FIBIGERIANA

Volume 4

THE VARTIAN COLLECTION
PART IV
GEOMETRIDAE

A TAXONOMIC ATLAS OF THE EURASIAN AND NORTH AFRICAN NOCTUOIDEA

Ronkay, L., Ronkay, G. & Behounek, G. (2008): Plusiinae I. A Taxonomic Atlas of the Eurasian and North African Noctuoidea. Volume 1. – Heterocera Press, Budapest. 342 pp. ISBN 978-963-88014-0-1

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Zilli, A., Varga, Z., Ronkay, G. & Ronkay, L. (2009): Apameini I. A Taxonomic Atlas of the Eurasian and North African Noctuoidea. Volume 3. – Heterocera Press, Budapest. 393 pp. ISBN 978-963-88014-3-2

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Part IV
GEOMETRIDAE

Gyula M. László, Martin Lödl, Sabine Gaal-Haszler,
Anthony Galsworthy, Gábor Ronkay, László Ronkay & Zoltán Varga

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Authors' addresses
Gyula M. László – The African Natural History Research Trust,
Street Court, Leominster, Kingsland, HR6 9QA United Kingdom. E-mail: gyula.m.laszlo@gmail.com
Martin Lödl – Naturhistorisches Museum Wien, A-1010 Vienna, Burgring 7, Austria.
E-mail: martin.loedl@nhm-wien.ac.at
Sabine Gaal-Haszler – Naturhistorisches Museum Wien, A-1010 Vienna, Burgring 7, Austria.
E-mail: sabine.gaal@nhm-wien.ac.at
Anthony Galsworthy – The Natural History Museum
Cromwell Road, London, SW7 5BD United Kingdom. E-mail: acgalsworthy@btopenworld.com
Gábor Ronkay – H-1137, Budapest, Szent István krt. 4, Hungary. E-mail: gaborronkay@gmail.com
László Ronkay – Department of Zoology, Hungarian Natural History Museum,
H-1088 Budapest, Baross u. 13, Hungary. E-mail: ronkay@mail.zoo.nhmus.hu
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

The Vartian collection is one of the most comprehensive collections of the Lepidoptera of Europe, North Africa and the Middle East, comprising some 140,000 specimens. The Geometridae section of this collection is supposedly the richest western and Central Asiatic reference material of this very diverse and yet insufficiently studied fauna, comprising nearly 22,100 specimens of 1353 species-group taxa. The specimens have been collected in altogether 52 countries but the overwhelming majority of the Geometridae specimens originate from Armenia, Transcaucasia, Iran, Afghanistan and Pakistan. There are significant materials having been gathered from the Balkan Peninsula, Spain and Morocco and, naturally, the local fauna of Austria is also well represented in the collection.

The complete list of the countries of origin of the Geometridae is presented prior to the collection check list section of the book. All species listed in the check list are associated with the abbreviation of all countries where the specimens of the given taxon have been collected.

Besides the outstanding species number of the Vartian Geometridae material, it is necessary to mention the excellent quality of the setting of specimens: they are beautifully and uniformly set, having been maintained the original shape of specimens as if they had just been taken off the setting board. Moreover, almost all exemplars are fresh and fair in condition. This kind of extraordinarily aesthetic look of the Lepidoptera material is very rarely found in any large collection, praising the professional skill and artistic taste of Eva Vartian as a brilliant mounter who was able also to arrange her own collection in a stunningly neat way, as well as the preserving conditions of the collection what must have also been ideal all the time.

The entire Geometridae collection was arranged by Eva Vartian herself using all available literature for identification. Extensive taxonomic studies on the Geometridae material had been carried out by Wiltshire and Vojnits in the sixties and eighties of the last century. The research field of the latter author was restricted to the genus *Eupithecia*, while Wiltshire dealt with a broad range of Geometridae groups and provided expertise help in the identification for Mrs Vartian. In the nineties, Axel Hausmann studied the Sterrhinae subfamily of the Vartian collection as part of preparation of the Sterrhinae volume of the Geometrid Moths of Europe series. As a result of the work of the former researchers in the Vartian Geometridae collection, the type material includes 48 holotype and 1120 paratype specimens representing 87 taxa. Despite these studies, significant parts of the Vartian collection have remained generally unrevised by modern methods and, in spite of the efforts of the specialists, numerous species remained unidentified or were misidentified before the present work.

The compilation of the Geometridae part of the book series introducing the Vartian collection commenced back in 2010. The specimen photos for the colour plates have been selected from altogether 5167 individual digital images. The imaging, then selecting and properly processing the specimen photos proved to be a very time consuming and exhausting task, which was finalized in the spring of 2017. The major aim of our project was, besides the preparation of a fully illustrated catalogue of the collection, to check all identifications and correct the misidentifications, identify the still unidentified specimens and describe the new taxa found in the collection. These objectives proved to be rather hard to fully accomplish as many groups of Geometridae require a complete taxonomic revision before the taxa can be precisely identified. This difficult and vast task could not fit entirely into the scope of the present work, therefore in quite a few cases we decided to provide tentative identification only. Having said that, the identifications of approximately 20% of the taxa harboured in the collection have been updated, including a number of taxa which have been identified by us for the first time. Besides the mentioned updating, we found seven apparently undescribed taxa in the collection and the descriptions of these new species are also given in this present work. For the identification of the problematic taxa we had to use multiple tools. Besides checking

all original publications regarding any part of the Geometridae material of the Vartian collection or the geographical regions concerned, we relied also on the splendid Geometrid Moths of Europe series as one of our main source for the proper identification. Last but not least, the most problematic – principally Far Eastern, Himalayan and Afghan – specimens have been identified by comparing them with primary types or identified collection specimens deposited in the Natural History Museum, London. In several cases the information found on the BOLD website also provided clues for the identification.

During compiling the checklist of the Geometridae material of the Vartian collection our intention was to present the sequence of the species in systematic order. This objective proved to be not an easily achievable one as the suprageneric taxonomy and systematics of the family Geometridae are far from being fully clarified and the position of many taxonomic groups is still dubious, being topics of current researches or simply has not yet been studied. The preparation of a perfect taxonomic checklist of taxa exceeding 1300 unspecified Palaearctic and Oriental Geometridae species, what the Vartian collection consists of, is, therefore, difficult and cannot be done satisfactorily in every respect. In order to provide the most up-to-date taxonomic content we decided to follow the nomenclature and taxonomy of the Geometrid Moths of Europe series as the most modern, accurate and state of the art source for each species and genera occurring in Europe. For the extra-European taxa we followed the taxonomic concept of Parsons et al. (1999). The complete list of the literature used for identification and systematics is presented in the chapter "References".

We do hope that present collection monograph will serve as an identification guide as well and will be considered as an important reference book for any subsequent research regarding the Geometridae of Europe, the Middle East and Southern Central Asia.

Vienna and Budapest, 28th October 2017

The authors

VORWORT

Die Vartian-Sammlung ist eine der umfangreichsten Sammlungen von Lepidoptera Europas, Nordafrikas und des Mittleren Ostens und umfasst etwa 140.000 Exemplare. Der Geometridae-Teil dieser Sammlung ist vermutlich das reichste west- und zentralasiatische Referenzmaterial dieser sehr diversen und bis jetzt unzureichend untersuchten Fauna, mit nahezu 22.100 Exemplaren von 1353 Artgruppen-Taxa. Die Falter wurden in insgesamt 52 Ländern gesammelt, die überwältigende Mehrheit stammt aber aus Armenien, Transkaukasien, dem Iran, Afghanistan und Pakistan. Beträchtliches Material wurde auch auf der Balkanhalbinsel, in Spanien und in Marokko gesammelt, und selbstverständlich ist auch die lokale Fauna Österreichs gut vertreten.

In diesem Buch wird die komplette Liste der Herkunftsländer vor dem Kapitel mit der Sammlungs-Checkliste präsentiert. Allen in der Checkliste aufgeführten Arten werden die Abkürzungen der Länder zugeordnet, in denen Exemplare des angeführten Taxons gesammelt worden sind. Neben der herausragenden Artenzahl des Vartian-Geometridae-Materials ist es wichtig, die exzellente Qualität der Aufstellung der Falter zu erwähnen. Sie sind wunderschön und gleichmäßig gesteckt, die ursprüngliche Form der Exemplare ist erhalten geblieben, so als hätte man sie gerade vom Spannbrett genommen. Darüber hinaus ist der Zustand fast aller Exemplare gut und wie neu. Dieses außergewöhnlich ästhetische Aussehen des Lepidoptera-Materials wird nur sehr selten in großen Sammlungen gefunden und zeigt die professionelle Geschicklichkeit und den künstlerischen Geschmack von Eva Vartian, einer brillanten Präparatorin, welche ihre eigene Sammlung verblüffend akkurat aufgestellt hat. Ebenso zeigt die Sammlung, dass die Aufbewahrungsbedingungen zu jeder Zeit ideal gewesen sein müssen.

Die gesamte Geometridae-Sammlung wurde von Eva Vartian selbst aufgestellt, unter Verwendung aller verfügbaren Bestimmungsliteratur. Ausführliche taxonomische Studien des Geometridae-Materials wurden von Wiltshire und Vojnits in den Sechziger- und Achtzigerjahren des vorigen Jahrhunderts durchgeführt. Das Untersuchungsgebiet von Vojnits war auf die Gattung *Eupithecia* beschränkt, während Wiltshire eine große Bandbreite von Geometridae-Gruppen bearbeitete. Er bot Frau Vartian seine Fachkompetenz und Hilfe bei der Identifizierung des Materials an. In den Neunzigerjahren untersuchte Axel Hausmann im Zuge der Vorbereitung des Sterrhinae-Bandes der Buchserie Geometrid Moths of Europe die Unterfamilie Sterrhinae der Vartian-Sammlung. Die Bearbeitung der Geometridae durch die bisherigen Forscher resultiert in einem reichen Typusmaterial von 48 Holotypus-Exemplaren und 1120 Paratypus-Exemplaren, die 87 Taxa repräsentieren. Trotz der erwähnten Studien, sind signifikante Teile der Vartian-Sammlung mit modernen Methoden weitgehend unbearbeitet geblieben, und trotz der Bemühungen der Spezialisten sind zahlreiche Arten vor dieser jetzt vorliegenden Arbeit unbestimmt oder falsch bestimmt geblieben.

Die Zusammenstellung des Geometridae-Teils unserer Buchserie über die Vartian-Sammlung begann 2010. Die Fotos der Falter für die Farbtafeln wurden aus insgesamt 5167 Digitalbildern ausgewählt. Das Fotografieren, Auswählen und saubere Verarbeiten der Falterfotos erwies sich als sehr zeitaufwendige und strapaziöse Aufgabe, welche im Frühling 2017 beendet wurde. Das Hauptziel unseres Projektes war, neben der Erstellung eines vollillustrierten Kataloges der Sammlung, alle Bestimmungen zu überprüfen, die Fehlbestimmungen zu korrigieren, die noch immer nicht bestimmten Exemplare zu bestimmen und die neu gefundenen Taxa zu beschreiben. Die Zielsetzung erwies sich als ziemlich schwer durchzuführen, da viele Gruppen der Geometridae eine komplette taxonomische Revision brauchen, bevor die Taxa präzise identifiziert werden können. Diese schwierige und große Aufgabe konnte nicht vollständig in den Rahmen des hier vorgestellten Werkes passen, deswegen haben wir in einigen wenigen Fällen beschlos-

sen, nur eine provisorische Bestimmung bereitzustellen. Abgesehen davon wurden ca. 20% der Taxa in der Geometridae-Sammlung von uns auf den neuesten Stand gebracht, darunter auch eine Anzahl von Taxa, die zum ersten Mal bestimmt wurden. Überdies fanden wir sieben offensichtlich unbeschriebene Taxa in der Sammlung, deren Beschreibung in diesem vorliegenden Werk erfolgt. Für die Bestimmung der problematischen Taxa mussten wir mehrere Methoden anwenden. Außer der Überprüfung sämtlicher Originalpublikationen für jeden Teil des Geometridae-Materials der Vartian-Sammlung oder die betreffenden geographischen Regionen, stützten wir uns auch auf die großartige Buchserie Geometrid Moths of Europe, eine unserer Hauptquellen für korrekte Bestimmung. Zu guter Letzt, wurden die problematischsten Exemplare - vorwiegend diejenigen aus dem Fernen Osten, dem Himalaja und Afghanistan - durch das Vergleichen mit den primären Typusexemplaren oder identifizierten Sammlungsexemplaren aus dem Natural History Museum in London bestimmt. In einigen Fällen gaben auch die Informationen auf der BOLD-Website Hinweise für Identifizierungen.

Während des Zusammenstellens der Checkliste des Geometridae-Materials der Vartian-Sammlung war es unsere Absicht, die Abfolge der Arten in systematischer Reihenfolge zu präsentieren. Diese Zielsetzung erwies sich als nicht leicht zu erreichen, da die supragenerische Taxonomie und Systematik der Familie Geometridae weit davon entfernt sind, vollständig geklärt zu sein, und die Positionen von vielen taxonomischen Gruppen noch immer zweifelhaft sind. Sie sind der Gegenstand gegenwärtiger Forschungen oder die Bearbeitung wurde ganz einfach noch nicht begonnen. Die Erstellung einer perfekten taxonomischen Checkliste von Taxa, die 1300 unspezifizierte paläarktische und orientalische Geometridae-Arten - woraus die Vartian-Sammlung besteht – übersteigt, ist daher schwierig und kann nicht in jeder Hinsicht zufriedenstellend erledigt werden. Um den aktuellsten taxonomischen Inhalt zu bieten, haben wir beschlossen, der Nomenklatur und Taxonomie der Buchserie Geometrid Moths of Europe zu folgen. Diese Quelle ist für jede Art und jede Gattung, die in Europa vorkommt, am modernsten, präzisesten und auf dem letzten Stand. Für die außereuropäischen Taxa folgen wir dem taxonomischen Konzept von Parsons et al. (1999). Die vollständige Liste, der für die Bestimmung und Systematik benutzten Literatur, wird im Kapitel “References” bereitgestellt.

Wir hoffen, dass diese Sammlungs-Monographie ebenso als Bestimmungshandbuch dienen wird, und als ein wichtiges Referenzwerk für jede nachfolgende Forschungsarbeit über die Geometridae Europas, des Mittleren Ostens und des südlichen Zentralasiens betrachtet werden wird.

Wien und Budapest, 28. Oktober 2017

Die Autoren

CONTENTS

ABBREVIATIONS

Afg – Afghanistan
Alg – Algeria
Arm – Armenia
Aut – Austria
Bih – Bosnia & Herzegovina
Bul – Bulgaria
Chi – People's Republic of China
Cor – Corsica
Cre – Crete
Cro – Croatia
Cyp – Cyprus
Cze – Czech Republic
Den – Denmark
Egy – Egypt
Eng – England
Est – Estonia
Fin – Finland
Fra – France
Geo – Georgia
Ger – Germany
Gre – Greece
Hun – Hungary
Ind – India
Ira – Iran
Irq – Iraq
Isr – Israel
Ita – Italy
Jap – Japan
Jor – Jordan
Kaz – Kazakhstan
Ksa – Kingdom of Saudi Arabia
Leb – Lebanon
Mac – Macedonia
Mne – Montenegro
Mor – Morocco
Ned – The Netherlands
Nep – Nepal
Pak – Pakistan
Pol – Poland
Por – Portugal
RFE – Russian Far East
Rus – Russia
Sar – Sardinia
Sic – Sicily
Slo – Slovenia
Spa – Spain
Srb – Serbia
Sud – Sudan
Sui – Switzerland
Swe – Sweden
Syr – Syria
Tai – Taiwan
Tha – Thailand
Tun – Tunisia
Tur – Turkey
Ukr – Ukraine

Collection related abbreviations

LG – Genitalia slide made by Gyula M. László
NHM – The Natural History Museum, London, UK
NHMW – Naturhistorisches Museum Wien, Austria
NHRS – Naturhistoriska Riksmuseet, Stockholm, Sweden
SMNH – Staatliches Museum für Naturkunde Stuttgart, Germany
ZFMK – Zoologisches Forschungsmuseum Alexander Koenig, Bonn, Germany
ZSM – Zoologische Staatssammlung München, Germany

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THE GEOMETRIDAE TYPE MATERIAL OF THE VARTIAN COLLECTION

by

Sabine Gaal-Haszler, Martin Lödl & Gyula M. László

The list of the type material of the Geometridae collection is compiled following the nomenclature of the original descriptions and listed in alphabetical order. We have included into the type list the infrasubspecific name holder specimens, too, although they do not bear taxonomic value. These names can be found at the end of the list. In several cases we found discrepancies between the original descriptions and the label data, in addition some taxa were published in ambiguous circumstances. We attempted to clarify these problematic cases by adding explanatory remarks in each such occasion. After checking the original descriptions and cross-checking with the collection specimens, altogether 48 holotype and 1120 paratype specimens have been found, representing 87 taxa.

Acidalia incanata ibericata Reisser, 1935, *Entomologische Rundschau* **53**: 78, pl. 1, C3-C8. Type-locality: Spain, Sierra de Gredos, 1900 m. 2 paratypes.

Acrobiston aestivalis Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 159, pl. 2, fig. 22. Type-locality: Afghanistan, Badakhshan, Anjuman, 2900 m. 9 paratypes.

Alcis evae Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 146, fig. 10, pl. 12, fig. 16. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2200 m. Holotype.

Alcis granitaria klapperichi Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 160, pl. 2, fig. 26. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2200 m. Holotype, 40 paratypes.

Alcis paghmana Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 162, pl. 2, fig. 29, pl. 3, fig. 30. Type-locality: Afghanistan, Paghman, 2100 m. 4 paratypes.

Anaitis cretica Reisser, 1974, *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen* **24**(4): 133. Type-locality: Greece, Crete. 13 paratypes.

Artemidora vartianae Weisert, 2003, *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen* **55**: 62, figs 1–5. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2500 m. Holotype, 62 paratypes.

Catarhoe arachne Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 152, pl. 1, fig. 8. Type-locality: Afghanistan, Pul-i-chomri, 700 m. 5 paratypes.

Catarhoe semnana Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 378, fig. 5, pl. 2, fig. 10. Type-locality: Iran, Derbend, 25 km north of Teheran, 2000 m. Holotype, 20 paratypes.

Chlorissa asphaleia Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 30, fig. 1, pl. 2, fig. 3. Type-locality: Iran, Derbend, 25 km north of Teheran, 2000 m. Holotype.

Chloroclysta miata buzurga Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 373, pl. 1, fig. 5. Type-locality: Iran, Derbend, 25 km north of Teheran, 2000 m. Holotype, 1 paratype.

Coenotephria triciliata Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 151, pl. 1, figs 4, 5. Type-locality: East-Afghanistan, Hindukush, Ejan, Salang valley, 2000 m. 2 paratypes.

Coenotephria vartianata Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 372, fig. 2, pl. 1, fig. 2. Type-locality: Iran, Derbend, 25 km north of Teheran, 2000 m. Holotype, 2 paratypes.

Contropis tagana Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 164, pl. 3, fig. 32. Type-locality: Afghanistan, Khinjan valley, Ferush-Tagan, 1900 m. 10 paratypes.

Ctenognophos eolaria anax Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 150, fig. 9, pl. 12, fig. 22. Type-locality: Central Afghanistan, Band-i-Amir, 3000 m. Holotype, 21 paratypes.

Euphyia chalusata Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 374, fig. 3, pl. 2, fig. 7. Type-locality: N-Iran, south of Chalus, 2000 m. Holotype, 4 paratypes.

Eupithecia albicans Vojnits, 1981, *Acta Zoologica Academiae Scientiarum Hungaricae* **27**(1–2): 225, figs 10, 11. Type-locality: Nepal, Dudh Kosi Tal, 3500 m. 1 paratype. Synonym of *E. leucethensis* Prout, 1926.

Eupithecia convallata terricolor Vojnits, 1988, *Acta Zoologica Academiae Scientiarum Hungaricae* **34**(4): 423, figs 9–12, pl. 1, figs 5, 6. Type-locality: Afghanistan, 10 km northwest of Kabul, 1900 m. Holotype, 3 paratypes.

Eupithecia edaphopteryx Vojnits, 1988, *Acta Zoologica Academiae Scientiarum Hungaricae* **34**(4): 426, figs 17–20, pl. 2, fig. 10. Type-locality: Iran, Paskala northeast of Derbend, 25 km north of Teheran, 2250 m. Holotype, 1 paratype.

Eupithecia elbursi Vojnits, 1988, *Acta Zoologica Academiae Scientiarum Hungaricae* **34**(4): 425, figs 13–16, pl. 1, figs 7, 8. Type-locality: Iran, Elburs Mts, south side, Shimshak, 50 km north of Teheran, 2300 m. Holotype, 7 paratypes.

Eupithecia multa Vojnits, 1981, *Acta Zoologica Academiae Scientiarum Hungaricae* **27**(1–2): 234, figs 19, 20. Type-locality: Nepal, Prov. Nr. 2, East Bhandar unter Thodung, 2200 m. 1 paratype. Synonym of *Eupithecia albibaltea* Prout, 1958.

Eupithecia thurnerata Schütze, 1958, *Entomologische Zeitschrift* **68**(5): 62, fig. 18, pl. 1C, figs 21–30. Type-locality: Macedonia, Trenovo-Kavadar. 4 paratypes. Synonymized with *E. inconspicuata* Bohatsch, 1893 by Mironov (2013).

Eupithecia torva Vojnits, 1983, *Acta Zoologica Academiae Scientiarum Hungaricae* **29**(1–3): 271, fig. 14. Type-locality: Nepal, Kathmandu, 1400 m. 1 paratype.

Eupithecia xanthomixta Vojnits, 1988, *Acta Zoologica Academiae Scientiarum Hungaricae* **34**(4): 428, figs 21–24, pl. 2, fig. 11. Type-locality: E-Afghanistan, south of Khinjan, Salang pass north side, 2100 m. Holotype, 4 paratypes.

Eupithecia xanthomixta derbendi Vojnits, 1988, *Acta Zoologica Academiae Scientiarum Hungaricae* **34**(4): 429, figs 25–27, pl. 2, fig. 13. Type-locality: Iran, Derbend, 25 km north of Teheran, 2000 m. Holotype.

Erannis ankeraria bervaensis Jablonkay, 1965, *Folia entomologica hungarica (N.S.)* **18**(31): 522. Type-locality: Hungary, Bükk Mts, Berva valley, southern slope. 1 paratype.

Geometra purissima Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 28, pl. 2, fig. 1. Type-locality: Afghanistan, Nuristan, 25 km north of Barikot, 1800 m. Holotype.

Glossotrophia terminata Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 130, fig. 25, pl. 9, figs 31, 32. Type-locality: Afghanistan, Nuristan, 25 km north of Barikot, 1800 m. Holotype, 3 paratypes.

Glossotrophia ghirshmani Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 129, pl. 9, figs 29, 30. Type-locality: Afghanistan, Kabul. 11 paratypes. Synonym of *G. semitata ariana* Ebert, 1965.

Gnopharmia eberti Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 158, pl. 2, fig. 17. Type-locality: SW-Afghanistan, 50 km from Kandahar, Arghandab river, 1150 m. 30 paratypes. Synonym of *Gnopharmia colchidaria objectaria Staudinger, 1892.* No paratypes were mentioned in the original description, so the examples with paratype labels are probably not type specimens.

Gnopharmia inermis vartianae Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 389, pl. 1, fig. 4. Type-locality: NE-Iran, west of Jussufabad. Holotype, 3 paratypes. Synonym of *Gnopharmia colchidaria objectaria* Staudinger, 1892. In the original description, the collecting site of the holotype is stated as "west of Meshed", but on the locality label of the holotype "west of Jussufabad" is written.

Gnopharmia maculifera kasyi Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 389, pl. 1, fig. 3. Type-locality: NE-Iran, west of Jussufabad. Holotype. Synonym of *Gnopharmia colchidaria objectaria* Staudinger, 1892.

Gnopharmia objectaria luxuriosa Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 156, pl. 2, figs 18, 19. Type-locality: Afghanistan, Nuristan, Bashgul-valley, 1100 m. 71 paratypes. Synonym of *Gnopharmia sarobiana Ebert, 1965.*

Gnophos badakhshanus Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 167, pl. 3, figs 37, 41. Type-locality: Afghanistan, Badakhshan, Sarekanda, 4200 m. 3 paratypes.

Gnophos boarmioides Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 168, pl. 4, fig. 53. Type-locality: Afghanistan, Badakhshan, Sarekanda, 4100–4200 m. 3 paratypes.

Gnophos brachyphora Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 150, fig. 7, pl. 12, figs. 19, 20. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2200 m. Holotype, 59 paratypes. During his revisional studies on *Gnophos* and related genera Erlacher identified the holotype of *G. brachyphora* as *Charissa taftana*. This synonymy will probably be published by Erlacher in one of his forthcoming publications.

Gnophos difficillimus Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 165, pl. 3, figs 34, 35, 38, 40. Type-locality: Afghanistan, Paghman Mts., 3000 m. 111 paratypes.

Gnophos klapperichi Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 165, pl. 1, figs 1, 2, pl. 4, fig. 43. Type-locality: Afghanistan, Nuristan, Bashgul-valley, 1200 m. 8 paratypes.

Gnophos vastarius pagranitus Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 148, fig. 8, pl. 12, fig. 18. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2100 m. Holotype, 19 paratypes.

Gonodontis xenobia Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 140, fig. 5, pl. 11, fig. 4. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2100 m. Holotype, 5 paratypes.

Hemistola directa Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 32, pl. 2, fig. 2. Type-locality: Afghanistan, Nuristan, 25 km north of Barikot, 1800 m. Holotype, 2 paratypes.

Horisme bamiana Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 139, fig. 2, pl. 11, fig. 2. Type-locality: Central Afghanistan, Bamian. Holotype, 1 paratype.

Lomographa mesonephele Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 153, pl. 1, figs 11–13. Type-locality: Afghanistan, Nuristan, Bashgul-valley, 1100 m. 6 paratypes.

Mannia psyloritaria Reisser, 1958, *Zeitschrift der Wiener Entomologischen Gesellschaft* **43**(7): 123. Type-locality: Greece, Crete, Ida, Silva Rouva, 1400 m. 1 paratype.

Nychiodes princeps Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 142, fig. 12, pl. 11, fig. 5. Type-locality: Central Afghanistan, Band-i-Amir, 3000 m. Holotype.

Nychiodes quettensis Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 142, fig. 13, pl. 11, figs 6, 7. Type-locality: Pakistan, 80 km northwest of Quetta, 2100 m. Holotype, 2 paratypes.

Phaselia kasyi Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 144, fig. 3, pl. 11, fig. 8. Type-locality: Central Afghanistan, Band-i-Amir, 3000 m. Holotype.

Psodos baldensis Wolfsberger, 1966, *Memorie del Museo Civico di Storia Naturale di Verona* **14**: 450, fig. 1, pl. 1, figs 1–4, pl. 2, figs 1, 2, pl. 3, figs 1, 2. Type-locality: N-Italy**,** Monte Baldo, 2100–2200 m. 1 paratype.

Ptychopoda incisaria pulverulenta Reisser, 1933, *Eos* **9**: 251, pl. 5, figs. 21, 22, pl. 9, fig. 6. Type-locality: „the Algerian race"; no exact locality for the holotype is given. 2 paratypes. The editors of Eos printed "1933" as publication date of the 9th volume. Reisser refers in a footnote (on page 251) to another journal: "during the printing of this chapter Wehrli named the Algerian *incisaria* as *incisarioides* (*Internationale Entomologische Zeitschrift* Frankfurt am Main, 22.I.1934); therefore *pulverulenta* should be treated as a synonym, but is kept here to cause no discrepancy with the plate texts." Parsons et al. (1999) do not refer *pulverulenta.*

Ptychopoda incisaria praecisa Reisser, 1934, *Zeitschrift des österreichischen Entomologen-Vereines Wien* **19**(2): 15. Type-locality: N-Morocco, Rif Mts, 1300 m. 2 paratypes. In *Eos* **9**, 1933, on page 248, Reisser claims that the taxon *incisaria praecisa* subsp. nov. has been described shortly in *Zeitschrift des österreichischen Entomologen-Vereines Wien in 1934.* On the page 252 of *Eos* he describes again *praecisa*. Parsons et al. (1999) refer *Zeitschrift des österreichischen Entomologen-Vereines Wien* **19** (1934) as the journal where the original description was published.

Rhodostrophia anjumana Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 147, pl. 5, fig. 64. Type-locality: NE-Afghanistan, Anjuman pass, 4200 m. 3 paratypes.

Rhodostrophia froitzheimi Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 133. Type-locality: NE-Afghanistan, Anjuman pass, 4200 m. 2 paratypes. In 1967 (*Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 148) *Rhodostrophia froitzheimi* was described again as a new species. Wiltshire explains in his paper of 1966, that for the case if it was earlier published than the paper in the "Beiträge", he gives a short description of this new species, because he wants to give page priority to *R. froitzheimi froitzheimi* above *R. f. salangensis* [see below]. In the "Beiträge" there is a longer description published.

Rhodostrophia froitzheimi salangensis Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 133, fig. 29, pl. 10, fig. 43. Type-locality: Afghanistan, Salang pass S, north of Kabul, 2700 m. Holotype, 5 paratypes.

Rhodostrophia kabulensis Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 382, fig. 3, pl. 3, figs 15–18. Type-locality: Afghanistan, Khurd- Kabul, southeast of Kabul, 1900 m. Holotype, 32 paratypes.

Rhodostrophia lenis Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 134, fig. 31, pl. 9, fig. 35. Type-locality: Afghanistan, Khurd-Kabul, southeast of Kabul, 1900 m. Holotype, 18 paratypes.

Rhodostrophia linguata Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 130, fig. 22, pl. 9, figs 34, 37, pl. 10, fig. 38. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2500 m. Holotype, 6 paratypes.

Rhodostrophia meonaria pallidior Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 131, fig. 20, pl. 9, fig. 33. Type-locality: Afghanistan, Khurd- Kabul, southeast of Kabul, 1900 m. Holotype, 14 paratypes.

Rhodostrophia nubifera klapperichi Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 149, pl. 5, fig. 65. Type-locality: Afghanistan, Nuristan, Bashgul-valley, 1200 m. 136 paratypes.

Rhodostrophia olivopallens Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 132, fig. 27, pl. 10, fig. 40. Type-locality: Central Afghanistan, east of Band-i-Amir, 3600 m. Holotype, 12 paratypes.

Rhodostrophia vartianae Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 134, fig. 30, pl. 10, 42, 44. Type-locality: Central Afghanistan, east of Band-i-Amir, 3600 m. Holotype, 10 paratypes.

Scopula danieli Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 127, pl. 8, fig. 27. Type-locality: Afghanistan, Nuristan, Bashgul-valley, 1150 m. 4 paratypes. In 1967 (*Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 142), *Scopula danieli* was described again as a new species. Wiltshire explains in the paper of 1966, that for the case if it was earlier published than his paper in the "Beiträge", he provides a short description of this new species and in the "Beiträge" there will be a longer description.

Scopula nigrociliata Ebert, 1965, *Stuttgarter Beiträge zur Naturkunde* **142**: 7, pl. 1, fig. 7, pl. 2, fig 7. Type-locality: Afghanistan, Khinsh-e-Andarab, northern Badakhshan, 3500–4000 m. 1 paratype.

Scopula submutata safida Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 128, pl. 8, fig. 25, 26. Type-locality: Afghanistan, Nuristan, Bashgul-valley. 30 paratypes.

Scotopteryx sinuosa Wiltshire, 1970, *Annalen des Naturhistorischen Museums in Wien* **74**: 376, fig. 7, pl. 3, fig. 14. Type-locality: Afghanistan, Dasht-i-Nawar, northwest of Ghazni, 3000 m. Holotype, 14 paratypes.

Sterrha abnorma Pinker, 1960, *Zeitschrift der Wiener Entomologischen Gesellschaft* **45**: 99, figs 2–9. Type-locality: Gran Canaria, Telde. 10 paratypes.

Sterrha angustifrons Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 125, fig. 24, pl. 8, fig. 24. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2200 m. Holotype.

Sterrha arenophana Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 119, fig. 12, pl. 7, figs. 9, 10. Type-locality: Afghanistan, Khurd Kabul southeast of Kabul. Holotype, 3 paratypes.

Sterrha barikotensis Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 122, fig. 17, pl. 7, figs. 5, 6, pl. 8, fig. 18. Type-locality: Afghanistan, Nuristan, 25 km north of Barikot, 1800 m. Holotype, 56 paratypes.

Sterrha forsteri Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 118, fig. 6, pl. 7, fig. 3, pl. 8, fig. 15. Type-locality: Afghanistan. 67 paratypes.

Sterrha macropaga Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 118, fig. 8, pl. 7, fig. 7. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2200 m. Holotype, 2 paratypes.

Sterrha maskina Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 124, fig. 3, pl. 8, fig. 22. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2100 m. Holotype, 2 paratypes.

Sterrha micropaga Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 116, fig. 7, pl. 7, fig. 4. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2100 m. Holotype.

Sterrha nigrella Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 119, fig. 11, pl. 8, fig. 21. Type-locality: Afghanistan, Nuristan, 25 km north of Barikot, 1800 m. Holotype, 1 paratype.

Sterrha obsoletaria persidis Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 120, fig. 15, pl. 7, figs. 8, 11, 12. Type-locality: SW-Iran, Saadatabad, Fars, 2000 m. 26 paratypes.

Sterrha reisseri Prout, 1935, *Lepidopterorum Catalogus* **68**: 445. 1 paratype (Cotype Nr. 7). Prout (1935) refers to the species in the original publication as follows: "Reisseri nom. nov. - rupicolaria Reisser (nom. praeocc.)." No description and no type-locality are given. Parsons et al (1999) refers the species as synonym of *Idaea rupicolaria* Reisser, 1927. Label data of the single paratype: Spain, Sierra Nevada, Puerta del Lobo, 2100 m.

