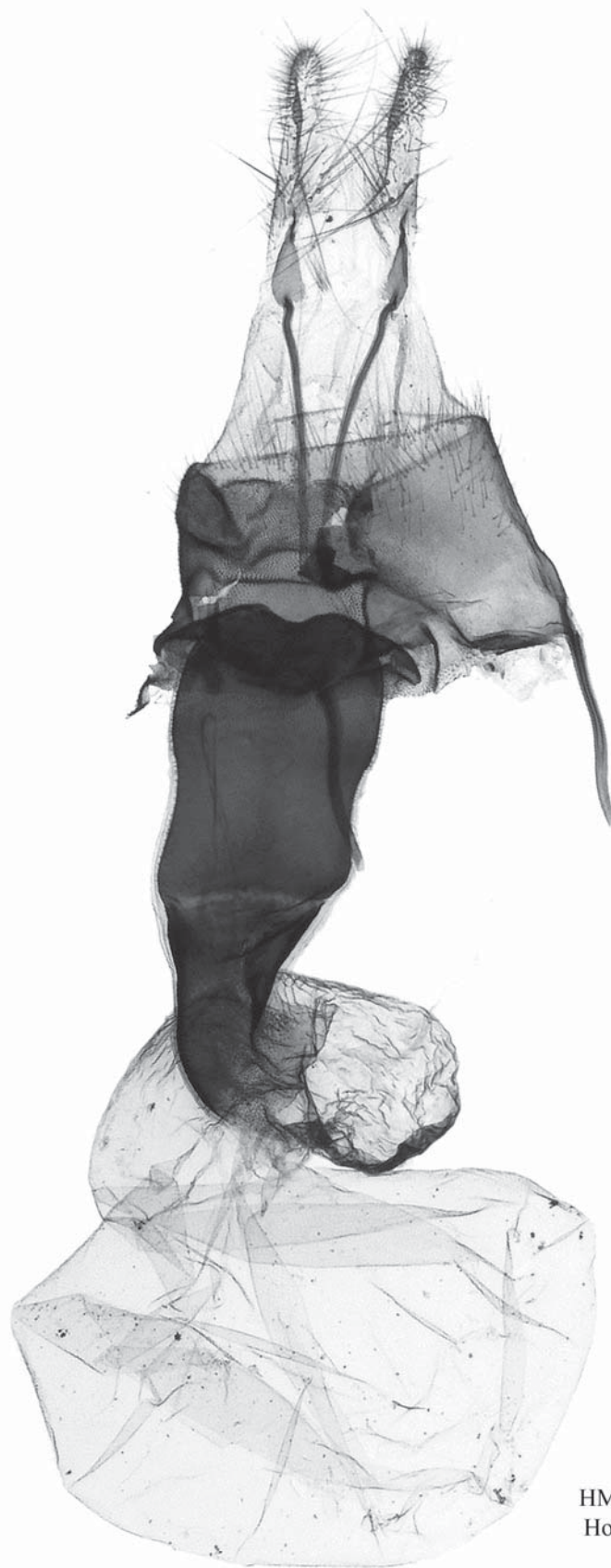
Gen. fig. 75. *Agrocholorta (Flavirenorta) flavirena* (Moore, 1881)







Gen. fig. 78. *Agrocholorta (Flavirenorta) antiqua kosagezai* (Hreblay, Peregovits & Ronkay, 1999)

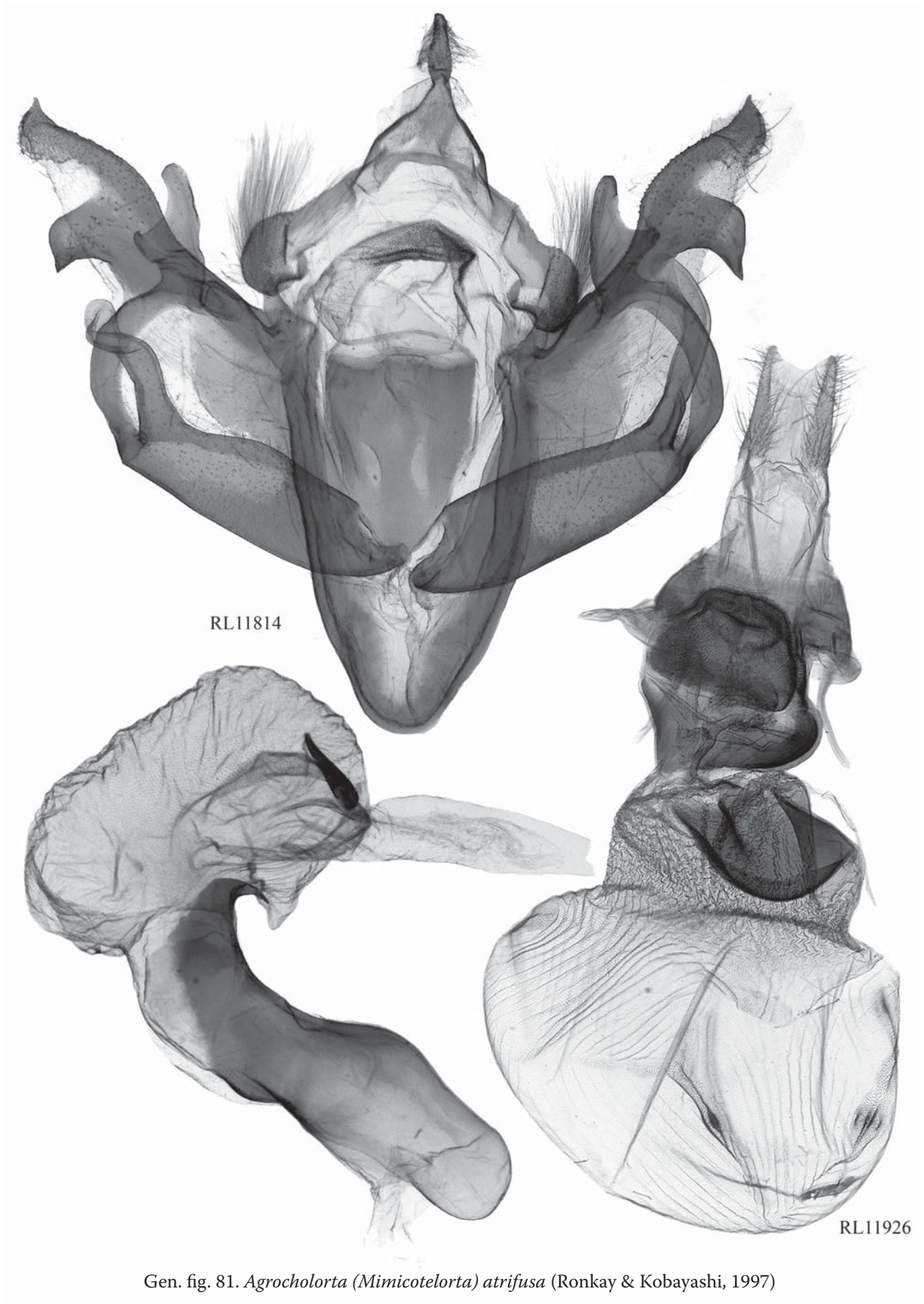


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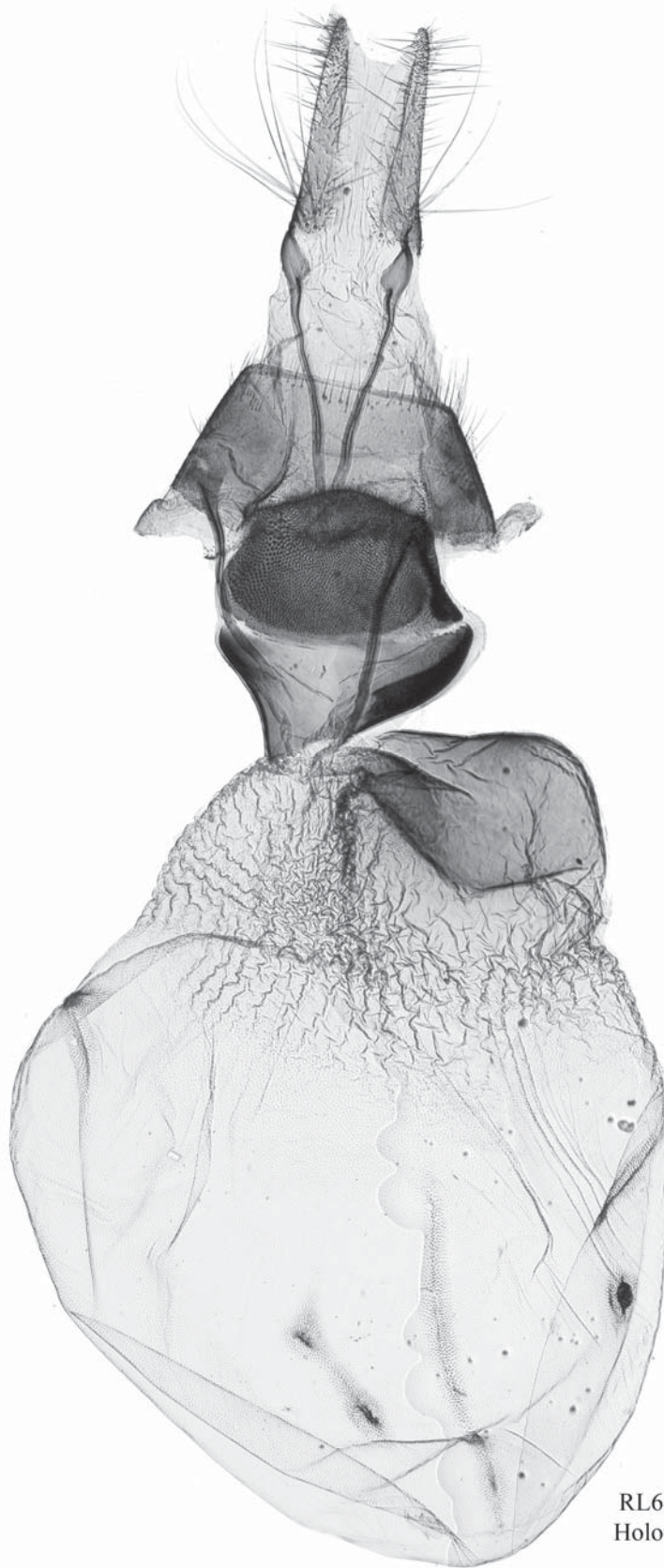
Gen. fig. 79. *Agrocholorta (Flavirenorta) punctilinea* (Hreblay & Ronkay, 1999)



Gen. fig. 80. *Agrocholorta (Flavirenorta) gorza* (Hreblay & Ronkay, 1999)

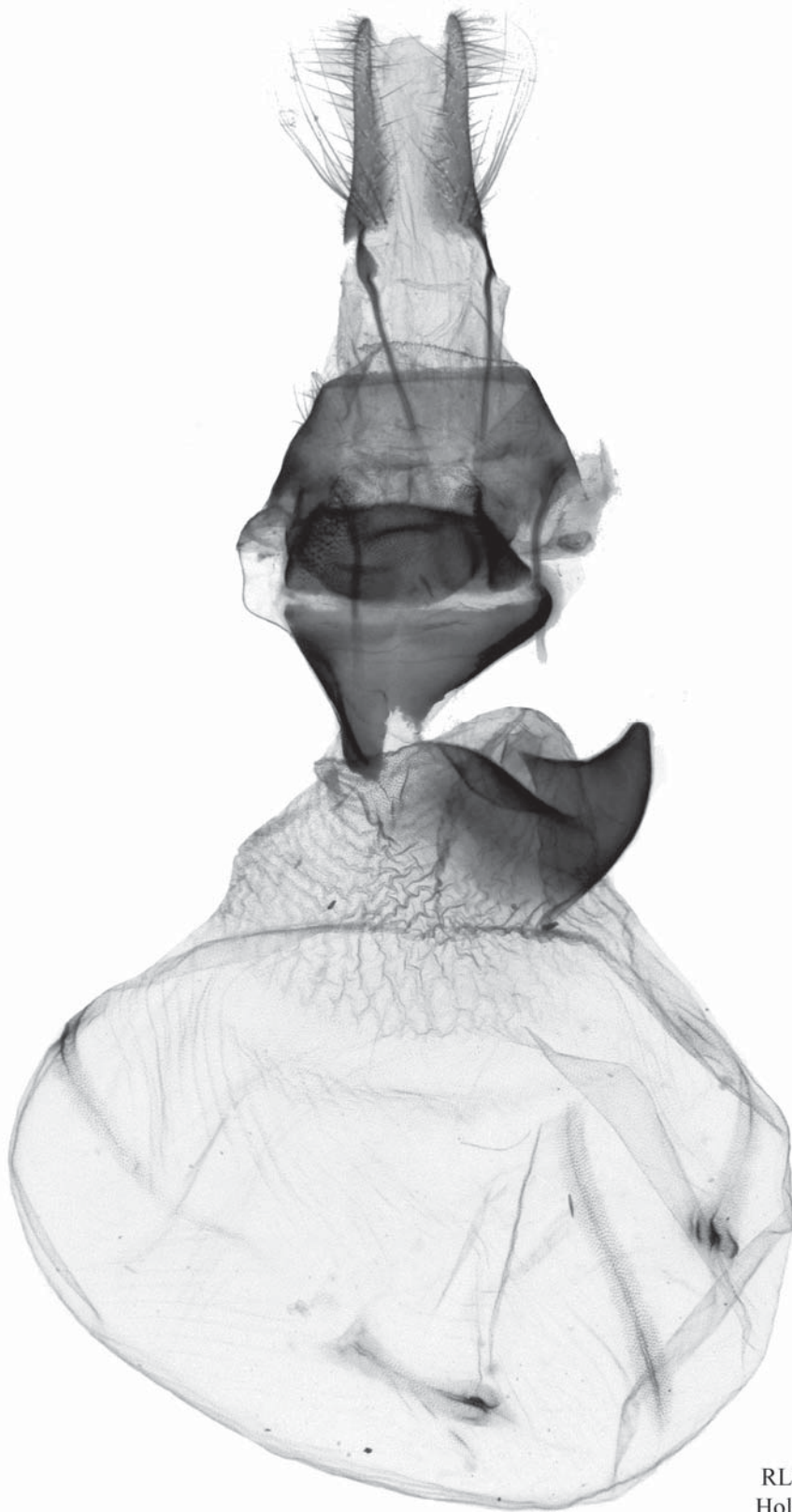


Gen. fig. 81. *Agrocholorta (Mimicotelorta) atrifusa* (Ronkay & Kobayashi, 1997)



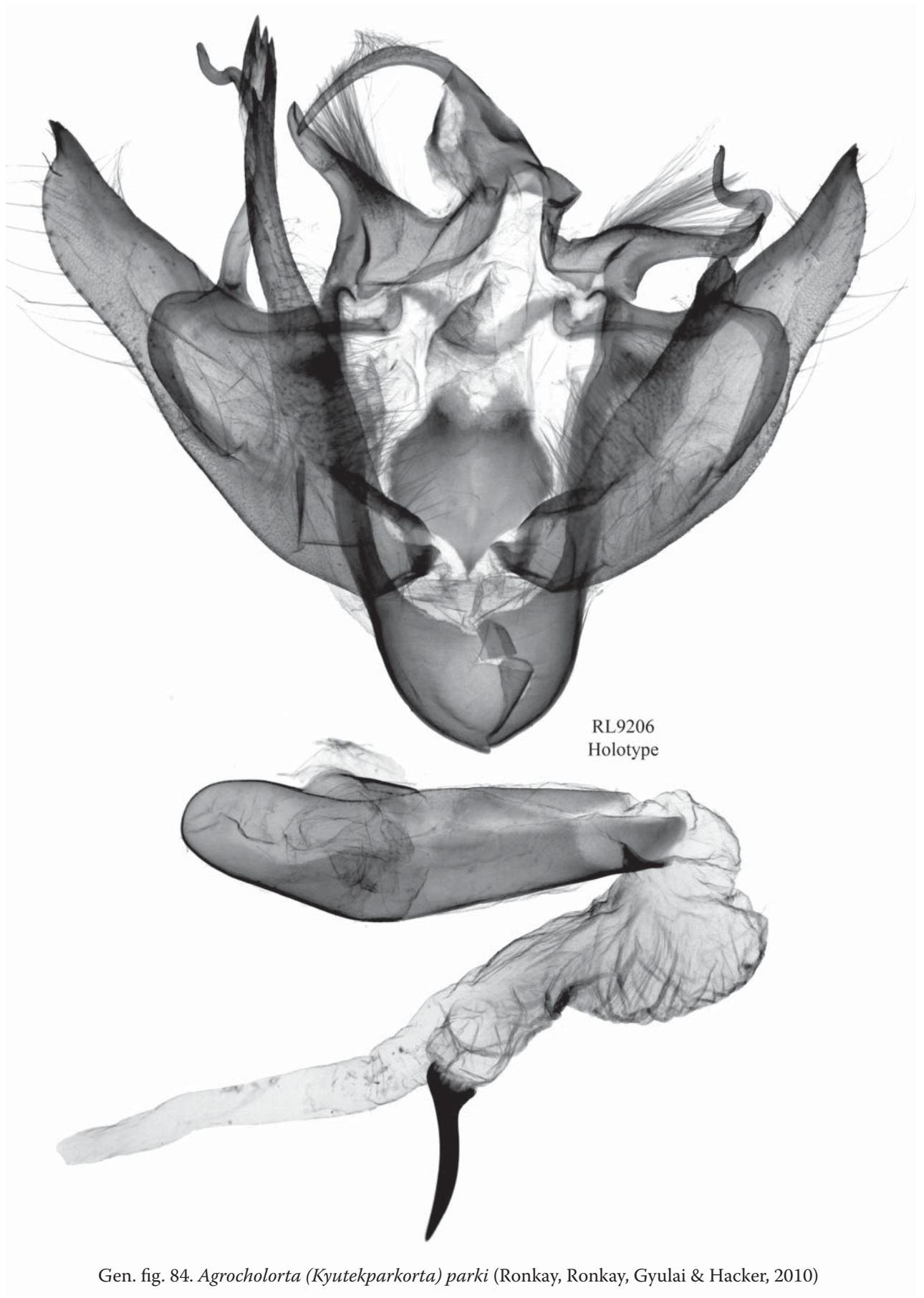
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Gen. fig. 82. *Agrocholorta (Mimicotelorta) telortoides* (Hreblay & Ronkay, 1999)