Sterrha rufaria imami Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 116, fig. 2. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2200 m. Holotype, 1 paratype.

Sterrha saida Wiltshire, 1968, *The Entomologist* **101**: 166, fig. 4, pl. 2, figs 3, 4. Type-locality: Lebanon, Shweir, 4000 ft. 2 paratypes.

Sterrha vartianae Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 123, fig. 18, pl. 8, figs. 19, 20. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2200 m. Holotype, 1 paratype.

Synopsidia phasidaria afghana Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 145, fig. 11, pl. 12, figs 9–12. Type-locality: Afghanistan, 40 km southeast of Kabul, 2300 m. Holotype, 4 paratypes.

Tephrina klapperichi Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26**(3): 155, pl. 1, fig. 14, pl. 2, fig. 15. Type-locality: Afghanistan, Nuristan, Bashgul-valley, 1200 m. 62 paratypes.

Venusia kasyata Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 139, fig. 1, pl. 1, fig. 1. Type-locality: Afghanistan, Paghman, 30 km northwest of Kabul, 2100 m. Holotype, 2 paratypes.

Xenochlorodes gilvescens Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 114, pl. 7, fig. 1. Type-locality: Afghanistan, Dasht-i-Nawar, northwest of Ghazni, 3000 m. Holotype.

Zamarada ionephela Wiltshire, 1966, *Zeitschrift der Wiener Entomologischen Gesellschaft* **51**: 148, fig. 4, pl. 12, fig. 17. Type-locality: Afghanistan, Nuristan, 25 km north of Barikot, 1800 m. Holotype. Synonym of *Peratophyga hyalinata* Kollar, 1844.

Type specimens of aberrations and forms (unavailable names):

Cosymbia ariadne gen. vern. ***pasiphae*** Reisser, 1975 (1976), *Zeitschrift der Arbeitsgemeinschaft österreichischer Entomologen* **27**(3/4): 85, figs 1C, 2C, 5C. Type-locality: Greece, Crete, Psychro, 980 m. 1 paratype. Infrasubspecific, unavailable name for a spring-form.

Dyscia crassipunctaria gen. autumn. ***phthinopora*** Reisser, 1962, *Zeitschrift der Wiener Entomologischen Gesellschaft* **47**: 210, pl. 23, figs 27–38. Type-locality: Crete occid., Vrysses, 150 m. 6 paratypes. Infrasubspecific, unavailable name for the autumnal generation of the species.

Gnophos difficillimus f.? ***debilis*** Wiltshire, 1967, *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **26** (3): 166. Type-locality: Central Afghanistan, Dasht-i-Nawar, pass, 3150 m. Holotype, 22 paratypes. Wiltshire writes about this form/race (without mentioning a name) in the description of *G. difficillimus*: "…represent either a race or a seasonal form, it is impossible at present to decide which". No description of *debilis* was found. However, it would anyway be unavailable, infrasubspecific name.

Sterrha albitorquata ab. ***diffluata*** Reisser, 1961, *Zeitschrift der Wiener Entomologischen Gesellschaft* **46**: 187. Type-locality: Greece, Crete, Assites, 600 m. 3 paratypes.

Incorrect type designation:

Sterrha hathor Wiltshire, 1949, *Bull. Soc. Fouad 1er Entom.* **33**: 410, fig. 100, pl. 9, figs 5, 6. Type-locality: Egypt, Wadi Isla, Karm Alam, 680 m. 1 „Neallotype". Wiltshire (1966) refers to a series of males of *S. hathor* from Afghanistan found long after the publication of the original description (Wiltshire 1949) based on only females. Having the formerly unknown males in hand he decides to describe the males of *S. hathor* and designates a male „neallotype", the category of which is not accepted by ICZN. The specimen has been figured as „*Sterrha hathor* Neallotypus" in the paper of Wiltshire published in 1966. As neallotype is an invalid nomenclatural category, there is no real *S. hathor* type specimen found in the Vartian collection.

CHECK LIST OF THE GEOMETRIDAE SPECIES OF THE VARTIAN COLLECTION

by Gyula M. László, Martin Lödl, Sabine Gaal-Haszler, Anthony Galsworthy, Gábor Ronkay, László Ronkay & Zoltán Varga

Superfamily GEOMETROIDEA Leach, 1815

Family Geometridae Leach, 1815

Subfamily Archiearinae Fletcher, 1953

Genus ***Archiearis*** Hübner, 1823
Archiearis parthenias (Linnaeus, 1761) (23 exs – Aut) (Plate 1, Figs 1–2)
Genus ***Boudinotiana*** Leraut, 2002
Boudinotiana notha (Hübner, 1803) (7 exs – Aut) (Plate 1, Figs 3–5)
Boudinotiana puella (Esper, 1787) (38 exs – Aut) (Plate 1, Figs 6–9)

Subfamily Orthostixinae Meyrick, 1892

Genus ***Orthostixis*** Hübner, 1823
Orthostixis calcularia Lederer, 1853 (5 exs – Gre, Tur, Ira) (Plate 1, Figs 11–15)
Orthostixis cinerea Rebel, 1916 (1 ex. – Cyp) (Plate 1, Fig. 10)
Orthostixis cribraria (Hübner, 1799) (14 exs – Arm) (Plate 1, Figs 16–19)
Genus ***Naxa*** Walker, 1856
Naxa seriaria (Motschulsky, 1866) (6 exs – Chi) (Plate 1, Figs 20–23)

Subfamily Desmobathrinae Meyrick, 1886

Genus ***Myinodes*** Meyrick, 1892
Myinodes shohami Hausmann, 1994 (1 ex. – Irq) (Plate 1, Fig. 24)
Genus ***Epirranthis*** Hübner, 1823
Epirranthis diversata (Denis & Schiffermüller, 1775) (12 exs – Cze, Ger, Aut) (Plate 1, Figs 25–28)

Subfamily Oenochrominae Guenée, 1857

Genus ***Eumegethes*** Staudinger, 1898
Eumegethes tenuis (Staudinger, 1898) (3 exs – Alg) (Plate 1, Figs 29–31)
Genus ***Sarcinodes*** Guenée, 1858
Sarcinodes yeni Sommerer, 1996 (1 ex. – Tai) (Plate 1, Fig. 41)

Subfamily Alsophilinae Herbulot, 1962

Genus ***Alsophila*** Hübner, 1825
Alsophila aceraria (Denis & Schiffermüller, 1775) (21 exs – Aut, Cze) (Plate 1, Figs 32–35)
Alsophila aescularia (Denis & Schiffermüller, 1775) (32 exs – Aut, Ger) (Plate 1, Figs 36–40)

Subfamily Geometrinae Stephens, 1829

Genus ***Heliothea*** Boisduval, 1840
Heliothea discoidaria Boisduval, 1840 (13 exs – Spa) (Plate 2, Figs 1–3)
Genus ***Aplasta*** Hübner, 1823
Aplasta ononaria (Fuessly, 1783) (67 exs – Spa, Fra, Ger, Mac, Leb, Tur, Syr) (Plate 2, Figs 4–6)
Genus ***Holoterpna*** Püngeler, 1900
Holoterpna diagrapharia Püngeler, 1900 (14 exs – Ira) (Plate 2, Figs 7–10)
Genus ***Pingasa*** Moore, 1887
Pingasa lahayei (Oberthür, 1887) (13 exs – Ira) (Plate 2, Figs 11–13)
Pingasa pseudoterpnaria gracilis Prout, 1916 (1 ex. – Ind) (Plate 2, Fig. 14)
Genus ***Pseudoterpna*** Hübner, 1823
Pseudoterpna pruinata (Hufnagel, 1767) (21 exs – Spa, Fra, Ger, Aut, Hun, Cre) (Plate 2, Figs 15–16)
Pseudoterpna coronillaria coronillaria (Hübner, 1817) (44 exs – Spa, Ita) (Plate 2, Figs 17–19)
Pseudoterpna coronillaria algirica Wehrli, 1929 (25 exs – Mor) (Plate 2, Figs 20–22)
Pseudoterpna coronillaria axillaria Guenée, 1858 (9 exs – Leb) (Plate 2, Fig. 23)
Pseudoterpna coronillaria flamignii Hausmann, 1997 (4 exs – Sic) (Plate 2, Figs 24–26)
Pseudoterpna corsicaria (Rambur, 1833) (2 exs – Cor) (Plate 2, Figs 27–28)
Genus ***Dindicodes*** Prout, 1912
Dindicodes crocina (Butler, 1880) (1 ex. – Nep) (Plate 2, Fig. 29)
Genus ***Herochroma*** Swinhoe, 1893
Herochroma crassipunctata (Alphéraky, 1888) (33 exs – Afg) (Plate 2, Figs 32–33)
Herochroma usneata (Felder & Rogenhofer, 1875) (1 ex. – Pak) (Plate 2, Fig. 30)
Genus ***Pachista*** Prout, 1912
Pachista superans (Butler, 1878) (1 ex. – Jap) (Plate 2, Fig. 31)
Genus ***Gnophosema*** Prout, 1912
Gnophosema isometra hansoni Ebert, 1965 (1 ex. – Afg) (Plate 2, Fig. 34)
Gnophosema isometra mekrana Brandt, 1941 (12 exs – Ira) (Plate 2, Figs 35–38)
Genus ***Praegnophosema*** Ebert, 1968
Praegnophosema drypepes (Prout, 1938) (14 exs – Pak) (Plate 3, Figs 1–5)
Genus ***Dysphania*** Hübner, 1819
Dysphania patula (Walker, 1865) (1 ex. – Tha) (Plate 3, Fig. 6)
Genus ***Agathia*** Guenée, 1858
Agathia carissima Butler, 1878 (5 exs, Chi, Jap) (Plate 3, Figs 14–17)
Genus ***Geometra*** Linnaeus, 1758
Geometra flavifrontaria (Guenée, 1858) (4 exs – Pak) (Plate 3, Figs 9–11)
Geometra papilionaria (Linnaeus, 1758) (14 exs – Fra, Aut) (Plate 3, Figs 7–8)
Geometra purissima Wiltshire, 1966 (2 exs – Afg) (Plate 3, Figs 12–13, 12: holotype)
Genus ***Chloroglyphica*** Warren, 1894
Chloroglyphica variegata (Butler, 1889) (1 ex. – Afg) (Plate 3, Fig. 18)
Genus ***Comibaena*** Hübner, 1823
Comibaena bajularia (Denis & Schiffermüller, 1775) (17 exs – Fra, Aut, Hun, Tur) (Plate 3, Figs 19–21)
Comibaena cassidaria (Guenée, 1858) (1 ex. – Afg) (Plate 3, Fig. 22)
Comibaena pictipennis Butler, 1880 (2 exs – Pak) (Plate 3, Figs 23–24)
Comibaena serrulata Fletcher, 1963 (7 exs – Ira, Rus) (Plate 3, Figs 25–28)
Genus ***Proteuchloris*** Hausmann, 1996
Proteuchloris neriaria (Herrich-Schäffer, 1852) (2 exs – Leb, Tur) (Plate 3, Figs 29–30)
Genus ***Thetidia*** Boisduval, 1840
Thetidia crucigerata (Christoph, 1887) (22 exs – Ira) (Plate 3, Figs 31–34)
Thetidia albosagittata (Ebert, 1965) (3 exs – Pak) (Plate 4, Figs 1–3)

Thetidia fulminaria (Lederer, 1870) (13 exs – Afg, Ira) (Plate 4, Figs 4–6)
Thetidia hammeri (Ebert, 1965) (3 exs – Afg) (Plate 4, Figs 7–9)
Thetidia hazara (Ebert, 1965) (4 exs – Afg) (Plate 4, Figs 10–12)
Thetidia radiata (Walker, 1863) (31 exs – Pak, Afg) (Plate 4, Figs 13–16)
Thetidia plusiaria Boisduval, 1840 (74 exs – Spa) (Plate 4, Figs 17–20)
Thetidia sardinica (Schawerda, 1934) (3 exs – Sar) (Plate 4, Figs 21–22)
Thetidia smaragdaria (Fabricius, 1787) (28 exs – Ita, Fra, Hun, Aut, Tur, Ira, Arm) (Plate 4, Figs 23–24)
Thetidia persica Hausmann, 1996 (68 exs – Tur, Arm, Ira) (Plate 4, Figs 25–27)

Genus ***Hemistola*** Warren, 1893
Hemistola chrysoprasaria chrysoprasaria (Esper, 1795) (23 exs – Ita, Aut, Hun, Mac, Rus) (Plate 4, Figs 28–30)
Hemistola chrysoprasaria occidentalis Wehrli, 1929 (4 exs – Mor) (Plate 4, Figs 31–32)
Hemistola detracta (Walker, 1861) (19 exs – Pak, Afg) (Plate 4, Figs 33–35)
Hemistola directa Wiltshire, 1966 (3 exs – Afg) (Plate 4, Figs 36–38, 36: holotype)
Hemistola fletcheri Prout, 1934 (17 exs – Pak, Afg) (Plate 4, Figs 39–41)

Genus ***Xenochlorodes*** Warren, 1897
Xenochlorodes olympiaria (Herrich-Schäffer, 1852) (32 exs – Fra, Cro, Syr, Leb, Tur, Cre, Mor) (Plate 4, Figs 42–46)
Xenochlorodes nubigena (Wollaston, 1858) (5 exs – Mad) (Plate 4, Figs 47–49)
Xenochlorodes albicostaria Brandt, 1938 (2 exs – Ira, Pak) (Plate 4, Figs 50–51)
Xenochlorodes gilvescens Wiltshire, 1966 (1 ex. – Afg) (Plate 4, Fig. 52 holotype)

Genus ***Comostola*** Meyrick, 1888
Comostola hypotyphla Prout, 1917 (33 exs – Pak) (Plate 4, Figs 53–56)

Genus ***Eucrostes*** Hübner, 1823
Eucrostes indigenata indigenata (Villers, 1789) (36 exs – Ita, Fra, Cre, Gre, Syr, Leb) (Plate 4, Figs 57–60)
Eucrostes indigenata lanjeronica Hausmann, 1996 (4 exs – Spa) (Plate 4, Figs 61–64)

Genus ***Jodis*** Hübner, 1823
Jodis lactearia (Linnaeus, 1758) (1 ex. – Aut) (Plate 5, Fig. 1)
Jodis putata (Linnaeus, 1758) (3 exs – Aut) (Plate 5, Figs 2–3)

Genus ***Thalera*** Hübner, 1823
Thalera fimbrialis (Scopoli, 1763) (61 exs – Fra, Aut, Gre, Mac, Ira, Arm) (Plate 5, Figs 4–6)

Genus ***Bustilloxia*** Expósito, 1978
Bustilloxia saturata saturata (Bang-Haas, 1906) (3 exs – Mor) (Plate 5, Figs 7–9)
Bustilloxia saturata iberica Hausmann, 1995 (1 ex. – Spa) (Plate 5, Fig. 10)

Genus ***Hemithea*** Duponchel, 1829
Hemithea aestivaria (Hübner, 1799) (15 exs – Aut, Ira) (Plate 5, Figs 11–12)

Genus ***Chlorissa*** Stephens, 1831
Chlorissa viridata (Linnaeus, 1758) (27 exs – Aut, Ita, Mac) (Plate 5, Figs 13–15)
Chlorissa gelida (Butler, 1889) (97 exs – Pak, Afg) (Plate 5, Figs 16–19)
Chlorissa rubripicta (Warren, 1893) (3 exs – Pak) (Plate 5, Figs 20–22)
Chlorissa asphaleia Wiltshire, 1966 (1 ex. – Ira) (Plate 5, Fig. 23, holotype)
Chlorissa pretiosaria (Staudinger,1877) (4 exs – Arm) (Plate 5, Figs 24–27)
Chlorissa sp. near *distinctaria* Walker, 1866 (6 exs – Afg) (Plate 5, Figs 28–32)

Genus ***Phaiogramma*** Gumppenberg, 1887
Phaiogramma etruscaria (Zeller, 1849) (108 exs – Aut, Hun, Mac, Turk, Arm, Syr, Leb, Ira, Afg) (Plate 5, Figs 33–37)
Phaiogramma polemia (Prout, 1920) (1 ex. – Irq) (Plate 5, Fig. 38)
Phaiogramma faustinata Milliére, 1868 (8 exs – Sud, Mor, Pak) (Plate 5, Figs 39–42)

Genus ***Heteroculpinia*** Hausmann, 1994
Heteroculpinia prouti (Brandt, 1938) (6 exs – Ira) (Plate 5, Figs 43–46)

Genus ***Microloxia*** Warren, 1893
Microloxia herbaria herbaria (Hübner, 1813) (22 exs – Spa, Mac, Sar, Tur, Syr, Leb) (Plate 5, Figs 47–49)
Microloxia herbaria indecretata (Walker, 1863) (11 exs – Pak) (Plate 5, Figs 50–52)
Microloxia herbaria advolata (Eversmann, 1837) (67 exs – Ira, Afg, Pak) (Plate 5, Figs 53–55)
Microloxia herbaria virideciliata Bubacek, 1926 (1 ex. – Cor) (Plate 5, Fig. 56)
Microloxia ruficornis Warren, 1897 (1 ex. – Ira) (Plate 5, Fig. 57)

Microloxia simonyii Rebel, 1894 (7 exs – Can) (Plate 5, Figs 58–61)
Genus ***Hemidromodes*** Prout, 1916
Hemidromodes robusta (Prout, 1913) (3 exs – Sud) (Plate 5, Figs 62–64)
Hemidromodes sabulifera Prout, 1922 (21 exs – Ira) (Plate 5, Figs 65–69)

Subfamily Sterrhinae Meyrick, 1892

Genus ***Anthometra*** Boisduval, 1840
Anthometra plumularia Boisduval, 1840 (3 exs – Spa) (Plate 5, Figs 70–72)
Genus ***Emmiltis*** Hübner, 1825
Emmiltis pygmaearia (Hübner, 1809) (13 exs – Ita) (Plate 6, Figs 1–3)
Genus ***Cleta*** Duponchel, 1845
Cleta filacearia (Herrich-Schäffer, 1847) (12 exs – Fra, Mac) (Plate 6, Figs 4–6)
Cleta ramosaria (Villers, 1789) (2 exs – Spa) (Plate 6, Figs 7–8)
Genus ***Idaea*** Treitschke, 1825
Idaea serpentata (Hufnagel, 1767) (14 exs – Fra, Aut) (Plate 6, Figs 9–12)
Idaea numidaria (Lucas, 1849) (1 ex. – Alg) (Plate 6, Fig. 13)
Idaea luteolaria (Constant, 1863) (3 exs – Spa) (Plate 6, Figs 14–16)
Idaea aureolaria (Denis & Schiffermüller, 1775) (13 exs – Aut) (Plate 6, Figs 17–20)
Idaea flaveolaria (Hübner, 1809) (3 exs – Sui) (Plate 6, Figs 21–23)
Idaea muricata (Hufnagel, 1767) (11 exs – Fra, Aut, Hun) (Plate 6, Figs 24–26)
Idaea determinata (Staudinger, 1876) (1 ex. – Mac) (Plate 6, Fig. 27)
Idaea maskina (Wiltshire, 1966) (3 exs – Afg) (Plate 6, Figs 28–30, 28: holotype)
Idaea litigiosaria (Boisduval, 1840) (8 exs – Spa) (Plate 6, Figs 31–33)
Idaea lusohispanica Herbulot, 1991 (5 exs – Spa) (Plate 6, Figs 34–36)
Idaea lambessata (Oberthür, 1887) (34 exs – Mor) (Plate 6, Figs 37–39)
Idaea sardoniata (Homberg, 1912) (3 exs – Spa) (Plate 6, Figs 40–42)
Idaea mediaria (Hübner, 1819) (9 exs – Mor, Spa, Fra) (Plate 6, Figs 43–44)
Idaea leipnitzi Hausmann, 2004 (2 exs – Cro) (Plate 6, Figs 45–46)
Idaea rufaria rufaria (Hübner, 1799) (46 exs – Spa, Fra, Aut, Mac, Tur, Ira, Arm) (Plate 6, Figs 47–48)
Idaea rufaria imami (Wiltshire, 1966) (37 exs – Afg) (Plate 6, Figs 49–50, 49: holotype)
Idaea peluraria (Reisser, 1939) (24 exs – Ira) (Plate 7, Figs 1–3)
Idaea consanguinaria consanguinaria (Lederer, 1853) (6 exs – Tur) (Plate 7, Figs 4–5)
Idaea consanguinaria consecrata (Staudinger, 1897) (3 exs – Syr) (Plate 7, Figs 6–7)
Idaea sp. near *consanguinaria consecrata* (Staudinger, 1897) (3 exs – Tur, Ira) (Plate 7, Figs 8–9)
Idaea ossiculata (Lederer, 1870) (4 exs – Syr) (Plate 7, Figs 10–12)
Idaea sericeata sericeata (Hübner, 1813) (24 exs – Sui, Aut, Hun, Arm) (Plate 7, Figs 13–15)
Idaea sericeata calvaria (Wehrli, 1927) (52 exs – Mor, Spa) (Plate 7, Figs 16–18)
Idaea allardiata (Mabille, 1869) (1 ex. – Alg) (Plate 7, Fig. 19)
Idaea macilentaria (Herrich-Schäffer, 1847) (2 exs – Fra) (Plate 7, Fig. 24)
Idaea ochrata ochrata (Scopoli, 1763) (6 exs – Aut, Hun, Mac, Cre) (Plate 7, Figs 20–21)
Idaea ochrata albida (Zerny, 1936) (6 exs – Mor, Spa) (Plate 7, Figs 22–23)
Idaea nevadata (Wehrli, 1926) (2 exs – Spa) (Plate 7, Figs 25–26)
Idaea alicantaria (Reisser, 1963) (12 exs – Spa) (Plate 7, Figs 27–30)
Idaea intermedia (Staudinger, 1899) (26 exs – Gre, Cre, Leb) (Plate 7, Figs 31–35)
Idaea rusticata (Denis & Schiffermüller, 1775) (30 exs – Spa, Aut, Mac, Cre, Arm, Ira) (Plate 7, Figs 36–39)
Idaea filicata (Hübner, 1799) (36 exs – Fra, Ita, Hun, Cro, Mac, Leb) (Plate 7, Figs 40–44)
Idaea affinitata (Bang–Haas, 1907) (3 exs – Leb) (Plate 7, Figs 45–47)
Idaea troglodytaria (Heydenreich, 1851) (2 exs – Leb) (Plate 7, Figs 48–49)
Idaea barikotensis (Wiltshire, 1966) (58 exs – Afg) (Plate 8, Figs 1–4, 1: holotype)
Idaea laevigata (Scopoli, 1763) (3 exs – Spa, Ger) (Plate 8, Figs 5–6)
Idaea efflorata Zeller, 1849 (5 exs – Mor) (Plate 8, Figs 7–11)
Idaea attenuaria (Rambur, 1833) (2 exs – Sic) (Plate 8, Figs 12–13)
Idaea incalcarata (Chrétien, 1913) (6 exs – Spa) (Plate 8, Figs 14–16)
Idaea typicata typicata (Guenée, 1858) (1 ex. – Sic) (Plate 8, Fig. 17)
Idaea typicata hornigaria (Staudinger, 1901) (2 exs – Ita) (Plate 8, Figs 18–19)

Idaea alyssumata (Himmighoffen & Milliére, 1871) (2 exs – Spa, Fra) (Plate 8, Figs 20–21)
Idaea micropaga (Wiltshire, 1966) (1 ex. – Afg) (Plate 8, Fig. 22 holotype)
Idaea dyraria (Zerny, 1934) (12 exs – Mor) (Plate 8, Figs 23–25)
Idaea moniliata (Denis & Schiffermüller, 1775) (12 exs – Aut, Mac) (Plate 8, Figs 26–28)
Idaea circuitaria (Hübner, 1819) (16 exs – Spa, Fra, Cor, Bih, Tur) (Plate 8, Figs 29–31)
Idaea albarracina (Reisser, 1933) (2 exs – Spa) (Plate 8, Figs 32–33)
Idaea incisaria praecisa (Reisser, 1933) (4 exs – Mor) (Plate 8, Figs 34–37)
Idaea incisaria pulverulenta (Reisser, 1933) (2 exs – Alg) (Plate 8, Figs 38–39)
Idaea textaria (Lederer, 1861) (10 exs – Tur, Syr, Irq) (Plate 8, Figs 40–42)
Idaea calunetaria (Staudinger, 1859) (11 exs – Spa) (Plate 8, Figs 43–45)
Idaea atlantica (Stainton, 1859) (4 exs – Mad) (Plate 8, Figs 46–48)
Idaea palmata (Staudinger, 1901) (2 exs – Can) (Plate 8, Figs 49–50)
Idaea elongaria (Rambur, 1833) (20 exs – Mor, Spa, Ita, Mac, Leb, Tur) (Plate 8, Figs 51–54)
Idaea abnorma (Pinker, 1960) (10 exs – Can) (Plate 8, Figs 55–58)
Idaea palaestinensis (Sterneck, 1933) (6 exs – Cre) (Plate 8, Figs 59–61)
Idaea obsoletaria lilaceola Hausmann, 2003 (5 exs – Spa) (Plate 9, Figs 1–3)
Idaea obsoletaria rufularia (Herrich-Schäffer, 1847) (10 exs – Aut, Mac, Gre) (Plate 9, Figs 4–6)
Idaea obliquaria (Turati, 1913) (4 exs – Cor) (Plate 9, Figs 7–10)
Idaea inquinata inquinata (Scopoli, 1763) (13 exs – Aut, Ita) (Plate 9, Figs 11–12)
Idaea inquinata adherbariata (Staudinger, 1898) (5 exs – Leb, Ira, Syr) (Plate 9, Figs 13–14)
Idaea hathor (Wiltshire, 1949) (47 exs – Afg) (Plate 9, Figs 15–18)
Idaea mesodela (Prout, 1926) (3 exs – Afg) (Plate 9, Figs 19–21)
Idaea proclivata (Fuchs, 1902) (35 exs – Tur, Ira) (Plate 9, Figs 22–25)
Idaea dilutaria (Hübner, 1799) (20 exs – Spa, Fra, Aut, Mac, Rus) (Plate 9, Figs 26–28)
Idaea fuscovenosa (Goeze, 1781) (3 exs – Fra, Hun) (Plate 9, Figs 29–31)
Idaea sp. near *fuscovenosa* (Goeze, 1781) (1 ex. – Mor) (Plate 9, Fig. 32)
Idaea lutulentaria (Staudinger, 1892) (3 exs – Spa) (Plate 9, Figs 33–35)
Idaea humiliata (Hufnagel, 1767) (23 exs – Spa, Fra, Aut, Bul, Tur) (Plate 9, Figs 36–39)
Idaea bigladiata Herbulot, 1975 (4 exs – Mor) (Plate 9, Figs 40–43)
Idaea politaria (Hübner, 1799) (3 exs – Ita, Mac) (Plate 9, Figs 44–46)
Idaea longaria (Herrich-Schäffer, 1852) (10 exs – Sic) (Plate 9, Figs 47–50)
Idaea sp. near *longaria* (Herrich-Schäffer, 1852) (1 ex. – Ira) (Plate 9, Fig. 51)
Idaea mareotica (Draudt, 1912) (2 exs – Egy) (Plate 9, Figs 52–53)
Idaea allongata (Staudinger, 1898) (5 exs – Leb, Ira, Irq) (Plate 9, Figs 54–55)
Idaea arenophana (Wiltshire, 1966) (4 exs – Afg) (Plate 9, Figs 56–59, 56: holotype)
Idaea descitaria (Christoph, 1893) (1 ex. – Rus) (Plate 10, Fig. 4)
Idaea manicaria (Herrich-Schäffer, 1852) (8 exs – Mor, Spa) (Plate 10, Figs 1–3)
Idaea forsteri (Wiltshire, 1966) (105 exs – Afg) (Plate 10, Figs 5–7)
Idaea vesubiata (Millière, 1873) (3 exs – Fra) (Plate 10, Figs 8–10)
Idaea libycata (Bartel, 1906) (18 exs – Fra) (Plate 10, Figs 11–13)
Idaea consolidata (Lederer, 1853) (36 exs – Cro, Mac, Leb, Ira, Afg) (Plate 10, Figs 14–17)
Idaea seriata seriata (Schrank, 1802) (58 exs – Aut, Hun) (Plate 10, Figs 18–19)
Idaea seriata canteneraria (Boisduval, 1840) (47 exs – Mor, Spa, Ita, Sic, Bal, Cro, Tur) (Plate 10, Figs 20–21)
Idaea persidis (Wiltshire, 1966) (47 exs – Ira) (Plate 10, Figs 22–25)
Idaea macropaga (Wiltshire, 1966) (6 exs – Afg) (Plate 10, Figs 26–28, 26: holotype)
Idaea soldaitisi Herbulot, 1994 (55 exs – Afg) (Plate 10, Figs 29–31)
Idaea minuscularia (Ribbe, 1912) (10 exs – Spa) (Plate 10, Figs 32–34)
Idaea albitorquata albitorquata (Püngeler, 1909) (21 exs – Mac, Bul, Cre, Leb) (Plate 10, Figs 35–37)
Idaea albitorquata madoniensis Hausmann, 1993 (4 exs – Sic) (Plate 10, Figs 38–40)
Idaea carvalhoi Herbulot, 1979 (18 exs – Spa) (Plate 10, Figs 41–43)
Idaea fathmaria (Oberthür, 1876) (5 exs – Mor) (Plate 10, Fig. 44)
Idaea illustris (Brandt, 1941) (3 exs – Ira) (Plate 10, Figs 45–47)
Idaea microptera (Warren & Rothschild, 1905) (4 exs – Ira, Pak) (Plate 10, Figs 48–50)
Idaea mimetes (Brandt, 1941) (41 exs – Ira, Pak) (Plate 10, Figs 51–55)
Idaea nigrella (Wiltshire, 1966) (3 exs – Afg) (Plate 10, Figs 56–58, 56: holotype)

Idaea camparia camparia (Herrich-Schäffer, 1852) (109 exs – Sic, Cre, Tur, Leb, Ira) (Plate 10, Figs 59–61)
Idaea camparia sodaliaria (Herrich-Schäffer, 1852) (11 exs – Cro, Mac) (Plate 10, Figs 62–63)
Idaea saida (Wiltshire, 1968) (3 exs – Leb, Syr) (Plate 11, Figs 1–3)
Idaea sanctaria (Staudinger, 1900) (18 exs – Ira, Pak) (Plate 11, Figs 4–7)
Idaea vartianae (Wiltshire, 1966) (14 exs – Afg, Pak) (Plate 11, Figs 8–11, 8: holotype)
Idaea sp. near *volloni* (Lucas & Joannis, 1907) (2 exs – Afg) (Plate 11, Figs 12–13)
Remark. Despite of the external similarity, the specimens from Afghanistan (Paghman) are most probably not conspecific with *I. volloni* described from Tunisia.
Idaea subsericeata (Haworth, 1809) (8 exs – Fra, Aut, Sic, Mac) (Plate 11, Figs 14–16)
Idaea pallidata (Denis & Schiffermüller, 1775) (10 exs – Aut) (Plate 11, Figs 17–19)
Idaea sylvestraria (Hübner, 1799) (7 exs – Fra, Aut, Hun) (Plate 11, Figs 20–22)
Idaea dimidiata dimidiata (Hufnagel, 1767) (9 exs – Spa, Aut, Ira) (Plate 11, Figs 23–25)
Idaea dimidiata antitaurica (Wehrli, 1931) (4 exs – Tur, Irq) (Plate 11, Figs 26–29)
Idaea sp. near *dimidiata* (Hufnagel, 1767) (2 exs – Afg) (Plate 11, Figs 30–31)
Idaea subsaturata (Guenée, 1858) (3 exs – Fra) (Plate 11, Figs 32–34)
Idaea trigeminata trigeminata (Haworth, 1809) (11 exs – Aut, Hun, Bul, Mac, Arm) (Plate 11, Figs 35–37)
Idaea trigeminata tenuirussata (Zerny, 1933) (10 exs – Leb) (Plate 11, Figs 38–40)
Idaea biselata (Hufnagel, 1767) (11 exs – Aut, Hun) (Plate 11, Figs 41–42)
Idaea fractilineata fractilineata (Zeller, 1847) (1 ex. – Sic) (Plate 11, Fig. 43)
Idaea fractilineata subrufaria (Staudinger, 1900) (2 exs – Spa) (Plate 11, Figs 44–45)
Idaea exilaria (Guenée, 1858) (1 ex. – Spa) (Plate 11, Fig. 46)
Idaea cervantaria cervantaria (Millière, 1869) (12 exs – Spa) (Plate 11, Figs 47–48)
Idaea cervantaria carneotincta (Zerny, 1936) (4 exs – Mor) (Plate 11, Figs 49–51)
Idaea sp. near *cervantaria* (Millière, 1869) (3 exs – Arm) (Plate 11, Figs 52–53)
Idaea vilaflorensis (Rebel, 1911) (9 exs – Can) (Plate 11, Figs 54–55)
Idaea sp near *vilaflorensis* (Rebel, 1911) (2 exs – Spa) (Plate 11, Figs 56–57)
Idaea contiguaria (Hübner, 1799) (6 exs – Aut, Spa) (Plate 11, Figs 58–59)
Idaea rupicolaria (Reisser, 1927) (3 exs – Spa) (Plate 12, Figs 1–3)
Idaea deitanaria (Reisser & Weisert, 1977) (7 exs – Spa) (Plate 12, Figs 4–7)
Idaea tineata (Thierry-Mieg, 1911) (6 exs – Leb) (Plate 12, Figs 8–11)
Idaea maronitaria (Zerny, 1933) (3 exs – Leb) (Plate 12, Figs 12–14)
Idaea infirmaria infirmaria (Rambur, 1833) (5 exs – Spa, Cor, Gre, Cre) (Plate 12, Figs 15–18)
Idaea infirmaria mitescens (Prout, 1935) (1 ex. – Mor) (Plate 12, Fig. 19)
Idaea rhodogrammaria (Püngeler, 1913) (1 ex. – Spa) (Plate 12, Fig. 20)
Idaea charitata (Rebel, 1914) (4 exs – Can) (Plate 12, Figs 21–23)
Idaea ostrinaria (Hübner, 1813) (54 exs – Mor, Spa, Fra, Cro, Mac, Leb) (Plate 12, Figs 24–26)
Idaea capnaria (Püngeler, 1909) (2 exs – Syr) (Plate 12, Figs 27–28)
Idaea sp. near *capnaria* (Püngeler, 1909) (3 exs – Syr) (Plate 12, Figs 29–30)
Idaea purpureomarginata (Bohatsch, 1880) (4 exs – Leb, Syr) (Plate 12, Figs 31–33)
Idaea metohiensis (Rebel, 1900) (32 exs – Gre) (Plate 12, Figs 34–36)
Idaea eugeniata (Dardoin & Millière, 1870) (22 exs – Mor, Alg, Spa, Por) (Plate 12, Figs 37–39)
Idaea distinctaria (Boisduval, 1840) (33 exs – Aut, Cro, Mac, Sic, Cre, Leb, Syr, Tur, Afg) (Plate 12, Figs 40–43)
Idaea predotaria (Hartig, 1951) (1 ex. – Spa) (Plate 12, Fig. 44)
Idaea nitidata (Herrich-Schäffer, 1861) (5 exs – Aut) (Plate 12, Figs 45–46)
Idaea emarginata (Linnaeus, 1758) (5 exs – Ger, Aut, Hun) (Plate 12, Figs 47–48)
Idaea rubraria (Staudinger, 1901) (6 exs – Aut, Mac) (Plate 12, Figs 49–50)
Idaea aversata (Linnaeus, 1758) (59 exs – Aut, Ita, Tur, Ukr, Rus, Arm) (Plate 12, Figs 51–52)
Idaea angustifrons (Wiltshire, 1966) (3 exs – Afg) (Plate 13, Figs 1–3, 1: holotype)
Idaea indecorata (Warren, 1900) (1 ex. – Afg) (Plate 13, Fig. 4)
Idaea wiltshirei (Brandt, 1938) (9 exs – Ira) (Plate 13, Figs 5–7)
Idaea degeneraria (Hübner, 1799) (89 exs – Mor, Spa, Ita, Aut, Hun, Sic, Cor, Mac, Gre, Cre, Leb, Tur, Arm, Ira) (Plate 13, Figs 8–10)
Idaea straminata (Borkhausen, 1794) (10 exs – Spa, Aut, Ita) (Plate 13, Figs 11–13)
Idaea deversaria (Herrich-Schäffer, 1847) (57 exs – Spa, Aut, Mac, Gre, Tur, Rus, Arm, Pak) (Plate 13, Figs 14–18)

Idaea craspedota (Prout, 1934) (1 ex. – Tha) (Plate 13, Fig. 19)

Genus ***Brachyglossina*** Wagner, 1914

Brachyglossina sp. near *sonyae* Wiltshire, 1990 (5 exs – Pak) (Plate 13, Figs 20–22)

Remark. The specimens from Pakistan (Swat) show superficial similarity to *B. sonyae* described from Saudi Arabia, but probably represent a distinct taxon.

Brachyglossina chaspia Brandt, 1938 (12 exs – Ira) (Plate 13, Figs 23–25)

Brachyglossina culoti (Wehrli, 1930) (4 exs – Mor) (Plate 13, Figs 26–29)

Brachyglossina sciasmatica Brandt, 1941 (12 exs – Ira, Sud) (Plate 13, Figs 31–34)

Brachyglossina vindicata Prout, 1938 (1 ex. – Alg) (Plate 13, Fig. 30)

Genus ***Oar*** Prout, 1913

Oar reaumuraria (Millière, 1864) (65 exs – Spa) (Plate 13, Figs 35–36)

Oar pratana pratana (Fabricius, 1794) (5 exs – Tun) (Plate 13, Figs 37–38)

Oar pratana baezi Hausmann, 2004 (3 exs – Mor, Can) (Plate 13, Figs 39–40)

Genus ***Cinglis*** Guenée, 1858

Cinglis andalusiaria Wagner, 1935 (10 exs – Spa) (Plate 13, Figs 41–42)

Genus ***Scopula*** Schrank, 1802

Scopula immorata (Linnaeus, 1758) (16 exs – Spa, Aut, Mac) (Plate 13, Figs 43–44)

Scopula tessellaria (Boisduval, 1840) (12 exs – Fra, Mac) (Plate 13, Figs 45–46)

Scopula corrivalaria (Kretschmar, 1862) (6 exs – Ger, Hun) (Plate 14, Figs 1–3)

Scopula caricaria (Reutti, 1853) (9 exs – Aus) (Plate 14, Figs 4–5)

Scopula nemoraria (Hübner, 1799) (4 exs – Rus) (Plate 14, Figs 6–8)

Scopula umbelaria (Hübner, 1813) (9 exs – Aut) (Plate 14, Figs 9–11)

Scopula nigropunctata (Hufnagel, 1767) (14 exs – Aut, Spa, Ira) (Plate 14, Figs 12–13)

Scopula virgulata (Denis & Schiffermüller, 1775) (25 exs – Aut, Hun, Tur) (Plate 14, Figs 14–16)

Scopula ornata ornata (Scopoli, 1763) (16 exs – Fra, Aut, Cre) (Plate 14, Figs 17–18)

Scopula ornata enzela Prout, 1935 (2 exs – Ira, Arm) (Plate 14, Figs 19–20)

Scopula concinnaria universaria (Zerny, 1927) (2 exs – Spa) (Plate 14, Figs 21–22)

Scopula orientalis (Alphéraky, 1876) (3 exs – Ira) (Plate 14, Figs 23–26)

Scopula decorata decorata (Denis & Schiffermüller, 1775) (55 exs – Spa, Fra, Aut, Hun, Mac) (Plate 14, Figs 27–28)

Scopula decorata armeniaca (Thierry-Mieg, 1916) (13 exs – Arm, Ira) (Plate 14, Figs 29–31)

Scopula decorata congruata (Zeller, 1847) (18 exs – Mor, Spa) (Plate 14, Figs 32–34)

Scopula kashmirensis (Moore, 1888) (39 exs – Afg, Pak) (Plate 15, Figs 1–5)

Scopula transcaspica Prout, 1935 (52 exs – Ira, Arm, Tur) (Plate 15, Figs 6–8)

Scopula achrosta Prout, 1935 (1 ex. – Pak) (Plate 15, Fig. 9)

Scopula submutata submutata (Treitschke, 1828) (32 exs – Ita, Cro, Mac, Cre) (Plate 15, Figs 10–11)

Scopula submutata nivellearia (Oberthür, 1922) (10 exs – Mor, Spa) (Plate 15, Figs 12–13)

Scopula submutata taurilibanotica (Wehrli, 1932) (7 exs – Leb) (Plate 15, Figs 14–15)

Scopula submutata roseonitens (Wagner, 1926) (3 exs – Fra) (Plate 15, Figs 16–17)

Scopula submutata gedrensis Hausmann, 2003 (1 ex. – Spa) (Plate 15, Fig. 18)

Scopula cleoraria (Walker, 1861) (1 ex. – Afg) (Plate 15, Fig. 19)

Scopula vigilata (Wagner, 1926) (2 exs – Cre) (Plate 15, Figs 20–22)

Scopula rubiginata (Hufnagel, 1767) (45 exs – Fra, Aut, Hun, Mac, Rus, Ukr, Mor) (Plate 15, Figs 23–24)

Scopula nigrociliata Ebert, 1965 (1 ex. – Afg) (Plate 15, Fig. 28)

Scopula turbidaria (Hübner, 1819) (14 exs – Mac, Arm) (Plate 15, Figs 25–27)

Scopula turbulentaria turbulentaria (Staudinger, 1870) (6 exs – Sic, Syr, Tur) (Plate 15, Figs 29–31)

Scopula turbulentaria steinbacheri Prout, 1935 (1 ex. – Ira) (Plate 15, Fig. 32)

Scopula irrorata (Bethune-Baker, 1891) (7 exs – Mad) (Plate 15, Figs 33–34)

Scopula rubellata (Staudinger, 1871) (2 exs – Spa) (Plate 15, Figs 35–36)

Scopula beckeraria (Lederer, 1853) (221 exs – Mac, Tur, Syr, Arm, Ira, Afg, Pak) (Plate 16, Figs 1–4)

Scopula incanata incanata (Linnaeus, 1758) (49 exs – Spa, Aut, Gre, Rus) (Plate 16, Figs 5–6)

Scopula incanata ibericata (Reisser, 1935) (2 exs – Spa) (Plate 16, Figs 7–8)

Scopula marginepunctata marginepunctata (Goeze, 1781) (109 exs – Spa, Fra, Aut, Ita, Hun, Mac, Leb, Tur, Syr, Arm) (Plate 16, Figs 9–11)

Scopula marginepunctata terrigena Prout, 1935 (30 exs – Ira, Pak) (Plate 16, Figs 12–14)

Scopula marginepunctata argillacea Reisser, 1933 (2 exs – Mor) (Plate 16, Figs 15–16)

Scopula luridata (Zeller, 1847) (3 exs – Syr, Leb) (Plate 16, Figs 17–18)
Scopula guancharia illustris Pinker, 1968 (7 exs – Can) (Plate 16, Figs 22–24)
Scopula guancharia uniformis Pinker, 1968 (14 exs – Can) (Plate 16, Figs 19–21)
Scopula eberti Wiltshire, 1967 (7 exs – Afg) (Plate 16, Figs 25–27)
Scopula imitaria imitaria (Hübner, 1799) (38 exs – Spa, Ita, Fra, Sic, Cro, Mac, Tur) (Plate 16, Figs 28–29)
Scopula imitaria syriacaria (Culot, 1918) (5 exs – Leb, Cre) (Plate 16, Figs 30–31)
Scopula immutata (Linnaeus, 1758) (29 exs – Aut, Arm) (Plate 16, Figs 32–34)
Scopula ternata Schrank, 1802 (6 exs – Aut) (Plate 17, Figs 1–3)
Scopula floslactata (Haworth, 1809) (8 exs – Aut) (Plate 17, Figs 4–6)
Scopula subpunctaria (Herrich-Schäffer, 1847) (4 exs – Aut) (Plate 17, Figs 7–8)
Scopula flaccidaria (Zeller, 1852) (13 exs – Aut, Ira) (Plate 17, Figs 9–11)
Scopula emutaria (Hübner, 1809) (3 exs – Spa, Fra) (Plate 17, Figs 12–13)
Scopula minorata (Boisduval, 1833) (8 exs – Leb, Ira, Pak) (Plate 17, Figs 14–16)
Scopula adelpharia pharaonis Sterneck, 1933 (4 exs – Egy, Sud) (Plate 17, Figs 17–19)
Scopula immistaria immistaria (Herrich-Schäffer, 1852) (43 exs – Tur, Arm, Ira) (Plate 17, Figs 20–22)
Scopula immistaria lehmanni Hausmann, 1991 (5 exs – Syr) (Plate 17, Figs 23–25)
Scopula donovani Distant, 1892 (6 exs – Mor, Pak) (Plate 17, Figs 26–30)

Genus ***Scopuloides*** Hausmann, 1994

Scopuloides origalis danieli (Wiltshire, 1966) (10 exs – Ira, Afg) (Plate 17, Figs 31–33)
Scopuloides origalis safida (Wiltshire, 1966) (49 exs – Afg) (Plate 17, Figs 34–37)

Genus ***Glossotrophia*** Prout, 1913

Glossotrophia confinaria (Herrich-Schäffer, 1847) (34 exs – Aut, Ita, Cro, Slo, Mac) (Plate 17, Figs 38–41)
Glossotrophia diffinaria Prout, 1913 (69 exs – Tur, Ira, Arm, Syr) (Plate 18, Figs 1–3)
Glossotrophia uberaria Zerny, 1933 (3 exs – Syr) (Plate 18, Figs 4–6)
Glossotrophia rufomixtaria (Graslin, 1863) (9 exs – Spa) (Plate 18, Figs 7–9)
Glossotrophia asellaria gerstbergeri Hausmann, 1993 (2 exs – Can) (Plate 18, Figs 10–11)
Glossotrophia asellaria isabellaria (Millière, 1868) (2 exs – Spa) (Plate 18, Fig. 12)
Glossotrophia chalcographata Brandt, 1938 (1 ex. – Ira) (Plate 18, Fig. 13)
Glossotrophia jacta (Swinhoe, 1885) (12 exs – Pak) (Plate 18, Figs 14–17)
Glossotrophia semitata semitata Prout, 1913 (58 exs – Syr, Ira, Irq) (Plate 18, Figs 18–21)
Glossotrophia semitata ariana Ebert, 1965 (128 exs – Ira, Afg, Pak) (Plate 18, Figs 22–25, paratypes of *G. ghirshmani* Wiltshire, 1966)
Glossotrophia terminata Wiltshire, 1966 (4 exs – Afg) (Plate 18, Figs 26–29, 26: holotype)

Genus ***Problepsis*** Lederer, 1853

Problepsis ocellata ocellata Frivaldszky, 1845 (34 exs – Cre, Tur, Leb, Jor, Syr) (Plate 18, Figs 30–32)
Problepsis ocellata cinerea Butler, 1886 (91 exs – Afg, Pak) (Plate 18, Figs 33–36)
Problepsis vulgaris Butler, 1889 (32 exs – Pak) (Plate 18, Figs 37–40)

Genus ***Somatina*** Guenée, 1858

Somatina indicataria morata Prout, 1938 (1 ex. – Jap) (Plate 18, Fig. 41)
Somatina wiltshirei Prout, 1938 (3 exs – Ira) (Plate 18, Figs 42–44)

Genus ***Craspediopsis*** Warren, 1895

Craspediopsis sinuosaria (Leech, 1897) (1 ex. – Chi) (Plate 18, Fig. 45)

Genus ***Rhodostrophia*** Hübner, 1823

Rhodostrophia calabra calabra (Petagna, 1786) (23 exs – Fra, Ita, Cro) (Plate 18, Figs 46–47)
Rhodostrophia calabra separata Prout, 1935 (15 exs – Spa) (Plate 18, Figs 48–49)
Rhodostrophia auctata (Staudinger, 1879) (16 exs – Tur, Arm, Ira) (Plate 18, Figs 50–53)
Rhodostrophia adauctata (Staudinger, 1892) (7 exs – Afg, Pak) (Plate 18, Figs 54–57)
Rhodostrophia pudorata pudorata (Fabricius, 1794) (25 exs – Mor, Spa) (Plate 19, Figs 1–3)
Rhodostrophia pudorata perezaria (Oberthür, 1875) (2 exs – Spa) (Plate 18, Fig. 58)
Rhodostrophia pudorata sicanaria (Zeller, 1852) (3 exs – Sic) (Plate 19, Figs 4–5)
Rhodostrophia sieversi (Christoph, 1882) (9 exs – Arm, Ira) (Plate 19, Figs 6–7)
Rhodostrophia cretacaria Rebel, 1916 (17 exs – Cre) (Plate 19, Figs 8–10)
Rhodostrophia discopunctata Amsel, 1935 (53 exs – Mac, Tur, Syr, Leb, Arm) (Plate 19, Figs 11–13)
Rhodostrophia terrestraria (Lederer, 1869) (7 exs – Ira) (Plate 19, Figs 14–17)
Rhodostrophia sp. near *terrestraria* (Lederer, 1869) (21 exs – Ira, Afg) (Plate 19, Figs 18–20)

Remark. A large series of *terrestraria*-like specimens from Iran (Fars) and Afghanistan (Salang Pass) was found in the Vartian collection. They supposedly belong to a distinct taxon, however, no available name applicable for these specimens was found.

Rhodostrophia vibicaria vibicaria (Clerck, 1759) (37 exs – Aut, Hun, Bih, Tur, Arm, Rus) (Plate 19, Figs 21–24)

Rhodostrophia vibicaria strigata (Staudinger, 1871) (12 exs – Mor) (Plate 19, Figs 25–27)

Rhodostrophia inconspicua (Butler, 1886) (2 exs – Afg, Pak) (Plate 19, Figs 28–29)

Rhodostrophia subconspicua Prout, 1913 (5 exs – Afg, Pak) (Plate 19, Figs 30–32)

Rhodostrophia herbicolens (Butler, 1883) (1 ex. – Pak) (Plate 19, Fig. 33)

Rhodostrophia cinerascens Moore, 1888 (29 exs – Afg, Pak) (Plate 19, Figs 34–36)

Rhodostrophia linguata Wiltshire, 1966 (7 exs – Afg) (Plate 19, Figs 37–40, 37: holotype)

Rhodostrophia meonaria meonaria (Guenée, 1858) (2 exs – Pak) (Plate 19, Figs 41–42)

Rhodostrophia meonaria pallidior Wiltshire, 1966 (20 exs – Afg) (Plate 19, Figs 43–45, 43: holotype)

Rhodostrophia tristrigalis Butler, 1889 (3 exs – Pak) (Plate 20, Figs 1–3)

Rhodostrophia sp. near *stigmatica* Butler, 1889 (2 exs – China) (Plate 20, Figs 4–5)

Rhodostrophia oxyntis Prout, 1935 (149 exs – Afg, Pak) (Plate 20, Figs 6–10)

Rhodostrophia vartianae Wiltshire, 1966 (11 exs – Afg) (Plate 20, Figs 11–13, 11: holotype)

Rhodostrophia lenis Wiltshire, 1966 (22 exs – Afg) (Plate 20, Figs 14–17, 14: holotype)

Rhodostrophia olivopallens Wiltshire, 1966 (18 exs – Afg) (Plate 20, Figs 18–20, 18: holotype)

Rhodostrophia froitzheimi froitzheimi Wiltshire, 1966 (2 exs – Afg) (Plate 20, Figs 21–22)

Rhodostrophia froitzheimi salangensis Wiltshire, 1966 (6 exs – Afg) (Plate 20, Figs 23–25, 23: holotype)

Rhodostrophia kabulensis Wiltshire, 1970 (21 exs – Afg, Pak) (Plate 20, Figs 26–30, paratypes)

Remark. The holotype of *R. kabulensis* has been borrowed by a specialist prior to the start of preparation of this book and, as it has not been returned before the closing of the manuscript, therefore, we could not image and figure it here.

Rhodostrophia sp. near *kabulensis* Wiltshire, 1970 (13 exs – Afg) (Plate 20, Figs 31–33)

Remark. The specimens from Afghanistan (Salang Pass) are somewhat similar to *kabulensis* described from Khurd–Kabul, but most probably belong to a distinct taxon. We could not found any name applicable for the specimens collected at the Salang Pass.

Rhodostrophia badiaria (Freyer, 1841) (3 exs – Tur, Syr) (Plate 20, Figs 34–35)

Rhodostrophia bahara Brandt, 1938 (20 exs – Ira) (Plate 20, Figs 36–38)

Rhodostrophia praecisaria badakhschana Ebert, 1965 (130 exs – Afg) (Plate 20, Figs 39–42)

Rhodostrophia cuprinaria (Christoph, 1876) (105 exs – Ira) (Plate 20, Figs 43–46)

Rhodostrophia nesam nesam Brandt, 1938 (23 exs – Ira, Pak) (Plate 21, Figs 1–3)

Rhodostrophia nesam fuscata Brandt, 1941 (2 exs – Ira) (Plate 21, Figs 4–5)

Rhodostrophia nubifera nubifera Brandt, 1941 (14 exs – Pak) (Plate 21, Figs 6–10)

Rhodostrophia nubifera klapperichi Wiltshire, 1966 (138 exs – Pak) (Plate 21, Figs 11–15)

Rhodostrophia anjumana Wiltshire, 1967 (3 exs – Afg) (Plate 21, Figs 16–18)

Genus ***Timandra*** Duponchel, 1829

Timandra comae Schmidt, 1931 (18 exs – Aut, Ukr, Rus, Ira) (Plate 21, Figs 19–20)

Timandra correspondens Hampson, 1895 (1 ex. – Pak) (Plate 21, Fig. 21)

Genus ***Pseudosterrha*** Warren, 1888

Pseudosterrha paulula Swinhoe, 1887 (11 exs – Ira) (Plate 21, Figs 22–25)

Genus ***Traminda*** Saalmüller, 1891

Traminda mundissima (Walker, 1861) (8 exs – Ira, Pak) (Plate 21, Figs 26–27)

Genus ***Cyclophora*** Hübner, 1822

Cyclophora pendularia (Clerck, 1759) (7 exs – Eng, Aut, Hun) (Plate 21, Figs 28–31)

Cyclophora albipunctata (Hufnagel, 1767) (23 exs – Aut) (Plate 21, Figs 32–35)

Cyclophora albiocellaria (Hübner, 1789) (34 exs – Aut, Mac, Tur, Rus) (Plate 21, Figs 36–40)

Cyclophora lennigiaria mauretanica (Reisser, 1933) (1 ex. – Mor) (Plate 21, Fig. 41)

Cyclophora ariadne (Reisser, 1939) (6 exs – Cre) (Plate 21, Figs 42–45)

Cyclophora annularia (Fabricius, 1775) (17 exs – Aut, Ukr, Rus, Ira) (Plate 21, Figs 46–49)

Cyclophora puppillaria puppillaria (Hübner, 1799) (61 exs – Mor, Fra, Spa, Cro, Mac, Tur, Leb, Syr, Afg, Pak) (Plate 21, Figs 50–54)

Cyclophora puppillaria lilacinipes (Schaus & Cockerel, 1923) (5 exs – Mad) (Plate 21, Figs 55–59)

Cyclophora quercimontaria (Bastelberger, 1897) (11 exs – Aut, Tur, Ira) (Plate 22, Figs 1–4)

Cyclophora ruficiliaria (Herrich-Schäffer, 1855) (14 exs – Aut, Mac, Sic, Ira) (Plate 22, Figs 5–7)
Cyclophora porata (Linnaeus, 1767) (14 exs – Aut, Mac, Sic, Tur, Arm) (Plate 22, Figs 8–11)
Cyclophora suppunctaria (Zeller, 1847) (7 exs – Cro, Mac, Tur) (Plate 22, Figs 12–14)
Cyclophora punctaria punctaria (Linnaeus, 1758) (20 exs – Sic, Aut, Ukr) (Plate 22, Figs 15–18)
Cyclophora punctaria fritzae Hausmann, 2003 (2 exs – Tur, Rus) (Plate 22, Figs 19–20)
Cyclophora linearia (Hübner, 1799) (13 exs – Aut, Tur, Ira) (Plate 22, Figs 21–24)
Cyclophora maderensis Bethune–Baker, 1891 (5 exs – Mad) (Plate 22, Figs 25–28)
Cyclophora sp. near *maderensis* Bethune–Baker, 1891 (17 exs – Can) (Plate 22, Figs 29–31)
Remark. No taxon name for this *maderensis*-like population of the Canary Islands was found. According to the BOLD website, the Madeira and Canary populations are conspecific. Due to the external differences, the Canary Island populations may represent a distinct, so far undescribed subspecies.
Cyclophora sympathica (Alphéraky, 1883) (1 ex. – Afg) (Plate 22, Fig. 32)
Remark. The single specimen from Afghanistan (Nuristan) found in the collection was identified by Wiltshire. It is worth mentioning that *C. sympathica* was described from Kuldja, a locality being rather remote from Nuristan, located in the Tien Shan massif.

Genus ***Rhodometra*** Meyrick, 1892
Rhodometra sacraria (Linnaeus, 1767) (50 exs – Mor, Spa, Sic, Cro, Leb, Arm, Ira, Afg, Pak) (Plate 22, Figs 33–38)

Genus ***Casilda*** Agenjo, 1952
Casilda antophilaria rosearia (Treitschke, 1828) (45 exs – Tur) (Plate 22, Figs 39–42)
Casilda consecraria (Staudinger, 1871) (10 exs – Spa, Syr, Ira) (Plate 22, Figs 43–46)

Genus ***Ochodontia*** Lederer, 1853
Ochodontia adustaria (Fischer de Waldheim, 1840) (23 exs – Arm, Ira) (Plate 22, Figs 47–50)

Genus ***Lythria*** Hübner, 1823
Lythria plumularia (Freyer, 1831) (6 exs – Sui) (Plate 22, Figs 51–53)
Lythria purpuraria (Linnaeus, 1758) (22 exs – Aut, Hun, Mac, Gre, Tur, Arm) (Plate 22, Figs 54–57)
Lythria cruentaria (Hufnagel, 1767) (17 exs – Cze, Aut, Hun, Mac, Tur) (Plate 22, Figs 58–61)
Lythria sanguinaria (Duponchel, 1842) (1 ex. – Spa) (Plate 22, Figs 62)

Subfamily Larentiinae Duponchel, 1845

Genus ***Phibalapteryx*** Stephens, 1829
Phibalapteryx virgata (Hufnagel, 1767) (29 exs – Aut, Hun) (Plate 22, Figs 63–66)

Genus ***Cataclysme*** Hübner, 1825
Cataclysme riguata riguata (Hübner, 1813) (64 exs – Spa, Fra, Ita, Aut, Hun, Mac, Tur, Arm) (Plate 22, Figs 67–70)
Cataclysme riguata elbursica (Wagner, 1937) (18 exs – Ira) (Plate 22, Figs 71–74)
Cataclysme dissimilata (Rambur, 1833) (2 exs – Cor) (Plate 23, Figs 1–2)
Cataclysme uniformata (Bellier, 1862) (2 exs – Spa) (Plate 23, Figs 3–4)
Cataclysme obliquilineata Hampson, 1895 (4 exs – Pak) (Plate 23, Figs 5–8)

Genus ***Scotopteryx*** Hübner, 1825
Scotopteryx coarctaria (Denis & Schiffermüller, 1775) (21 exs – Spa, Fra, Aut) (Plate 23, Figs 9–11)
Scotopteryx vicinaria vicinaria (Duponchel, 1830) (46 exs – Fra, Mac) (Plate 23, Figs 12–15)
Scotopteryx vicinaria hyrcanaria (Staudinger, 1892) (3 exs – Ira) (Plate 23, Figs 16–18)
Scotopteryx elbursica (Bytinski-Salz & Brandt, 1937) (11 exs – Ira) (Plate 23, Figs 19–22)
Scotopteryx mucronata (Scopoli, 1763) (8 exs – Fra) (Plate 23, Fig. 23)
Scotopteryx luridata (Hufnagel, 1767) (31 exs – Aut, Fra, Mac, Tur) (Plate 23, Figs 24–27)
Scotopteryx ignorata Huemer & Hausmann, 1998 (7 exs – Gre) (Plate 23, Fig. 28)
Scotopteryx peribolata peribolata (Hübner, 1817) (31 exs – Spa, Fra) (Plate 23, Figs 29–31)
Scotopteryx peribolata chouika (Oberthür, 1909) (4 exs – Mor) (Plate 23, Figs 32–35)
Scotopteryx proximaria (Rambur, 1833) (3 exs – Sar, Cor) (Plate 23, Figs 36–37)
Scotopteryx nasifera (Warren, 1888) (6 exs – Afg) (Plate 23, Figs 38–41; Gen. figs 3, 4)
Scotopteryx safedkohensis László, 2017 **sp. n.** (5 exs – Afg) (Plate 23, Figs 42–45, 42: holotype; Gen. figs 1, 2)
Scotopteryx bipunctaria (Denis & Schiffermüller, 1775) (38 exs – Fra, Aut, Gre) (Plate 23, Figs 46–47)
Scotopteryx octodurensis (Favre, 1903) (23 exs – Spa, Fra) (Plate 23, Figs 48–50)

Scotopteryx olympia Rezbanyai-Reser, 2003 (14 exs – Mac, Gre, Tur) (Plate 23, Figs 51–53)
Scotopteryx aelptes (Prout, 1937) (14 exs – Arm, Ira) (Plate 23, Figs 54–56)
Scotopteryx subvicinaria libanaria (Prout, 1914) (1 ex. – Leb) (Plate 23, Fig. 57)
Scotopteryx fuscofasciata subardua (Wiltshire, 1949) (3 exs – Ira) (Plate 23, Figs 58–59)
Scotopteryx sartata (Alphéraky, 1883) (4 exs – Afg) (Plate 24, Figs 1–4)
Scotopteryx sinuosa Wiltshire, 1970 (15 exs – Afg) (Plate 24, Figs 5–8, 5: holotype)
Scotopteryx moeniata (Scopoli, 1763) (12 exs – Aut, Gre) (Plate 24, Figs 9–11)
Scotopteryx angularia (Villers, 1789) (2 exs – Fra) (Plate 24, Figs 12–13)
Scotopteryx coelinaria (Graslin, 1863) (2 exs – Spa) (Plate 24, Figs 14–15)
Scotopteryx obvallaria (Mabille, 1867) (2 exs – Cor) (Plate 24, Figs 16–17)
Scotopteryx alfacaria alfacaria (Staudinger, 1859) (15 exs – Spa) (Plate 24, Figs 18–21)
Scotopteryx alfacaria transmarina (Zerny, 1934) (13 exs – Mor) (Plate 24, Figs 22–25)
Scotopteryx chenopodiata (Linnaeus, 1758) (37 exs – Aut, Fra, Geo, Arm) (Plate 24, Figs 26–27)
Scotopteryx sterilis (Prout, 1938) (7 exs – Ira) (Plate 24, Figs 28–30)
Scotopteryx langi (Christoph, 1885) (1 ex. – Arm) (Plate 24, Fig. 31)
Scotopteryx semenovi (Alphéraky, 1892) (3 exs – China) (Plate 24, Figs 32–33)

Genus ***Orthonama*** Hübner, 1825

Orthonama vittata (Borkhausen, 1794) (6 exs – Aut) (Plate 24, Figs 34–36)
Orthonama obstipata (Fabricius, 1794) (58 exs – Spa, Fra, Aut, Cro, Leb, Syr, Ira, Afg) (Plate 24, Figs 37–39)

Genus ***Xanthorhoe*** Hübner, 1825

Xanthorhoe decoloraria (Esper, 1806) (2 exs – Aut) (Plate 24, Figs 40–41)
Xanthorhoe fluctuata fluctuata (Linnaeus, 1758) (35 exs – Fra, Aut, Ger, Mac, Gre, Tur, Leb, Ukr, Rus) (Plate 24, Figs 42–44)
Xanthorhoe fluctuata iberiata (Staudinger, 1901) (8 exs – Spa) (Plate 24, Figs 45–47)
Xanthorhoe fluctuata herculeana (Zerny, 1934) (1 ex. – Mor) (Plate 24, Fig. 48)
Xanthorhoe acutangulata (Christoph, 1887) (20 exs – Arm, Ira) (Plate 24, Figs 49–52)
Xanthorhoe skoui Viidalepp & Hausmann, 2004 (2 exs – Spa) (Plate 25, Figs 1–2)
Xanthorhoe disjunctaria (Harpe, 1860) (4 exs – Sic) (Plate 25, Figs 3–4)
Xanthorhoe oxybiata (Millière, 1872) (2 exs – Cro, Cre) (Plate 25, Figs 5–6)
Xanthorhoe pseudogaliata (Staudinger, 1898) (5 exs – Syr, Leb) (Plate 25, Figs 7–9)
Xanthorhoe incursata (Hübner, 1813) (9 exs – Sui, Aut) (Plate 25, Figs 10–12)
Xanthorhoe annotinata (Zetterstedt, 1839) (2 exs – Swe) (Plate 25, Figs 13–14)
Xanthorhoe biriviata (Borkhausen, 1794) (15 exs – Aut, Rus) (Plate 25, Figs 15–18)
Xanthorhoe spadicearia (Denis & Schiffermüller, 1775) (34 exs – Aut) (Plate 25, Figs 19–22)
Xanthorhoe ferrugata (Clerck, 1759) (29 exs – Aut, Hun) (Plate 25, Figs 23–25)
Xanthorhoe rectifasciaria (Lederer, 1853) (2 exs – Ira, Arm) (Plate 25, Figs 26–27)
Xanthorhoe saturata (Guenée, 1858) (8 exs – Pak) (Plate 25, Figs 28–31)
Xanthorhoe stupida (Alphéraky, 1897) (1 ex. – Pak) (Plate 25, Fig. 32)
Xanthorhoe abrasaria (Herrich-Schäffer, 1855) (2 exs – Fin, Swe) (Plate 25, Figs 33–34)
Xanthorhoe designata (Hufnagel, 1767) (9 exs – Ger, Aut, Ira) (Plate 25, Figs 35–37)
Xanthorhoe mecoterma (Prout, 1938) (8 exs – Afg) (Plate 25, Figs 38–41)
Xanthorhoe montanata (Denis & Schiffermüller, 1775) (30 exs – Fra, Aur, Gre, Arm) (Plate 25, Figs 42–45)
Xanthorhoe quadrifasiata (Clerck, 1759) (13 exs – Aut, Rus) (Plate 25, Figs 46–48)
Xanthorhoe rupicola (Wollaston, 1858) (13 exs – Mad) (Plate 25, Figs 49–52)
Xanthorhoe tauaria (Staudinger, 1882) (1 ex. – Kaz) (Plate 25, Fig. 53)
Xanthorhoe rhodoides (Brandt, 1941) (1 ex. – Ira) (Plate 25, Fig. 54)
Xanthorhoe wiltshirei (Brandt, 1941) (10 exs – Ira) (Plate 25, Figs 55–57)

Genus ***Protorhoe*** Herbulot, 1951

Protorhoe corollaria (Herrich-Schäffer, 1848) (62 exs – Mac, Tur, Syr, Ira) (Plate 25, Figs 58–61)
Protorhoe unicata (Guenée, 1858) (6 exs – Tur, Ira, Syr) (Plate 25, Figs 62–64)
Protorhoe tangaba (Wiltshire, 1952) (70 exs – Ira) (Plate 25, Figs 65–67)