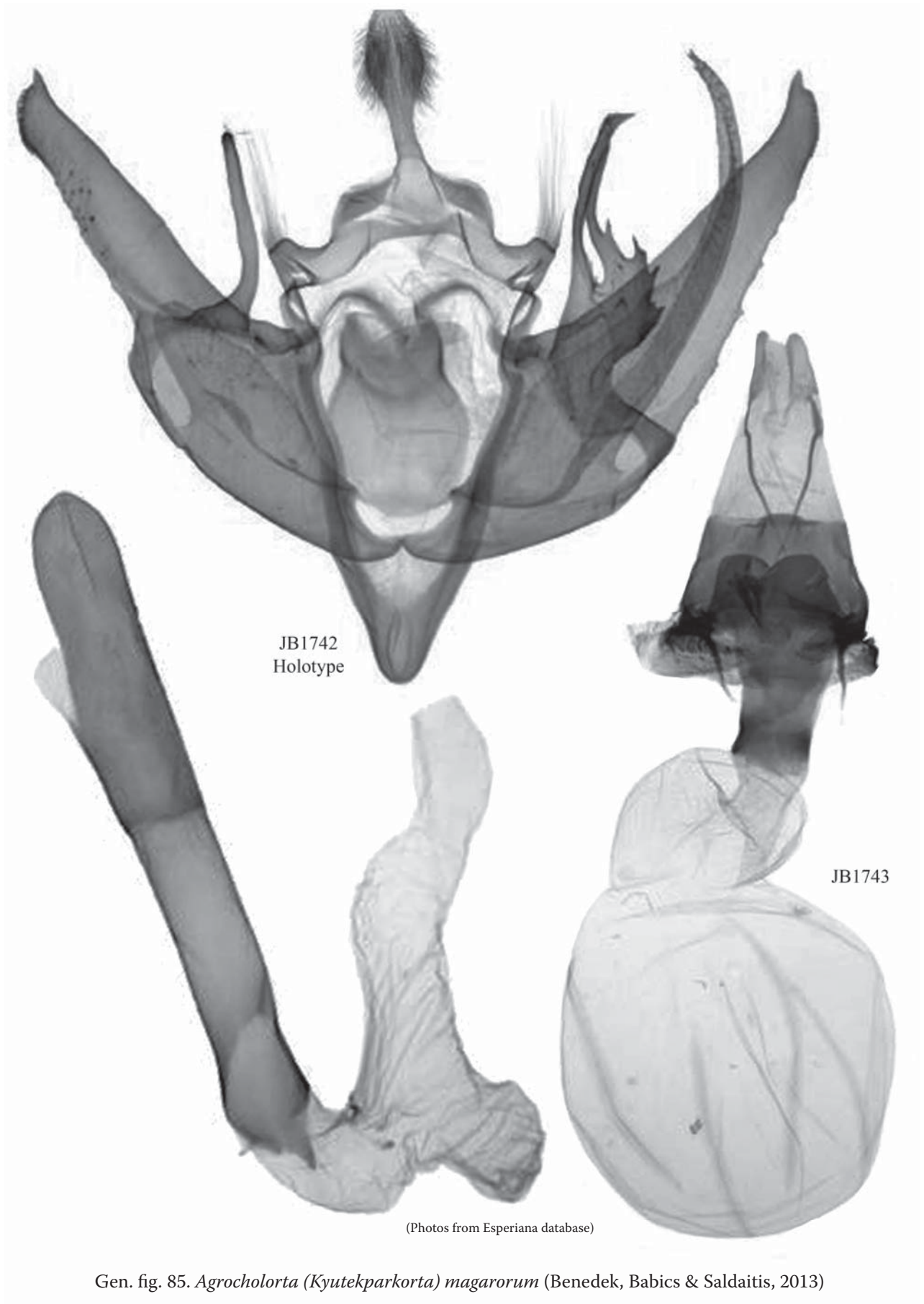


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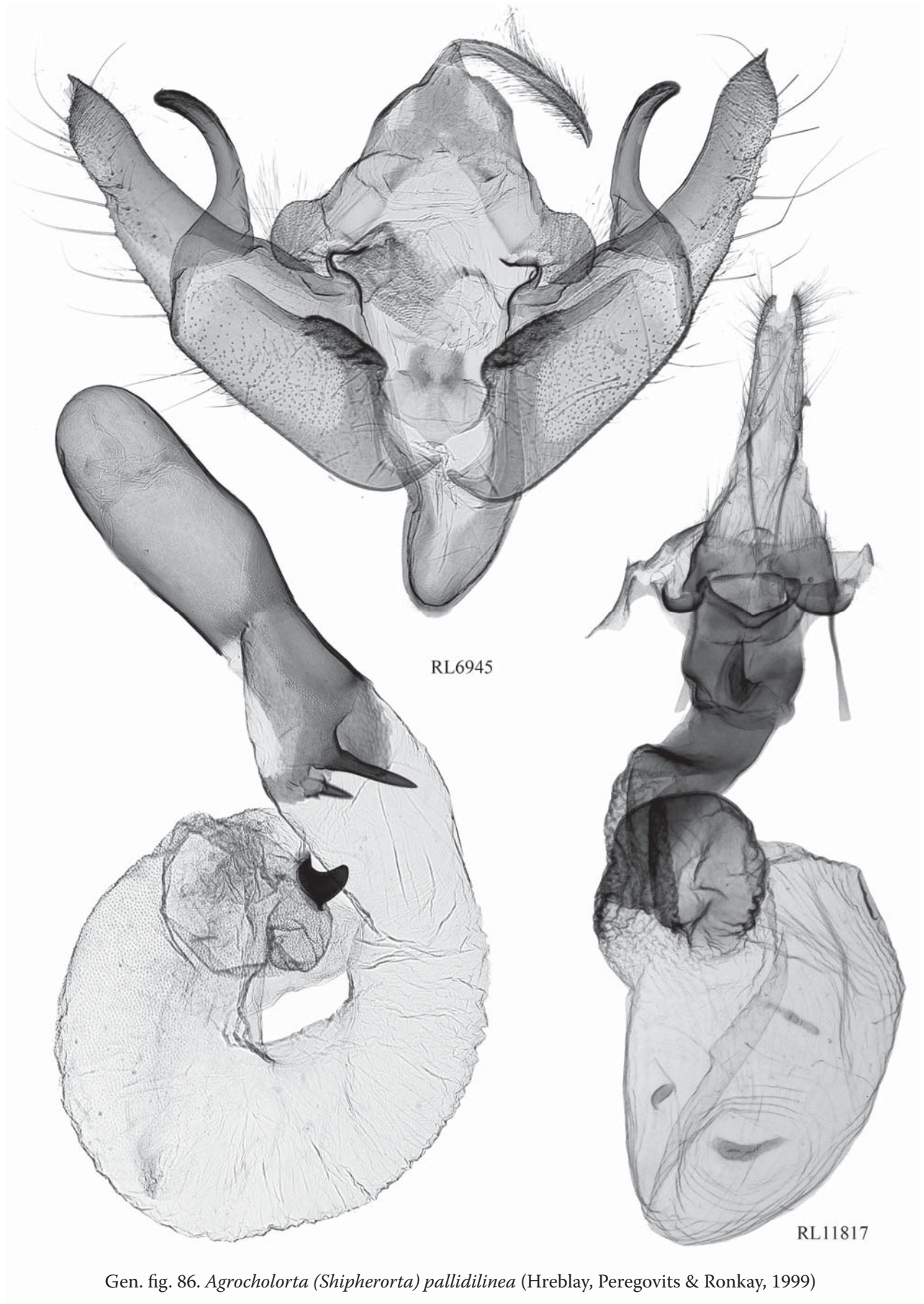
Gen. fig. 83. *Agrocholorta (Mimicotelorta) fibigeri* (Ronkay, Ronkay, Gyulai & Hacker, 2010)



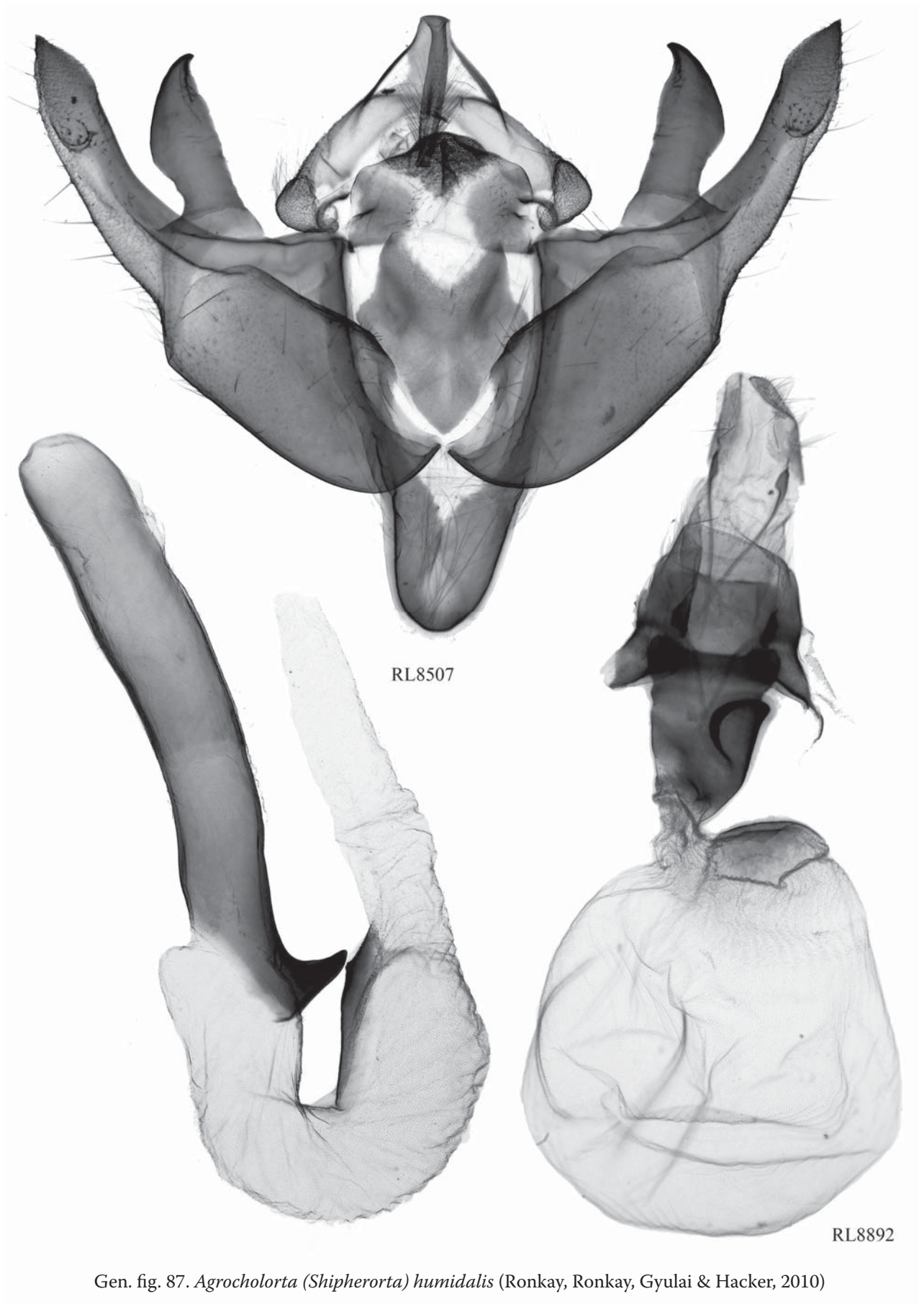
Gen. fig. 84. *Agrocholorta (Kyutekparkorta) parki* (Ronkay, Ronkay, Gyulai & Hacker, 2010)



Gen. fig. 85. *Agrocholorta (Kyutekparkorta) magarorum* (Benedek, Babics & Saldaitis, 2013)



Gen. fig. 86. *Agrocholorta (Shipherorta) pallidilinea* (Hreblay, Peregovits & Ronkay, 1999)



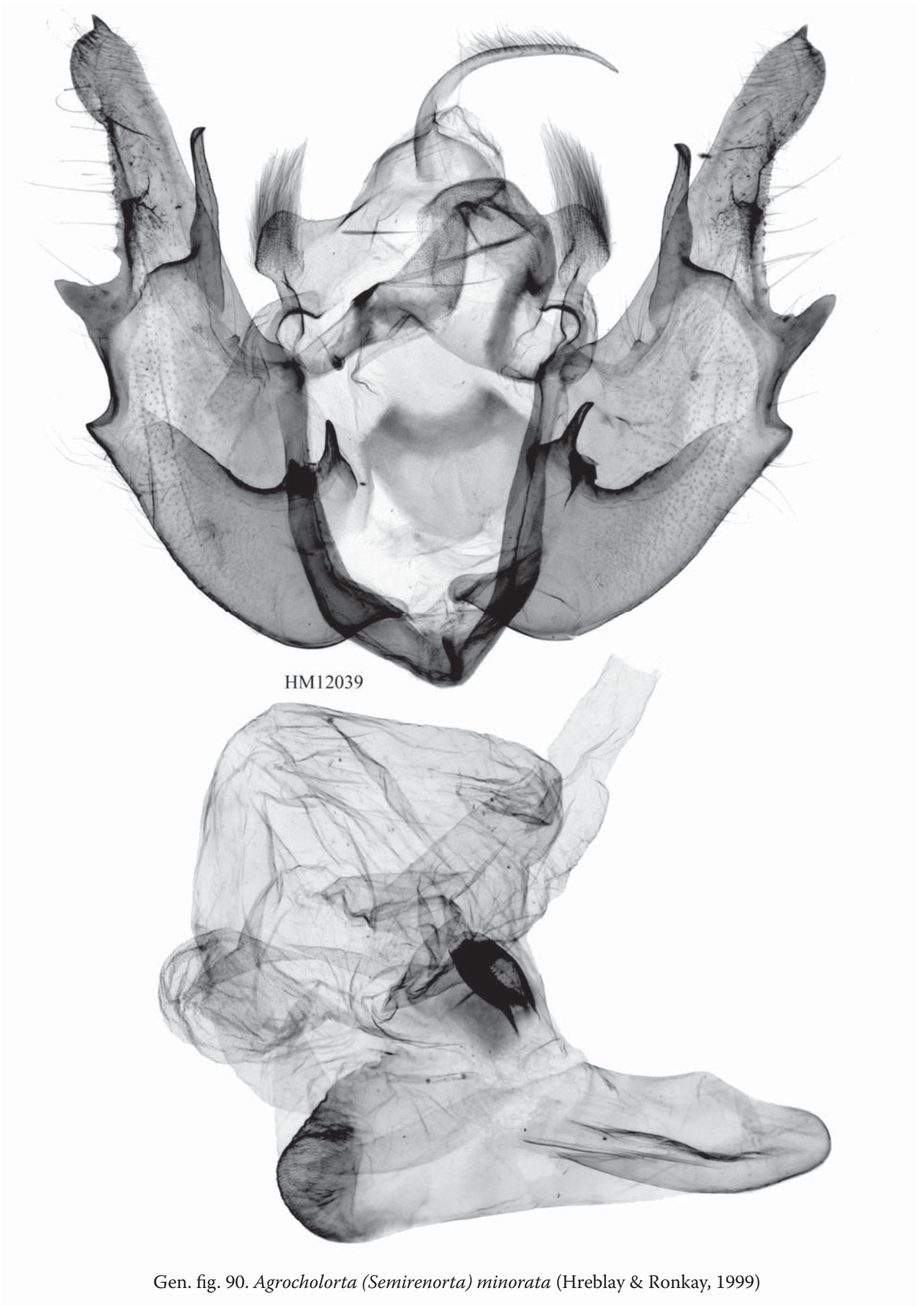
Gen. fig. 87. *Agrocholorta (Shipherorta) humidalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010)