Genus ***Catarhoe*** Herbulot, 1951

Catarhoe basochesiata (Duponchel, 1831) (2 exs – Spa, Fra) (Plate 26, Figs 1–2)
Catarhoe putridaria (Herrich-Schäffer, 1852) (82 exs – Fra, Ita, Mac, Tur, Syr, Leb, Arm) (Plate 26, Figs 3–7)

Catarhoe sp. near *semnana* Wiltshire, 1970 (1 ex. – Ira) (Plate 26, Fig. 8)
Remark. The single female specimen from North Iran (Tepe) most probably represents a pale form of *C. semnana*; the identity of the specimen can be decided by examination of its genitalia.
Catarhoe semnana Wiltshire, 1970 (23 exs – Ira) (Plate 26, Figs 9–13, 9: holotype)
Catarhoe arachne Wiltshire, 1967 (18 exs – Afg) (Plate 26, Figs 14–17)
Catarhoe renodata (Püngeler, 1909) (32 exs – Tur, Ira, Arm) (Plate 26, Figs 18–21)
Catarhoe mosulensis (Schawerda, 1924) (36 exs – Jor, Syr, Leb) (Plate 26, Figs 22–25)
Catarhoe mazeli Viidalepp, 2008 (1 ex. – Mor) (Plate 26, Fig. 26)
Catarhoe cuculata cuculata (Hufnagel, 1767) (14 exs – Aut, Ita) (Plate 26, Figs 27–29)
Catarhoe cuculata decolor (Schwingenschuss, 1939) (5 exs – Arm) (Plate 26, Figs 30–32)
Catarhoe bahrama (Wiltshire, 1952) (2 exs – Ira, Pak) (Plate 26, Figs 33–34)
Catarhoe rubidata (Denis & Schiffermüller, 1775) (16 exs – Aut) (Plate 26, Figs 35–37)

Genus ***Costaconvexa*** Agenjo, 1949
Costaconvexa polygrammata polygrammata (Borkhausen, 1794) (7 exs – Aut, Mac, Ira) (Plate 26, Figs 38–39)
Costaconvexa polygrammata rosea (Wiltshire, 1946) (20 exs – Irq) (Plate 26, Figs 40–43)
Costaconvexa centrostrigaria (Wollaston, 1858) (9 exs – Can) (Plate 26, Figs 44–47)

Genus ***Camptogramma*** Stephens, 1831
Camptogramma bilineata bilineata (Linnaeus, 1758) (48 exs – Spa, Fra, Aut, Hun, Mac, Cor, Tur, Syr, Ira, Arm) (Plate 26, Figs 48–52)
Camptogramma bilineata numidica (Rothschild, 1925) (1 ex. – Mor) (Plate 26, Fig. 53)
Camptogramma grisescens (Staudinger, 1892) (137 exs – Gre, Tur) (Plate 26, Figs 54–59)
Camptogramma bistrigata (Treitschke, 1828) (1 ex. – Sar) (Plate 26, Fig. 60)
Camptogramma scripturata (Hübner, 1799) (7 exs – Aut, Ita) (Plate 26, Figs 61–64)

Genus ***Phoenissa*** Warren, 1899
Phoenissa uber (Prout, 1938) (1 ex. – Chi) (Plate 26, Fig. 65)

Genus ***Epirrhoe*** Hübner, 1825
Epirrhoe tristata (Linnaeus, 1758) (14 exs – Aut) (Plate 27, Figs 1–3)
Epirrhoe pupillata (Thunberg, 1788) (21 exs – Aut) (Plate 27, Figs 4–7)
Epirrhoe alternata (Müller, 1764) (41 exs – Aut, Mac, Arm, Tur, Rus) (Plate 27, Figs 8–10)
Epirrhoe rivata (Hübner, 1813) (18 exs – Aut, Hun, Rus) (Plate 27, Figs 11–12)
Epirrhoe hastulata (Hübner, 1790) (10 exs – Aut) (Plate 27, Figs 13–14)
Epirrhoe molluginata (Hübner, 1813) (6 exs – Aut, Sui, Fra) (Plate 27, Figs 15–18)
Epirrhoe galiata (Denis & Schiffermüller, 1775) (46 exs – Spa, Fra, Ita, Sic, Aut, Hun, Mac, Gre, Ukr) (Plate 27, Figs 19–22)
Epirrhoe timozzaria (Constant, 1884) (1 ex. – Cor) (Plate 27, Fig. 23)

Genus ***Euphyia*** Hübner, 1825
Euphyia biangulata (Haworth, 1809) (15 exs – Aut, Ger, Rus) (Plate 27, Figs 24–26)
Euphyia submarginata (Warren, 1909) (6 exs – Pak, Ind) (Plate 27, Figs 27–31)
Euphyia ochreata (Moore, 1888) (1 ex. – Chi) (Plate 27, Fig. 32)
Euphyia unangulata (Haworth, 1809) (3 exs – Aut) (Plate 27, Figs 33–34)
Euphyia cinnamifusa Prout, 1939 (6 exs – Pak) (Plate 27, Figs 35–37)
Euphyia frustata frustata (Treitschke, 1828) (45 exs – Spa, Fra, Ita, Aut, Sui, Mac, Gre, Tur, Arm) (Plate 27, Figs 38–41)
Euphyia frustata fulvocinctata (Staudinger, 1871) (3 exs – Mor) (Plate 27, Figs 42–44)
Euphyia chalusata Wiltshire, 1970 (13 exs – Ira) (Plate 27, Figs 45–48, 45: holotype)
Euphyia sintenisi (Staudinger, 1892) (10 exs – Arm) (Plate 27, Figs 49–52)
Euphyia maximiliana (Reisser, 1933) (1 ex. – Mor) (Plate 27, Fig. 53)
Euphyia intersecta (Staudinger, 1882) (1 ex. – Ira) (Plate 27, Fig. 54)

Genus ***Mattia*** Viidalepp, 2009
Mattia callidaria (Joannis, 1891) (11 exs – Cre, Leb) (Plate 27, Figs 55–56)

Genus ***Antilurga*** Herbulot, 1951
Antilurga alhambrata alhambrata (Staudinger, 1859) (18 exs – Spa) (Plate 27, Figs 57–60)
Antilurga alhambrata altatlas Herbulot, 1981 (3 exs – Mor) (Plate 27, Fig. 61)

Genus ***Earophila*** Gumppenberg, 1887
Earophila badiata (Denis & Schiffermüller, 1775) (18 exs – Ger, Aut, Hun, Cro, Mac) (Plate 28, Figs 1–4)

Genus ***Anticlea*** Stephens, 1831
Anticlea derivata (Denis & Schiffermüller, 1775) (6 exs – Aut, Mac) (Plate 28, Figs 5–6)
Genus ***Mesoleuca*** Hübner, 1825
Mesoleuca albicillata (Linnaeus, 1758) (16 exs – Aut) (Plate 28, Figs 7–9)
Genus ***Pelurga*** Hübner, 1825
Pelurga comitata (Linnaeus, 1758) (12 exs – Aut) (Plate 28, Figs 10–11)
Genus ***Xenortholitha*** Inoue, 1944
Xenortholitha latifusata (Walker, 1862) (1 ex. – Pak) (Plate 28, Fig. 12)
Genus ***Larentia*** Treitschke, 1825
Larentia clavaria (Haworth, 1809) (6 exs – Ger, Aut) (Plate 28, Figs 13–14)
Larentia malvata (Rambur, 1833) (4 exs – Fra) (Plate 28, Figs 15–18)
Larentia berberina Herbulot, 1981 (4 exs – Mor) (Plate 28, Figs 19–22)
Genus ***Herbulotina*** Pinker, 1969
Herbulotina grandis lapalmae (Pinker, 1963) (7 exs – Can) (Plate 28, Figs 23–26)
Genus ***Entephria*** Hübner, 1825
Entephria polata (Duponchel, 1830) (2 exs – Fin) (Plate 28, Figs 27–28)
Entephria punctipes (Curtis, 1835) (1 ex. – Fin) (Plate 28, Fig. 29)
Entephria nobiliaria (Herrich-Schäffer, 1852) (13 exs – Aut) (Plate 28, Figs 30–33)
Entephria flavata (Osthelder, 1929) (13 exs – Aut) (Plate 28, Figs 34–36)
Entephria cyanata cyanata (Hübner, 1809) (15 exs – Sui, Aut, Gre) (Plate 28, Figs 37–39)
Entephria cyanata bubaceki (Reisser, 1926) (14 exs – Spa) (Plate 28, Figs 40–42)
Entephria cyanata leucocyanata (Reisser, 1935) (2 exs – Spa) (Plate 28, Figs 43–44)
Entephria flavicinctata (Hübner, 1813) (13 exs – Fra, Aut, Mac) (Plate 28, Figs 45–47)
Entephria muscosaria (Christoph, 1893) (1 ex. – Arm) (Plate 28, Fig. 48)
Entephria infidaria (de la Harpe, 1853) (4 exs – Aut) (Plate 29, Figs 1–3)
Entephria poliotaria (Hampson, 1902) (1 ex. – Pak) (Plate 29, Fig. 4)
Entephria caesiata (Denis & Schiffermüller, 1775) (48 exs – Fra, Aut, Mac) (Plate 29, Figs 5–7)
Entephria catochra Prout, 1939 (1 ex. – Ira) (Plate 29, Fig. 8)
Genus ***Spargania*** Guenée, 1858
Spargania luctuata (Denis & Schiffermüller, 1775) (20 exs – Aut) (Plate 29, Figs 9–11)
Genus ***Hydriomena*** Hübner, 1825
Hydriomena furcata (Thunberg, 1784) (26 exs – Spa, Ita, Aut) (Plate 29, Figs 12–15)
Hydriomena impluviata (Denis & Schiffermüller, 1775) (25 exs – Sui, Aut) (Plate 29, Figs 16–19)
Hydriomena ruberata (Freyer, 1831) (1 ex. – Cze) (Plate 29, Figs 20)
Genus ***Stamnodes*** Guenée, 1858
Stamnodes depeculata (Lederer, 1870) (2 exs – Ira) (Plate 29, Figs 21–22)
Stamnodes lusoria Prout, 1938 (3 exs – Chi) (Plate 29, Figs 23–25)
Stamnodes pauperaria (Eversmann, 1848) (4 exs – Afg) (Plate 29, Figs 26–29)
Genus ***Almeria*** Agenjo, 1949
Almeria kalischata kalischata (Staudinger, 1870) (10 exs – Spa) (Plate 29, Figs 30–33)
Almeria kalischata rubrotincta (Zerny, 1934) (18 exs – Mau, Mor) (Plate 29, Figs 34–37)
Genus ***Heterothera*** Inoue, 1943
Heterothera consimilis (Warren, 1888) (58 exs – Afg, Pak) (Plate 29, Figs 38–41)
Heterothera serraria (Lienig, 1846) (7 exs – Fin) (Plate 29, Figs 42–44)
Genus ***Pennithera*** Viidalepp, 1980
Pennithera firmata (Hübner, 1822) (10 exs – Fra, Aut) (Plate 29, Figs 45–47)
Genus ***Thera*** Stephens, 1831
Thera cognata (Thunberg, 1792) (22 exs – Ita, Aut, Gre) (Plate 29, Figs 48–51)
Thera variata variata (Denis & Schiffermüller, 1775) (14 exs – Aut, Ita) (Plate 29, Figs 52–55)
Thera variata subtaurica (Wehrli, 1932) (5 exs – Leb) (Plate 29, Figs 56–58)
Thera variata balcanicola (de Lattin, 1951) (1 ex. – Tur) (Plate 29, Fig. 59)
Thera variolata (Staudinger, 1900) (91 exs – Mor) (Plate 30, Figs 1–5)
Thera britannica (Turner, 1925) (7 exs – Aut) (Plate 30, Figs 6–9)
Thera vetustata (Denis & Schiffermüller, 1775) (5 exs – Aut, Cze) (Plate 30, Figs 10–12)
Thera cembrae (Kitt, 1912) (1 ex. – Aut) (Plate 30, Fig. 13)
Thera obeliscata (Hübner, 1787) (31 exs – Spa, Fra, Aut, Cze, Gre, Ukr) (Plate 30, Figs 14–17)

Thera juniperata (Linnaeus, 1758) (16 exs – Aut, Mac) (Plate 30, Figs 18–21)
Thera cupressata (Geyer, 1831) (3 exs – Fra, Cro) (Plate 30, Figs 22–24)

Genus ***Costicoma*** Choi, 2000
Costicoma exangulata (Warren, 1909) (3 exs – Pak) (Plate 30, Figs 25–26)

Genus ***Plemyria*** Hübner, 1825
Plemyria rubiginata (Denis & Schiffermüller, 1775) (11 exs – Aut) (Plate 30, Figs 27–29)

Genus ***Cidaria*** Treitschke, 1825
Cidaria fulvata (Forster, 1771) (31 exs – Fra, Aut, Tur, Arm, Ira) (Plate 30, Figs 30–34)
Cidaria nugata Felder & Rogenhofer, 1875 (41 exs – Afg) (Plate 30, Figs 35–37)

Genus ***Electrophaes*** Prout, 1923
Electrophaes corylata (Thunberg, 1792) (11 exs – Aut, Ukr) (Plate 30, Figs 40–42)

Genus ***Cosmorhoe*** Hübner, 1825
Cosmorhoe ocellata (Linnaeus, 1758) (31 exs – Aut, Tur, Arm, Rus) (Plate 30, Figs 38–39)

Genus ***Eustroma*** Hübner, 1825
Eustroma reticulata (Denis & Schiffermüller, 1775) (5 exs – Aut) (Plate 30, Figs 43–44)

Genus ***Eulithis*** Hübner, 1821
Eulithis prunata (Linnaeus, 1758) (7 exs – Aut) (Plate 30, Figs 45–47)
Eulithis testata (Linnaeus, 1761) (8 exs – Aut) (Plate 30, Figs 48–50)
Eulithis populata (Linnaeus, 1758) (19 exs – Cze, Aut, Ger, Ita) (Plate 30, Figs 51–53)
Eulithis mellinata (Fabricius, 1787) (5 exs – Aut) (Plate 30, Figs 54–56)
Eulithis pyropata pyropata (Hübner, 1809) (8 exs – Russia) (Plate 30, Figs 57–60)
Eulithis pyropata sugitanii (Prout, 1937) (2 exs – Chi) (Plate 31, Figs 1–2)
Eulithis flavomacularia (Leech, 1897) (1 ex. – Chi) (Plate 31, Fig. 3)

Genus ***Gandaritis*** Moore, 1868
Gandaritis pyraliata (Denis & Schiffermüller, 1775) (32 exs – Aut, Gre, Arm) (Plate 31, Figs 4–5)

Genus ***Ecliptopera*** Warren, 1894
Ecliptopera silaceata (Denis & Schiffermüller, 1775) (40 exs – Aut) (Plate 31, Figs 6–8)
Ecliptopera postpallida nuristana Wiltshire, 1967 (10 exs – Afg) (Plate 31, Figs 9–10)

Genus ***Chloroclysta*** Hübner, 1825
Chloroclysta miata miata (Linnaeus, 1758) (9 exs –Fra, Aut, Mac) (Plate 31, Figs 11–12)
Chloroclysta miata buzurga Wiltshire, 1970 (2 exs – Ira) (Plate 31, Figs 13–14, 13: holotype)
Chloroclysta siterata (Hufnagel, 1767) (20 exs – Fra, Ita, Aut) (Plate 31, Figs 15–16)

Genus ***Dysstroma*** Hübner, 1825
Dysstroma citrata (Linnaeus, 1761) (17 exs – Aut) (Plate 31, Figs 17–20)
Dysstroma truncata (Hufnagel, 1767) (59 exs – Den, Aut, Ger, Ita, Gre) (Plate 31, Figs 21–25)
Dysstroma latefasciata (Blöcker, 1908) (1 ex. – Swe) (Plate 31, Figs 26)

Genus ***Colostygia*** Hübner, 1825
Colostygia aptata (Hübner, 1813) (10 exs – Aut, Fra) (Plate 31, Figs 27–30)
Colostygia olivata (Denis & Schiffermüller, 1775) (10 exs – Aut, Sic, Fra) (Plate 31, Figs 31–32)
Colostygia wolfschlaegerae (Pinker, 1953) (2 exs – Mac) (Plate 31, Figs 33–34)
Colostygia pectinataria (Knoch, 1871) (30 exs – Aut) (Plate 31, Figs 35–37)
Colostygia aquaeata aquaeata (Hübner, 1813) (7 exs – Aut) (Plate 31, Figs 38–40)
Colostygia aquaeata hercegovinensis (Rebel, 1901) (48 exs – Mac, Gre) (Plate 31, Figs 41–43)
Colostygia turbata turbata (Hübner, 1799) (9 exs – Aut) (Plate 31, Figs 44–45)
Colostygia turbata pyrenaeata (Oberthür, 1882) (2 exs – Fra) (Plate 31, Fig. 46)
Colostygia kollariaria (Herrich-Schäffer, 1848) (1 ex. – Aut) (Plate 31, Fig. 47)
Colostygia laetaria (de la Harpe, 1853) (2 exs – Ger) (Plate 31, Figs 48–49)
Colostygia austriacaria (Herrich-Schäffer, 1852) (1 ex. – Aut) (Plate 31, Fig. 50)
Colostygia tempestaria (Herrich-Schäffer, 1856) (2 exs – Slo) (Plate 31, Figs 51–52)
Colostygia multistrigaria multistrigaria (Haworth, 1809) (7 exs – Eng, Ger) (Plate 32, Figs 1–4)
Colostygia multistrigaria olbiaria (Millière, 1865) (1 ex. – Fra) (Plate 32, Fig. 5)
Colostygia albigirata (Kollar, 1844) (1 ex. – Pak) (Plate 32, Fig. 6)
Colostygia sp. indet from Afghanistan (9 exs – Afg) (Plate 32, Figs 1–4)

Remark. The specimens from Afghanistan (Salang Pass) were found in the collection without identification. In spite of our efforts, the specimens have remained unidentified, even the generic placement of the taxon is rather tentative.

Genus ***Coenotephria*** Prout, 1914

Coenotephria salicata (Hübner, 1799) (4 exs – Aut) (Plate 32, Figs 10–13)
Coenotephria ablutaria ablutaria (Boisduval, 1840) (5 exs – Fra, Sic) (Plate 32, Figs 14–15)
Coenotephria ablutaria hangayi (Vojnits, 1986) (71 exs – Mac, Tur, Jor, Leb, Ira) (Plate 32, Figs 16–18)
Coenotephria ablutaria probaria (Herrich-Schäffer, 1852) (9 exs – Ita) (Plate 32, Figs 20–21)
Coenotephria tophaceata (Denis & Schiffermüller, 1775) (14 exs – Aut) (Plate 32, Figs 22–25)
Coenotephria sp. indet from Italy, South Tyrol (2 exs – Ita) (Plate 32, Figs 26–27)
Remark. Surprisingly, despite of all the efforts having been put into identification, these peculiar European specimens have remained unidentified, even their generic position is dubious.
Coenotephria schneideraria schneideraria (Lederer, 1855) (1 ex. – Leb) (Plate 32, Fig. 28)
Coenotephria schneideraria eteocretica (Rebel, 1906) (2 exs – Cre) (Plate 32, Figs 29–30)

Genus ***Nebula*** Bruand, 1846

Nebula nebulata (Treitschke, 1828) (18 exs – Spa, Fra, Aut, Mac) (Plate 32, Figs 31–34)
Nebula senectaria (Herrich–Schäffer, 1852) (28 exs – Cre, Mac, Tur, Leb) (Plate 32, Figs 35–38)
Nebula achromaria (de la Harpe, 1853) (22 exs – Fra, Ita, Aut, Mac) (Plate 32, Figs 39–40)
Nebula sp. near *achromaria* (16 exs – Ira, Arm) (Plate 32, Figs 41–42)
Remark. The series of *N. achromaria*-like specimens from Armenia and North Iran differs externally from the European *achromaria* specimens. No applicable taxon name was found for these populations.
Nebula ibericata numidiata (Staudinger, 1892) (12 exs – Can, Alg) (Plate 32, Figs 43–47)
Remark. The taxon *numidiata* was described from Algeria; the specimens from the Canary Islands are treated here tentatively also as ssp. *numidiata* as no available name described for the Canary Island populations was found. To justify whether the *ibericata* populations of the Canary Island represent a distinct taxon, further studies are required.
Nebula apiciata pamirica Viidalepp, 1988 (3 exs – Afg) (Plate 32, Figs 48–50)
Nebula homophana (Hampson, 1895) (11 exs – Pak) (Plate 32, Figs 51–53)
Nebula triciliata (Wiltshire, 1967) (2 exs – Afg) (Plate 32, Figs 54–55)
Nebula vartianata (Wiltshire, 1970) (5 exs – Ira) (Plate 32, Figs 56–59, 56: holotype)

Genus ***Lampropteryx*** Stephens, 1831

Lampropteryx suffumata (Denis & Schiffermüller, 1775) (4 exs – Fin) (Plate 32, Figs 60–63)

Genus ***Malacodea*** Tengström, 1869

Malacodea regelaria Tengström, 1869 (1 ex. – Fin) (Plate 33, Fig. 1)

Genus ***Operophtera*** Hübner, 1825

Operophtera fagata (Scharfenberg, 1805) (30 exs – Aut) (Plate 33, Figs 2–6)
Operophtera brumata (Linnaeus, 1758) (20 exs – Aut) (Plate 33, Figs 7–10)

Genus ***Epirrita*** Hübner, 1822

Epirrita dilutata (Denis & Schiffermüller, 1775) (28 exs – Eng, Aut, Hun, Bul) (Plate 33, Figs 11–14)
Epirrita christyi (Allen, 1906) (22 exs – Fra, Ger, Aut, Bul) (Plate 33, Figs 15–18)
Epirrita autumnata (Borkhausen, 1794) (16 exs – Aut, Bul) (Plate 33, Figs 19–22)

Genus ***Minoa*** Treitschke, 1825

Minoa murinata murinata (Scopoli, 1763) (16 exs – Fra, Ita, Aut) (Plate 33, Figs 23–24)
Minoa murinata monochroaria (Herrich-Schäffer, 1848) (16 exs – Gre, Cro) (Plate 33, Figs 25–26)

Genus ***Laciniodes*** Warren, 1894

Laciniodes denigrata Warren, 1896 (1 ex. – Chi) (Plate 33, Fig. 32)

Genus ***Asthena*** Hübner, 1825

Asthena albulata (Hufnagel, 1767) (13 exs – Aut, Mac, Tur) (Plate 33, Figs 27–28)
Asthena anseraria candidissima (Staudinger, 1897) (10 exs – Ira) (Plate 33, Figs 29–31)

Genus ***Euchoeca*** Hübner, 1823

Euchoeca nebulata (Scopoli, 1763) (7 exs – Aut, Hun) (Plate 33, Figs 33–34)

Genus ***Hydrelia*** Hübner, 1825

Hydrelia chionata (Lederer, 1870) (2 exs – Ira) (Plate 33, Figs 35–36)
Hydrelia sylvata (Denis & Schiffermüller, 1775) (6 exs – Aut) (Plate 33, Figs 41–42)
Hydrelia flammeolaria (Hufnagel, 1767) (12 exs – Ger, Aut, Ita, Ukr) (Plate 33, Figs 37–40)

Genus ***Venusia*** Curtis, 1839

Venusia cambrica Curtis, 1839 (3 exs – Aut) (Plate 33, Figs 43–45)
Venusia blomeri (Curtis, 1832) (7 exs – Aut, Ger) (Plate 33, Figs 46–47)
Venusia kasyata Wiltshire, 1966 (7 exs – Afg, Pak) (Plate 33, Figs 48–52, 48: holotype)

Genus ***Philereme*** Hübner, 1825
Philereme vetulata (Denis & Schiffermüller, 1775) (11 exs – Aut, Hun) (Plate 33, Figs 53–56)
Philereme transversata (Hufnagel, 1767) (6 exs – Ger, Aut, Hun, Mac) (Plate 33, Figs 57–59)
Philereme senescens (Staudinger, 1892) (11 exs – Tur, Arm) (Plate 33, Figs 60–62)
Genus ***Hospitalia*** Agenjo, 1950
Hospitalia flavolineata (Staudinger, 1883) (3 exs – Alg, Fra) (Plate 33, Figs 63–65)
Genus ***Rheumaptera*** Hübner, 1822
Rheumaptera hastata (Linnaeus, 1758) (7 exs – Aut) (Plate 34, Figs 1–2)
Rheumaptera subhastata (Nolcken, 1870) (1 ex. – Ger) (Plate 34, Fig. 3)
Genus ***Hydria*** Hübner, 1822
Hydria undulata (Linnaeus, 1758) (7 exs – Aut) (Plate 34, Figs 4–5)
Hydria cervinalis (Scopoli, 1763) (21 exs – Aut) (Plate 34, Figs 6–9)
Hydria montivagata hyrcana Staudinger, 1871 (3 exs – Ira) (Plate 34, Figs 10–11)
Hydria montivagata andalusica (Ribbe, 1912) (14 exs – Spa) (Plate 34, Figs 12–15)
Hydria moniliferaria (Oberthür, 1893) (1 ex. – Chi) (Plate 34, Fig. 16)
Hydria alternata (Staudinger, 1896) (2 exs – Afg) (Plate 34, Figs 17–18)
Genus ***Triphosa*** Stephens, 1829
Triphosa sabaudiata (Duponchel, 1830) (5 exs – Ger, Aut) (Plate 34, Figs 19–22)
Triphosa taochata (Lederer, 1870) (7 exs – Arm, Afg) (Plate 34, Figs 23–26)
Triphosa dubitata (Linnaeus, 1758) (25 exs – Spa, Fra, Aut, Mac, Arm) (Plate 34, Figs 27–30)
Triphosa expansa (Moore, 1888) (4 exs – Chi) (Plate 35, Figs 1–4)
Genus ***Pareulype*** Herbulot, 1951
Pareulype berberata berberata (Denis & Schiffermüller, 1775) (27 exs – Fra, Aut, Tur) (Plate 35, Figs 5–7)
Pareulype berberata nevadensis (Rebel, 1916) (8 exs – Spa) (Plate 35, Figs 8–10)
Pareulype lasithiotica (Rebel, 1906) (8 exs – Cre) (Plate 35, Figs 11–13)
Genus ***Amnesicoma*** Warren, 1895
Amnesicoma simplex Warren, 1895 (1 ex. – Pak) (Plate 35, Fig. 17)
Genus ***Photoscotosia*** Warren, 1888
Photoscotosia dejuta Prout, 1937 (5 exs – Chi) (Plate 35, Figs 18–19)
Photoscotosia palaearctica (Staudinger, 1882) (1 ex. – Afg) (Plate 35, Fig. 20)
Genus ***Baptria*** Hübner, 1825
Baptria tibiale tibiale (Esper, 1804) (5 exs – Ger, Aut) (Plate 35, Figs 14–15)
Baptria tibiale mychioleuca Prout, 1938 (1 ex. – RFE) (Plate 35, Fig. 16)
Genus ***Coenocalpe*** Hübner, 1825
Coenocalpe lapidata (Hübner, 1809) (14 exs – Aut) (Plate 35, Figs 21–24)
Coenocalpe millierata zerhounaria (Oberthür, 1921) (1 ex. – Mor) (Plate 35, Fig. 25)
Genus ***Horisme*** Hübner, 1825
Horisme vitalbata (Denis & Schiffermüller, 1775) (47 exs – Spa, Fra, Aut, Ita) (Plate 35, Figs 26–29)
Horisme corticata (Treitschke, 1835) (14 exs – Aut, Mac) (Plate 35, Figs 30–33)
Horisme tersata (Denis & Schiffermüller, 1775) (19 exs – Fra, Ger, Aut, Mac, Ukr) (Plate 35, Figs 34–37)
Horisme radicaria (de la Harpe, 1855) (3 exs – Fra, Sic, Mac) (Plate 35, Figs 38–39)
Horisme exoletata (Herrich-Schäffer, 1838) (3 exs – Sic) (Plate 35, Fig. 40)
Horisme aemulata (Hübner, 1813) (10 exs – Fra, Aut) (Plate 35, Figs 41–43)
Horisme calligraphata (Herrich-Schäffer, 1838) (14 exs – Fra, Ita, Aut, Mac, Gre) (Plate 35, Figs 44–47)
Horisme aquata (Hübner, 1813) (2 exs – Ger) (Plate 35, Figs 48–49)
Horisme bamiana Wiltshire, 1966 (3 exs – Afg) (Plate 36, Figs 1–3, 1: holotype)
Genus ***Melanthia*** Duponchel, 1829
Melanthia procellata (Denis & Schiffermüller, 1775) (31 exs – Aut, Ukr) (Plate 36, Figs 4–7)
Melanthia alaudaria (Freyer, 1846) (7 exs – Aut) (Plate 36, Figs 9–12)
Melanthia catenaria (Moore, 1868) (1 ex. – Chi) (Plate 36, Fig. 8)
Genus ***Anticollix*** Prout, 1938
Anticollix sparsata (Treitschke, 1828) (2 exs – Ger) (Plate 36, Fig. 13)
Genus ***Pseudobaptria*** Inoue, 1982
Pseudobaptria bogumilaria (Rebel, 1904) (1 ex. – Mac) (Plate 36, Fig. 14)
Genus ***Mesotype*** Hübner, 1825
Mesotype didymata (Linnaeus, 1758) (6 exs – Aut) (Plate 36, Figs 15–17)

Mesotype parallelolineata (Retzius, 1783) (18 exs – Aut, Ita) (Plate 36, Figs 18–19)
Mesotype verberata (Scopoli, 1763) (28 exs – Aut) (Plate 36, Figs 20–22)

Genus ***Perizoma*** Hübner, 1825

Perizoma affinitata (Stephens, 1831) (4 exs – Aut) (Plate 36, Figs 23–24)
Perizoma alchemillata (Linnaeus, 1758) (22 exs – Aut) (Plate 36, Figs 25–26)
Perizoma hydrata (Treitschke, 1829) (10 exs – Spa, Fra, Aut, Arm) (Plate 36, Figs 27–30)
Perizoma lugdunaria (Herrich-Schäffer, 1855) (10 exs – Aut) (Plate 36, Figs 31–33)
Perizoma bifaciata (Haworth, 1809) (20 exs – Spa, Fra, Cor, Sic, Aut) (Plate 36, Figs 34–37)
Perizoma flavosparsata (Wagner, 1926) (13 exs – Spa) (Plate 36, Figs 38–41)
Perizoma minorata (Treitschke, 1828) (18 exs – Fra, Aut, Gre) (Plate 36, Figs 42–44)
Perizoma sp. near *minorata* from Iran, Elburs (27 exs – Ira) (Plate 36, Figs 45–47)
Perizoma blandiata (Denis & Schiffermüller, 1775) (13 exs – Spa, Aut) (Plate 36, Figs 48–51)
Perizoma albulata (Denis & Schiffermüller, 1775) (20 exs – Fra, Aut, Rus) (Plate 36, Figs 52–56)
Perizoma flavofasciata (Thunberg, 1792) (10 exs – Spa, Ger, Mac) (Plate 36, Figs 57–59)
Perizoma obsoletata (Herrich-Schäffer, 1838) (31 exs – Ger, Aut) (Plate 36, Figs 60–63)
Perizoma incultaria (Herrich-Schäffer, 1848) (2 exs – Aut, Gre) (Plate 36, Figs 64–65)

Genus ***Martania*** Mironov, 2000

Martania seriata (Moore, 1888) (4 exs – Afg, Pak) (Plate 36, Figs 66–68)
Martania taeniata (Stephens, 1831) (3 exs – Aut, Fin, Lat) (Plate 36, Figs 69–70)

Genus ***Gagitodes*** Warren, 1893

Gagitodes sagittata (Fabricius, 1787) (4 exs – Aut) (Plate 36, Figs 71–72)

Genus ***Gymnoscelis*** Mabille, 1868

Gymnoscelis rufifasciata (Haworth, 1809) (63 exs – Spa, Fra, Aut, Ita, Sic, Hun, Mac, Gre, Leb, Ira, Afg) (Plate 37, Figs 1–4)
Gymnoscelis schulzi (Rebel, 1914) (1 ex – Can) (Plate 36, Fig. 73)
Gymnoscelis lundbladi lundbladi Prout, 1939 (8 exs – Mad) (Plate 37, Figs 5–7)
Gymnoscelis lundbladi palmata Pinker, 1962 (6 exs – Can) (Plate 37, Figs 8–10)
Gymnoscelis insulariata fernandezi Pinker & Bacallado, 1975 (12 exs – Can) (Plate 37, Figs 11–13)

Genus ***Chloroclystis*** Hübner, 1825

Chloroclystis v-ata (Haworth, 1809) (13 exs – Fra, Aut, Mac) (Plate 37, Figs 14–17)

Genus ***Pasiphila*** Meyrick, 1883

Pasiphila rectangulata (Linnaeus, 1758) (23 exs – Aut) (Plate 37, Figs 18–20)
Pasiphila debiliata (Hübner, 1817) (2 exs – Aut) (Plate 37, Figs 21–22)