Gen. fig. 88. *Agrocholorta (Semirenorta) semirena* (Draudt, 1950)

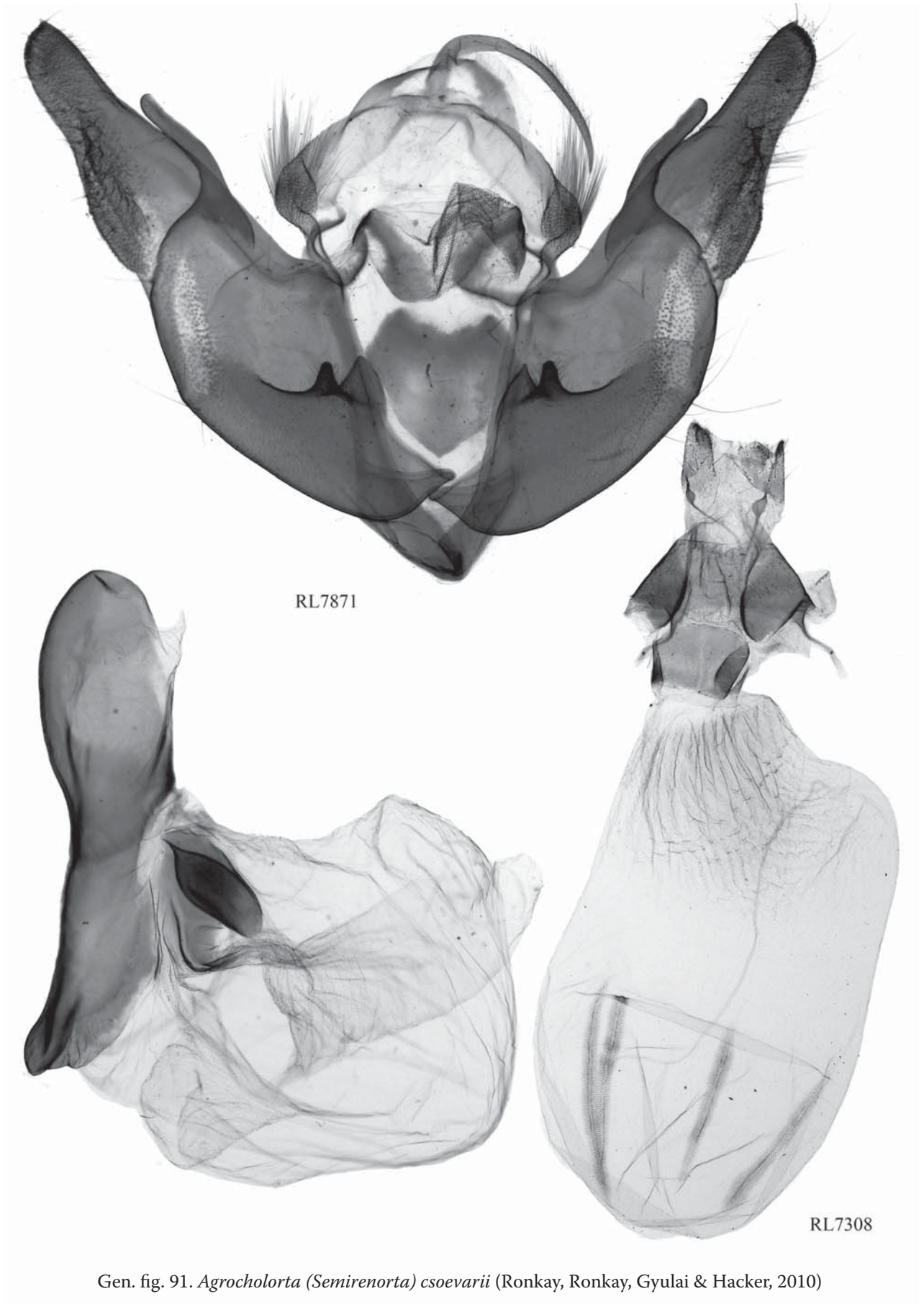


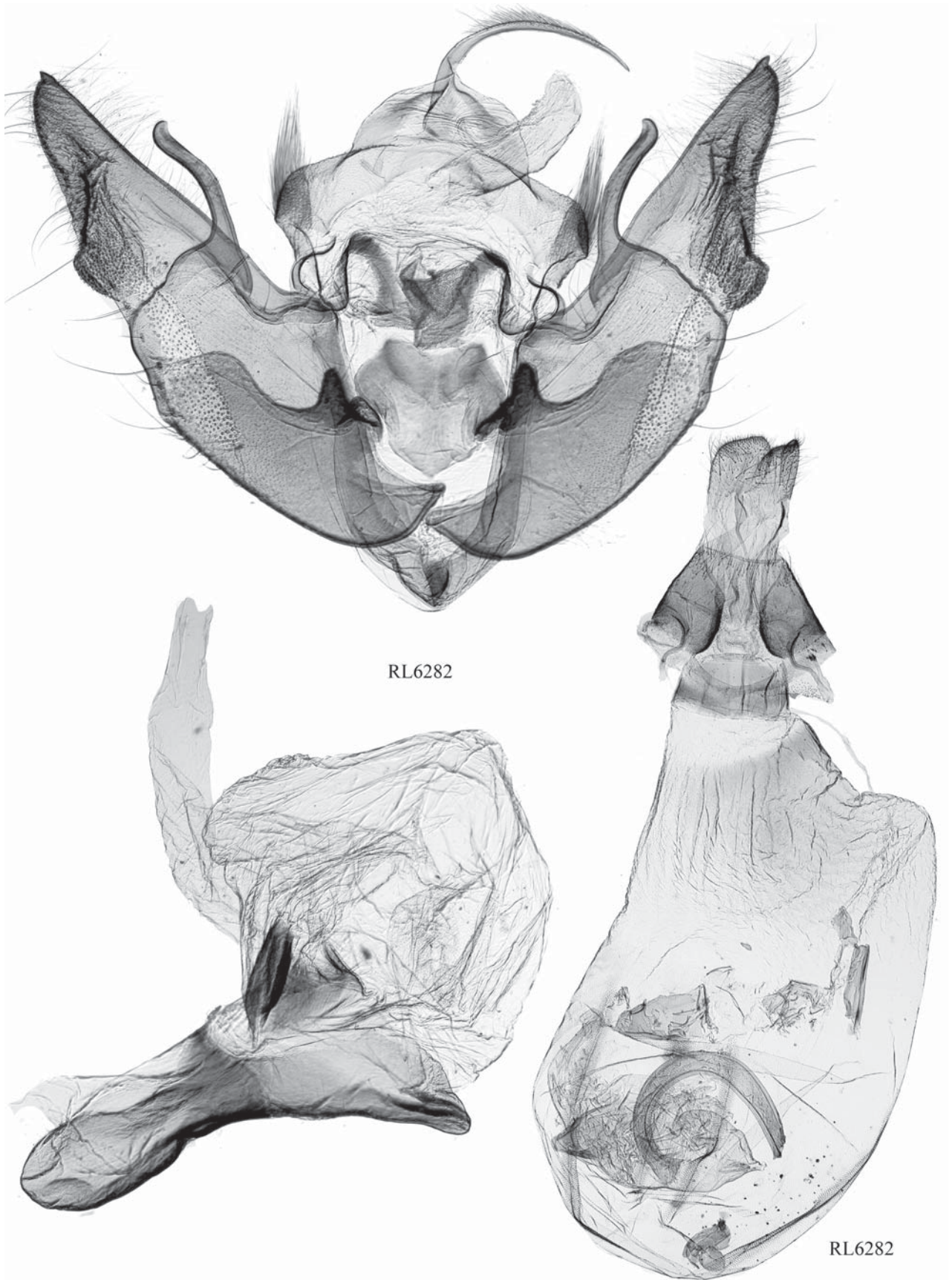
Gen. fig. 89. *Agrocholorta (Semirenorta) siamica* (Hreblay & Ronkay, 1999)



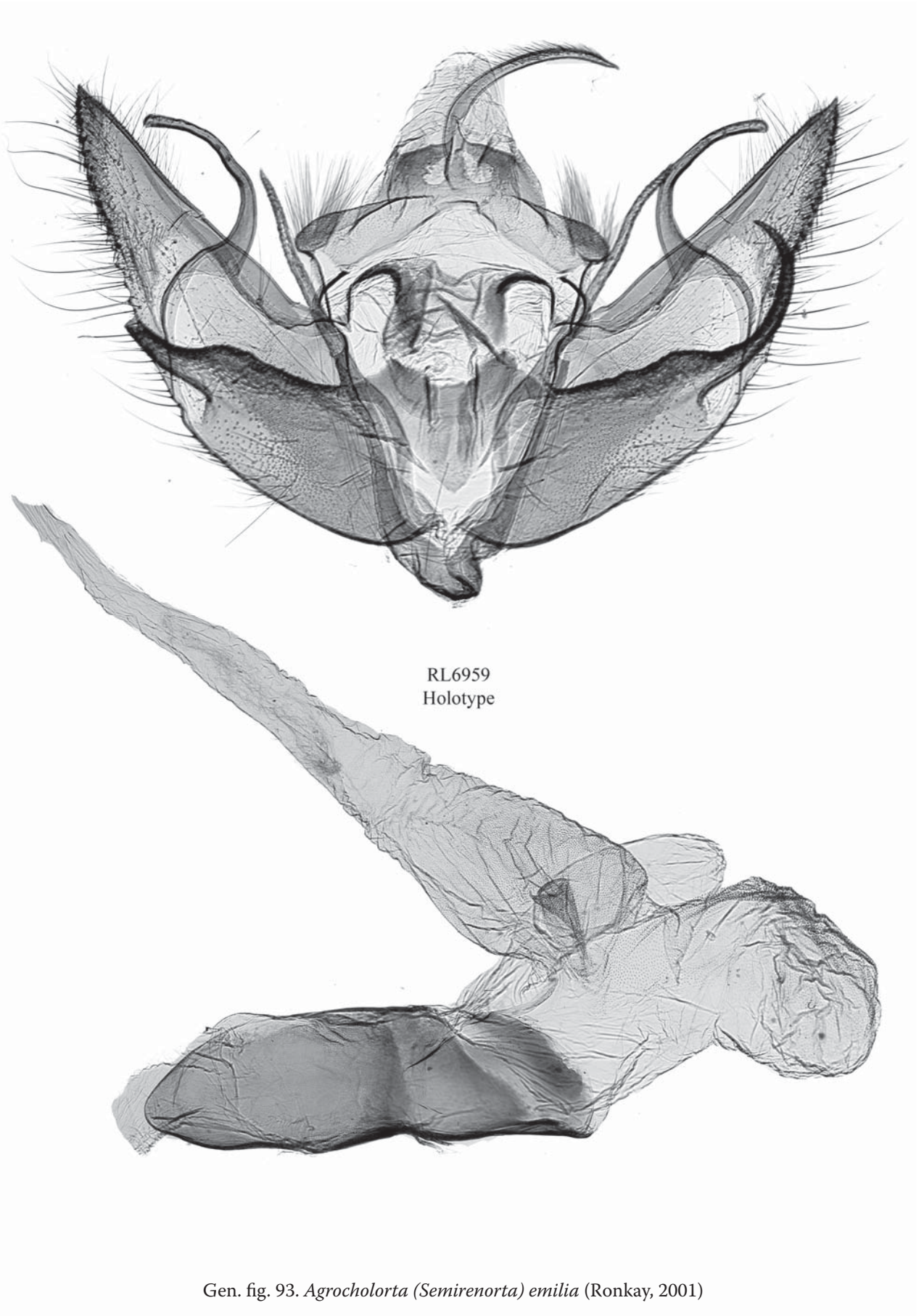
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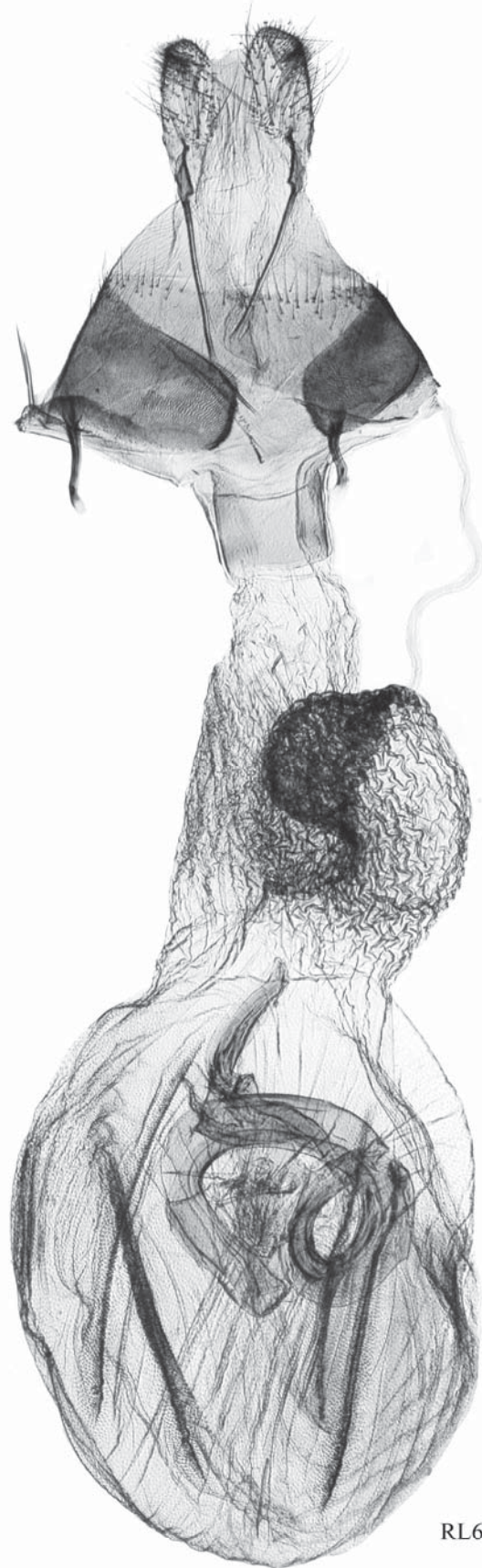
Gen. fig. 90. *Agrocholorta (Semirenorta) minorata* (Hreblay & Ronkay, 1999)



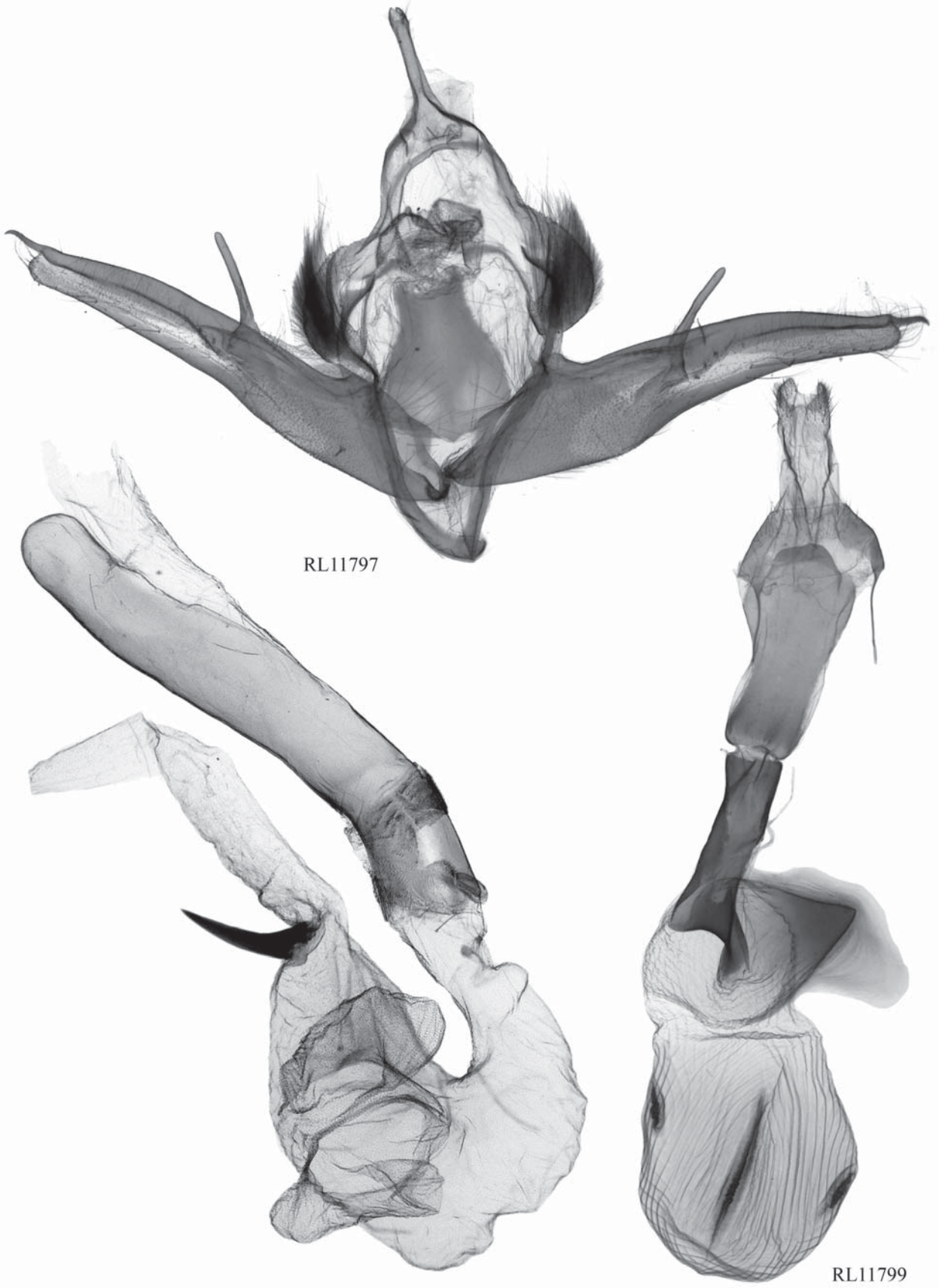


Gen. fig. 92. *Agrocholorta (Semirenorta) kunandrasi* (Hreblay & Ronkay, 1999)





Gen. fig. 94. *Agrocholorta (Semirenorta) plumbitincta* (Hreblay, Peregovits & Ronkay, 1999)



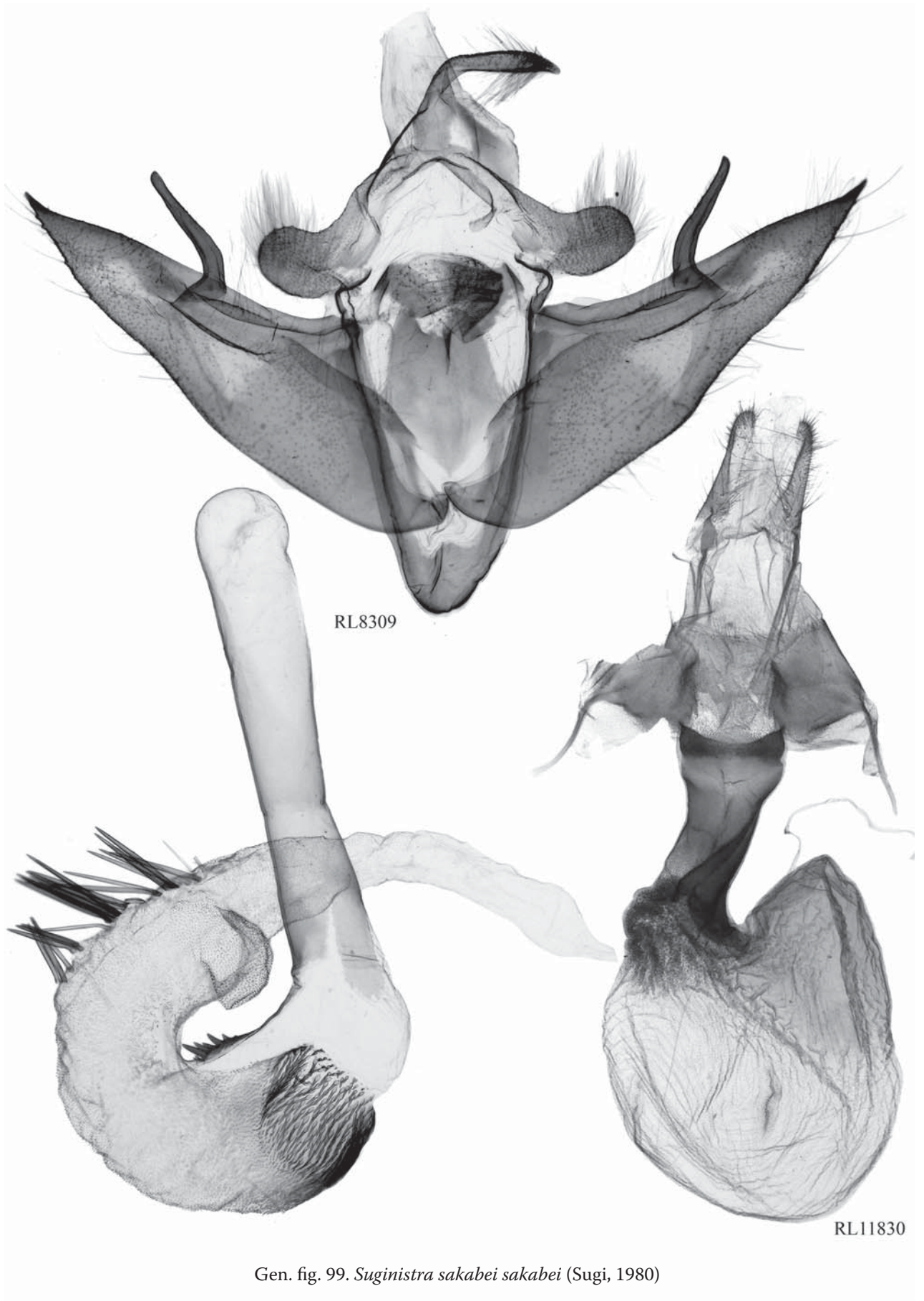
Gen. fig. 95. *Agrocholorta (Pacifcorta) nawae* (Matsumura, 1926)

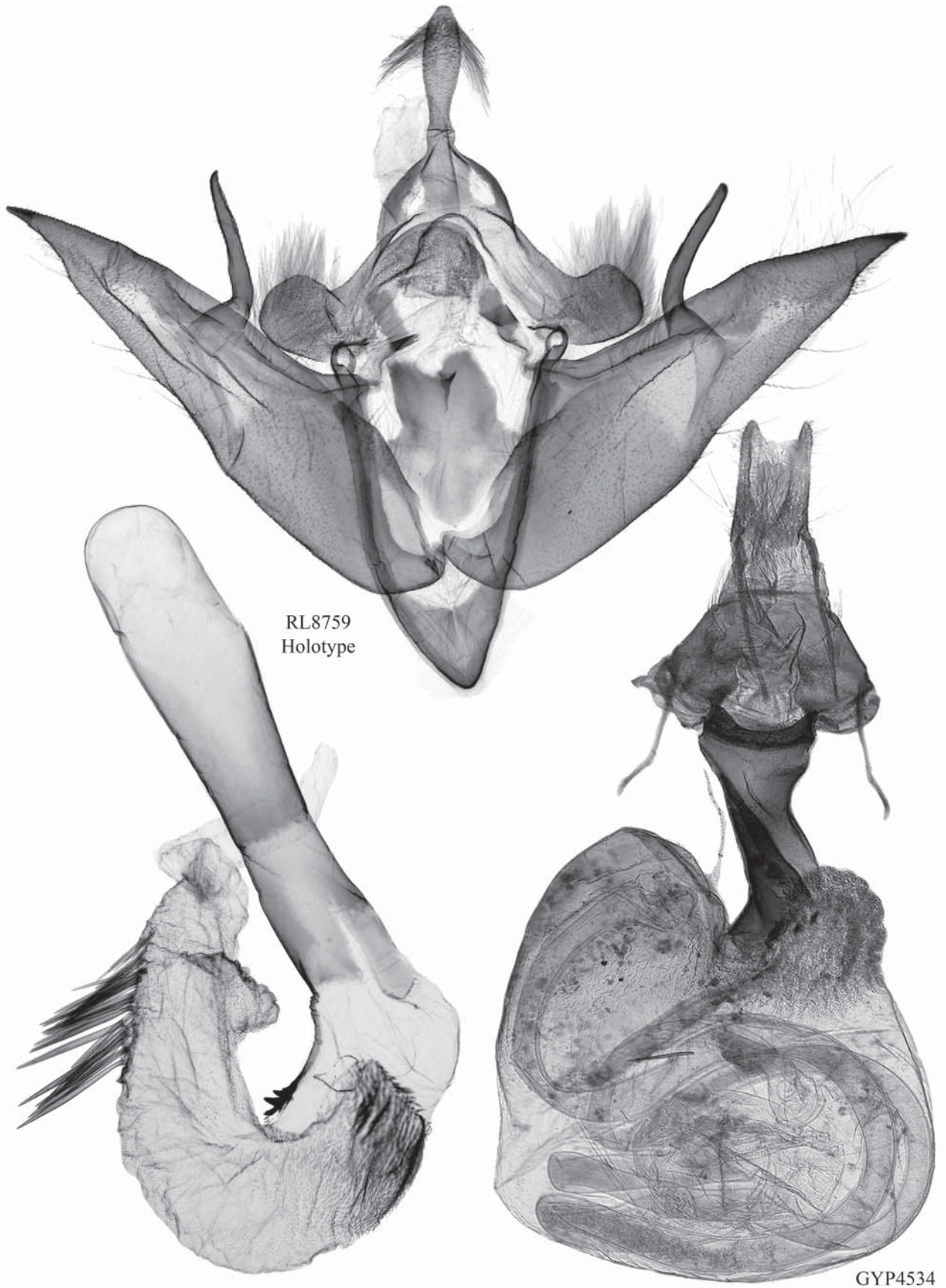


Gen. fig. 96. *Agrocholorta (Pacificorta) taiwanawae* sp. n.