Genus ***Eupithecia*** Curtis, 1825

Eupithecia haworthiata Doubleday, 1856 (7 exs – Aut, Mac) (Plate 37, Figs 23–25)
Eupithecia tenuiata (Hübner, 1813) (7 exs – Ger, Aut, Hun) (Plate 37, Figs 26–29)
Eupithecia inturbata (Hübner, 1817) (2 exs – Ger) (Plate 37, Figs 30–31)
Eupithecia abietaria (Goeze, 1781) (3 exs – Aut) (Plate 37, Figs 32–35)
Eupithecia interrubrescens (Hampson, 1902) (2 exs – Pak) (Plate 37, Figs 36–37)
Eupithecia subrubrescens (Warren, 1888) (4 exs – Pak) (Plate 37, Figs 38–41)
Eupithecia albibaltea Prout, 1958 (1 ex. – Nep) (Plate 37, Fig. 42)
Remark. There are multiple problems about this taxon. In the Vartian collection there is a paratype of *Eupithecia multa* Vojnits, 1981, which is illustrated here but the specimen is misidentified by Vojnits and should be named as *E. albibaltea*. Moreover, *E. multa* is a synonym of *E. tricrossa* Prout, 1926.
Eupithecia linariata (Denis & Schiffermüller, 1775) (20 exs – Aut, Mac, Gre, Rus) (Plate 37, Figs 43–46)
Eupithecia pulchellata iberica Dietze, 1913 (4 exs – Spa) (Plate 37, Figs 47–50)
Eupithecia sp. near *pulchellata* (Stephens, 1831) (28 exs – Afg) (Plate 37, Figs 51–54)
Remark. The specimens from Afghanistan (Paghman) are most probably not conspecific with *pulchellata*. For the exact identification further investigations are required.
Eupithecia pyrenaeata Mabille, 1871 (14 exs – Aut, Mac, Tur) (Plate 37, Figs 55–58)
Eupithecia laquaearia Herrich-Schäffer, 1848 (15 exs – Spa, Sic, Aut, Mac) (Plate 37, Figs 59–61)
Eupithecia ultimaria Boisduval, 1840 (3 exs – Alg, Sud) (Plate 38, Figs 1–3)
Eupithecia pantellata canariata Pinker, 1965 (3 exs – Can) (Plate 38, Figs 4–6)
Eupithecia sp. near *pantellata* from Iran, Elburs (33 exs – Ira) (Plate 38, Figs 7–11)
Eupithecia boryata (Rebel, 1906) (8 exs – Can) (Plate 38, Figs 12–15)
Eupithecia plumbeolata (Haworth, 1809) (8 exs – Aut) (Plate 38, Figs 16–19)

Eupithecia undata (Freyer, 1840) (5 exs – Aut) (Plate 38, Figs 20–23)
Eupithecia mustangata Schütze, 1961 (2 exs – Nep) (Plate 38, Figs 24–25)
Eupithecia silenata Assman, 1848 (2 exs – Cze) (Plate 38, Figs 26–27)
Eupithecia carpophagata Staudinger, 1871 (6 exs – Mac, Gre) (Plate 38, Figs 28–32)
Eupithecia venosata (Fabricius, 1787) (25 exs – Mor, Spa, Fra, Aut, Mac, Gre) (Plate 38, Figs 33–36)
Eupithecia sp. near *venosata* from Afghanistan, Paghman (36 exs – Afg) (Plate 38, Figs 37–40)
Eupithecia schiefereri Bohatsch, 1893 (4 exs – Aut) (Plate 38, Figs 41–43)
Eupithecia silenicolata Mabille, 1867 (8 exs – Aut, Hun, Mac) (Plate 38, Figs 44–47)
Eupithecia alliaria Staudinger, 1870 (19 exs – Aut) (Plate 38, Figs 48–51)
Eupithecia rosai Pinker, 1962 (11 exs – Can) (Plate 38, Figs 52–55)
Eupithecia cocciferata Millière, 1864 (5 exs – Fra, Cro) (Plate 38, Figs 56–58)
Eupithecia abbreviata Stephens, 1831 (15 exs – Aut, Mac) (Plate 38, Figs 59–61)
Eupithecia dodoneata Guenée, 1858 (9 exs – Ger, Mac) (Plate 39, Figs 1–4)
Eupithecia extremata (Fabricius, 1787) (11 exs – Aut, Mac) (Plate 39, Figs 5–8)
Eupithecia scopariata (Rambur, 1833) (3 exs – Fra, Ita) (Plate 39, Figs 9–11)
Eupithecia pusillata (Denis & Schiffermüller, 1775) (55 exs – Fra, Ita, Aut, Gre) (Plate 39, Figs 12–15)
Eupithecia ericeata (Rambur, 1833) (54 exs – Aut, Ita, Mac) (Plate 39, Figs 16–19)
Eupithecia phoeniceata (Rambur, 1834) (1 ex. – Alg) (Plate 39, Fig. 20)
Eupithecia oxycedrata (Rambur, 1833) (29 exs – Mor, Fra, Cro, Mac, Bul) (Plate 39, Figs 21–24)
Eupithecia tripunctaria Herrich-Schäffer, 1852 (13 exs – Aut) (Plate 39, Figs 25–28)
Eupithecia virgaureata Doubleday, 1861 (7 exs – Aut) (Plate 39, Figs 29–32)
Eupithecia tantillaria Boisduval, 1840 (4 exs – Aut, Lat) (Plate 39, Figs 33–35)
Eupithecia lariciata (Freyer, 1841) (19 exs – Aut) (Plate 39, Figs 36–39)
Eupithecia lanceata (Hübner, 1825) (8 exs – Aut) (Plate 39, Figs 40–43)
Eupithecia selinata Herrich-Schäffer, 1861 (2 exs – Aut) (Plate 39, Figs 44–45)
Eupithecia actaeata Walderdorff, 1869 (10 exs – Ger, Aut) (Plate 39, Figs 46–49)
Eupithecia quercetica Prout, 1938 (8 exs – Mac) (Plate 39, Figs 50–53)
Eupithecia egenaria Herrich-Schäffer, 1848 (9 exs – Aut) (Plate 39, Figs 54–56)
Eupithecia pimpinellata (Hübner, 1813) (15 exs – Aut) (Plate 40, Figs 1–4)
Eupithecia sp. near *pimpinellata* from Greece, Olympos (39 exs – Gre) (Plate 40, Figs 5–6)
Eupithecia latipennata Prout, 1914 (2 exs – Mad) (Plate 40, Figs 7–8)
Eupithecia schutzeata Pinker, 1961 (3 exs – Can) (Plate 40, Figs 9–10)
Eupithecia tenerifensis (Rebel, 1906) (8 exs – Can) (Plate 40, Figs 11–14)
Eupithecia torva Vojnits, 1983 (1 ex. – Nep) (Plate 40, Fig. 15)
Eupithecia recens Dietze, 1904 (1 ex. – Chi) (Plate 40, Fig. 16)
Remark. The identification made by Vojnits without dissecting the specimen is dubious. The specimen is rather worn; the proper identification requires, therefore, the examination of the genitalia.
Eupithecia simpliciata (Haworth, 1809) (14 exs – Aut) (Plate 40, Figs 17–20)
Eupithecia sinuosaria (Eversmann, 1848) (12 exs – Ger) (Plate 40, Figs 23–26)
Eupithecia nanata (Hübner, 1813) (3 exs – Ger, Aut) (Plate 40, Figs 21–22)
Eupithecia innotata (Hufnagel, 1767) (39 exs – Eng, Aut) (Plate 40, Figs 27–32)
Eupithecia ochridata Schütze & Pinker, 1968 (7 exs – Hun, Mac) (Plate 40, Figs 33–36)
Eupithecia graphata (Treitschke, 1828) (22 exs – Cro, Mac) (Plate 40, Figs 37–40)
Eupithecia inconspicuata Bohatsch, 1893 (5 exs – Mac) (Plate 40, Figs 41–44, all are paratypes of *E. thurnerata* Schütze, 1958)
Remark. *E. thurnerata* has recently been synonymized with *E. inconspicuata* by Mironov (2013).
Eupithecia gemellata Herrich-Schäffer, 1861 (17 exs – Mac) (Plate 40, Figs 45–49)
Eupithecia subsequaria Herrich-Schäffer, 1852 (11 exs – Tur) (Plate 41, Figs 1–4)
Eupithecia sp. near *subsequaria* from Turkey, Akshehir (2 exs – Tur) (Plate 41, Figs 5–6)
Remark. The specimens may represent only a form of *subsequaria*, the subsequent examination of the genitalia is needed.
Eupithecia convallata convallata Brandt, 1938 (14 exs – Ira) (Plate 41, Figs 7–10)
Eupithecia convallata terricolor Vojnits, 1988 (4 exs – Afg) (Plate 41, Figs 11–12, 11: holotype)
Eupithecia edaphopteryx Vojnits, 1988 (2 exs – Ira) (Plate 41, Figs 13–14, 13: holotype)
Eupithecia breviculata (Donzel, 1837) (25 exs – Fra, Sic, Mac, Tur) (Plate 41, Figs 15–18)
Eupithecia spissilineata Metzner, 1846 (5 exs – Fra, Mac, Leb, Arm) (Plate 41, Figs 19–22)

Eupithecia cuculliaria Rebel, 1901 (11 exs – Cro, Mac) (Plate 41, Figs 23–26)
Eupithecia cerussaria (Lederer, 1855) (9 exs – Tur, Jor) (Plate 41, Figs 27–30)
Eupithecia irriguata (Hübner, 1813) (10 exs – Aut, Mac) (Plate 41, Figs 31–34)
Eupithecia indigata (Hübner, 1813) (10 exs – Aut) (Plate 41, Figs 35–38)
Eupithecia distinctaria Herrich-Schäffer, 1848 (29 exs – Ita, Aut, Mac, Gre) (Plate 41, Figs 39–41)
Eupithecia elbursi Vojnits, 1988 (8 exs – Ira) (Plate 41, Figs 42–45, 42: holotype)
Eupithecia xanthomixta xanthomixta Vojnits, 1988 (5 exs – Afg) (Plate 41, Figs 46–47, 46: holotype)
Eupithecia xanthomixta derbendi Vojnits, 1988 (1 ex. – Ira) (Plate 41, Fig. 48, holotype)
Eupithecia extraversaria Herrich-Schäffer, 1852 (8 exs – Aut, Hun) (Plate 41, Figs 49–51)
Eupithecia centaureata (Denis & Schiffermüller, 1775) (48 exs – Aut, Cro, Sic, Leb, Syr) (Plate 41, Figs 52–57)
Eupithecia limbata (Staudinger, 1879) (4 exs – Spa, Mac) (Plate 42, Figs 1–4)
Eupithecia insigniata (Hübner, 1790) (17 exs – Ger, Aut, Mac) (Plate 42, Figs 5–9)
Eupithecia trisignaria Herrich-Schäffer, 1848 (18 exs – Aut) (Plate 42, Figs 10–13)
Eupithecia gueneata gueneata Millière, 1862 (18 exs – Aut) (Plate 42, Figs 14–17)
Eupithecia gueneata busambraria Ragusa, 1889 (1 ex. – Sic) (Plate 42, Fig. 18)
Eupithecia gratiosata Herrich-Schäffer, 1861 (4 exs – Sar, Cro, Mac) (Plate 42, Figs 19–22)
Eupithecia veratraria Herrich-Schäffer, 1848 (6 exs – Aut) (Plate 42, Figs 23–27)
Eupithecia cretaceata fenestrata Millière, 1874 (2 exs – Mac) (Plate 42, Figs 28–29)
Eupithecia praealta rerayata Reisser, 1933 (2 exs – Mor) (Plate 42, Figs 30–31)
Eupithecia intricata (Zetterstedt, 1839) (10 exs – Ger, Aut, Mac) (Plate 42, Figs 32–35)
Eupithecia satyrata (Hübner, 1813) (5 exs – Aut) (Plate 42, Figs 36–39)
Eupithecia cauchiata (Duponchel, 1831) (16 exs – Aut) (Plate 42, Figs 40–42)
Eupithecia pernotata Guenée, 1858 (9 exs – Aut) (Plate 42, Figs 43–45)
Eupithecia absinthiata (Clerck, 1759) (16 exs – Aut) (Plate 43, Figs 1–4)
Eupithecia expallidata Doubleday, 1856 (8 exs – Eng, Aut) (Plate 43, Figs 5–7)
Eupithecia valerianata (Hübner, 1813) (8 exs – Ger, Aut) (Plate 43, Figs 8–10)
Eupithecia vulgata (Haworth, 1809) (10 exs – Aut, Gre) (Plate 43, Figs 11–14)
Eupithecia immundata (Lienig & Zeller, 1846) (13 exs – Aut) (Plate 43, Figs 15–18)
Eupithecia thalictrata (Püngeler, 1902) (31 exs – Aut) (Plate 43, Figs 19–23)
Eupithecia exiguata (Hübner, 1813) (3 exs – Aut) (Plate 43, Figs 24–26)
Eupithecia druentiata Dietze, 1902 (7 exs – Fra, Mac) (Plate 43, Figs 27–30)
Eupithecia denotata (Hübner, 1813) (3 exs – Aut) (Plate 43, Figs 31–33)
Eupithecia leucethensis Prout, 1926 (1 ex. – Nep) (Plate 43, Fig. 34, paratype of *E. albicans* Vojnits, 1981)
Remark. The figured specimen is a paratype of *E. albicans* Vojnits, 1981; this taxon is a synonym of *E. leucethensis*.
Eupithecia pauxillaria Boisduval, 1840 (52 exs – Aut, Cor, Gre) (Plate 43, Figs 35–38)
Eupithecia santolinata Mabille, 1871 (2 exs – Spa) (Plate 43, Figs 39–40)
Eupithecia millefoliata Rössler, 1866 (16 exs – Aut, Mac) (Plate 43, Figs 41–44)
Eupithecia icterata (Villers, 1789) (18 exs – Spa, Sic, Aut, Mac) (Plate 43, Figs 45–49)
Eupithecia impurata (Hübner, 1813) (22 exs – Ger, Aut, Cro) (Plate 44, Figs 1–5)
Eupithecia succenturiata (Linnaeus, 1758) (5 exs – Aut) (Plate 44, Figs 6–10)
Eupithecia semigraphata Bruand, 1850 (37 exs – Spa, Fra, Ger, Ita, Sic, Mac, Gre) (Plate 44, Figs 11–16)
Eupithecia subumbrata (Denis & Schiffermüller, 1775) (5 exs – Cze, Aut) (Plate 44, Figs 17–20)
Eupithecia orphnata Petersen, 1909 (1 ex. – Aut) (Plate 44, Fig. 21)
Eupithecia subfuscata (Haworth, 1809) (6 exs – Spa, Aut, Mac) (Plate 44, Figs 22–24)
Eupithecia brunneata Staudinger, 1900 (7 exs – Ira) (Plate 44, Figs 25–31)
Eupithecia sp. indet from Greece, Olymp (2 exs – Gre) (Plate 44, Figs 32–33)
Eupithecia sp. indet Iran, Elburs (1 ex. – Ira) (Plate 44, Fig. 34)

Genus ***Tyloptera*** Christoph, 1881
Tyloptera bella (Butler, 1878) (1 ex. – Jap) (Plate 44, Fig. 35)

Genus ***Emmesomia*** Warren, 1896
Emmesomia bilinearia Leech, 1897 (1 ex. – Chi) (Plate 44, Fig. 36)

Genus ***Schistostege*** Hübner, 1825
Schistostege decussata decussata (Denis & Schiffermüller, 1775) (6 exs – Aut, Ita) (Plate 44, Figs 37–40)

Schistostege decussata dinarica (Schawerda, 1913) (26 exs – Ita, Slo, Bih, Mne, Mac, Tur) (Plate 44, Figs 41–45)

Genus ***Odezia*** Boisduval, 1840

Odezia atrata (Linnaeus, 1758) (27 exs – Spa, Fra, Aut, Ita, Tur) (Plate 44, Figs 46–47)

Genus ***Docirava*** Walker, 1863

Docirava dervenaria (Mentzer, 1981) (4 exs – Mac) (Plate 44, Fig. 48)
Docirava mundata (Staudinger, 1892) (4 exs – Tur, Arm) (Plate 44, Figs 49–51)
Docirava mundulata (Guenée, 1858) (4 exs – Leb, Syr) (Plate 45, Figs 1–4)
Docirava musculata (Staudinger, 1892) (17 exs – Ira) (Plate 45, Figs 5–9)

Genus ***Carsia*** Hübner, 1825

Carsia sororiata imbutata (Hübner, 1813) (27 exs – Aut) (Plate 45, Figs 10–14)
Carsia lythoxylata (Hübner, 1799) (1 ex. – Bih) (Plate 45, Fig. 15)

Genus ***Aplocera*** Stephens, 1827

Aplocera annexata (Freyer, 1830) (1 ex. – Tur) (Plate 45, Fig. 16)
Aplocera columbata (Mentzer, 1845) (1 ex. – Arm) (Plate 45, Fig. 17)
Aplocera cretica (Reisser, 1974) (13 exs – Cre) (Plate 45, Figs 18–21)
Aplocera efformata (Guenée, 1858) (8 exs – Mor, Ger, Aut) (Plate 45, Figs 22–25)
Aplocera obsitaria obsitaria (Lederer, 1853) (18 exs – Syr) (Plate 45, Figs 26–29)
Aplocera obsitaria anatolica (Wehrli, 1931) (2 exs – Tur) (Plate 45, Fig. 30)
Aplocera obsitaria evanescens (Wehrli, 1931) (37 exs – Arm, Ira) (Plate 45, Figs 31–34)
Aplocera opificata (Lederer, 1870) (5 exs – Tur) (Plate 45, Figs 35–38)
Aplocera plagiata (Linnaeus, 1758) (79 exs – Spa, Fra, Aut, Mac, Bul, Tur, Leb, Syr, Arm, Ira, Afg, Pak) (Plate 45, Figs 39–41)
Aplocera praeformata (Hübner, 1826) (17 exs – Aut) (Plate 45, Figs 42–44)
Aplocera simpliciata (Treitschke, 1835) (16 exs – Mac) (Plate 45, Figs 45–47)
Aplocera uniformata (Urbahn, 1971) (4 exs – Arm, Ira) (Plate 46, Figs 1–4)

Genus ***Chesias*** Treitschke, 1825

Chesias legatella (Denis & Schiffermüller, 1775) (17 exs – Fra, Ger) (Plate 46, Figs 5–8)
Chesias plumbeata Staudinger, 1901 (4 exs – Mor) (Plate 46, Figs 9–11)
Chesias rufata rufata (Fabricius, 1775) (20 exs – Fra, Aut, Ita) (Plate 46, Figs 12–16)
Chesias rufata cinereata Staudinger, 1901 (1 ex. – Spa) (Plate 46, Fig. 17)

Genus ***Chesistege*** Viidalepp, 1990

Chesistege korbi korbi (Bohatsch, 1910) (1 ex. – Ira) (Plate 46, Fig. 18)
Chesistege korbi taurica (Wehrli, 1938) (2 ex. – Tur) (Plate 46, Fig. 19)

Genus ***Lithostege*** Hübner, 1825

Lithostege witzenmanni Standfuss, 1892 (7 exs – Ira) (Plate 46, Figs 20–23)
Lithostege amoenata Christoph, 1885 (24 exs – Afg) (Plate 46, Figs 24–28; Gen. figs 5, 6)
Lithostege amseli Wiltshire, 1967 (4 exs – Afg) (Plate 46, Figs 29–31; Gen. figs 7, 8)
Lithostege usgentaria Christoph, 1885 (2 exs – Afg) (Plate 46, Figs 32–33)
Lithostege hreblayi Rajaei, 2011 (1 ex. – Afg) (Plate 46, Fig. 34; Gen. fig. 9)
Lithostege rufovirgata László, 2017 **sp. n.** (1 ex. – Pak) (Plate 46, Fig. 35 holotype; Gen. fig. 10)
Lithostege wiltshirei László, 2017 **sp. n.** (5 exs – Pak) (Plate 46, Figs 36–39, 36: holotype; Gen. fig. 11)
Lithostege farinata (Hufnagel, 1767) (23 exs – Aut, Ukr) (Plate 46, Figs 40–43)
Lithostege ancyrana Prout, 1938 (3 exs – Tur) (Plate 46, Figs 44–45)
Lithostege griseata griseata (Denis & Schiffermüller, 1775) (7 exs – Aut, Tur) (Plate 46, Figs 46–48)
Lithostege griseata cycnaria Guenée, 1858 (3 exs – Mor) (Plate 46, Figs 49–50)
Lithostege sp. near *coassata* from Jordan (1 ex. – Jor) (Plate 47, Fig. 1)

Remark. The genitalia of the single female collected at Mafraq in Jordan differ from those of the nominotypical *L. coassata*; to clarify its taxonomic position examination of further specimens would be desirable.

Lithostege palaestinensis Amsel, 1935 (23 exs – Jor, Ira) (Plate 47, Figs 2–5)
Lithostege infuscata (Eversmann, 1837) (23 exs – Ira, Afg) (Plate 47, Figs 6–9)
Lithostege flavicornata (Zeller, 1847) (5 exs – Tur) (Plate 47, Figs 10–11)
Lithostege castiliaria Staudinger, 1877 (33 exs – Spa) (Plate 47, Figs 12–15)
Lithostege vartianae László, 2017 **sp. n.** (17 exs – Pak) (Plate 47, Figs 16–20, 16: holotype; Gen. figs 12, 13)

Genus ***Epilobophora*** Inoue, 1943
Epilobophora sabinata sabinata (Geyer, 1831) (19 exs – Fra, Sui) (Plate 47, Figs 21–23)
Epilobophora sabinata teriolensis (Kitt, 1932) (11 exs – Aut) (Plate 47, Figs 24–26)
Genus ***Oulobophora*** Staudinger, 1892
Oulobophora internata (Püngeler, 1888) (24 exs – Mac) (Plate 47, Figs 27–30)
Oulobophora externaria externaria (Herrich–Schäffer, 1848) (1 ex. – Tur) (Plate 47, Fig. 31)
Oulobophora externaria turcosyrica Wehrli, 1934 (2 exs – Leb) (Plate 47, Figs 32–33)
Genus ***Lobophora*** Curtis, 1825
Lobophora halterata (Hufnagel, 1767) (13 exs – Aut) (Plate 47, Figs 34–37)
Genus ***Pterapherapteryx*** Curtis, 1825
Pterapherapteryx sexalata (Retzius, 1783) (7 exs – Fra, Aut) (Plate 47, Figs 38–40)
Genus ***Nothocasis*** Prout, 1937
Nothocasis sertata (Hübner, 1817) (8 exs – Aut) (Plate 47, Figs 46–49)
Genus ***Acasis*** Duponchel, 1845
Acasis viretata (Hübner, 1799) (11 exs – Aut) (Plate 47, Figs 41–44)
Acasis appensata (Eversmann, 1842) (2 exs – Ger) (Plate 47, Fig. 45)
Genus ***Trichopteryx*** Hübner, 1825
Trichopteryx carpinata (Borkhausen, 1794) (7 exs – Ger, Aut) (Plate 47, Figs 50–52)
Trichopteryx polycommata (Denis & Schiffermüller, 1775) (15 exs – Aut) (Plate 47, Figs 53–56)
Genus ***Episauris*** Rebel, 1898
Episauris kiliani Rebel, 1898 (14 exs – Can) (Plate 47, Figs 57–61)

Subfamily Ennominae Duponchel, 1845

Genus ***Chemerina*** Boisduval, 1840
Chemerina caliginearia (Rambur, 1833) (1 ex. – Fra) (Plate 48, Fig. 1)
Genus ***Descoreba*** Butler, 1878
Descoreba simplex Butler, 1878 (1 ex. – Jap) (Plate 48, Fig. 2)
Genus ***Compsoptera*** Blanchard, 1845
Compsoptera opacaria (Hübner, 1819) (42 exs – Spa, Fra) (Plate 48, Figs 3–6)
Compsoptera jourdanaria jourdanaria (Serres, 1826) (30 exs – Spa, Fra) (Plate 48, Figs 7–9)
Compsoptera jourdanaria anargyra (Turati, 1913) (9 exs – Sar, Cor) (Plate 48, Figs 10–12)
Compsoptera argentaria (Herrich-Schäffer, 1839) (3 exs – Alg, Sic) (Plate 48, Figs 13–15)
Genus ***Anonychia*** Warren, 1893
Anonychia grisea (Butler, 1883) (4 exs – Pak) (Plate 48, Figs 16–17)
Anonychia rostrifera (Warren, 1888) (1 ex. – Pak) (Plate 48, Fig. 18)
Genus ***Phaselia*** Guenée, 1858
Phaselia serrularia serrularia (Eversmann, 1847) (1 ex. – Rus) (Plate 48, Fig. 19)
Phaselia serrularia catharia Wehrli, 1941 (6 exs – Ira) (Plate 48, Figs 20–23)
Phaselia erika Ebert, 1965 (10 exs – Ira, Afg) (Plate 48, Figs 24–29)
Phaselia kasyi Wiltshire, 1966 (1 ex. – Afg) (Plate 48, Fig. 30, holotype)
Phaselia deliciosaria (Lederer, 1855) (2 exs – Leb) (Plate 48, Figs 31–32)
Phaselia joestleinae Hausmann, 1996 (2 exs – Tur) (Plate 48, Figs 33–34)
Phaselia algiricaria gigantaria Schwingenschuss, 1936 (1 ex. – Mor) (Plate 48, Fig. 35)
Phaselia algiricaria aragona Wehrli, 1941 (2 exs – Spa) (Plate 49, Figs 1–2)
Genus ***Petrophora*** Hübner, 1811
Petrophora chlorosata (Scopoli, 1763) (10 exs – Aut, Mac) (Plate 49, Figs 3–5)
Genus ***Perigune*** Gumppenberg, 1887
Perigune fraternaria Rothschild, 1914 **stat. n.** (2 exs – Alg) (Plate 49, Figs 6–7)
Remark. Skou & Sihvonen (2015) refer *fraternaria* as a subspecies of *P. binaevata*. Due to the rather different external habitus of the two taxa, *fraternaria* is raised here to species rank.
Perigune convergata (Villers, 1789) (41 exs – Spa, Fra) (Plate 49, Figs 8–11)
Perigune narbonea (Linnaeus, 1767) (30 exs – Spa, Fra, Ita) (Plate 49, Figs 12–15)
Genus ***Selidosema*** Hübner, 1823
Selidosema brunnearia (Villers, 1789) (18 exs – Aut) (Plate 49, Figs 16–18)
Selidosema plumaria (Denis & Schiffermüller, 1775) (16 exs – Spa, Mac, Tur, Arm) (Plate 49, Figs 19–22)

Selidosema ambustaria (Geyer, 1831) (5 exs – Sic) (Plate 49, Figs 23–26)
Selidosema taeniolaria (Hübner, 1813) (14 exs – Spa, Fra) (Plate 49, Figs 27–30)
Genus ***Sirinopteryx*** Butler, 1883
Sirinopteryx ablunata (Guenée, 1858) (3 exs – Pak) (Plate 49, Figs 31–32)
Sirinopteryx rosinaria Oberthür, 1911 (1 ex. – Chi) (Plate 49, Fig. 33)
Genus ***Opisthograptis*** Hübner, 1823
Opisthograptis luteolata (Linnaeus, 1758) (71 exs – Spa, Fra, Sic, Ita, Aut, Arm, Ira, Afg, Pak) (Plate 49, Figs 34–39)
Opisthograptis swanni Prout, 1923 (2 exs – Chi) (Plate 49, Figs 40–41)
Genus ***Toulgoetia*** Herbulot, 1946
Toulgoetia cauteriata (Staudinger, 1859) (8 exs – Mor) (Plate 49, Figs 42–45)
Genus ***Eilicrinia*** Hübner, 1823
Eilicrinia cordiaria cordiaria (Hübner, 1790) (86 exs – Hun, Mac, Tur, Arm, Ira) (Plate 50, Figs 1–6)
Eilicrinia cordiaria signigera Butler, 1889 (2 exs – Pak) (Plate 50, Figs 11–12)
Eilicrinia subcordaria acardia Stichel, 1911 (28 exs – Ira) (Plate 50, Figs 7–10)
Eilicrinia orias Wehrli, 1933 (1 ex. – Afg) (Plate 49, Fig. 46)
Eilicrinia trinotata (Metzner, 1845) (29 exs – Mac, Ukr, Arm, Ira) (Plate 50, Figs 13–17)
Genus ***Therapis*** Hübner, 1823
Therapis flavicaria (Denis & Schiffermüller, 1775) (31 exs – Aut, Rus, Arm, Ira) (Plate 50, Figs 18–22)
Genus ***Pseudopanthera*** Hübner, 1823
Pseudopanthera macularia (Linnaeus, 1758) (29 exs – Fra, Ger, Srb, Gre) (Plate 50, Figs 23–26)
Pseudopanthera syriacata (Guenée, 1858) (22 exs – Jor, Leb) (Plate 50, Figs 27–30)
Pseudopanthera oberthuri (Alphéraky, 1895) (2 exs – Chi) (Plate 50, Figs 31–32)
Pseudopanthera triangulum (Oberthür, 1886) (1 ex. – Chi) (Plate 50, Fig. 33)
Genus ***Heterolocha*** Lederer, 1853
Heterolocha laminaria (Herrich-Schäffer, 1852) (4 exs – Tur, Ira) (Plate 50, Figs 34–37)
Heterolocha phoenicotaeniata (Kollar, 1844) (71 exs – Afg, Pak, Ind) (Plate 50, Figs 38–42)
Genus ***Anthyperythra*** Swinhoe, 1891
Anthyperythra caladsaota Hampson, 1902 (2 exs – Pak) (Plate 50, Figs 43–44)
Genus ***Enanthyperythra*** Wehrli, 1937
Enanthyperythra legataria (Herrich-Schäffer, 1852) (11 exs – Mac) (Plate 50, Figs 45–48)
Genus ***Adalbertia*** Wehrli, 1931
Adalbertia castiliaria (Staudinger, 1900) (1 ex. – Spa) (Plate 50, Fig. 49)
Genus ***Pungeleria*** Rougemont, 1903
Pungeleria capreolaria (Denis & Schiffermüller, 1775) (8 exs – Aut) (Plate 51, Figs 1–4)
Pungeleria poeymiraui (Oberthür, 1922) (41 exs – Mor) (Plate 50, Figs 50–54)
Genus ***Scodiomima*** Staudinger, 1892
Scodiomima crocallaria (Staudinger, 1892) (3 exs – Ira) (Plate 51, Figs 5–8)
Scodiomima afghana Wiltshire, 1961 (9 exs – Afg) (Plate 51, Figs 9–12)
Genus ***Coenina*** Walker, 1860
Coenina dentataria Swinhoe, 1904 (5 exs – Pak, Ira) (Plate 51, Figs 13–16)
Coenina collenettei Prout, 1931 (1 ex. – Ira) (Plate 51, Fig. 17)
Genus ***Plagodis*** Hübner, 1823
Plagodis dolabraria (Linnaeus, 1767) (24 exs – Aut, Ukr) (Plate 51, Figs 18–19)
Plagodis pulveraria (Linnaeus, 1758) (21 exs – Aut) (Plate 51, Figs 20–21)
Genus ***Garaeus*** Moore, 1868
Garaeus albipunctatus Hampson, 1895 (7 exs – Afg, Pak, Ind) (Plate 51, Figs 22–25)
Garaeus lateritiaria (Poujade, 1895) (2 exs – Chi) (Plate 51, Figs 26–27)
Genus ***Hylaea*** Hübner, 1822
Hylaea fasciaria (Linnaeus, 1758) (36 exs – Aut, Gre) (Plate 51, Figs 28–31)
Hylaea pinicolaria (Bellier, 1861) (2 exs – Cor) (Plate 51, Figs 32–33)
Genus ***Artemidora*** Meyrick, 1892
Artemidora disistaria (Walker, 1862) (8 exs – Pak) (Plate 51, Figs 34–37)
Artemidora vartianae Weisert, 2003 (63 exs – Afg) (Plate 51, Figs 38–41, 38: holotype)
Genus ***Odontopera*** Stephens, 1831
Odontopera sp. near *blaisa* (Wehrli, 1936) (4 exs – Afg, Pak) (Plate 51, Figs 42–44)

Remark. The specimens from Afghanistan (Paghman) and Pakistan (Swat) are similar in habitus to *O. blaisa* described from Punjab, but their male genitalia characters do not match completely with those of the holotype of *O. blaisa*. The taxonomic position of the populations in Afghanistan and Pakistan can be clarified by examination of further specimens from the region.

Odontopera sp. near *muscularia* Staudinger, 1892 (4 exs – Pak) (Plate 51, Figs 45–48)

Remark. *O. muscularia* was described from Usbekistan (Margelan). The externally similar specimens from Pakistan (Swat) most probably represent a distinct taxon. The taxonomic position of numerous *Odontopera* populations occurring in the Himalayas and the adjacent areas can be clarified only by a revision of the genus.

Odontopera alienata Staudinger, 1892 (1 ex. – Ind) (Plate 51, Fig. 49)

Odontopera acutaria (Leech, 1897) (5 exs – Chi) (Plate 52, Figs 1–4)

Odontopera bidentata (Clerck, 1759) (25 exs – Ita, Aut) (Plate 52, Figs 5–8)

Odontopera xenobia (Wiltshire, 1966) (10 exs – Afg) (Plate 52, Figs 9–12, 9: holotype)

„Odontopera" kametaria (Felder & Rogenhofer, 1875) (83 exs – Afg, Pak, Ind) (Plate 52, Figs 13–17)

Remark. *O. kametaria* most probably belongs, according to its external and genital characters, to a distinct genus related to *Scodiomima*.