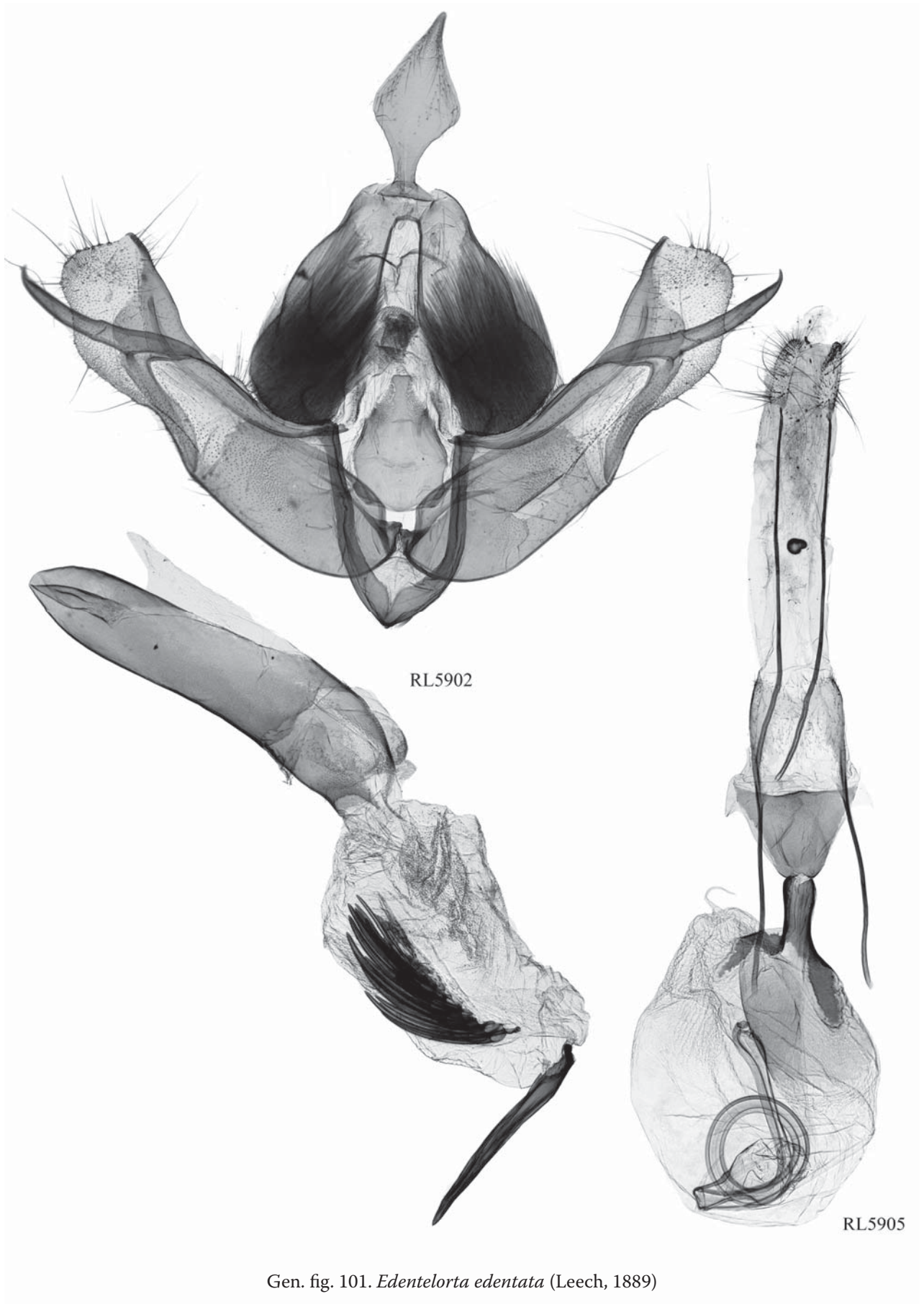




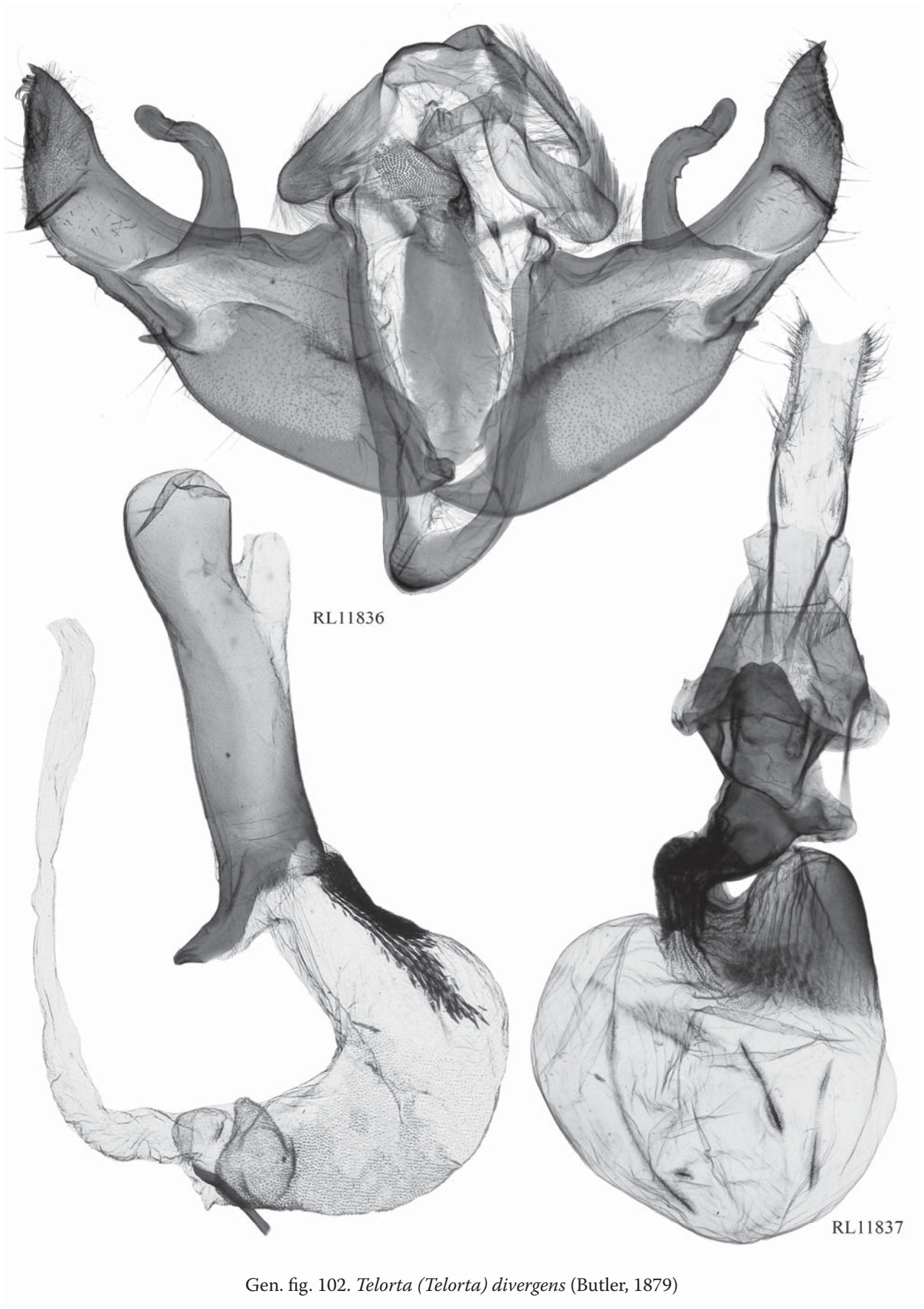


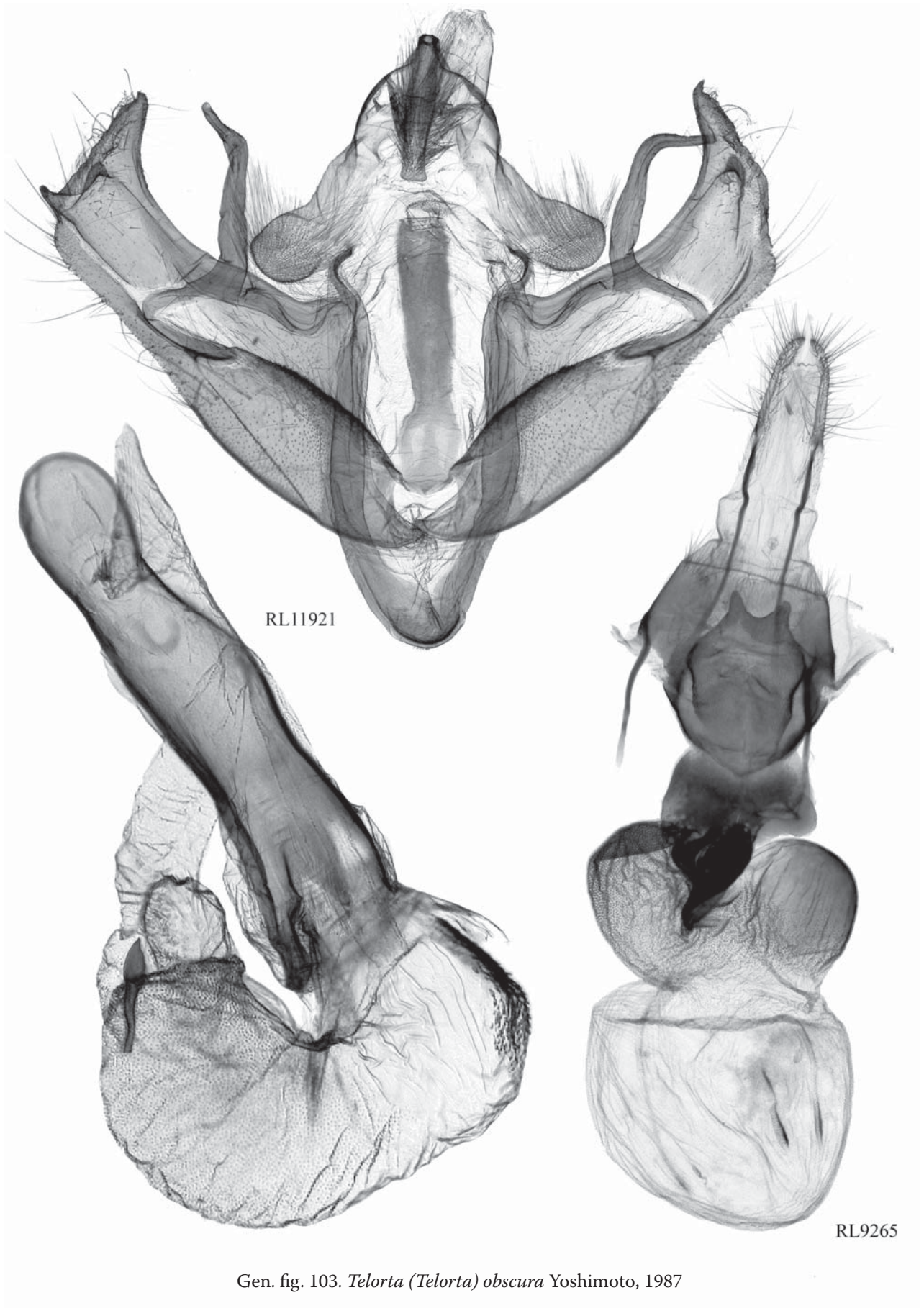


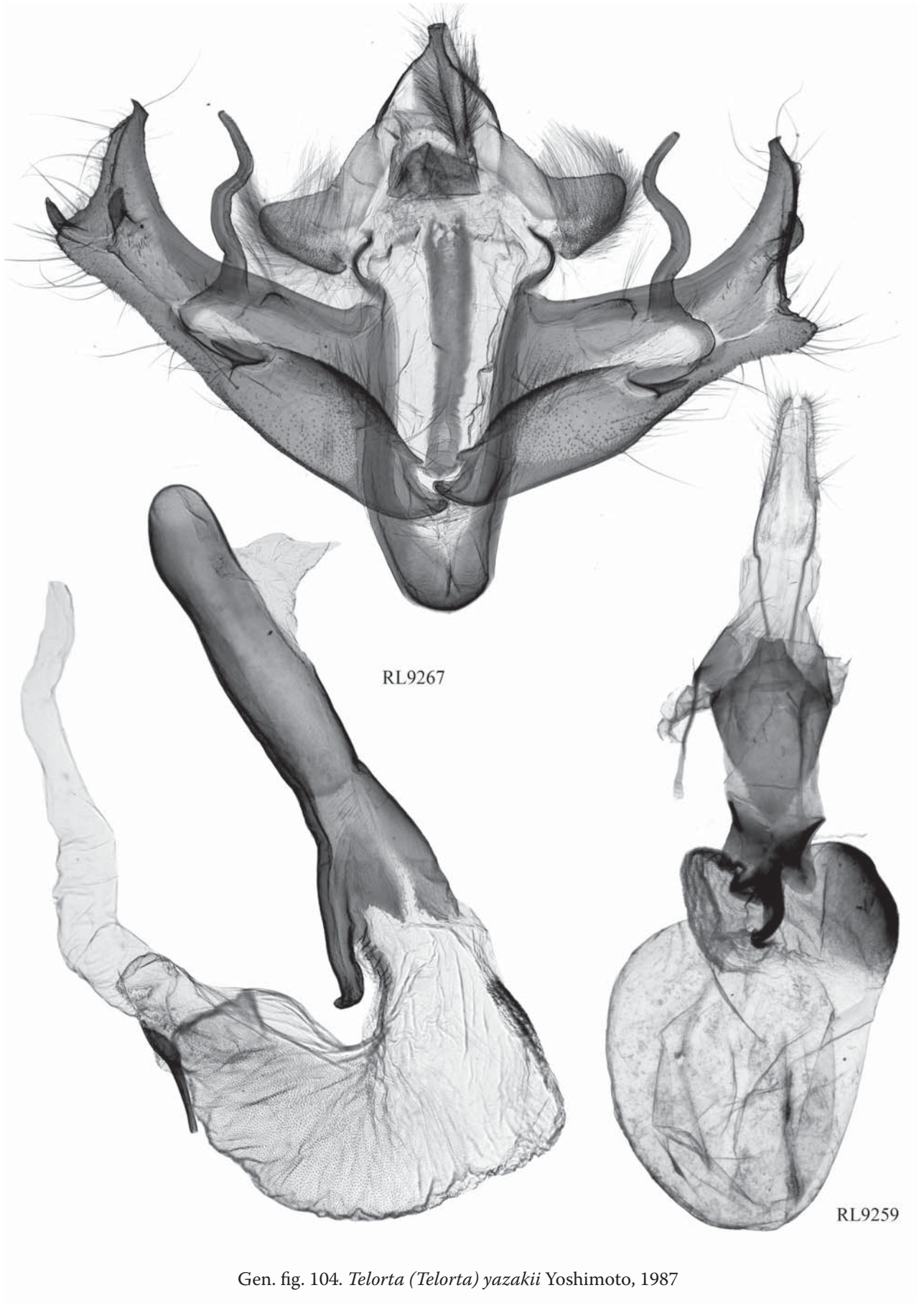
Gen. fig. 100. *Suginistra sakabei continentalis* (Ronkay, Ronkay, Gyulai & Hacker, 2010)



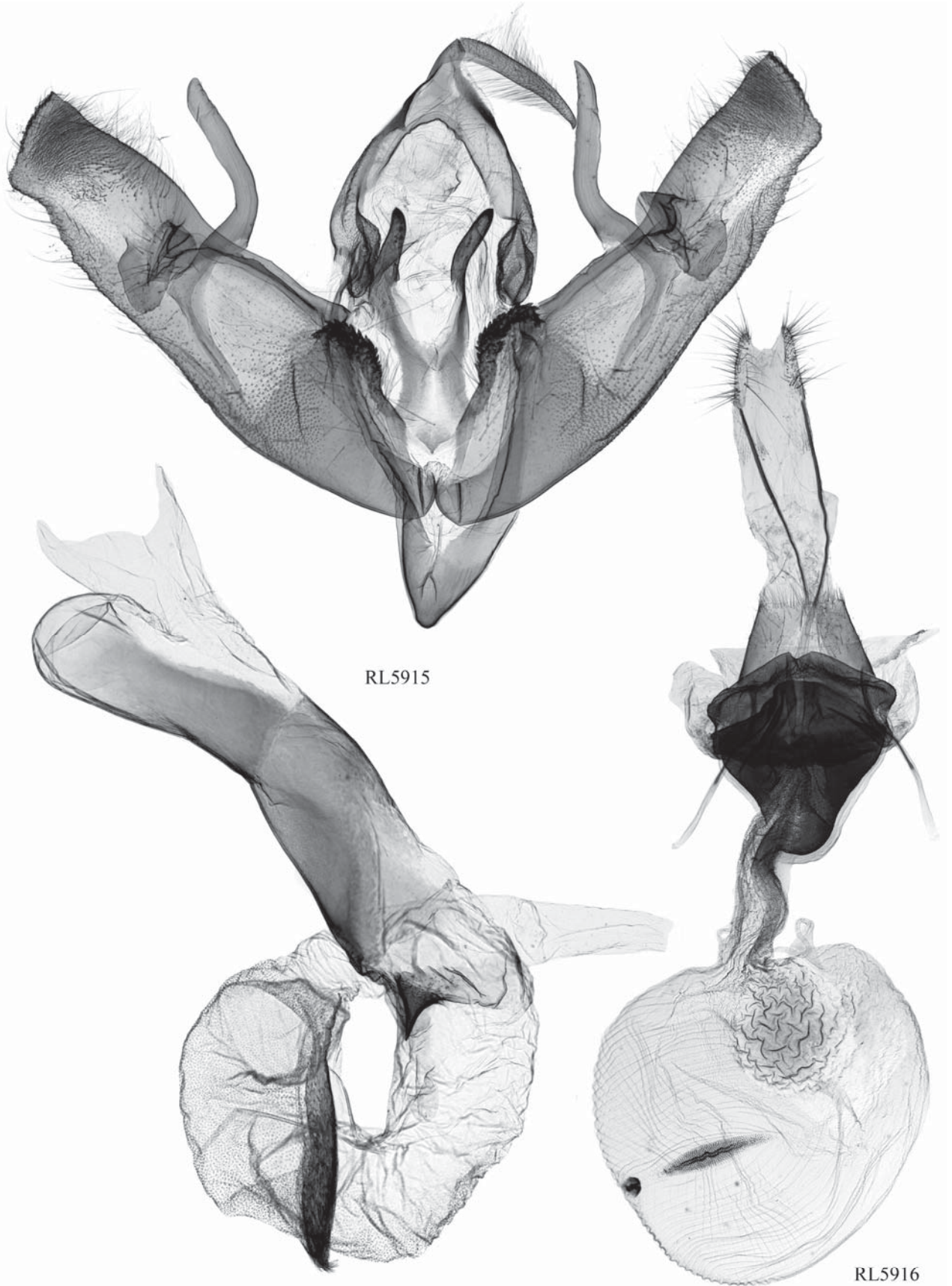
Gen. fig. 101. *Edentelorta edentata* (Leech, 1889)



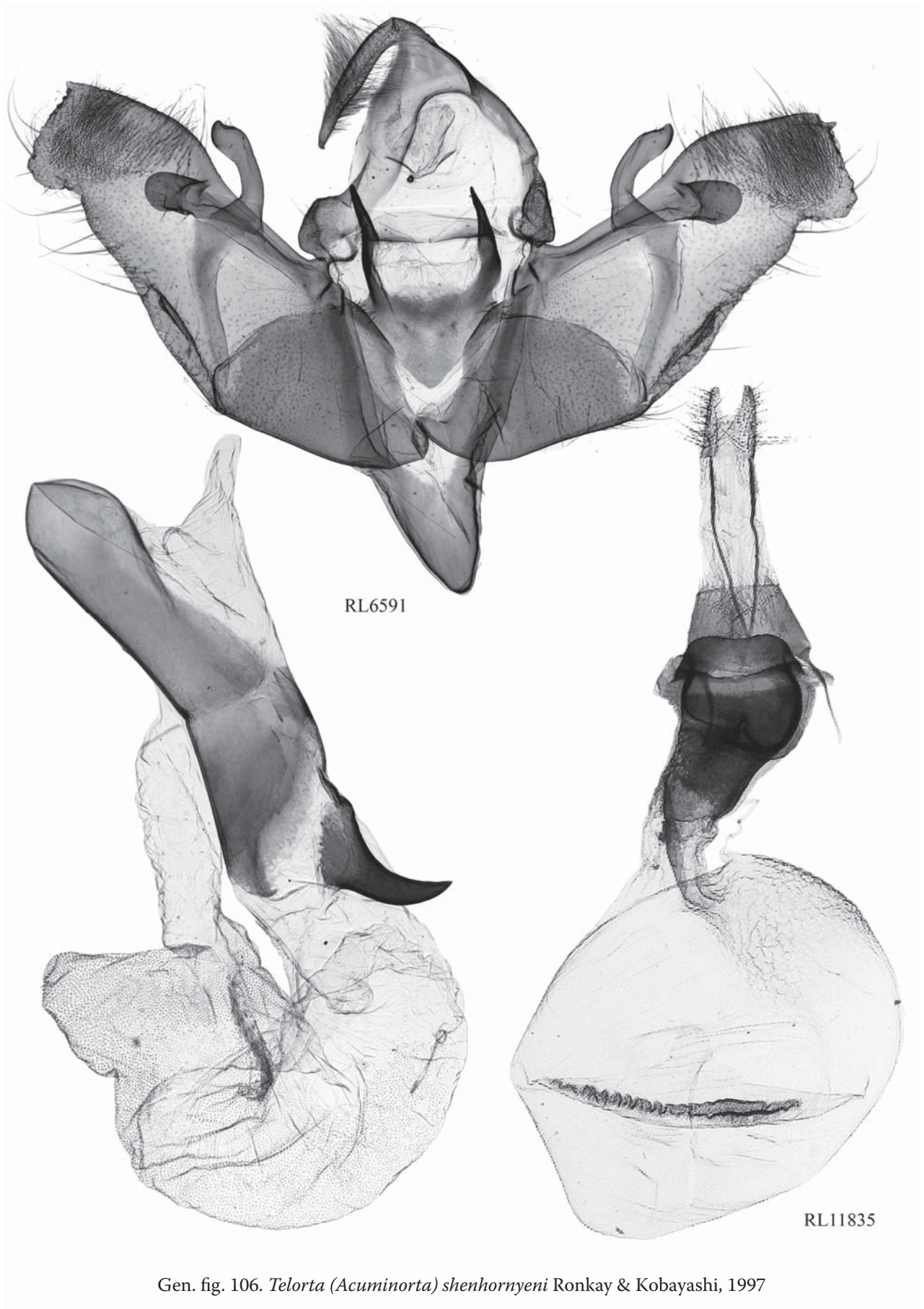




Gen. fig. 104. *Telorta (Telorta) yazakii* Yoshimoto, 1987

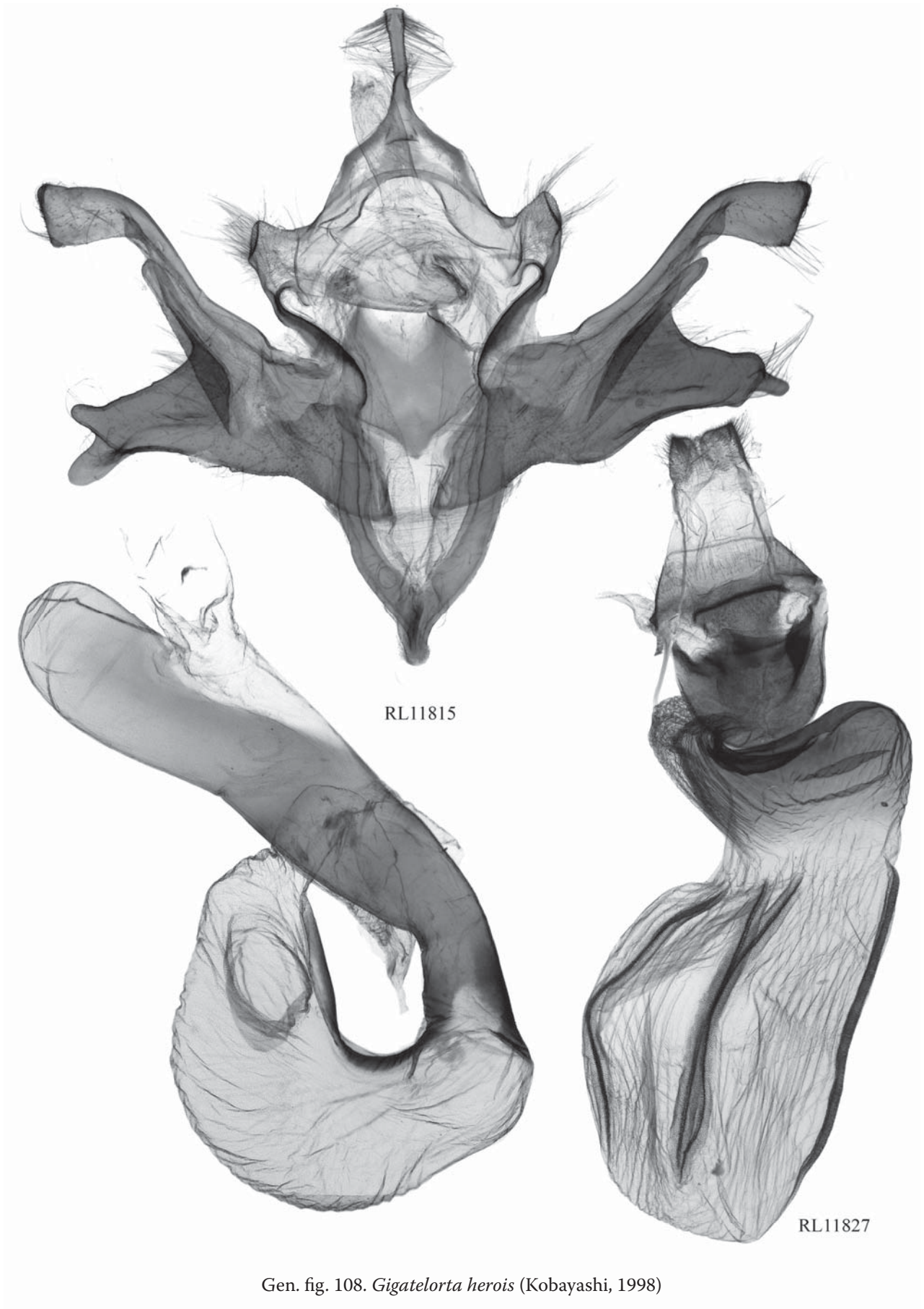


Gen. fig. 105. *Telorta (Acuminorta) acuminata* (Butler, 1878)

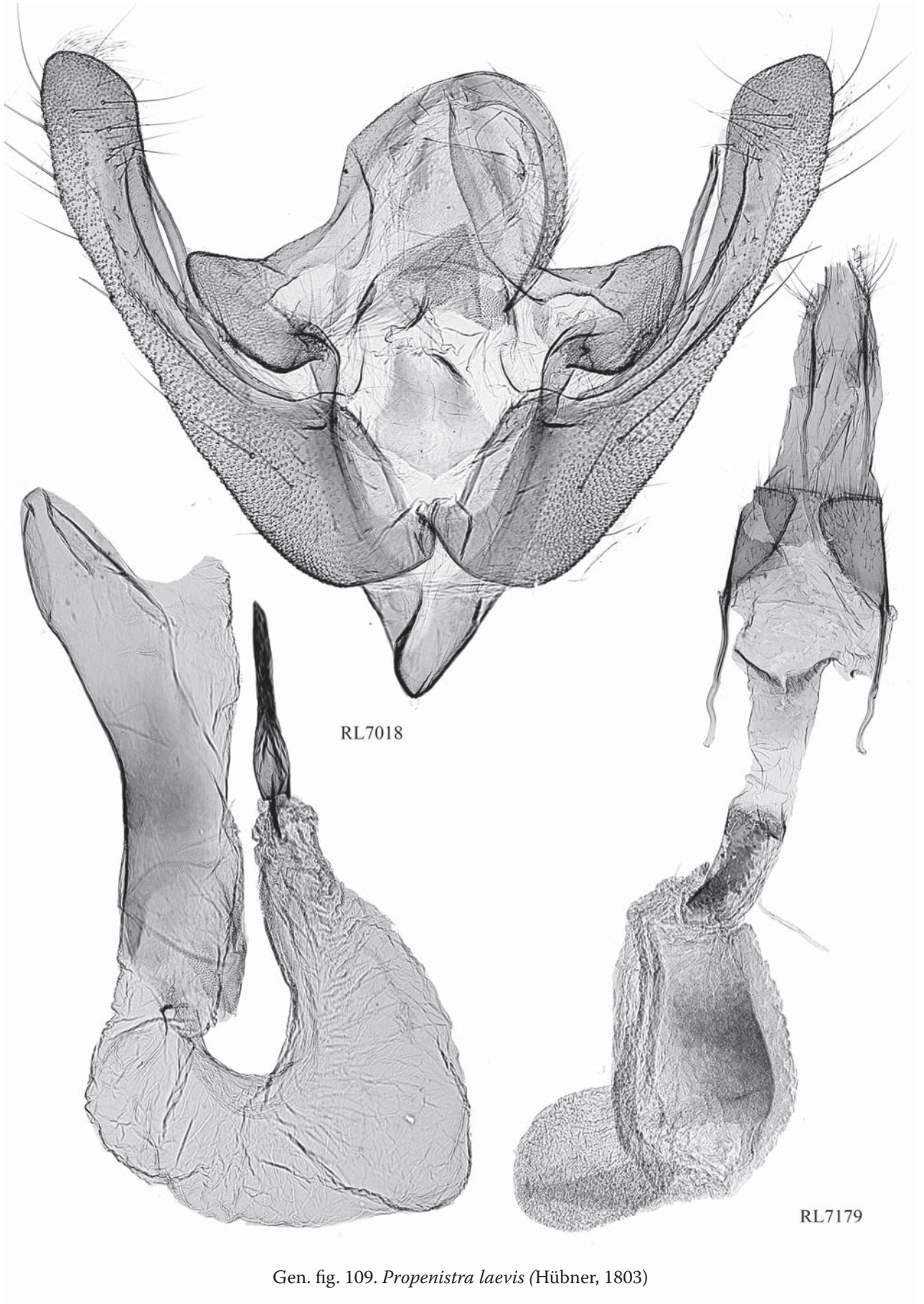




Gen. fig. 107. *Gigatelorta falcipennis* (Boursin, 1958)



Gen. fig. 108. *Gigatelorta herois* (Kobayashi, 1998)



Gen. fig. 109. *Propenistra laevis* (Hübner, 1803)

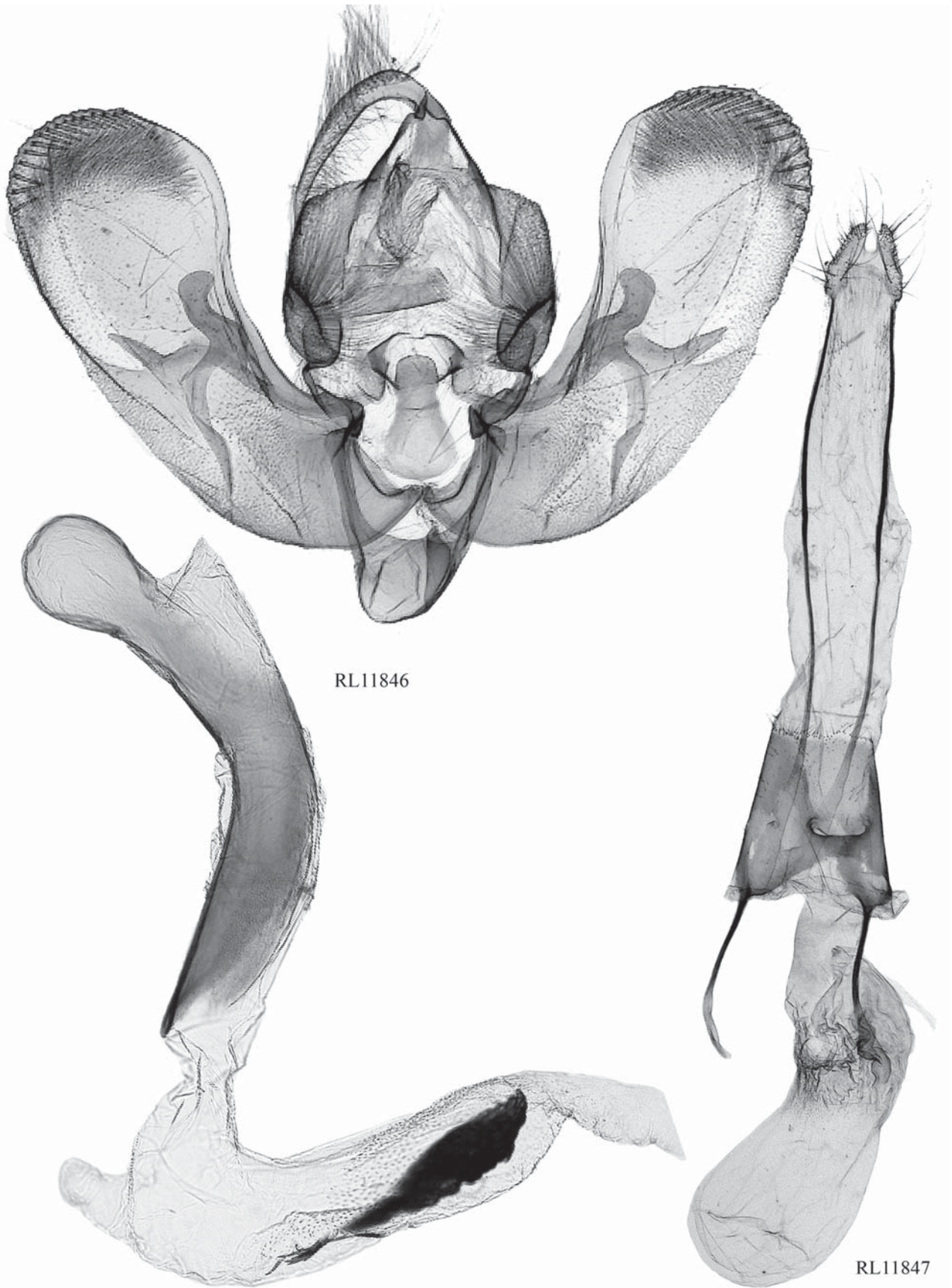




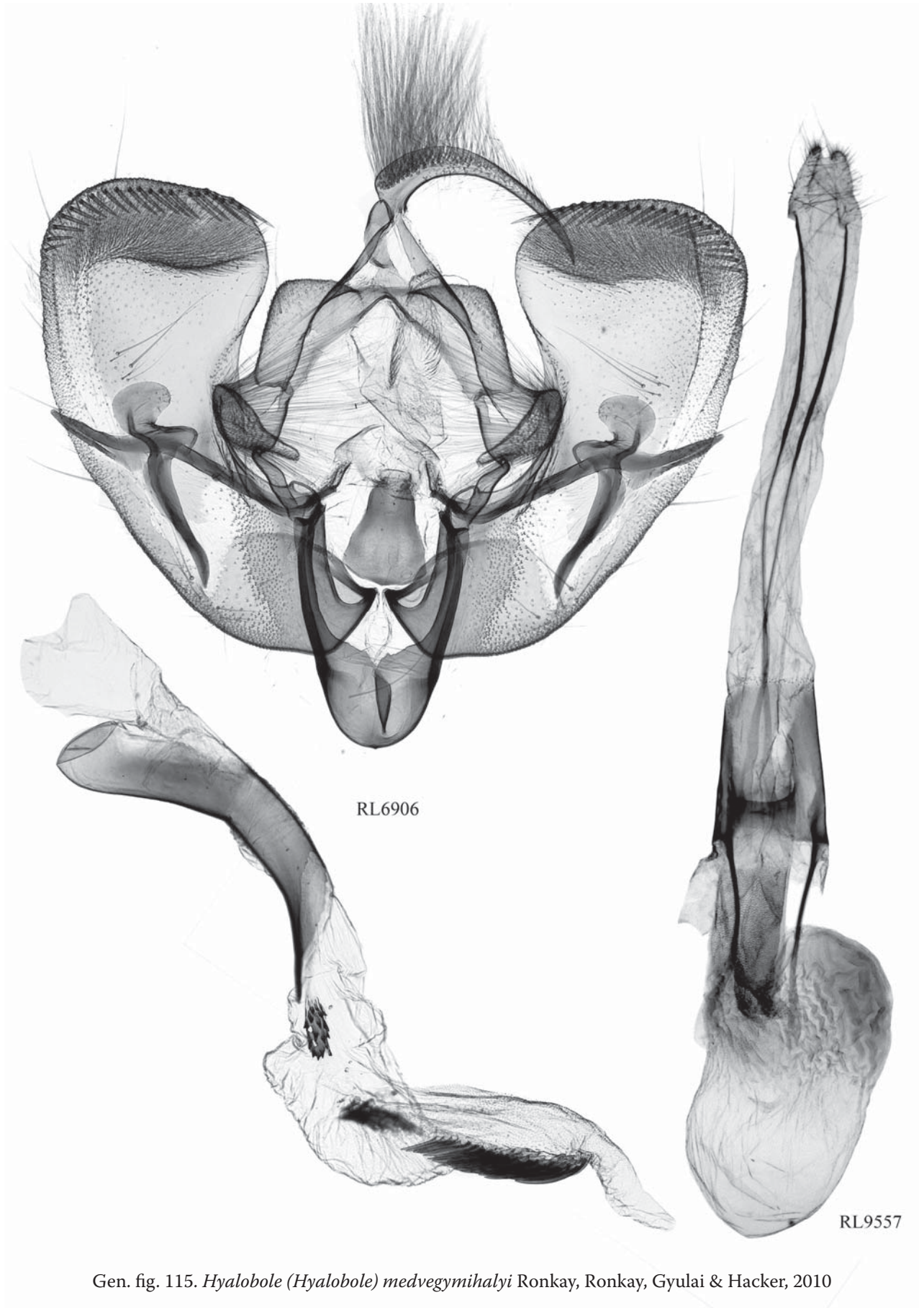
Gen. fig. 111. *Hyalobole (Hyalobole) orthosioides orthosioides* Warren, 1911