Genus ***Ennomos*** Treitschke, 1825

Ennomos autumnaria (Werneburg, 1859) (20 exs – Eng, Aut) (Plate 52, Figs 18–19)

Ennomos quercinaria (Hufnagel, 1767) (31 exs – Ger, Aut, Rus) (Plate 52, Figs 20–23)

Ennomos alniaria (Linnaeus, 1758) (10 exs – Spa, Fra, Aut) (Plate 52, Figs 24–27)

Ennomos fuscantaria (Haworth, 1809) (38 exs – Fra, Aut, Tur) (Plate 52, Figs 28–30)

Ennomos fraxineti Wiltshire, 1947 (7 exs – Ira) (Plate 52, Figs 31–33)

Ennomos kasyi László, 2017 **sp. n.** (3 exs – Arm) (Plate 53, Figs 1–3, 1: holotype; Gen. fig. 18)

Ennomos erosaria erosaria (Denis & Schiffermüller, 1775) (20 exs – Aut, Hun, Mac, Ukr) (Plate 53, Figs 4–6)

Ennomos erosaria ifranaria Rungs, 1941 (7 exs – Mor) (Plate 53, Figs 7–10)

Ennomos quercaria quercaria (Hübner, 1813) (29 exs – Fra, Ita, Sic, Aut, Tur) (Plate 53, Figs 11–14)

Ennomos quercaria olivaria Brandt, 1938 (6 exs – Ira) (Plate 53, Figs 15–20, 19: Lectotype, 20: Paralectotype; Gen. figs 14, 15)

Ennomos vartianae László, 2017 **sp. n.** (3 exs – Ira) (Plate 53, Figs 21–23, 21: holotype; Gen. figs 16, 17)

Ennomos duercki Reisser, 1958 **stat. rev.** (1 ex. – Cre) (Plate 53, Fig. 24)

Remark. Skou & Sihvonen (2015) downgraded *E. duercki* to subspecific rank. In our opinion, the genitalia difference found between the nominate *E. quercaria* and the Cretan taxon justifies their separation at species rank, taken into consideration also the extent of genitalia differences found in other species of the *quercaria* species group.

Genus ***Artiora*** Meyrick, 1892

Artiora evonymaria (Denis & Schiffermüller, 1775) (32 exs – Aut, Tur) (Plate 53, Figs 25–28)

Genus ***Crocallis*** Treitschke, 1825

Crocallis tusciaria (Borkhausen, 1793) (26 exs – Ita, Ger, Cro, Mac, Bul) (Plate 53, Figs 29–33)

Crocallis elinguaria (Linnaeus, 1758) (30 exs – Aut, Sic, Mac) (Plate 53, Figs 34–37)

Crocallis dardoinaria Donzel, 1840 (21 exs – Spa, Fra) (Plate 53, Figs 38–41)

Crocallis auberti Oberthür, 1883 (2 exs – Mor) (Plate 54, Figs 1–2)

Crocallis boisduvalaria (Lucas, 1849) (2 exs – Sic) (Plate 54, Figs 3–4)

Crocallis inexpectata Warnecke, 1940 (7 exs – Tur) (Plate 54, Figs 5–8)

Crocallis elingomorpha Stadie & Fiebig, 2014 (4 exs – Arm) (Plate 54, Figs 9–12)

Crocallis transcaucasica Wehrli, 1940 (1 ex. – Ira) (Plate 54, Fig. 13)

Genus ***Dasycorsa*** Prout, 1915

Dasycorsa modesta (Staudinger, 1879) (40 exs – Cro, Mac, Tur) (Plate 54, Figs 14–16)

Genus ***Colotois*** Hübner, 1823

Colotois pennaria (Linnaeus, 1761) (37 exs – Ita, Aut, Srb, Mac, Bul) (Plate 54, Figs 17–18)

Genus ***Eumera*** Staudinger, 1892

Eumera hoferi transcaucasica Wehrli, 1940 (2 exs – Arm) (Plate 54, Figs 19–20)

Eumera regina Staudinger, 1892 (34 exs – Cro, Mac, Tur) (Plate 54, Figs 21–24)

Genus ***Cepphis*** Hübner, 1823

Cepphis advenaria (Hübner, 1790) (12 exs – Aut) (Plate 54, Figs 25–27)

Genus ***Selenia*** Hübner, 1823
Selenia dentaria (Fabricius, 1775) (34 exs – Ger, Aut) (Plate 54, Figs 28–30)
Selenia lunularia lunularia (Hübner, 1788) (26 exs – Aut) (Plate 54, Figs 31–34)
Selenia lunularia gamra Rungs, 1950 (4 exs – Mor) (Plate 55, Figs 1–4)
Selenia tetralunaria (Hufnagel, 1767) (33 exs – Spa, Ita, Sic, Aut, Hun, Ukr, Arm Rus) (Plate 55, Figs 5–6)
Genus ***Apeira*** Gistl, 1848
Apeira syringaria (Linnaeus, 1758) (14 exs – Aut) (Plate 55, Figs 7–9)
Genus ***Epione*** Duponchel, 1829
Epione repandaria (Hufnagel, 1767) (27 exs – Aut, Hun) (Plate 55, Figs 10–12)
Epione vespertaria (Linnaeus, 1767) (3 exs – Aut) (Plate 55, Figs 13–14)
Genus ***Campaea*** Lamarck, 1816
Campaea margaritaria (Linnaeus, 1761) (28 exs – Aut, Ita, Rus) (Plate 55, Figs 15–16)
Genus ***Gerinia*** Leraut, 2009
Gerinia honoraria (Denis & Schiffermüller, 1775) (29 exs – Mor, Spa, Ita, Aut, Cro) (Plate 55, Figs 17–18)
Genus ***Angerona*** Duponchel, 1829
Angerona prunaria (Linnaeus, 1758) (63 exs – Aut, Hun) (Plate 55, Figs 19–21)
Angerona nigrisparsa Butler, 1879 (1 ex. – Jap) (Plate 55, Fig. 22)
Genus ***Hypoxystis*** Prout, 1915
Hypoxystis pluviaria (Fabricius, 1787) (7 exs – Aut) (Plate 55, Figs 23–25)
Genus ***Pynthanosis*** Turati, 1922
Pynthanosis henricaria (Oberthür, 1881) (4 exs – Mor) (Plate 55, Figs 26–28)
Genus ***Lhommeia*** Wehrli, 1939
Lhommeia biskraria (Oberthür, 1885) (4 exs – Tun) (Plate 55, Figs 29–32)
Genus ***Hyperythra*** Guenée, 1858
Hyperythra swinhoei Butler, 1880 (19 exs – Ira) (Plate 55, Figs 33–36)
Genus ***Adactylotis*** Hübner, 1823
Adactylotis gesticularia gesticularia (Hübner, 1817) (18 exs – Spa) (Plate 55, Figs 37–40)
Adactylotis gesticularia umgemachi (Lucas, 1933) (9 exs – Mor) (Plate 55, Figs 41–42)
Genus ***Heliomata*** Grote & Robinson, 1866
Heliomata glarearia (Denis & Schiffermüller, 1775) (64 exs – Fra, Aut, Mac, Tur, Arm, Rus, Ira) (Plate 55, Figs 43–45)
Genus ***Isturgia*** Hübner, 1823
Isturgia famula (Esper, 1787) (9 exs – Spa) (Plate 56, Figs 1–3)
Isturgia roraria (Fabricius, 1776) (6 exs – Mac) (Plate 56, Figs 4–7)
Isturgia limbaria (Fabricius, 1775) (22 exs – Fra, Ger) (Plate 56, Figs 8–12)
Isturgia murinaria (Denis & Schiffermüller, 1775) (52 exs – Spa, Fra, Aut, Arm, Ira) (Plate 56, Figs 13–16)
Isturgia suleiman (Wehrli, 1936) (8 exs – Ira) (Plate 56, Figs 17–20)
Isturgia tengistanica (Brandt, 1938) (1 ex. – Ira) (Plate 56, Fig. 21)
Isturgia sp. near *sublimbata* (Butler, 1884) (1 ex. – Mor) (Plate 56, Fig. 22)
Remark. The single female specimen from Morocco cannot be identified reliably without examining its genitalia. It is not impossible that the specimen is just a large and pale form of *I. deerraria*.
Isturgia deerraria (Walker, 1861) (9 exs – Spa) (Plate 56, Figs 27–30)
Isturgia klapperichi (Wiltshire, 1967) (81 exs – Afg, Pak) (Plate 56, Figs 23–26)
Isturgia perviaria (Lederer, 1855) (14 exs – Ira, Pak) (Plate 56, Figs 31–34)
Isturgia wehrlii (Brandt, 1940) (6 exs – Ira) (Plate 56, Figs 35–37)
Isturgia disputaria (Guenée, 1858) (74 exs – Sud, Ira, Pak) (Plate 56, Figs 38–42)
Isturgia spodiaria (Lefèbvre, 1832) (42 exs – Mor, Spa, Sic) (Plate 56, Figs 43–46)
Isturgia miniosaria miniosaria (Duponchel, 1829) (47 exs – Spa, Fra) (Plate 56, Figs 47–52)
Isturgia miniosaria rungsi Leraut, 2009 (4 exs – Mor) (Plate 56, Figs 53–54)
Isturgia rubrior (Hausmann, 1990) (7 exs – Mor) (Plate 57, Figs 1–4)
Isturgia arenacearia (Denis & Schiffermüller, 1775) (41 exs – Aut, Mac, Cre, Rus) (Plate 57, Figs 5–8)
Isturgia sparsaria (Hübner, 1809) (2 exs – Ita) (Plate 57, Figs 9–10)
Isturgia hedemanni (Christoph, 1885) (16 exs – Ira) (Plate 57, Figs 16–19)
Genus ***Itame*** Hübner, 1823
Itame vincularia vincularia (Hübner, 1813) (34 exs – Spa) (Plate 57, Figs 11–14)
Itame vincularia mrassinaria (Oberthür, 1923) (2 exs – Mor) (Plate 57, Fig. 15)

Genus ***Narraga*** Walker, 1861

Narraga fasciolaria (Hufnagel, 1767) (15 exs – Aut) (Plate 57, Figs 20–23)
Narraga nelvae cappadocica Herbulot, 1943 (2 exs – Tur) (Plate 57, Figs 24–25)
Narraga nelvae catalaunica Herbulot, 1943 (67 exs – Spa) (Plate 57, Figs 26–29)
Narraga tessularia (Metzner, 1845) (128 exs – Aut) (Plate 57, Figs 20–33)

Genus ***Gnopharmia*** Staudinger, 1892

Gnopharmia colchidaria colchidaria (Lederer, 1870) (10 exs – Arm, Ira) (Plate 57, Figs 34–37)
Gnopharmia colchidaria sinesefida Wehrli, 1941 (155 exs – Ira, Afg) (Plate 57, Figs 38–47)
Remark. Although specimens identified as *G. irakensis* Wehrli, 1938 were found in the collection, after investigating their genitalia, all of them proved to belong to *G. colchidaria sinesefida*. Thus, for our surprise, *G. irakensis* is not present in the otherwise rather representative *Gnopharmia* material of the Vartian collection.
Gnopharmia colchidaria objectaria Staudinger, 1892 (96 exs – Ira, Tum, Afg, Pak) (Plate 57, Figs 48–59; 49 and 59: holotype and paratype of *G. inermis vartianae* Wiltshire, 1970; 53–57: paratypes of *G. eberti* Wiltshire, 1967; 48: holotype of *G. maculifera kasyi* Wiltshire, 1970)
Gnopharmia kasrunensis Wehrli, 1939 (12 exs – Ira, Irq) (Plate 58, Figs 1–12)
Gnopharmia rubraria Staudinger, 1892 (33 exs – Tur, Syr) (Plate 58, Figs 13–24)
Gnopharmia sarobiana Ebert, 1965 (119 exs – Afg) (Plate 58, Figs 25–34; 25–26, 33–34: paratypes of *G. objectaria luxuriosa* Wiltshire, 1967)

Genus ***Acanthovalva*** Krüger, 2001

Acanthovalva inconspicuaria (Hübner, 1819) (38 exs – Mor, Spa, Tur, Leb, Pak) (Plate 58, Figs 35–38)

Genus ***Macaria*** Curtis, 1826

Macaria notata (Linnaeus, 1758) (28 exs – Ger, Cze, Aut, Rus, Ira) (Plate 58, Figs 39–41)
Macaria alternata (Denis & Schiffermüller, 1775) (42 exs – Aut, Ita, Rus) (Plate 58, Figs 42–44)
Macaria signaria (Hübner, 1809) (6 exs – Aut) (Plate 58, Figs 45–48)
Macaria liturata (Clerck, 1759) (28 exs – Aut, Hun, Ukr) (Plate 58, Figs 49–52)
Macaria wauaria wauaria (Linnaeus, 1758) (8 exs – Sui, Aut) (Plate 58, Figs 54–56)
Macaria wauaria africana (Zerny, 1934) (4 exs – Mor) (Plate 58, Figs 57–60)
Macaria wauaria erevanica (Wardikjan, 1985) (3 exs – Arm) (Plate 58, Fig. 53)
Macaria artesiaria (Denis & Schiffermüller, 1775) (25 exs – Hun, Aut, Tur) (Plate 59, Figs 1–4)
Macaria brunneata (Thunberg, 1784) (6 exs – Aut) (Plate 59, Figs 5–8)
Macaria sp. near *halituaria* (Guenée, 1858) (6 exs – Afg) (Plate 59, Figs 9–12)
Remark. *M. halituaria* was described from the Altai; Viidalepp (1988) described a subspecies of *M. halituaria* from the SW Pamir (ssp. *pamirica* Viidalepp, 1988). The examination of the holotype of *M. halituaria halituaria* and *M. halituaria pamirica* is required to decide whether the specimens from Afghanistan (Safed Koh) belong to one of these described taxa, or the Safed Koh populations represent a distinct taxon.
Macaria fusca (Thunberg, 1792) (4 exs – Aut) (Plate 59, Figs 13–15)
Macaria carbonaria (Clerck, 1759) (5 exs – Aut) (Plate 59, Figs 16–20)
Macaria sp. indet from Thailand (1 ex. – Tha) (Plate 59, Fig. 21)

Genus ***Chiasmia*** Hübner, 1823

Chiasmia clathrata (Linnaeus, 1758) (87 exs – Spa, Fra, Aut, Srb, Ukr, Tur, Rus, Arm) (Plate 59, Figs 22–25)
Chiasmia aestimaria (Hübner, 1809) (31 exs – Fra, Cro, Mac, Tur, Leb, Syr) (Plate 59, Figs 26–32; Gen. figs 19, 20)
Chiasmia sareptanaria (Staudinger, 1871) **stat. rev.** (6 exs – Ira, Afg, Pak) (Plate 59, Figs 37–40; Gen. figs 21, 22)
Remark. The taxonomic status of *sareptanaria* has long been debated by researchers. The latest statement about the taxon found in Skou & Sihvonen (2015) suggesting *sareptanaria* to be probably a subspecies of *aestimaria*. In the Vartian collection there are specimens of typical *aestimaria* from Turkey and Lebanon, where, according to Skou & Sihvonen (2015), the ssp. *sareptanaria* should occur. This fact suggests a probably sympatric occurrence of *aestimaria* and *sareptanaria* in the Middle East, thus the two taxa cannot be in subspecific relation. After dissecting specimens of the two forms, significant morphological differences have been found in the genitalia: *aestimaria* has a conspicuous crest-like dentate plate at the basal part of the vesica, while *sareptanaria* completely lacks this character. In addition, *aestimaria* has considerably shorter and somewhat narrower costal lobe of valva compared to that

of *sareptanaria* (see Gen. figs 19, 21). The differences between the two species are well expressed also in the female genitalia: *aestimaria* has somewhat shorter ductus bursae with parallel margins, while that of *sareptanaria* is slightly tapering proximally; the sclerotized distal section of corpus bursae of *aestimaria* is shorter than that of *sareptanaria*, laterally curved on one side and straight on the other side, making corpus bursae laced medially, while the corpus bursae of *sareptanaria* has parallel margins in its full length, forming a much larger, quadrangular sac (see Gen. figs 20, 22).

Chiasmia syriacaria (Staudinger, 1871) (19 exs – Cyp, Irq) (Plate 59, Figs 33–36)

Remark. Skou & Sihvonen (2015) removed the species from the European list as they could not trace a correctly identified specimen from European locality in the collections they examined. The 4 specimens collected in Cyprus (near Larnaca by M. and A. Arenberger, 13–14.VII.1981) found in the Vartian Collection justify the occurrence of *syriacaria* in the island of Cyprus, thus the presence of the species in Europe is hereby restored.

Chiasmia fuscomarginata (Warren, 1888) (63 exs – Ira, Afg, Pak) (Plate 59, Figs 41–47)

Chiasmia myandaria (Walker, 1863) (20 exs – Pak, Ind) (Plate 59, Figs 48–51)

Chiasmia hebesata (Walker, 1861) (1 ex. – Jap) (Plate 59, Fig. 52)

Chiasmia latimarginaria (Rebel, 1907) (1 ex. – Ksa) (Plate 59, Fig. 53)

Genus ***Digrammia*** Gumppenberg, 1887

Digrammia rippertaria (Duponchel, 1830) (5 exs – Fra) (Plate 59, Figs 54–56)

Genus ***Hypephyra*** Butler, 1889

Hypephyra terrosa Butler, 1889 (1 ex. – Pak) (Plate 59, Fig. 62)

Genus ***Eurranthis*** Hübner, 1823

Eurranthis plummistaria (Villers, 1789) (16 exs – Spa, Fra) (Plate 59, Figs 57–61)

Genus ***Neognopharmia*** Wehrli, 1951

Neognopharmia stevenaria (Boisduval, 1840) (35 exs – Spa, Mac, Gre, Cre, Leb, Syr, Tur, Arm, Rus) (Plate 60, Figs 1–5)

Neognopharmia hoerhammeri (Brandt, 1941) (15 exs – Ira) (Plate 60, Fig. 6)

Neognopharmia cataleucaria (Staudinger, 1892) (5 exs – Ira) (Plate 60, Figs 7–10)

Neognopharmia sp. n. (Pöll, in prep.) (5 exs – Afg) (Plate 60, Figs 11–15)

Remark. The apparently new *Neognopharmia* species was under description by Mr Norbert Pöll during the time of publishing the present volume.

Genus ***Ourapteryx*** Leach, 1814

Ourapteryx sambucaria (Linnaeus, 1758) (31 exs – Spa, Fra, Ita, Aut, Tur) (Plate 60, Figs 16–18)

Ourapteryx malatyensis Wehrli, 1936 (11 exs – Ira) (Plate 60, Figs 19–20)

Ourapteryx persica Ménétriès, 1832 (25 exs – Arm, Rus) (Plate 60, Figs 21–24)

Ourapteryx ebuleata Guenée, 1858 (17 exs – Afg, Pak, Ind) (Plate 60, Figs 25–27)

Ourapteryx pluristrigata Warren, 1888 (6 exs – Chi) (Plate 61, Figs 1–3)

Ourapteryx sp. indet from Taiwan (1 ex. – Tai) (Plate 61, Fig. 4)

Ourapteryx convergens Warren, 1897 (17 exs – Afg, Pak) (Plate 61, Figs 5–8)

Ourapteryx excellens Butler, 1889 (1 ex. – Pak) (Plate 61, Fig. 9)

Ourapteryx sp. indet from W China (2 exs – Chi) (Plate 61, Figs 10–11)

Ourapteryx maculicaudaria (Motschulsky, 1866) (1 ex. – Chi) (Plate 61, Fig. 12)

Genus ***Thinopteryx*** Butler, 1883

Thinopteryx crocoptera (Kollar, 1844) (1 ex. – Afg) (Plate 61, Fig. 13)

Thinopteryx delectans (Butler, 1878) (1 ex. – Chi) (Plate 61, Fig. 14)

Genus ***Dyscia*** Hübner, 1825

Dyscia raunaria (Freyer, 1851) (6 exs – Ita, Cro, Mac) (Plate 61, Figs 15–19)

Dyscia innocentaria (Christoph, 1885) (29 exs – Mac, Gre, Leb, Syr, Ira) (Plate 61, Figs 20–27)

Dyscia malatyana malatyana Wehrli, 1934 (53 exs – Syr, Ira, Irq) (Plate 62, Figs 1–5)

Dyscia malatyana albersaria Warnecke, 1940 (8 exs – Afg, Pak) (Plate 62, Figs 6–9)

Dyscia crassipunctaria (Rebel, 1916) (68 exs – Cre) (Plate 62, Figs 10–14)

Dyscia conspersaria conspersaria (Denis & Schiffermüller, 1775) (21 exs – Aut, Hun) (Plate 62, Figs 15–18)

Dyscia conspersaria sultanica Wehrli, 1936 (2 exs – Tur, Arm) (Plate 62, Fig. 19)

Dyscia fagaria (Thunberg, 1784) (16 exs – Ger, Aut) (Plate 62, Figs 20–23)

Dyscia penulataria (Hübner, 1819) (32 exs – Spa) (Plate 62, Figs 24–28)

Dyscia plebejaria (Oberthür, 1910) (1 ex. – Tun) (Plate 62, Fig. 29)

Dyscia atlantica Reisser, 1933 (1 ex. – Mor) (Plate 62, Fig. 30)

Dyscia lentiscaria (Donzel, 1837) (1 ex. – Spa) (Plate 62, Fig. 31)
Dyscia negrama Wehrli, 1950 (2 exs – Ira) (Plate 62, Figs 32–33)
Dyscia leucogrammaria (Püngeler, 1900) (1 ex. – Afg) (Plate 62, Fig. 34)
Dyscia nobilaria (Bang-Haas, 1906) (4 exs – Mor, Tun) (Plate 62, Figs 35–38)

Genus ***Scodionista*** Joannis, 1912
Scodionista amoritaria (Püngeler, 1902) (2 exs – Jor, Ira) (Plate 62, Figs 39–40)

Genus ***Onychora*** Meyrick, 1892
Onychora agaritharia (Dardoin, 1842) (15 exs – Spa, Fra) (Plate 62, Figs 41–43)

Genus ***Chariaspilates*** Wehrli, 1953
Chariaspilates formosaria (Eversmann, 1837) (11 exs – Fra, Ger, Aut) (Plate 63, Figs 1–4)

Genus ***Siona*** Duponchel, 1829
Siona lineata (Scopoli, 1763) (16 exs – Fra, Ita, Aut, Srb) (Plate 63, Figs 5–6)

Genus ***Aspitates*** Treitschke, 1825
Aspitates gilvaria (Denis & Schiffermüller, 1775) (32 exs – Fra, Aut, Hun, Arm) (Plate 63, Figs 7–9)
Aspitates ochrearia (Rossi, 1794) (53 exs – Spa, Fra, Cor, Sar, Sic, Ita, Cro, Mac, Cre, Tur, Isr) (Plate 63, Figs 10–13)
Aspitates collinaria (Holt-White, 1894) (9 exs – Can) (Plate 63, Figs 14–17)
Aspitates stschurovskyi (Erschoff, 1874) (7 exs – Afg) (Plate 63, Figs 21–23)

Genus ***Perconia*** Hübner, 1823
Perconia strigillaria (Hübner, 1787) (15 exs – Fra, Ita, Mac) (Plate 63, Figs 18–20)

Genus ***Wehrliola*** Strand, 1932
Wehrliola revocaria (Staudinger, 1892) (2 exs – Tur) (Plate 63, Figs 24–25)

Genus ***Lignyoptera*** Lederer, 1853
Lignyoptera fumidaria (Hübner, 1825) (69 exs – Aut) (Plate 63, Figs 26–30)
Lignyoptera thaumastaria Rebel, 1901 (8 exs – Bih) (Plate 63, Figs 31–35)

Genus ***Theria*** Hübner, 1825
Theria rupicapraria (Denis & Schiffermüller, 1775) (33 exs – Ger, Aut, Bul) (Plate 63, Figs 36–39)

Genus ***Agriopis*** Hübner, 1825
Agriopis leucophaearia (Denis & Schiffermüller, 1775) (55 exs – Aut) (Plate 63, Figs 40–42)
Agriopis bajaria (Denis & Schiffermüller, 1775) (23 exs – Aut, Tur) (Plate 63, Figs 43–48)
Agriopis aurantiaria (Hübner, 1799) (72 exs – Fra, Aut, Hun) (Plate 64, Figs 1–4)
Agriopis marginaria (Fabricius, 1776) (35 exs – Aut, Ita, Bul) (Plate 64, Figs 5–8)

Genus ***Erannis*** Hübner, 1825
Erannis defoliaria Clerck, 1759 (51 exs – Aut) (Plate 64, Figs 9–12)
Erannis ankeraria ankeraria (Staudinger, 1861) (8 exs – Slo, Hun) (Plate 64, Figs 13–16)
Erannis ankeraria bervaensis Jablonkay, 1965 (1 ex. – Hun) (Plate 64, Fig. 17)
Erannis declinans (Staudinger, 1879) (6 exs – Tur) (Plate 64, Figs 18–21)

Genus ***Contropis*** Wiltshire, 1967
Contropis modestaria tagana Wiltshire, 1967 **stat. rev.** (10 exs – Afg) (Plate 64, Figs 23–26)
Remark. László (2001) synonymized *C. tagana* from Dasht-i-Nawar (SE Afghanistan) with *C. modestaria* (Püngeler, 1914) described from Syr-Darya, Baigacum (S. Kazakhstan). Despite of the similarity in both external and genital characters, the examination of the paratype series of *C. tagana* in the Vartian collection lead to a recognition of certain characteristic differences between the northern nominate population of *C. modestaria* and the south-east Afghan population described as *C. tagana* by Wiltshire expressed by the following characters: *C. tagana* is somewhat larger in size than *C. modestaria* (wingspan 30–32 mm and 25–28 mm, respectively), having less sharply defined wing pattern and more brownish grey forewing, than the generally grey coloured *C. modestaria*, which lacks the brownish shade. Thus, the taxon *tagana* is restored as a distinct subspecies of *C. modestaria*.

Genus ***Phigalia*** Duponchel, 1829
Phigalia pilosaria (Denis & Schiffermüller, 1775) (21 exs – Aut) (Plate 64, Figs 27–30)
Phigalia declinata (Staudinger, 1882) (1 ex. – Uzb) (Plate 64, Fig. 22)

Genus ***Apocheima*** Hübner, 1825
Apocheima hispidaria (Denis & Schiffermüller, 1775) (17 exs – Aut, Hun, Cro) (Plate 64, Figs 31–33)

Genus ***Chondrosoma*** Anker, 1854
Chondrosoma fiduciaria Anker, 1854 (42 exs – Aut) (Plate 64, Figs 34–38)

Genus ***Acrobiston*** Wiltshire, 1967
Acrobiston aestivalis Wiltshire, 1967 (12 exs – Afg) (Plate 64, Figs 39–42)
Genus ***Lycia*** Hübner, 1825
Lycia hirtaria (Clerck, 1759) (39 exs – Ger, Aut, Ita, Mac) (Plate 65, Figs 1–4)
Lycia hanoviensis (Heymons, 1891) (8 exs – Ger) (Plate 65, Figs 5–9)
Lycia alpina (Sulzer, 1776) (25 exs – Aut) (Plate 65, Figs 10–13)
Lycia florentina (Stefanelli, 1882) (7 exs – Ita) (Plate 65, Figs 14–17)
Lycia graecarius istrianus (Staudinger, 1901) (10 exs – Ita) (Plate 65, Figs 18–21)
Lycia isabellae (Harrison, 1914) (9 exs – Ger, Aut) (Plate 65, Figs 22–25)
Lycia lapponaria (Boisduval, 1840) (2 exs – Est) (Plate 65, Figs 26–27)
Lycia pomonaria (Hübner, 1790) (10 exs – Aut) (Plate 65, Figs 28–31)
Lycia zonaria (Denis & Schiffermüller, 1775) (39 exs – Aut) (Plate 65, Figs 32–36)
Genus ***Apochima*** Agassiz, 1847
Apochima flabellaria (Heeger, 1838) (4 exs – Ita, Tur, Leb) (Plate 65, Figs 37–39)
Apochima diaphanaria rjabovi (Wehrli, 1936) (2 exs – Arm) (Plate 65, Figs 40–41)
Genus ***Athroolopha*** Lederer, 1853
Athroolopha chrysitaria (Hübner, 1831) (6 exs – Sic) (Plate 65, Figs 42–44)
Athroolopha pennigeraria pennigeraria (Hübner, 1813) (38 exs – Spa, Fra) (Plate 66, Figs 1–4)
Athroolopha pennigeraria kabylaria (Oberthür, 1878) (1 ex. – Alg) (Plate 65, Fig. 45)
Genus ***Ematurga*** Lederer, 1853
Ematurga atomaria atomaria (Linnaeus, 1758) (54 exs – Fra, Ita, Aut, Mac) (Plate 66, Figs 5–9)
Ematurga atomaria iliaria Alphéraky, 1883 (1 ex. – Geo) (Plate 66, Fig. 10)
Genus ***Bupalus*** Leach, 1815
Bupalus piniaria piniaria (Linnaeus, 1758) (61 exs – Aut) (Plate 66, Figs 11–14)
Bupalus piniaria espagnolus Eitschberger & Steiniger, 1975 (9 exs – Spa) (Plate 66, Figs 15–16)
Genus ***Biston*** Leach, 1815
Biston strataria (Hufnagel, 1767) (49 exs – Spa, Ita, Aut, Mac) (Plate 66, Figs 17–19)
Biston robustum Butler, 1879 (1 ex. – Jap) (Plate 66, Fig. 20)
Biston betularia betularia (Linnaeus, 1758) (63 exs – Spa, Fra, Aut, Hun, Tur, Ira) (Plate 66, Figs 21–24)
Biston betularia fumosarius Alphéraky, 1897 (29 exs – Rus, Arm) (Plate 66, Figs 25–27)
Biston betularia parva Leech, 1897 (17 exs – Afg, Pak, Ind, Chi) (Plate 67, Figs 1–3)
Biston regalis (Moore, 1888) (6 exs – Pak) (Plate 67, Figs 4–5)
Biston suppressaria (Guenée, 1858) (5 exs – Pak) (Plate 67, Figs 6–8)
Biston perclara (Warren, 1899) (1 ex. – Tai) (Plate 67, Fig. 9)
Genus ***Nychiodes*** Lederer, 1853
Nychiodes obscuraria (Villers, 1789) (30 exs – Spa, Fra, Sui, Ita, Sic, Cro) (Plate 67, Figs 10–12)
Remark. The validity of the numerous *N. obscuraria* subspecies described is disputable; the clarification of their taxonomic rank requires a complete revision of the genus. Due to their uncertain position we ignore the currently available subspecies names of *N. obscuraria* in the checklist.
Nychiodes amygdalaria almensis Wehrli, 1941 (1 ex. – Leb) (Plate 67, Fig. 13)
Nychiodes amygdalaria malatyaca Wehrli, 1941 (1 ex. – Tur) (Plate 67, Fig. 14)
Nychiodes mauretanica Wehrli, 1929 (3 exs – Mor) (Plate 67, Figs 15–16)
Nychiodes dalmatina Wagner, 1909 (22 exs – Cro, Mac) (Plate 67, Figs 17–20)
Remark. The subspecific names of *N. dalmatina* are not included into the checklist due to their uncertain validity.
Nychiodes waltheri Wagner, 1919 (4 exs – Tur) (Plate 67, Figs 21–24)
Nychiodes persuavis Wehrli, 1929 (54 exs – Syr) (Plate 68, Figs 1–4)
Nychiodes antiquaria Staudinger, 1892 (45 exs – Afg, Pak) (Plate 68, Figs 5–10)
Nychiodes sp. near *antiquaria* from Afghanistan, Safed Koh (29 exs – Afg) (Plate 68, Figs 11–15)
Remark. The *antiquaria*-like specimens from Afghanistan (Safed Koh) differ in certain male genitalia features from the *antiquaria* specimens from Pakistan (Swat); the proper taxonomic interpretation of these populations can be given after a complete revision of the genus.
Nychiodes divergaria divergaria Staudinger, 1892 (24 exs – Syr, Tur) (Plate 68, Figs 16–19)
Nychiodes divergaria elbursica Wehrli, 1937 (28 exs – Ira) (Plate 68, Figs 20–23)
Remark. Ssp. *elbursica* represents most probably a distinct species due to the extent of genitalia differences found in comparison with the nominate taxon.