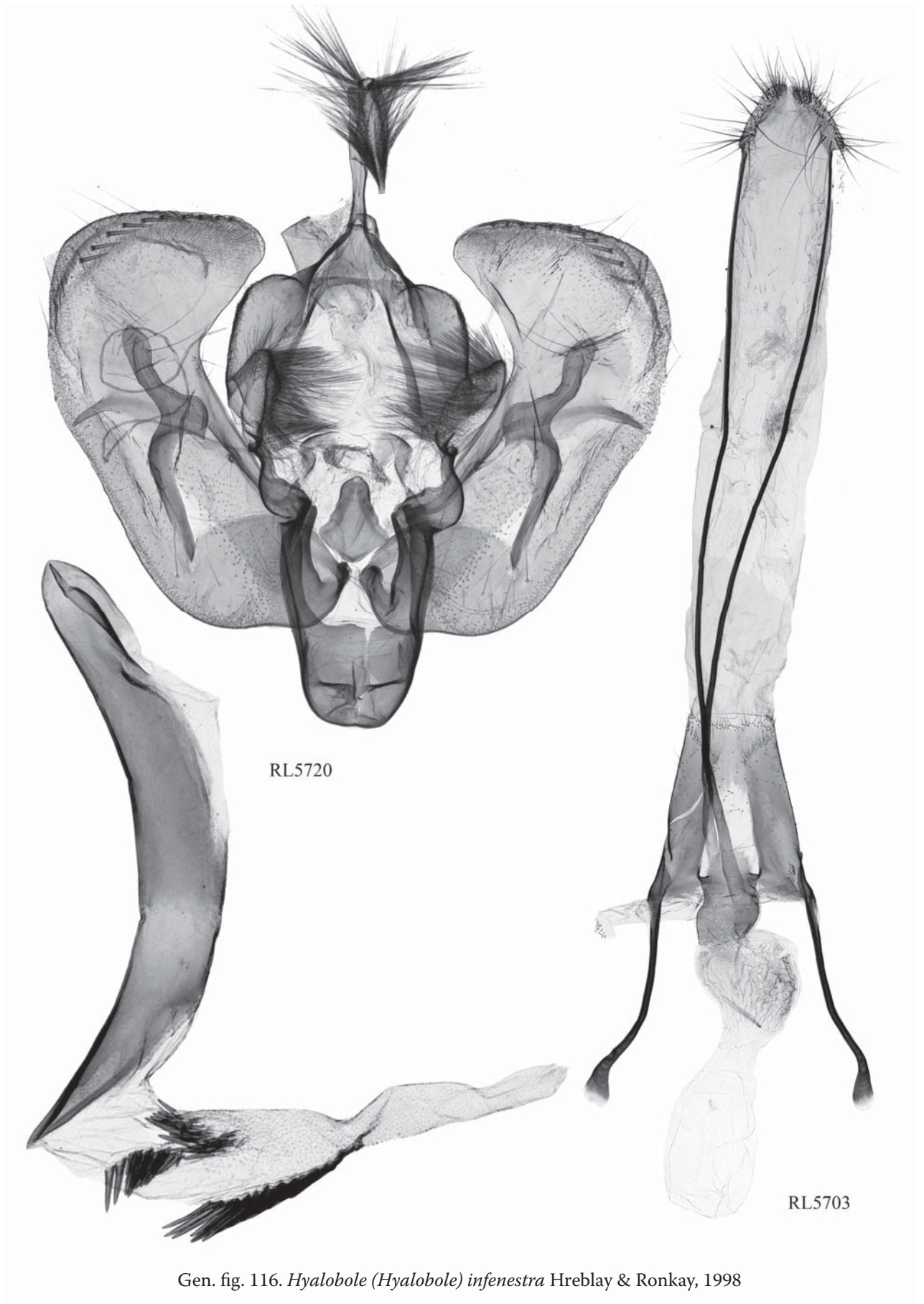






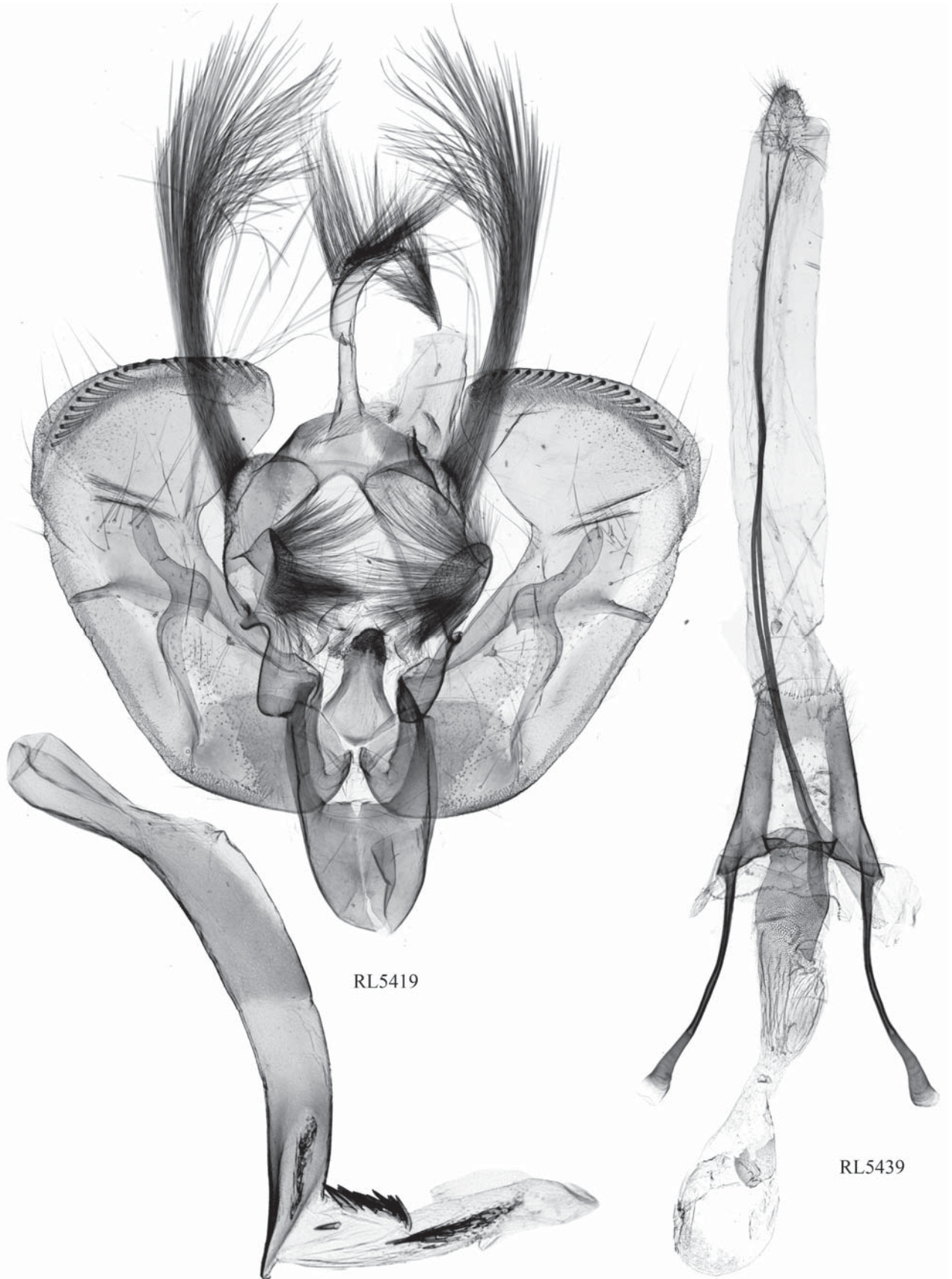
Gen. fig. 114. *Hyalobole (Hyalobole) marginalis* Hreblay & Ronkay, 1998



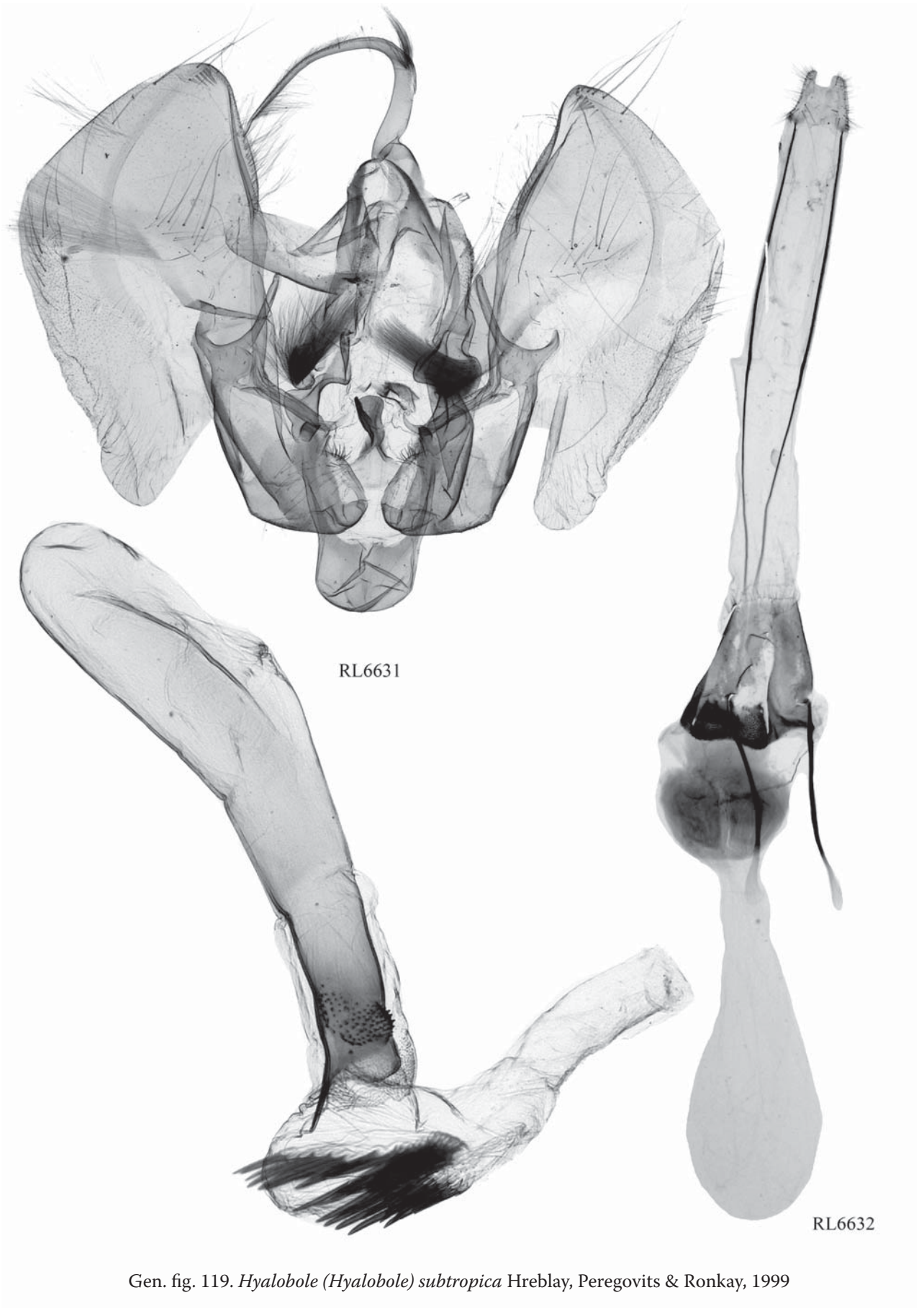




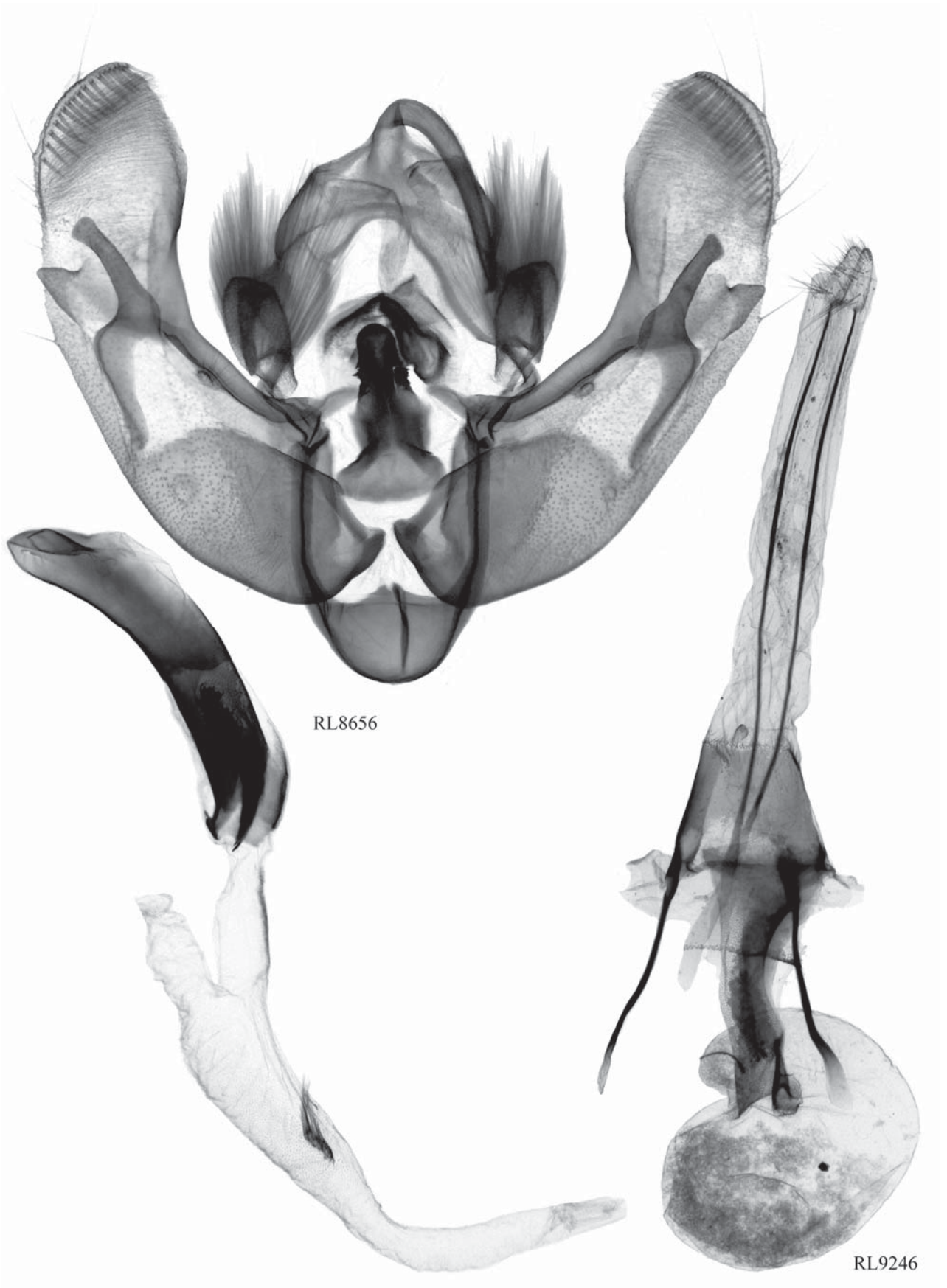
Gen. fig. 117. *Hyalobole (Hyalobole) phaeosoma* (Hampson, 1906)



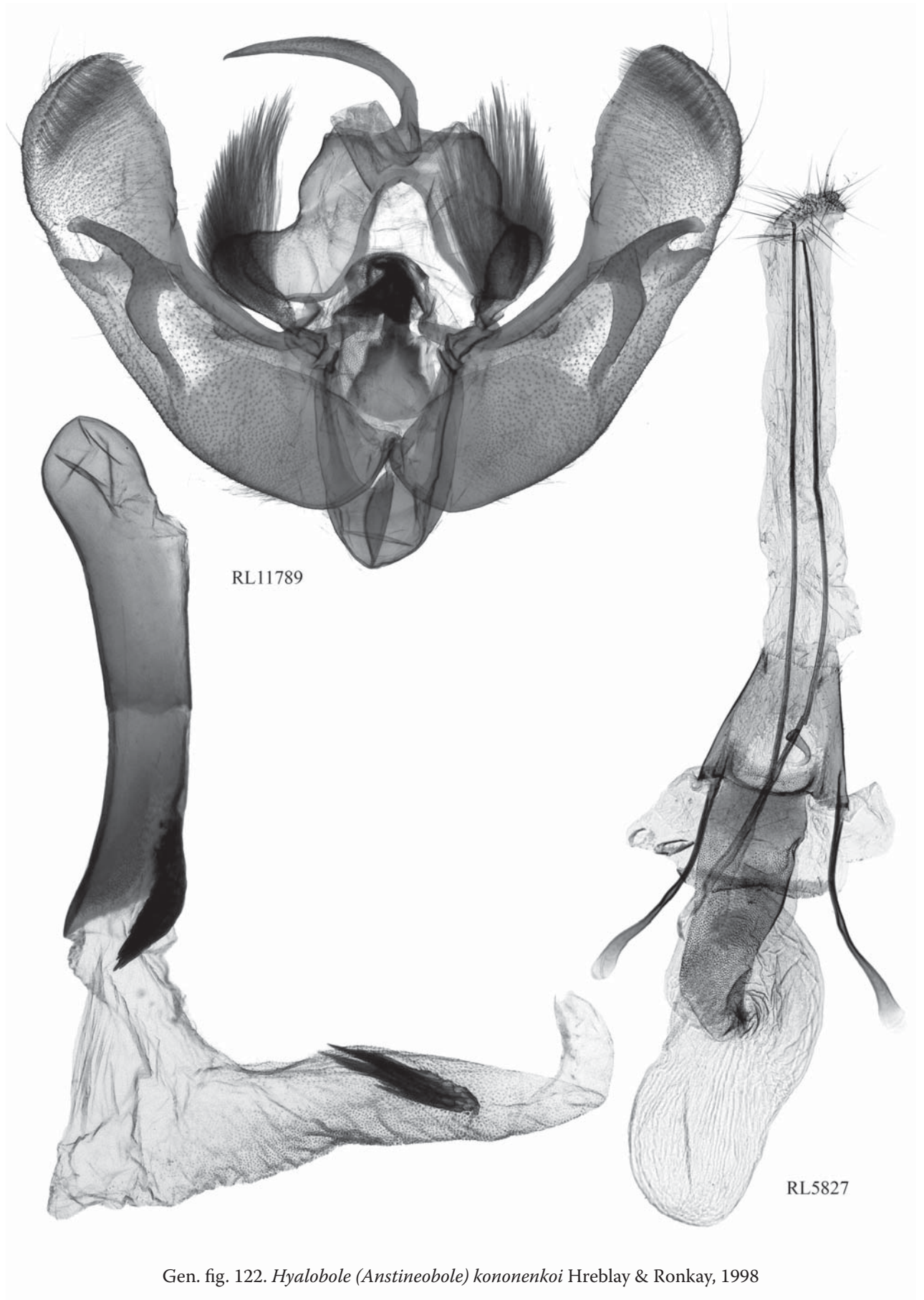
Gen. fig. 118. *Hyalobole (Hyalobole) subapicalis* Hreblay & Ronkay, 1998



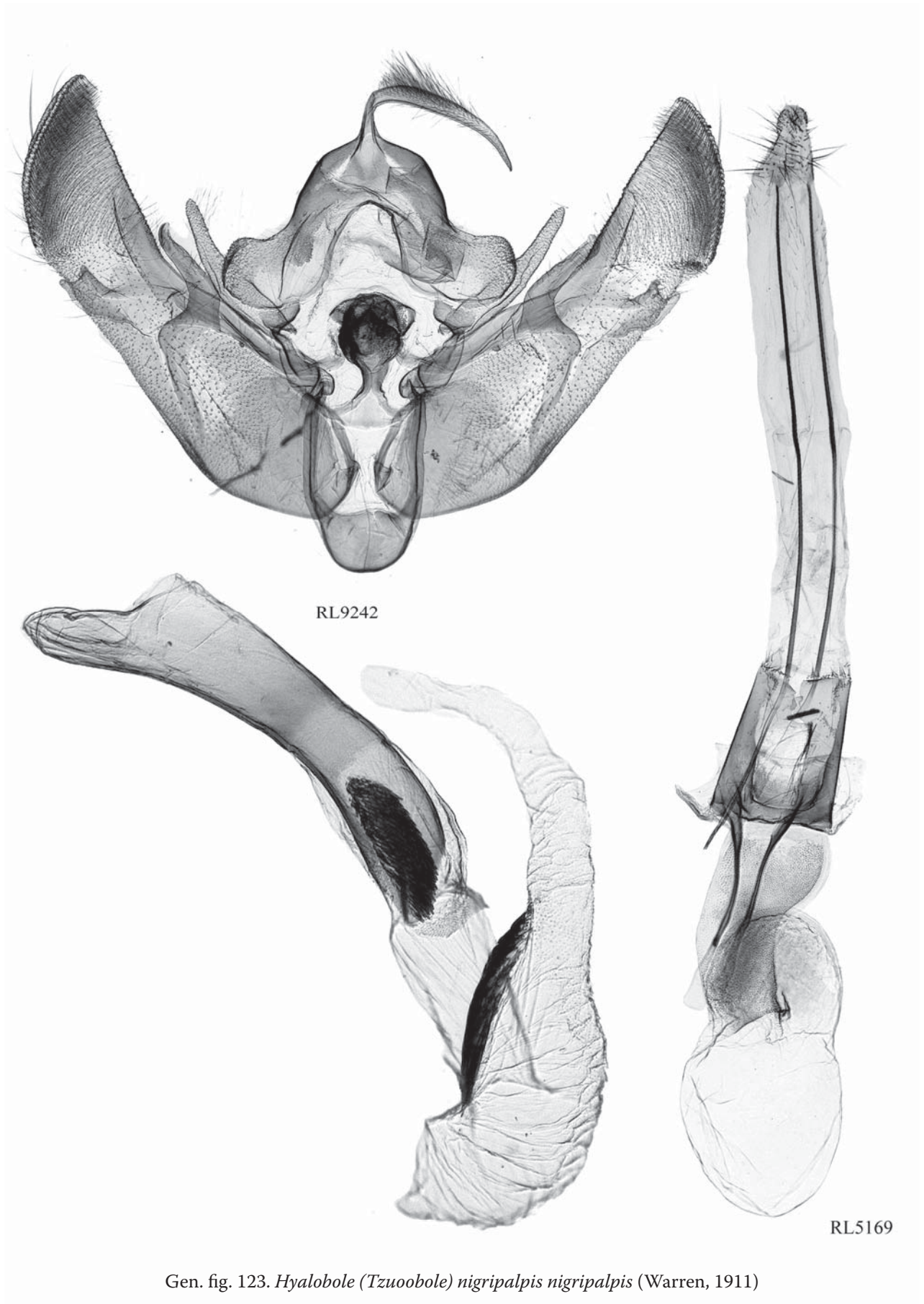




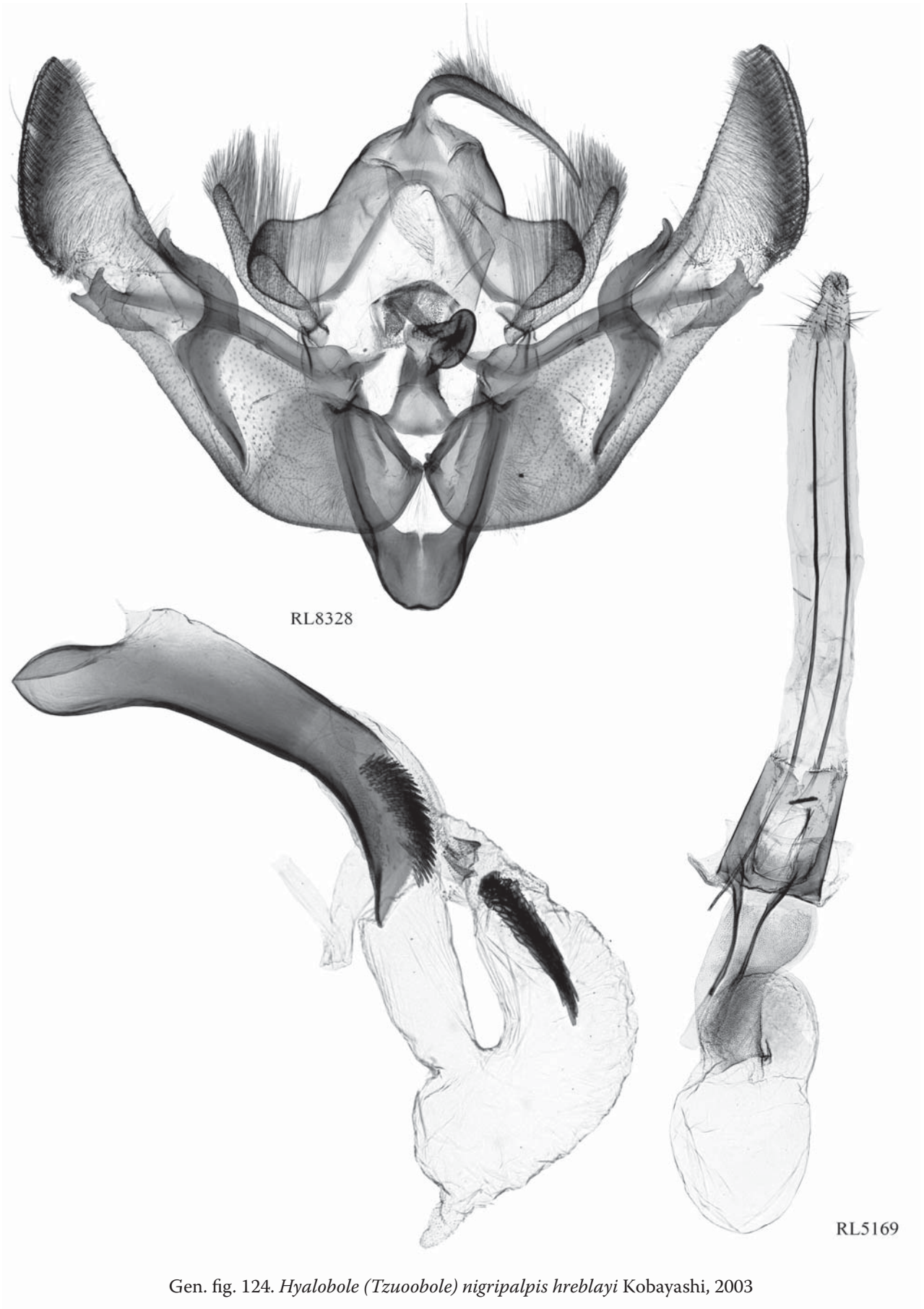
Gen. fig. 121. *Hyalobole (Anstineobole) albimacula nigrizonata* Ronkay, Ronkay, Gyulai & Hacker, 2010

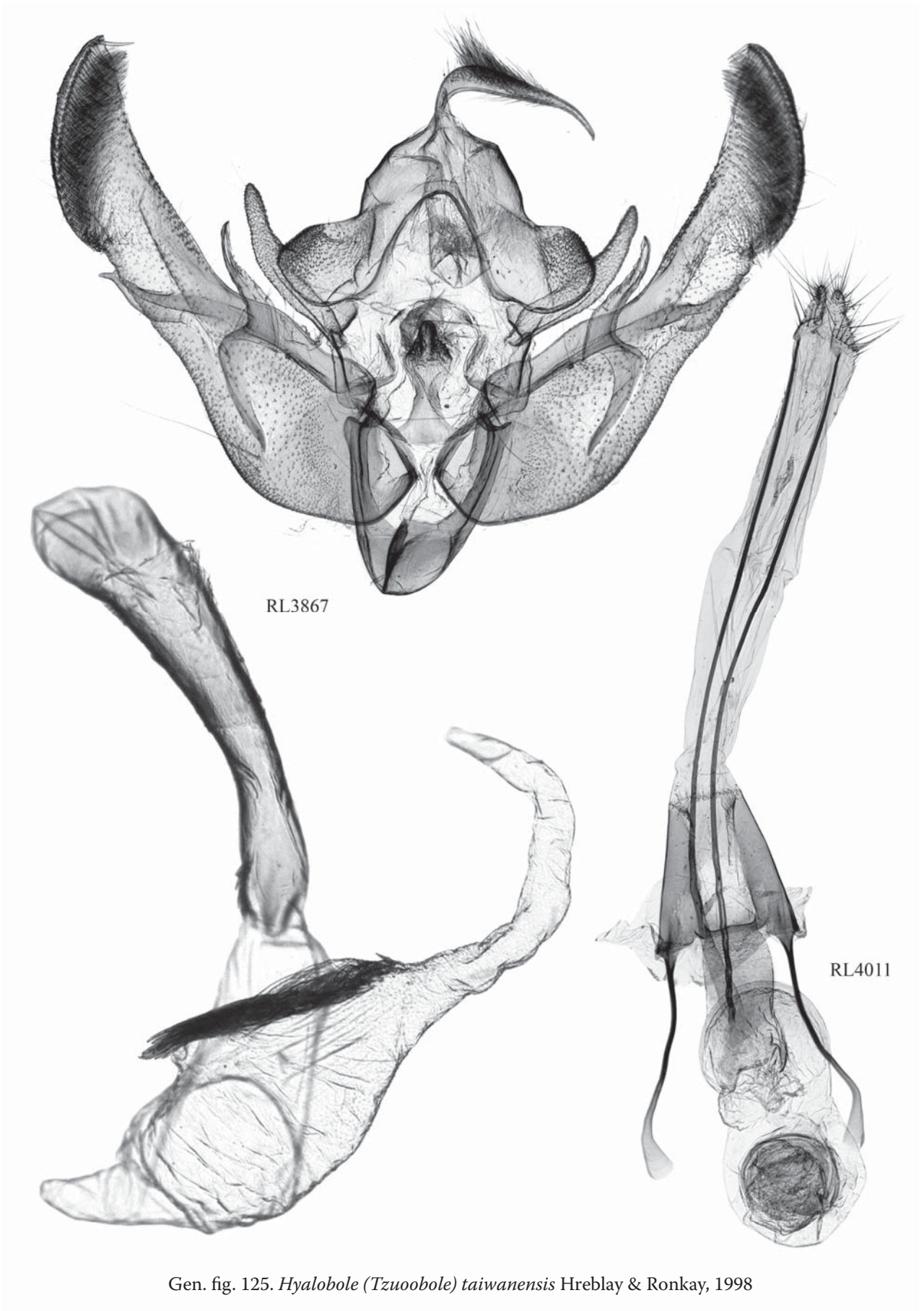


Gen. fig. 122. *Hyalobole (Anstineobole) kononenkoi* Hreblay & Ronkay, 1998



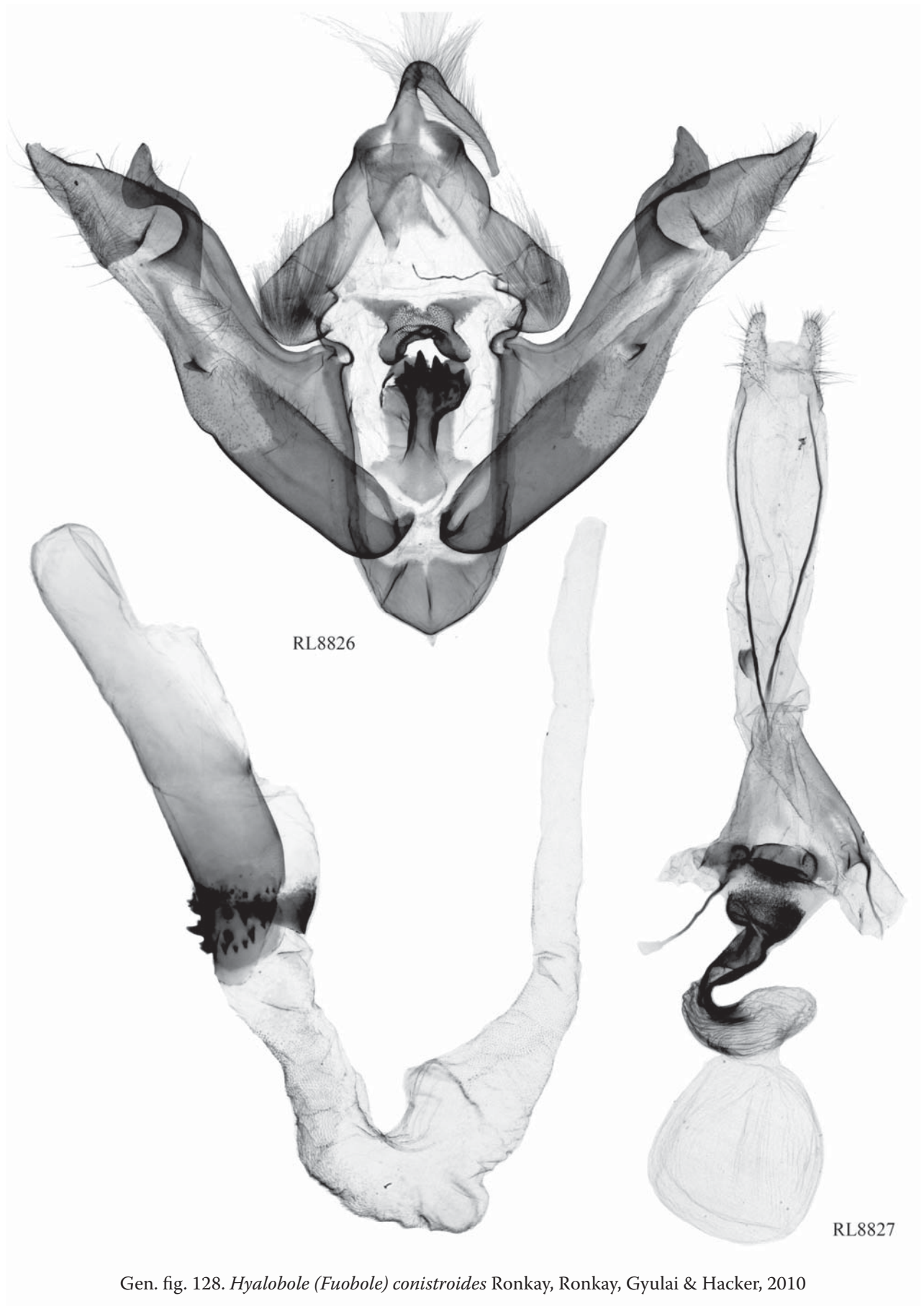
Gen. fig. 123. *Hyalobole (Tzuobole) nigripalpis nigripalpis* (Warren, 1911)

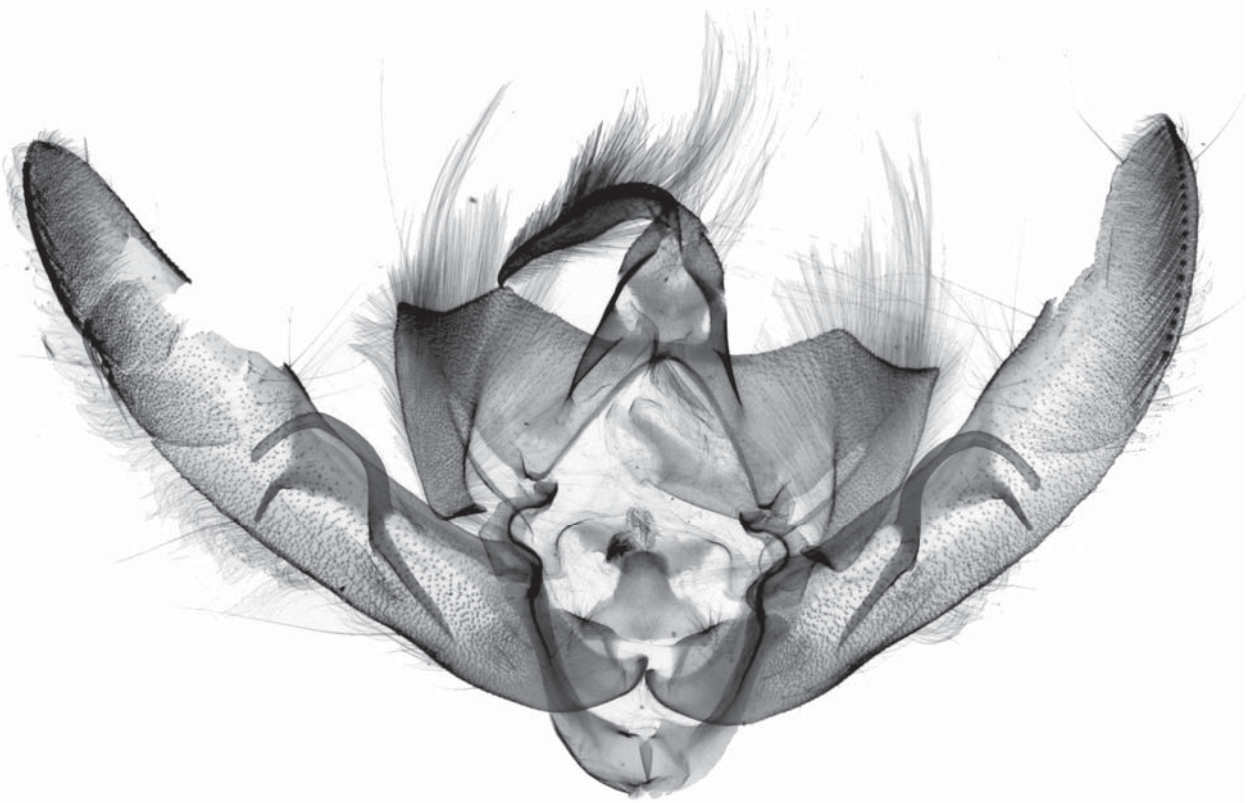












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