Nychiodes divergaria achtyca Wehrli, 1939 (31 exs – Arm) (Plate 68, Figs 24–27)
Nychiodes variabila Brandt, 1938 (38 exs – Ira) (Plate 68, Figs 28–31)
Nychiodes subvirida Brandt, 1938 (4 exs – Ira) (Plate 69, Figs 1–4)
Nychiodes quettensis Wiltshire, 1966 (3 exs – Pak) (Plate 69, Figs 5–7, 5: holotype)
Nychiodes princeps Wiltshire, 1966 (1 ex. – Afg) (Plate 69, Fig. 8, holotype)
Genus ***Synopsidia*** Djakonov, 1935
Synopsidia phasidaria phasidaria (Rogenhofer, 1873) (49 exs – Arm, Ira) (Plate 69, Figs 9–12)
Synopsidia phasidaria afghana Wiltshire, 1966 (7 exs – Afg) (Plate 69, Figs 13–17, 13: holotype)
Genus ***Synopsia*** Hübner, 1825
Synopsia sociaria (Hübner, 1799) (59 exs – Spa, Fra, Aut, Ita, Sic, Mac, Tur, Arm) (Plate 69, Figs 18–20)
Genus ***Phthonandria*** Warren, 1894
Phthonandria atrilineata indica Inoue, 1990 (37 exs – Afg, Pak, Ind) (Plate 69, Figs 21–25)
Genus ***Menophra*** Moore, 1887
Menophra abruptaria abruptaria (Thunberg, 1792) (18 exs – Mor, Fra, Sic, Cro, Mac) (Plate 69, Figs 26–30)
Menophra abruptaria canariensis (Rebel, 1917) (2 exs – Can) (Plate 69, Figs 31–32)
Menophra japygiaria (Costa, 1849) (47 exs – Mor, Spa, Fra, Cre) (Plate 69, Figs 33–35)
Menophra trypanaria cretacaria (Reisser, 1958) (8 exs – Cre) (Plate 70, Figs 1–4)
Menophra maderae (Bethune-Baker, 1891) (4 exs – Mad) (Plate 70, Figs 6–9)
Menophra sp. near *senilis* (Butler, 1878) (5 exs – Pak, Ind) (Plate 70, Figs 10–12)
Menophra sp. near *bicornuta* Inoue, 1990 (23 exs – Pak, Ind) (Plate 70, Figs 13–17)
Menophra nycthemeraria dinicola (Wehrli, 1941) (25 exs – Mor, Spa, Fra) (Plate 70, Figs 18–24)
Menophra harterti (Rothschild, 1912) (19 exs – Mor, Spa) (Plate 70, Figs 25–28)
Menophra erebaria (Oberthür, 1883) (1 ex. – Alg) (Plate 70, Fig. 5)
Menophra punctilinearia (Leech, 1897) (6 exs – Pak) (Plate 70, Figs 29–32)
Genus ***Chorodna*** Walker, 1860
Chorodna metaphaearia (Walker, 1863) (7 exs – Chi) (Plate 70, Figs 33–34)
Genus ***Lassaba*** Moore, 1888
Lassaba albidaria (Walker, 1866) (1 ex. – Ind) (Plate 71, Fig. 1)
Genus ***Alloharpina*** Wehrli, 1941
Alloharpina dejeani (Oberthür, 1884) (3 exs – Chi) (Plate 71, Figs 2–4)
Genus ***Deileptenia*** Hübner, 1825
Deileptenia ribeata (Clerck, 1759) (57 exs – Ned, Aut) (Plate 71, Figs 5–7)
Genus ***Parectropis*** Sato, 1980
Parectropis similaria (Hufnagel, 1767) (18 exs – Aut, Rus) (Plate 71, Figs 8–10)
Genus ***Ectropis*** Hübner, 1825
Ectropis crepuscularia (Denis & Schiffermüller, 1775) (76 exs – Aut, Ukr, Rus) (Plate 71, Figs 11–13)
Ectropis dentilineata (Moore, 1868) (73 exs – Afg, Pak) (Plate 71, Figs 14–17)
Genus ***Aethalura*** McDunnough, 1920
Aethalura punctulata (Denis & Schiffermüller, 1775) (10 exs – Aut) (Plate 71, Figs 18–20)
Genus ***Satoblephara*** Holloway, 1994
Satoblephara parvularia (Leech, 1891) (2 exs – Ind) (Plate 71, Figs 21–23)
Genus ***Paradarisa*** Warren, 1894
Paradarisa consonaria (Hübner, 1799) (12 exs – Aut) (Plate 71, Figs 24–27)
Genus ***Ophthalmitis*** Fletcher, 1979
Ophthalmitis irrorataria (Bremer & Grey, 1853) (2 exs – Chi) (Plate 71, Figs 28–29)
Ophthalmitis sinensium (Oberthür, 1913) (1 ex. – Tai) (Plate 71, Fig. 30)
Genus ***Amblychia*** Guenée, 1858
Amblychia insueta sinensis (Wehrli, 1935) (5 exs – Chi) (Plate 72, Figs 1–2)
Genus ***Asovia*** Alphéraky, 1908
Asovia maeoticaria (Alphéraky, 1876) (5 exs – Tur) (Plate 72, Figs 3–6)
Genus ***Alcis*** Curtis, 1826
Alcis repandata (Linnaeus, 1758) (155 exs – Spa, Fra, Ger, Aut, Rus, Arm) (Plate 72, Figs 7–11)
Alcis bastelbergeri (Hirschke, 1908) (220 exs – Spa, Fra, Aut) (Plate 72, Figs 12–15)
Alcis iterata (Butler, 1886) (1 ex. – Pak) (Plate 72, Fig. 19)
Alcis sp. near *iterata* (Butler, 1886) (1 ex. – Afg) (Plate 72, Fig. 20)

Alcis sp. near *nepalensis* Inoue, 1987 (52 exs – Afg, Pak) (Plate 72, Figs 16–18)

Remark. The specimens from Pakistan (Swat) being externally similar to *A. bastelbergeri* show closer relationship to *A. nepalensis* by their genitalia characters. The exact taxonomic position of the Pakistan populations can be ascertained by further investigations on the Himalayan *Alcis* taxa.

Alcis nudipennis Warren, 1888 (3 exs – Pak) (Plate 72, Fig. 21)

Alcis sp. near *subrepandata* (Staudinger, 1892) (27 exs – Afg, Pak) (Plate 72, Figs 22–24)

Alcis paghmana Wiltshire, 1967 (6 exs – Afg) (Plate 72, Figs 25–28)

Alcis trikotaria limitropha Wiltshire, 1967 (3 exs – Afg) (Plate 73, Figs 1–3)

Alcis depravata (Staudinger, 1892) (21 exs – Afg) (Plate 73, Figs 4–7)

Alcis granitaria (Moore, 1888) (48 exs – Pak) (Plate 73, Figs 8–11; Gen. figs 23, 24)

Alcis klapperichi Wiltshire, 1967 **stat. n.** (41 exs – Afg) (Plate 73, Figs 12–15, 12: holotype; Gen. figs 25, 26)

Remark. *A. klapperichi* was described originally as a subspecies of *A. granitaria*. Due to the significant genitalia differences between the two taxa, *klapperichi* (see Gen. figs 23–26) is upgraded hereby to species rank.

Alcis sinadmissa (Wehrli, 1943) (3 exs – Chi) (Plate 73, Figs 16–17)

Alcis sp. near *songarica* (Alphéraky, 1883) (3 exs – Afg) (Plate 73, Figs 18–20)

Alcis sp. near *shivae* Wiltshire, 1967 (4 exs – Afg) (Plate 73, Figs 22–23)

Remark. The specimens reminding *A. songarica* and *A. shivae* from Afghanistan can only be reliably identified after the complete taxonomic revision of the genus.

Alcis evae Wiltshire, 1966 (1 ex. – Afg) (Plate 73, Fig. 21 holotype)

Alcis jubata (Thunberg, 1788) (10 exs – Aut, Fin) (Plate 73, Figs 24–27)

Genus ***Ecleora*** Wehrli, 1941

Ecleora solieraria (Rambur, 1834) (9 exs – Spa, Fra) (Plate 73, Figs 28–31)

Ecleora undulosa (Albers & Warnecke, 1941) (9 exs – Mor) (Plate 73, Figs 32–35)

Genus ***Afriberina*** Wehrli, 1943

Afriberina tenietaria (Staudinger, 1900) (6 exs – Spa) (Plate 73, Figs 36–40)

Afriberina rungsi (Albers & Warnecke, 1941) (13 exs – Mor) (Plate 73, Figs 41–44)

Afriberina nobilitaria (Staudinger, 1892) (12 exs – Afg) (Plate 74, Figs 1–4)

Genus ***Calamodes*** Guenée, 1858

Calamodes occitanaria (Duponchel, 1829) (19 exs – Spa, Fra) (Plate 74, Figs 5–8)

Genus ***Cleorodes*** Warren, 1894

Cleorodes lichenaria (Hufnagel, 1767) (7 exs – Aut, Hun) (Plate 74, Figs 9–11)

Genus ***Cleora*** Curtis, 1825

Cleora cinctaria (Denis & Schiffermüller, 1775) (13 exs – Fra, Ita, Aut, Mac) (Plate 74, Figs 12–14)

Cleora cornaria (Guenée, 1858) (17 exs – Pak) (Plate 74, Figs 15–17)

Genus ***Peribatodes*** Wehrli, 1943

Peribatodes rhomboidaria rhomboidaria (Denis & Schiffermüller, 1775) (171 exs – Spa, Fra, Ita, Sic, Aut, Cro, Mac, Gre, Cre, Tur, Rus) (Plate 74, Figs 18–19)

Peribatodes rhomboidaria saerdabensis Wehrli, 1943 **stat. rev.** (62 exs – Arm, Ira) (Plate 74, Figs 20–21)

Remark. The ssp. *saerdabensis* was treated as a synonym of *P. rhomboidaria* by Parsons et al. (1999). Based on the differences expressed in habitus (significantly paler ground colour of *saerdabensis* compared to the nominate taxon), we restore the taxon on subspecies rank.

Peribatodes rhomboidaria sublutearia (Zerny, 1927) (2 exs – Spa) (Plate 74, Figs 22–23)

Peribatodes rhomboidaria syritaurica (Wehrli, 1931) (7 exs – Leb) (Plate 74, Fig. 24)

Peribatodes secundaria (Denis & Schiffermüller, 1775) (11 exs – Aut, Cro) (Plate 74, Figs 25–28)

Peribatodes umbraria umbraria (Hübner, 1809) (23 exs – Ita, Sic, Cro, Mac, Cre, Tur, Syr) (Plate 74, Figs 29–31)

Peribatodes umbraria syrirana (Wehrli, 1943) (38 exs – Ira, Afg, Pak) (Plate 74, Figs 32–34)

Peribatodes umbraria mimeuri (Rungs, 1950) (2 exs – Mor) (Plate 74, Figs 35–36)

Peribatodes correptaria (Zeller, 1847) (22 exs – Cro, Mac, Cre) (Plate 75, Figs 1–4)

Peribatodes ilicaria (Geyer, 1833) (4 exs – Spa) (Plate 75, Figs 5–7)

Peribatodes perversaria (Boisduval, 1840) (3 exs – Fra, Sui) (Plate 75, Figs 8–10)

Peribatodes powelli (Oberthür, 1913) (3 exs – Mor) (Plate 75, Figs 11–13)

Genus ***Psyra*** Walker, 1860

Psyra rufolinearia Leech, 1897 (1 ex. – Ind) (Plate 75, Fig. 15)

Genus ***Paraboarmia*** Krampl, 1994
Paraboarmia viertlii (Bohatsch, 1883) (1 ex. – Tur) (Plate 75, Fig. 14)
Genus ***Hypomecis*** Hübner, 1821
Hypomecis roboraria (Denis & Schiffermüller, 1775) (28 exs – Aut, Hun) (Plate 75, Figs 16–17)
Hypomecis punctinalis (Scopoli, 1763) (43 exs – Spa, Sui, Aut, Hun, Ukr, Cyp, Rus) (Plate 75, Figs 18–22)
Hypomecis cineracea Moore, 1888 (2 exs – Pak) (Plate 75, Figs 23–24)
Hypomecis sp. near *cineracea* from Afghanistan (1 ex. – Afg) (Plate 75, Fig. 25)
Remark. The single female specimen from Afghanistan (Barikot, Nuristan) differs slightly from *H. cineracea* both in its external and genital features. In order to decide the taxonomic rank of the Nuristan population, examination of further specimens of both sexes would be necessary.
Hypomecis arcearia (Hampson, 1902) (7 exs – Pak) (Plate 75, Figs 26–29)
Genus ***Fagivorina*** Wehrli, 1943
Fagivorina arenaria (Hufnagel, 1767) (8 exs – Aut, Ita) (Plate 75, Figs 30–32)
Genus ***Sardocyrnia*** Wehrli, 1943
Sardocyrnia fortunaria (Vázquez, 1905) (29 exs – Spa) (Plate 75, Figs 33–36)
Genus ***Ascotis*** Hübner, 1825
Ascotis selenaria selenaria (Denis & Schiffermüller, 1775) (62 exs – Spa, Ita, Sic, Aut, Slo, Cro, Ukr, Tur, Leb, Rus) (Plate 76, Figs 1–3)
Ascotis selenaria cretacea (Butler, 1879) (4 exs – Jap) (Plate 76, Figs 4–5)
Ascotis imparata (Walker, 1860) (12 exs – Afg, Pak, Ind) (Plate 76, Figs 6–9)
Ascotis fortunata fortunata (Blachier, 1887) (27 exs – Can) (Plate 76, Figs 16–19)
Ascotis fortunata azorica (Pinker, 1971) (2 exs – Aso) (Plate 76, Figs 23–24)
Ascotis fortunata flavonigrata (Pinker, 1965) (21 exs – Can) (Plate 76, Figs 10–15)
Ascotis fortunata wollastoni (Bethune-Baker, 1891) (4 exs – Mad) (Plate 76, Figs 20–22)
Genus ***Micrabraxas*** Butler, 1889
Micrabraxas tenuis (Warren, 1897) (1 ex. – Pak) (Plate 76, Fig. 25)
Genus ***Tephronia*** Hübner, 1825
Tephronia codetaria (Oberthür, 1881) (6 exs – Spa, Fra) (Plate 76, Figs 30–33)
Tephronia duercki Reisser, 1933 (5 exs – Mor) (Plate 76, Figs 26–29)
Tephronia sepiaria ssp. from the Canary Islands (8 exs – Can) (Plate 76, Figs 34–37)
Remark. No *Tephronia* taxon has been recorded from the Canary Islands. The specimens in the Vartian collection identified as *sepiaria* ssp. may belong to *Eumannia bytinskyi* (Wehrli, 1939).
Tephronia sepiaria (Hufnagel, 1767) (47 exs – Spa, Fra, Aut, Ita, Mac) (Plate 77, Figs 1–7)
Remark. Tentative identification. Satisfactory identification of the taxa of the *sepiaria*-group can be done after the complete taxonomic revision of the genus *Tephronia*.
Tephronia oranaria oranaria Staudinger, 1892 (7 exs – Mor) (Plate 77, Figs 12–13)
Tephronia oranaria castiliaria Staudinger, 1892 (5 exs – Spa) (Plate 77, Figs 14–15)
Genus ***Eumannia*** Fletcher, 1979
Eumannia sp. indet from Morocco (2 exs – Mor) (Plate 77, Figs 16–17)
Remark. The two specimens from Morocco were identified as *E. bytinskyi*. This identification is most probably incorrect as *E. bytinskyi* was described from the Canary Islands. The only known North African *Eumannia* taxon is *fatimaria* (Bang-Haas, 1906).
Eumannia arenbergeri Hausmann, 1995 (2 exs – Cyp) (Plate 77, Figs 18–19)
Eumannia oppositaria (Mann, 1864) (15 exs – Tur, Syr) (Plate 77, Figs 20–25)
Eumannia psyloritaria (Reisser, 1958) (1 ex. – Cre) (Plate 77, Fig. 26)
Genus ***Phyllometra*** Boisduval, 1840
Phyllometra gracilaria Boisduval, 1840 (4 exs – Spa) (Plate 77, Figs 27–30)
Genus ***Glacies*** Milliere, 1874
Glacies alpinata (Scopoli, 1763) (12 exs – Aut) (Plate 77, Figs 31–34)
Glacies canaliculata (Hochenwarth, 1785) (9 exs – Aut) (Plate 77, Figs 35–38)
Glacies baldensis (Wolfsberger, 1966) (1 ex. – Ita) (Plate 77, Fig. 39)
Glacies coracina (Esper, 1805) (13 exs – Aut) (Plate 77, Figs 41–44)
Glacies noricana (Wagner, 1898) (4 exs – Aut) (Plate 77, Figs 45–48)
Glacies spitzi (Rebel, 1907) (1 ex. – Slo) (Plate 77, Fig. 40)
Genus ***Psodos*** Treitschke, 1825
Psodos quadrifaria (Sulzer, 1776) (5 exs – Aut) (Plate 77, Figs 49–52)

Genus ***Sciadia*** Hübner, 1822

Sciadia tenebraria (Esper, 1806) (12 exs – Aut) (Plate 77, Figs 53–56)

Remark. Huemer & Hausmann (2009) revised the *S. tenebraria* complex and splitted the species into several taxa. The proper identification of the *Sciadia* specimens preserved in the Vartian collection would require the examination of their genitalia which was out of the scope of this present work.

Genus ***Pachycnemia*** Stephens, 1829

Pachycnemia hippocastanaria (Hübner, 1799) (53 exs – Spa, Fra, Aut, Cro) (Plate 77, Figs 57–59)

Pachycnemia tibiaria tibiaria (Rambur, 1829) (6 exs – Spa, Ita, Cro) (Plate 77, Figs 60–62)

Pachycnemia tibiaria benesignata (Bellier, 1861) (1 ex. – Cor) (Plate 77, Fig. 63)

Genus ***Odontognophos*** Wehrli, 1951

Odontognophos dumetata (Treitschke, 1827) (17 exs – Aut, Fra) (Plate 77, Figs 64–67)

Odontognophos perspersata (Treitschke, 1827) (43 exs – Spa) (Plate 78, Figs 1–4)

Odontognophos zacharia (Staudinger, 1879) (9 exs – Cre, Tur, Arm) (Plate 78, Figs 5–8)

Genus ***Gnophos*** Treitschke, 1825

Gnophos furvata (Denis & Schiffermüller, 1775) (12 exs – Aut, Ita, Mac) (Plate 78, Figs 9–11)

Gnophos obfuscata obfuscata (Denis & Schiffermüller, 1775) (21 exs – Spa, Aut) (Plate 78, Figs 12–13)

Gnophos obfuscata androgynus Reisser, 1936 (3 exs – Spa) (Plate 78, Figs 14–15)

Gnophos sartata Treitschke, 1827 (72 exs – Cro, Mac, Cre, Tur, Syr, Leb, Arm, Ira) (Plate 78, Figs 16–20)

Gnophos brandtorum Wehrli, 1941 (7 exs – Ira) (Plate 78, Figs 21–24)

Gnophos gorgata Brandt, 1938 (7 exs – Ira) (Plate 78, Figs 25–28)

Gnophos klapperichi Wiltshire, 1967 (15 exs – Afg) (Plate 79, Figs 1–4)

Gnophos snelleni Christoph, 1887 (2 exs – Arm) (Plate 79, Figs 5–6)

Gnophos sp. indet 1 from Afghanistan, Salang Pass (1 ex. – Afg) (Plate 79, Fig. 7)

Gnophos sp. indet 2 from Afghanistan, Band-i-Amir (1 ex. – Afg) (Plate 79, Fig. 8)

Remark. The specimen was misidentified by Wiltshire as *sibiriata*, a species belonging to the genus *Charissa*, while the specimen is obviously a *Gnophos* by its genital characters.

Gnophos sp. near *rubefactaria* Püngeler, 1902 (9 exs – Afg) (Plate 79, Figs 9–12)

Gnophos sp. near *nimbata* (1) from Afghanistan, Salang Pass (10 exs – Afg) (Plate 79, Figs 13–15; Gen. figs 27, 28)

Gnophos sp. near *nimbata* (2) from Afghanistan, Paghman (4 exs) (Plate 79, Figs 16–18; Gen. figs 29, 30)

Remark. The *nimbata*-like specimens from Afghanistan belong to two taxa supported both by their external and genitalia characters. Whether any of them is the real *G. nimbata*, it can be decided only by the examination of the genitalia of the holotype of *nimbata*. In addition, there is a taxon described from the Hindukush mountains by Ebert (1965) (*Gnophos nimbata hindukushi*) which seems to be based on erroneous identification: the specimens figured in the original description look more similar to *Ctenognophos anax* than *G. nimbata*. To clarify the taxonomic position of the Afghan taxa of the *nimbata* species group, further studies are required involving the examination of the holotypes of the taxa concerned.

Gnophos boarmioides Wiltshire, 1967 (3 exs – Afg) (Plate 79, Figs 19–22)

Gnophos pagranitus Wiltshire, 1966 (18 exs – Afg) (Plate 79, Figs 23–26, 23: holotype)

Genus ***Charissa*** Curtis, 1826

Charissa obscurata (Denis & Schiffermüller, 1775) (17 exs – Ger, Aut, Mac) (Plate 79, Figs 27–29)

Charissa canariensis (Rebel, 1911) (4 exs – Can) (Plate 79, Figs 30–32)

Charissa annubilata (Christoph, 1885) (26 exs – Ira, Rus) (Plate 80, Figs 1–6)

Charissa darashama (Wehrli, 1953) (5 exs – Arm) (Plate 80, Figs 7–9)

Charissa libanotica (Wehrli, 1931) (18 exs – Leb) (Plate 80, Figs 10–12)

Charissa luticiliata (Christoph, 1887) (30 exs – Ira) (Plate 80, Figs 13–18)

Charissa mutilata (Staudinger, 1879) (22 exs – Tur, Arm) (Plate 80, Figs 19–24)

Charissa pentheri (Rebel, 1901) (5 exs – Mac) (Plate 80, Figs 25–29)

Charissa subvariegata (Staudinger, 1898) (1 ex. – Irq) (Plate 80, Fig. 30)

Charissa taftana (Brandt, 1941) (62 exs – Afg) (Plate 80, Figs 31–36, 31: holotype of *C. brachyphora*)

Remark. *Charissa brachyphora* Wiltshire, 1966 is conspecific with *C. taftana* (Erlacher, pers. comm). Thus, we refer only the senior name but illustrate here the holotype of *C. brachyphora*, too.

Charissa crenulata (Staudinger, 1871) (10 exs – Spa) (Plate 80, Figs 37–40)

Charissa pullata (Denis & Schiffermüller, 1775) (16 exs – Aut, Gre, Ita) (Plate 80, Figs 41–45)

Charissa difficillimus (Wiltshire, 1967) (135 exs – Afg) (Plate 80, Figs 46–50)

Charissa sibiriata (Guenée, 1857) (1 ex. – Afg) (Plate 81, Fig. 1)
Charissa wanensis (Wehrli, 1936) (1 ex. – Arm) (Plate 81, Fig. 2)
Charissa amseli (Ebert, 1965) (1 ex. – Pak) (Plate 81, Fig. 3)
Charissa corsica (Oberthür, 1913) (1 ex. – Cor) (Plate 81, Fig. 4)
Charissa dubitaria dubitaria (Staudinger, 1892) (114 exs – Leb, Syr, Ira) (Plate 81, Figs 5–11)
Charissa dubitaria staudingeri (Wnukowsky, 1929) (10 exs – Cre) (Plate 81, Figs 12–15)
Charissa subtaurica (Wehrli, 1932) (8 exs – Leb, Syr) (Plate 81, Figs 16–20)
Charissa symmicta (Wehrli, 1953) (1 ex. – Rus) (Plate 81, Fig. 21)
Charissa variegata (Duponchel, 1830) (32 exs – Fra, Ita, Sic, Cro, Mac) (Plate 81, Figs 22–26)
Charissa mucidaria (Hübner, 1799) (19 exs – Por, Spa, Fra) (Plate 81, Figs 27–32)
Charissa porphyratus Zerny, 1936 (7 exs – Mor) (Plate 81, Figs 33–35)
Charissa badakhshanus (Wiltshire, 1967) (3 exs – Afg) (Plate 81, Figs 36–38)
Charissa ambiguata (Duponchel, 1830) (7 exs – Aut) (Plate 81, Figs 39–42)
Charissa argillata (Brandt, 1938) (32 exs – Ira) (Plate 81, Figs 43–46)
Charissa onustaria (Herrich-Schäffer, 1852) (13 exs – Ita, Mac, Leb, Tur, Ira) (Plate 81, Figs 47–50)
Charissa glaucinaria (Hübner, 1799) (63 exs – Spa, Fra, Ger, Ita, Aut, Slo, Mac, Gre) (Plate 82, Figs 1–5)
Charissa intermedia (Wehrli, 1917) (13 exs – Mac, Gre, Leb) (Plate 82, Figs 6–10)
Charissa sp. near *intermedia* from Lebanon (4 exs – Leb) (Plate 82, Figs 11–14)
Remark. In order to identify the *intermedia*-like specimens from Lebanon, further investigation are needed involving all taxa of the *intermedia* species group.
Charissa pfeifferi (Wehrli, 1926) (7 exs – Leb, Tur) (Plate 82, Figs 15–17)
Charissa certhiatus certhiatus Rebel & Zerny, 1931 (20 exs – Mac, Gre) (Plate 82, Figs 18–21)
Charissa certhiatus minorasiaticus (Wehrli, 1936) (15 exs – Tur, Arm) (Plate 82, Figs 22–25)
Charissa pollinaria (Christoph, 1887) (2 exs – Ira) (Plate 82, Figs 26–27)

Genus ***Elophos*** Boisduval, 1840
Elophos caelibaria caelibaria (Heydenreich, 1851) (4 exs – Aut) (Plate 82, Figs 31–33)
Elophos caelibaria senilaria (Fuchs, 1901) (5 exs – Aut) (Plate 82, Figs 34–36)
Elophos spurcaria (de la Harpe, 1853) (10 exs – Aut) (Plate 82, Figs 28–30)
Elophos zirbitzensis Pieszcek, 1902 (10 exs – Aut) (Plate 82, Figs 37–40)
Elophos dilucidaria dilucidaria (Denis & Schiffermüller, 1775) (35 exs – Ger, Aut) (Plate 82, Figs 41–44)
Elophos dilucidaria alagnensis (Nitsche, 1926) (1 ex. – Ita) (Plate 82, Fig. 45)
Elophos operaria operaria (Hübner, 1813) (2 exs – Aut) (Plate 82, Figs 46–47)
Elophos operaria hoefneri (Rebel, 1903) (4 exs – Aut) (Plate 83, Figs 1–4)
Elophos serotinaria (Denis & Schiffermüller, 1775) (10 exs – Fra, Ita) (Plate 83, Figs 5–8)
Elophos vittaria vittaria (Thunberg, 1788) (1 ex. – Fin) (Plate 83, Fig. 9)
Elophos vittaria mendicaria (Herrich-Schäffer, 1852) (14 exs – Ger, Aut) (Plate 83, Figs 10–13)

Genus ***Ctenognophos*** Prout, 1915
Ctenognophos eolaria (Guenée, 1858) (1 ex. – Ind) (Plate 83, Fig. 14; Gen. fig. 31)
Ctenognophos anax Wiltshire, 1966 **stat. n.** (37 exs – Afg) (Plate 83, Figs 15–18, 15: holotype; Gen. fig. 31)
Remark. *Ctenognophos anax* was originally described as subspecies of *C. eolaria*. The examination of the genitalia of the two taxa disclosed significant differences, thus, *C. anax* is hereby upgraded to species rank.
Ctenognophos anax ssp. from Afghanistan (42 exs – Afg) (Plate 83, Figs 19–22)
Remark. The specimens from Afghanistan (Paghman) have much darker forewing ground colour compared with the nominate subspecies. The external differences based on large series seem to be eligible to separate a subspecies for the Paghman populations. Ebert described, however, *Zystrognophos nimbata hindukushi* in 1965 but, according to the figures published, he most probably misidentified the actual *Ctenognophos anax* taxon as *Z. nimbata*. The detailed investigation of the holotype of *Z. nimbata hindukushi* is required to clarify this taxonomic problem.
Ctenognophos paerlita (Butler, 1886) (4 exs – Pak) (Plate 83, Figs 23–26)

Genus ***Bizia*** Walker, 1860
Bizia aexaria Walker, 1860 (1 ex. – Jap) (Plate 84, Fig. 1)

Genus ***Rhoptria*** Guenée, 1858
Rhoptria asperaria (Hübner, 1817) (124 exs – Mor, Spa, Fra, Sic, Cro, Tur) (Plate 84, Figs 7–10)

Genus ***Stueningia*** Hausmann, 1993
Stueningia poggearia poggearia (Lederer, 1855) (3 exs – Leb) (Plate 84, Figs 2–3)

Stueningia poggearia meyi Hausmann, 1993 (23 exs – Syr) (Plate 84, Figs 4–5)
Stueningia wolfi Hausmann, 1993 (6 exs – Tur) (Plate 84, Fig. 6)
Genus ***Taeniophila*** Staudinger, 1897
Taeniophila unio (Oberthür, 1880) (1 ex. – Jap) (Plate 84, Fig. 11)
Genus ***Lomographa*** Hübner, 1825
Lomographa bimaculata (Fabricius, 1775) (47 exs – Aut) (Plate 84, Figs 12–15)
Lomographa temerata (Denis & Schiffermüller, 1775) (13 exs – Aut, Rus) (Plate 84, Figs 16–17)
Genus ***Aleucis*** Guenée, 1845
Aleucis distinctata (Herrich-Schäffer, 1839) (6 exs – Ger) (Plate 84, Figs 18–21)
Aleucis orientalis (Staudinger, 1892) (16 exs – Mac) (Plate 84, Figs 22–25)
Aleucis sp. near *orientalis* from Iran (1 ex. – Ira) (Plate 84, Fig. 26)
Aleucis mimetes (Wehrli, 1932) (2 exs – Jor) (Plate 84, Figs 27–28)
Genus ***Cabera*** Treitschke, 1825
Cabera exanthemata (Scopoli, 1763) (15 exs – Fra, Aut) (Plate 84, Figs 29–30)
Cabera pusaria (Linnaeus, 1758) (35 exs – Spa, Ita, Aut, Hun, Ira, Rus) (Plate 84, Figs 31–32)
Cabera leptographa Wehrli, 1936 (10 exs – Ger, Aut) (Plate 84, Figs 33–36)
Genus ***Stegania*** Guenée, 1845
Stegania cararia (Hübner, 1790) (3 exs – Aut) (Plate 84, Figs 37–38)
Stegania dalmataria Guenée, 1858 (1 ex. – Ira) (Plate 84, Fig. 39)
Stegania dilectaria dilectaria (Hübner, 1790) (17 exs – Aut, Hun) (Plate 84, Figs 40–43)
Stegania dilectaria trimaculoides (Wehrli, 1931) (1 ex. – Tur) (Plate 84, Fig. 44)
Stegania trimaculata trimaculata (Villers, 1789) (Fra, Sic, Ger, Aut) (Plate 84, Figs 45–49)
Stegania trimaculata ochrearia Bang-Haas, 1910 (1 ex. – Mor) (Plate 84, Fig. 50)
Stegania mesonephele (Wiltshire, 1967) (104 exs – Afg, Pak) (Plate 84, Figs 51–57)
Genus ***Hydatocapnia*** Warren, 1895
Hydatocapnia nebulosa Yazaki, 1992 (7 exs – Pak) (Plate 84, Figs 58–61)
Genus ***Zamarada*** Moore, 1887
Zamarada minimaria Swinhoe, 1895 (10 exs – Ira) (Plate 84, Figs 62–65)
Genus ***Erebomorpha*** Walker, 1860
Erebomorpha fulguraria intervolans Wehrli, 1941 (2 exs – Chi) (Plate 85, Figs 1–2)
Genus ***Arichanna*** Moore, 1868
Arichanna sinica (Wehrli, 1933) (1 ex. – Chi) (Plate 85, Fig. 3)
Arichanna jaguararia gaschkevitchii (Motschulsky, 1861) (1 ex. – Jap) (Plate 85, Fig. 4)
Arichanna tientsuena (Wehrli, 1933) (1 ex. – Chi) (Plate 85, Fig. 5)
Arichanna melanaria (Linnaeus, 1758) (10 exs – Ger, Aut, Pol, Rus) (Plate 85, Figs 6–9)
Arichanna perimelaina (Wehrli, 1933) (2 exs – Chi) (Plate 85, Figs 10–11)
Genus ***Pogonopygia*** Warren, 1894
Pogonopygia pavida (Bastelberger, 1911) (1 ex. – Tai) (Plate 85, Fig. 12)
Genus ***Cystidia*** Hübner, 1819
Cystidia couaggaria (Guenée, 1858) (7 exs – Chi) (Plate 85, Fig. 13)
Cystidia eurypile (Ménétriès, 1859) (2 exs – Rus) (Plate 85, Fig. 14)
Cystidia eurymede (Motschulsky, 1861) (1 ex. – Jap) (Plate 85, Fig. 15)
Cystidia stratonice (Stoll, 1782) (1 ex. – Jap) (Plate 85, Fig. 16)
Genus ***Abraxesis*** Hampson, 1902
Abraxesis melaleucaria Hampson, 1902 (10 exs – Afg, Pak) (Plate 85, Figs 17–19)
Genus ***Abraxas*** Leach, 1815
Abraxas grossulariata grossulariata (Linnaeus, 1758) (31 exs – Eng, Aut, Ukr) (Plate 86, Figs 1–4)
Abraxas grossulariata dsungarica Wehrli, 1939 (24 exs – Arm) (Plate 86, Figs 5–8)
Abraxas virginalis Butler, 1886 (10 exs – Pak) (Plate 86, Figs 9–12)
Abraxas karafutonis Matsumura, 1925 (1 ex. – Rus) (Plate 86, Fig. 13)
Abraxas fuscescens Butler, 1886 (1 ex. – Ind) (Plate 86, Fig. 14)
Abraxas tenellula Inoue, 1984 (2 exs – Tai) (Plate 86, Figs 15–16)
Abraxas pantaria (Linnaeus, 1767) (43 exs – Spa, Fra, Alg) (Plate 86, Figs 17–19)
Abraxas discoparallela Wehrli, 1931 (1 ex. – Chi) (Plate 86, Fig. 20)
Abraxas sylvata (Scopoli, 1763) (8 exs – Ger, Aut, Mac) (Plate 86, Figs 21–23)

Genus ***Lomaspilis*** Hübner, 1825
Lomaspilis marginata (Linnaeus, 1758) (39 exs – Fra, Aut, Rus) (Plate 86, Figs 25–28)
Genus ***Ligdia*** Guenée, 1858
Ligdia adustata (Denis & Schiffermüller, 1775) (29 exs – Aut, Mac, Ukr) (Plate 86, Figs 29–31)
Ligdia coctata Guenée, 1858 (13 exs – Afg, Pak) (Plate 86, Figs 32–34)
Genus ***Mimomiza*** Warren, 1894
Mimomiza cruentaria (Moore, 1868) (1 ex. – Ind) (Plate 86, Fig. 24)
Genus ***Peratophyga*** Warren, 1894
Peratophyga hyalinata (Kollar, 1844) (23 exs – Afg, Pak, Ind, Chi) (Plate 86, Figs 35–38, 38: holotype of *Zamarada ionephela* Wiltshire, 1966)

DESCRIPTIONS OF NEW GEOMETRIDAE SPECIES FROM THE VARTIAN COLLECTION WITH REMARKS ON SOME POORLY KNOWN TAXA

by Gyula M. László

Scotopteryx safedkohensis László **sp. n.**

(Plate 23, Figs 42–45, Gen. figs 1, 2)

Holotype. Male, "SO-Afghanistan, Safed-Koh Südseite, Kotkai, 2350 m, 21.VI.–1.VII.1969 leg. Vartian", slide No.: LG 3528 (coll. Vartian, NHMW).

Paratypes. Afghanistan. 2 males, 2 females, with the same data as the holotype, slide No.: LG 3529 (female) (coll. Vartian, NHMW).

Diagnosis. Wingspan 24–28 mm, length of forewing 12–15 mm. The new species is closely related to *S. nasifera* (Warren, 1888) but is easily distinguishable by the following characters: *S. safedkohensis* has somewhat shorter and broader forewing compared to that of *S. nasifera*, all transverse lines are considerably narrower and less wavy in the new species than in *S. nasifera*. The new species has, in comparison with *S. nasifera*, less arcuate basal and postbasal lines originating more remotely from the base of forewing; the inner line of the double antemedial line is less wavy, while the outer one reaches the ventral margin in right angle (that is slightly oblique in *S. nasifera*); the postmedial line has much shorter medial projection; the medial area has much narrower dark brown filling in its outer part and shorter, narrower, less sharply defined apical streak. *Scotopteryx safedkohensis* has fine but well defined, double discal spots, while the related species has a single discal spot and a shadow-like trace of the second, lower appears only in a few specimens. The hindwing of the new species is somewhat darker than in *S. nasifera*, with better defined dark greyish medial line.

The male genitalia of the two species are almost identical, the only difference is expressed by the considerably narrower costal arm and membraneous apical part of the valva of the new species compared to those of *S. nasifera* (see Gen. figs 1, 3).

In the female genitalia, the new species has considerably shorter eighth tergite than in the related species, narrower, cup-shaped ostium bursae (it is much broader, funnel-like in *S. nasifera*), and narrower, poorly sclerotized, proximally gradually widening distal part of corpus bursae, what is much thicker, more strongly sclerotized, sac-like in *S. nasifera*. Last but not least, the signum bursae of *S. safedkohensis* is narrower, with irregular margin, while the signum of the related species is smoothly rounded, more or less cordiform (see Gen. figs 2, 4).

Lithostege amoenata Christoph, 1885

(Plate 46, Figs 24–28; Gen. figs 5, 6)

Material examined. Afghanistan. 1 male, 1 female, 40 km SW Kabul, 2300 m, 17.VI.1965, leg. Kasy & Vartian, slide Nos: LG 3444 (male), LG 3445 (female); 3 males, S Salang Pass, N of Kabul, 2700 m, 1.VII.1965, leg. Kasy & Vartian, slide Nos: LG 3465, LG 3466, LG 3523 (coll. Vartian, NHMW).

Lithostege amseli Wiltshire, 1967

(Plate 46, Figs 29–31; Gen. figs 7, 8)

Material examined. Afghanistan. 1 male, 1 female, Dasht-i-Nawar, NW of Ghazni, 3000 m, 8–10. VI.1965, leg. Kasy & Vartian, slide Nos: LG 3446 (male), LG 3447 (female); 1 male, 1 female, Safed Koh S side, Kotkai, 2350 m, 21.VI.–1.VII.1969, leg. Vartian, slide No.: LG 3448 (male), LG 3449 (female) (coll. Vartian, NHMW).

Remarks. *Lithostege amoenata* Christoph, 1885 was described from the Kopet-Dagh Mts, near Ashkhabad. Although Rajaei et al (2011) claimed that syntype specimens of *L. amoenata* have been studied by them, they figured the genitalia of a specimen collected in Tajikistan. On the other hand, they figured another, significantly different male genitalia of a specimen collected at Dasht-i-Nawar, Afghanistan – similar specimens also found in the Vartian collection during this present study – and identified this moth tentatively as *L. amseli* Wiltshire, 1967, described from West Afghanistan, Herat. As neither Rajaei et al. nor the authors of present work had the opportunity to trace the single type specimen of *L. amseli*, the validity of the taxon remains dubious. The type locality of *L. amseli* lies closer to the Kopet-Dagh than to Dasht-i-Nawar or Kabul, therefore it is more likely that *L. amseli* is a mere synonym of *L. amoenata* as it is suggested by Rajaei et al. (2011). Nevertheless, dissections of numerous specimens from Afghanistan justified the presence of two distinct taxa occuring in NE Afghanistan. Due to the lack of information on the genital morphology of *L. amseli* holotype, we simply follow the concept of Rajaei et al. (2011). Thus, the species with the considerably shorter apical process of valva is considered here as *L. amoenata*, while the other one having long, curved apical process is tentatively treated as *L. amseli*. It is worth mentioning, that the shape of the valva of *L. amoenata* figured in Rajaei et al. (2011) slightly differs from that of the specimens collected in Afghanistan, near Kabul and Salang Pass by Vartian (see Gen. fig. 5). Thus, it is also not excluded, that a third taxon (at least a distinct subspecies of *amoenata*) occurs in the region. To clarify the taxonomy of the *L. amoenata* species group, further examination of significantly more specimens from the region is needed, as well as the tracing and dissecting of the holotype of *L. amseli* would be essential.

Lithostege hreblayi Rajaei & Viidalepp, 2011

(Plate 46, Fig. 34; Gen. fig. 9)

Material examined. Afghanistan. 1 female, S Salang Pass, N of Kabul, 2700 m, 1.VII.1965, leg. Kasy & Vartian, slide No.: Wiltshire 234 (NHMW 15877) (coll. Vartian, NHMW).

Remarks. The single specimen found in the Vartian collection was labelled by Wiltshire as the holotype of *L. salangensis*, but this taxon has never been published. Thus, *salangensis* is a manuscript name. The specimen has been proved to be conspecific with *L. hreblayi* Rajaei & Viidalepp, 2011, described from North Pakistan and this is the first record of the species outside of the type locality.

Lithostege rufovirgata László **sp. n.**

(Plate 46, Fig. 35; Gen. fig. 10)

Holotype. Male, "Pakistan, 80 km NW of Quetta, 2100 m, 15.V.1965 leg. Kasy & Vartian"; slide No.: LG 3451 (coll. Vartian, NHMW).

Diagnosis. Wingspan 25 mm, length of forewing 12 mm. The new species is related to *L. hreblayi* Rajaei & Viidalepp, 2011 described from the westernmost chains of the Himalayas in North Pakistan. The diagnostic characters between the two species are as follows: *L. rufovirgata* has a more colourful appearance due to the red-brown suffusion between the basal and antemedial lines and the postmedial and subterminal lines, while the forewing pattern of *L. hreblayi* consists of grey scales of various shades,

lacking any reddish areas. The new species has much more sharply defined and more dentate basal and antemedial lines than in *L. hreblayi*, while the postmedial line of *L. rufovirgata* is much paler and conspicuously more undulate and dentate than that of *L. hreblayi*.

The differences between the male genitalia of the two related species are also well expressed by the following features: *L. rufovirgata* has considerably longer, basally more slender uncus, much shorter tegumen, somewhat shorter, gently arcuate, apically slightly dilated costal arm (that is more curved and apically not dilated in *L. hreblayi*), much shorter and somewhat broader valva, shorter, basally much broader, robust triangular harpe (it is more elongate and slenderer, apically recurved in *L. hreblayi*), less elongate saccular process, somewhat shorter vinculum, and considerably shorter, less arcuate aedeagus than in *L. hreblayi*. Female unknown.

Lithostege wiltshirei László **sp. n.**

(Plate 46, Figs 36–39; Gen. fig. 11)

Holotype. Female, "Pakistan, 20 km S of Quetta, 1900 m, 14.V.1965 leg. Kasy & Vartian". Slide No.: LG 3450 (coll. Vartian, NHMW).

Paratypes. Pakistan. 4 females, with the same data as the holotype. Slide Nos: LG 3524, LG 3525, Wiltshire 237 (NHMW 15876) (coll. Vartian, NHMW).

Diagnosis. Wingspan 23–25 mm, length of forewing 12–13 mm. The new species is a sister taxon of *L. samandooki* Rajaei, 2011, described from Kerman province in South-Eastern Iran, from a very high altitude locality (2700–2900 m). In spite of the external similarity, *L. wiltshirei* is easily distinguishable from *L. samandooki* by the following characters: basal and antemedial lines of the new species are much sharply angled, with much longer, pointed projection towards the medial area, and the postmedial line of *L. wiltshirei* has smoother, more rounded angles compared with the related species.

The differences in the female genitalia are more obviously expressed by the much shorter, thicker apophyses anteriores of the new species, the different shape of anthrum which is reversed trapezoidal with very narrow medial incision on the distal margin in *L. wiltshirei*, but quadrangular, with parallel margins with broad, V-shaped distal incision in *L. samandooki*. Moreover, *L. wiltshirei* has curved ductus bursae while that is straight in the related species, much longer, thicker, arcuate cervix bursae (that is only a small hump in *L. samandooki*) and much extensive spiculated area covering two-thirds of the corpus bursae in the new species while the spiculated surface is extended only to the middle of the corpus bursae in *L. samandooki*. Male unknown.

Remarks. The specimens found in the Vartian collection were labelled as types of *L. quettensis* Wiltshire, but this latter taxon has never been described.

Lithostege vartianae László **sp. n.**

(Plate 47, Figs 16–20; Gen. figs 12, 13)

Holotype. Male, "Pakistan, 20 km S of Quetta, 1900 m, 14.V.1965 leg. Kasy & Vartian". Slide No.: LG 3514 (coll. Vartian, NHMW).

Paratypes. Pakistan. 15 males, 1 female, with the same data as the holotype. Slide Nos: LG 3513 (male), LG 3512 (female) (coll. Vartian, NHMW).

Diagnosis. *Lithostege vartianae* is a very uniquely looking species of the genus. It was placed in the Vartian collection as an undescribed *Lobophora* species, due to the rather *Lobophora*-like forewing shape and pattern, moreover, it has a small anal lobe on the hindwing, similarly to the members of the genus *Lobophora*. The placement of the species into *Lithostege* is supported by the configuration of the genitalia which shows a surprisingly close relationship of *L. vartianae* with *L. excelsata* (Erschov, 1874). The diagnostic features between the two sister species are as follows: the new species has considerably broader forewings with pale greyish brown ground colour suffused with pale red-brown patches, lacking

any well-defined transverse lines (*L. excelsata* has pale grey ground colour with rather sharply defined, fine, blackish transverse lines); the hindwing of the new species is greyish white, while that is darker grey in *L. excelsata*.

The genitalia of both sexes clearly demonstrate the close relationship of *L. vartianae* and *L. excelsata*, with recognisable specific differences. In the male genitalia, the new species has considerably thicker and longer uncus, somewhat broader tegumen, somewhat longer and narrower valva with quadrangular apical part (that is evenly rounded in *L. excelsata*). The configuration of the juxta of the new species is similar to that of *L. excelsata* but its apical process is broadly rounded while it is pointed in the latter species; the vinculum of *L. vartianae* is somewhat shorter than that of *L. excelsata*; finally, the aedeagus is slightly shorter and thicker in the new species than in *L. excelsata*.

The distinctive features in the female genitalia between *L. vartianae* and *L. excelsata* are the following: the new species has, in comparison with *L. excelsata*, somewhat more elongated papillae anales, considerably shorter apophyses, somewhat longer eighth tergite, slightly broader, more cylindrical antrum (that is rather funnel-like in *L. excelsata*), considerably shorter membraneous part of ductus bursae and more elongate corpus bursae.

Ennomos quercaria olivaria Brandt, 1938

(Plate 53, Figs 15–20; Gen. figs 14, 15)

Type material examined: Syntype male, "Iran Fars Strasse Chiraz-Kazeroun Fort Mian-Kotal ca 2000 m, 4. Juni 1937 coll. Brandt", "Holotype E. quercaria Hbn. ssp. olivaria Brdt. Brandt", slide No.: LG 2284, designated here as Lectotype (coll. NHRS). Syntype female, "Iran Fars Strasse Chiraz-Kazeroun Fort Sine-Sefid ca 2200m, 14. Juni 1937 coll. Brandt" "Allotype E. quercaria Hbn. ssp. olivaria Brdt. Brandt" slide No.: LG 2283, designated here as Paralectotype (coll. NHRS).

Remark. Although the examined specimens of the type series of *E. quercaria olivaria* have been labelled as Holotype and Allotype, the original description does not designate the primary type specimen, thus the specimens of the type series can only be considered as syntypes. In order to facilitate the proper identification of the rather problematic *Ennomos* taxa in the Middle East, the designation of the Lectotype of *E. quercaria olivaria* is necessary. The Lectotype specimen (Plate 53, Fig. 19) and its genitalia (Gen. fig. 14) are illustrated here for the first time, as well as the female Paralectotype (Plate 53, Fig. 20) and its genitalia (Gen. fig. 15).

The externally rather variable taxon appears to be widespread in Iran and East Turkey but lacks records from the Elburs mountains to date. The taxon is replaced southwards by *E. quercaria freidbergi* Hausmann, 1997, described from Israel, but the exact distribution area of the two species and the geographical borderline between *E. q. olivaria* and *E. q. freidbergi* is yet unknown.

The genitalia of the various *E. quercaria* taxa show no significant and constant morphological differences found due to the rather strong variability in the shape of juxta and the configuration of cornuti in the male, as well as the structure of ductus bursae and signum bursae in the female.

Ennomos vartianae László **sp. n.**

(Plate 53, Figs 21–23; Gen. figs 16, 17)

Holotype. Male, "N-Iran 30.5.1971 55°90'L, 37°40'B Gorgantal 50 km östl. Mindudasht 430 m leg. Vartian", slide No.: LG 3596 (coll. Vartian, NHMW).

Paratypes. Iran. 2 males, with the same data as the holotype (coll. Vartian, NHMW). Turkmenistan, Kopet-Dagh Mts. 7 males, 1 female, 6 km S of Ipay-Kala, 1600 m, 57°07'E, 38°17'N, 16–23.VIII.1992, No. L74, leg. M. Hreblay, Gy. László & G. Ronkay, slide Nos: LG 219, LG 239, LG 244 (males); 1 male, 1 female, Sayvana valley, 1800 m, cca 8 km E of Sayvana, 56°55'E, 38°22'N, 28.VI.1992, No. L61, slide No.: LG 3696 (female); 4 males, Sayvana valley, 1000 m, cca 5 km SW of Sayvana, 56°50'E, 38°17'N, 28.VI.1992, No. L60; 10 males, 800–1500 m, valley of the rivers Ipay-Kala and Point-Kala, 59°54-57'E, 38°13'-15'N, 30.VI.–04.

VII.1992, No. L63; 1 male, Firyuza, 400–600 m, 58°05'E, 37°59'N, 25.VI.1992, No. L56, leg. Gy. Fábián, B. Herczig, A. Podlussány & Z. Varga (coll. Gy.M. László).

Diagnosis. Wingspan: 32–35 mm, length of forewing: 15–16 mm. *E. vartianae* is a sister species of *E. quercaria*, its area of distribution is restricted to the Kopet-Dagh mountains. The type locality of the new species lies on the south-westernmost slopes of the Kopet-Dagh, nevertheless, the species is proved to be relatively frequent in its flying period in the central chains of the Turkmenian side of the massif.

Being the member of the *E. quercaria* species group, *E. vartianae,* similarly to most species of the genus, shows significant external variability expressed in the colouration and size, making the identification of the taxa rather problematic based on the external features only. As the determination of the characteristic external features is rather difficult in the species group, the satisfactory identification requires the examination of the genitalia. There are, however, certain external features which help in the separation of *E. vartianae* from the supposedly sympatrically occurring. *E. quercaria olivaria* Brandt, 1938. The new species is smaller in size (especially the females) than *E. quercaria olivaria*, and has considerably darker, reddish shaded pale brown ground colour of wings, while the rather polymorphic *E. q. olivaria* is always paler, having a fine yellowish-greenish hue. The wing shape of the new species is identical with that of all *E. quercaria* taxa, with rather variable configuration of transverse lines.

The main diagnostic characters between *E. vartianae* and *E. quercaria* are expressed in the configuration of the male genitalia. The distinctive features are as follows: The new species has, comparing with *E. quercaria*, somewhat shorter uncus, considerably shorter and narrower valva with conspicuously narrower and more elongated membraneous apical section. The configuration of the gnathos is different in the two related species as the arm of the gnathos of is narrower than in *E. quercaria*, with smooth, unspined surface towards its conspicuously short, arched medial part projected cranially, which is covered with short, but relatively robust cornuti forming a short conical medial process projecting caudad. The gnathos of *E. quercaria* is densely covered in its full length with short, triangular cornuti, the medial part has a characteristic pair of evenly arcuate humps projecting cranially, armed with a few longer medial spines projecting caudad. The sclerotized costal section of valva of the new species is much shorter in than in *E. quercaria*, with much shorter projected sclerotized plate on the valval costal margin, terminated in an almost straight, strongly sclerotized ridge bordering the membraneous apical part of the valva and reaching downwards the two-third of the medial plate of valva. The sclerotized costal plate of *E. quercaria* is more elongated and less prominent than in *E. vartianae*, with evenly arcuate distal bordering ridge extending only the half of the valval plate. The central plate of the valva is covered with much finer, shorter and less sclerotized hair-like cornuti in *E. vartianae* than in the related species. The medially deeply incised bifurcate juxta has somewhat thicker, more robust processi in *E. vartianae* than in *E. quercaria*. The aedagus of the new species is somewhat thinner than that of *E. quercaria*, vesica is armed with two groups of cornuti showing the same composition in both species but *E. vartianae* has slightly shorter cornuti compared to those of the related species.

The ground plan of the female genitalia is basically the same in both species, but *E. vartianae* has somewhat longer, funnel-like ostium bursae, while the ostium bursae of *E. quercaria* is more or less tubular with parallel lateral margins; in addition, the new species has much larger, circular signum bursae, which is smaller, irregular shaped in *E. quercaria*.

Ennomos kasyi László **sp. n.**

(Plate 53, Figs 1–3; Gen. fig. 18)

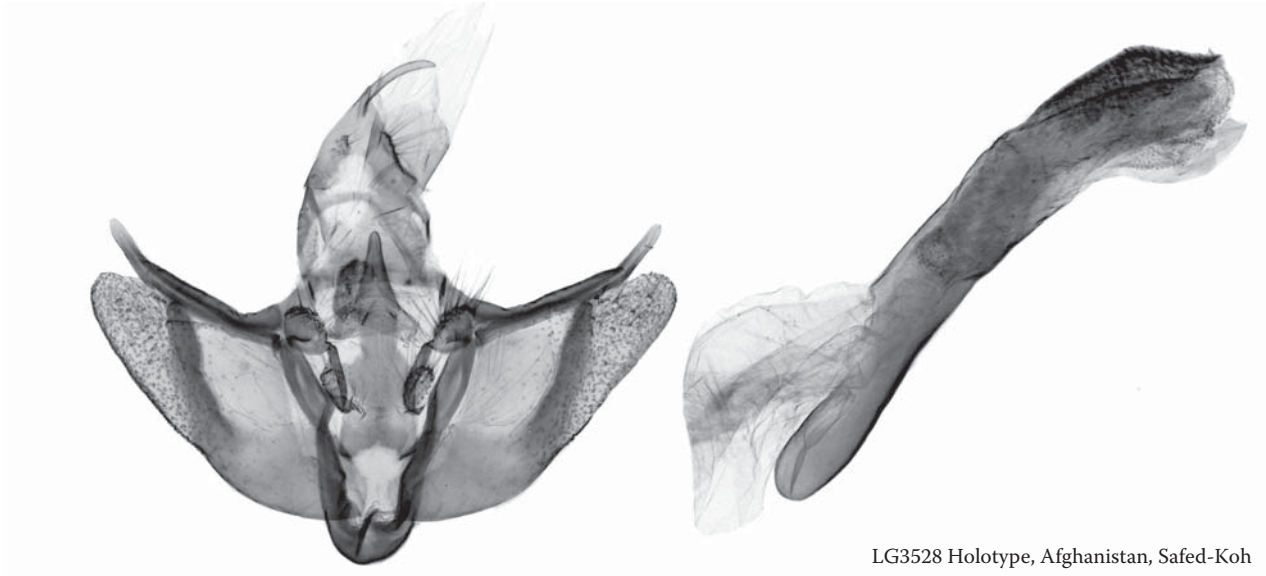
Holotype. Male, "Russ.-Armenien Geghard, 1700 m, 40 km östl. Eriwan 3. u. 4. VIII.1976, Kasy & Vartian", slide No.: LG 3605 (coll. Vartian, NHMW).

Paratypes. Armenia. 1 male, with the same data as the holotype, slide No.: LG 3835; 1 male, from the same site, collected at 30–31.VII.1976 (coll. Vartian, NHMW).

Diagnosis. Wingspan 35–36 mm, length of forewing 16 mm. The new species is closely related to *E. fuscantaria* and *E. fraxineti*, standing closer to *E. fraxineti* in external appearance by having similarly

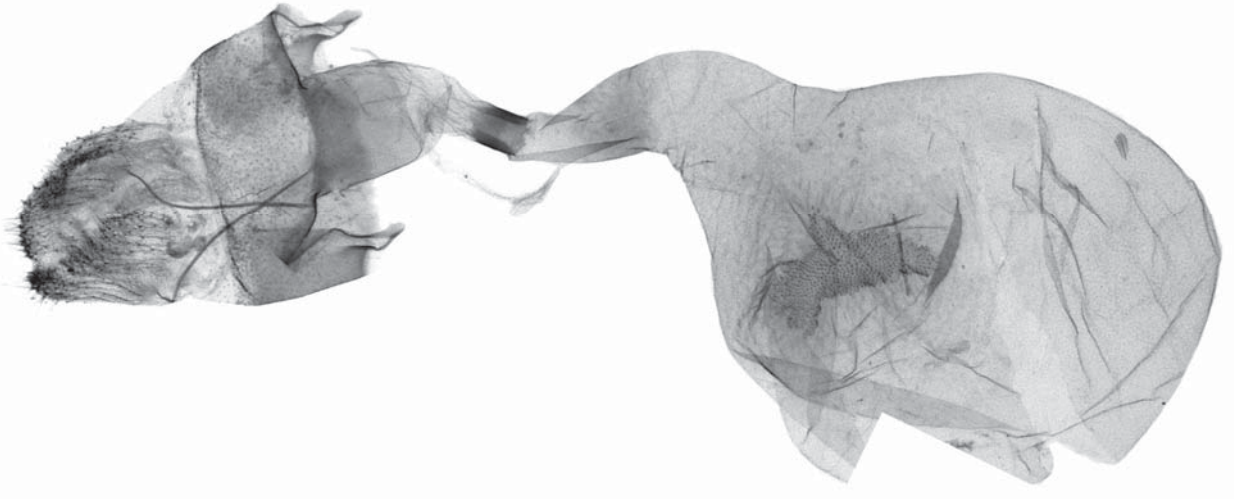
reddish-brown forewing ground colour, but the sharply defined ante- and postmedial lines of *E. kasyi* have conspicuous sharp inward angles right before reaching the costal margin, while the transverse lines of *E. fraxineti* are joining the costal margin without a sharp angle.

The male genitalia of *E. kasyi* are more similar to those of *E. fuscantaria* than to *E. fraxineti*. The main distinctive character between the three species is expressed by the shape of valva which is more elongated in *E. kasyi* than in the related two species, with the ventral margin conspicuously angled at its basal third, which is evenly arcuate in both allied species. The new species has somewhat more broadly rounded apical part of valva compared to that of *E. fuscantaria*, while the valva of *E. fraxineti* is the shortest in the group having the broadest, rounded-quadrangular apex. The configuration of the cornuti of the vesica also shows significant differences between the three related species: *E. kasyi* has 4 relatively robust, medium-long cornuti being almost equal in size; the armature of *E. fuscantaria* consists of two short and two long cornuti which are considerably thinner than in *E. kasyi*, while *E. fraxineti* has small, elongate cornuti field consisting of 8–10 cornuti of variable length being conspicuously shorter than in the other two relatives. Female unknown.



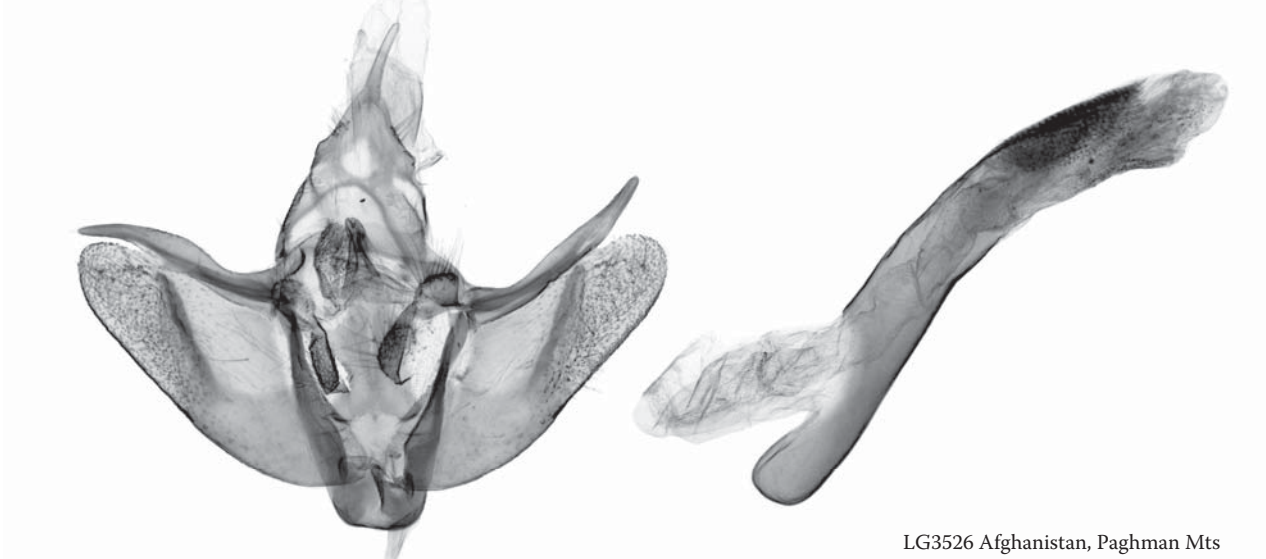
LG3528 Holotype, Afghanistan, Safed-Koh

Gen. fig. 1. *Scotopteryx safedkohensis* **sp. n.**



LG3529 Paratype, Afghanistan, Safed-Koh

Gen. fig. 2. *Scotopteryx safedkohensis* **sp. n.**

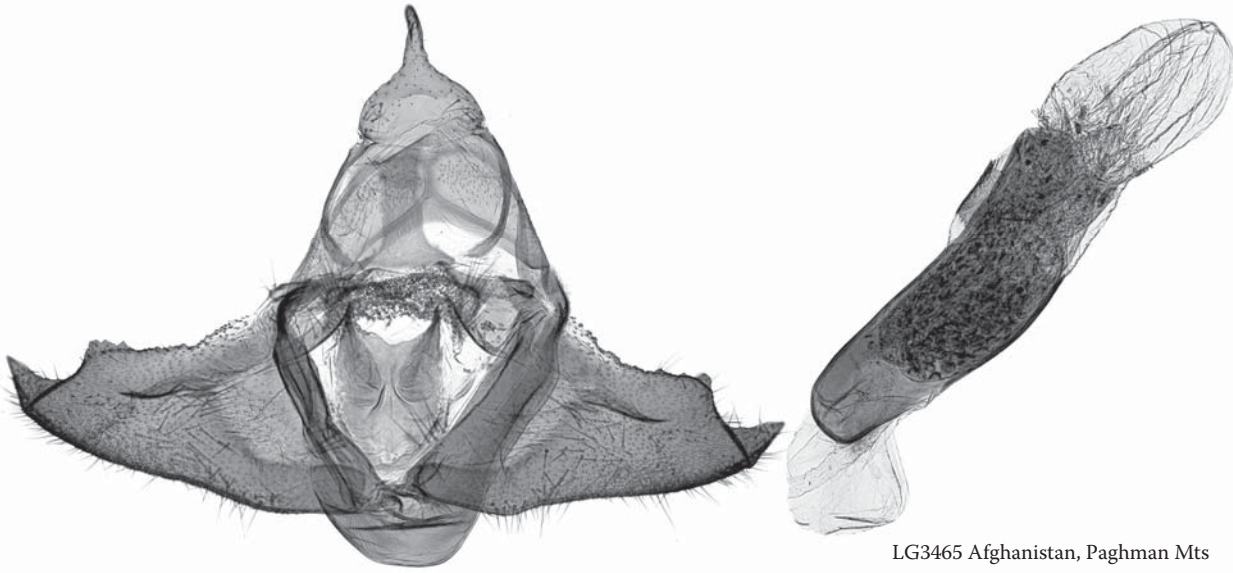


LG3526 Afghanistan, Paghman Mts

Gen. fig. 3. *Scotopteryx nasifera* (Warren, 1888)

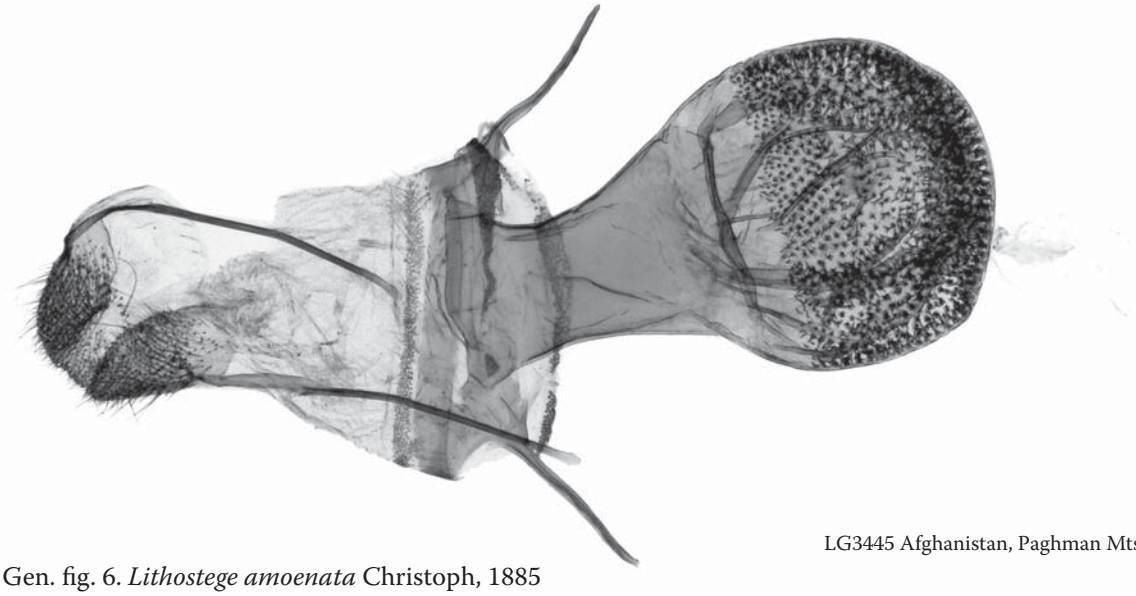
LG3527 Afghanistan, Paghman Mts

Gen. fig. 4. *Scotopteryx nasifera* (Warren, 1888)



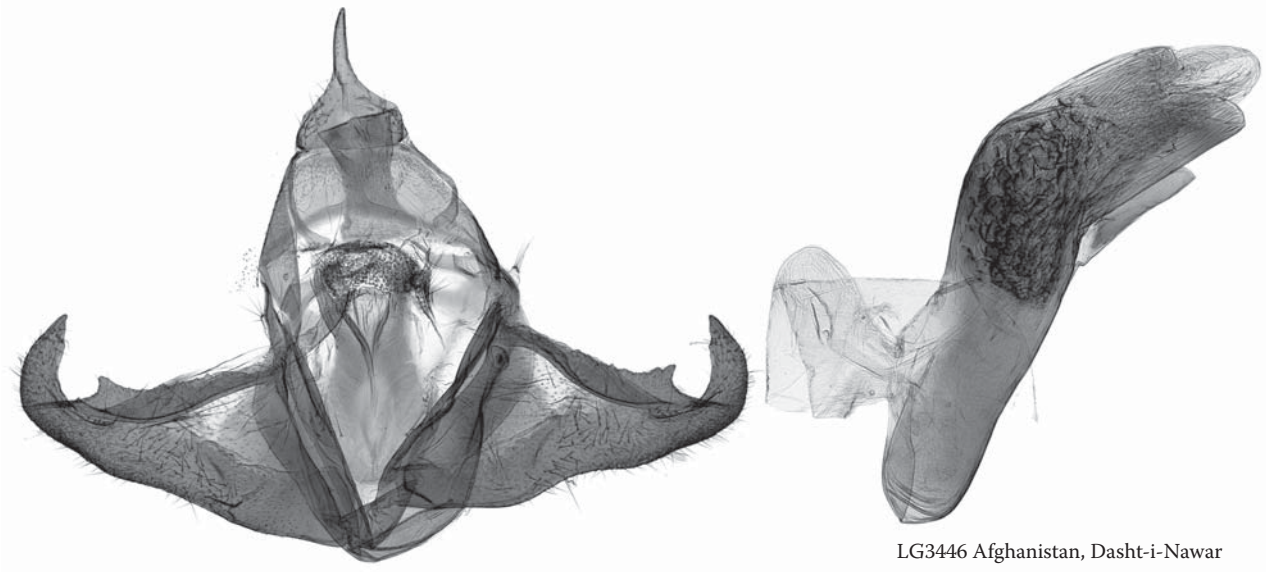
LG3465 Afghanistan, Paghman Mts

Gen. fig. 5. *Lithostege amoenata* Christoph, 1885



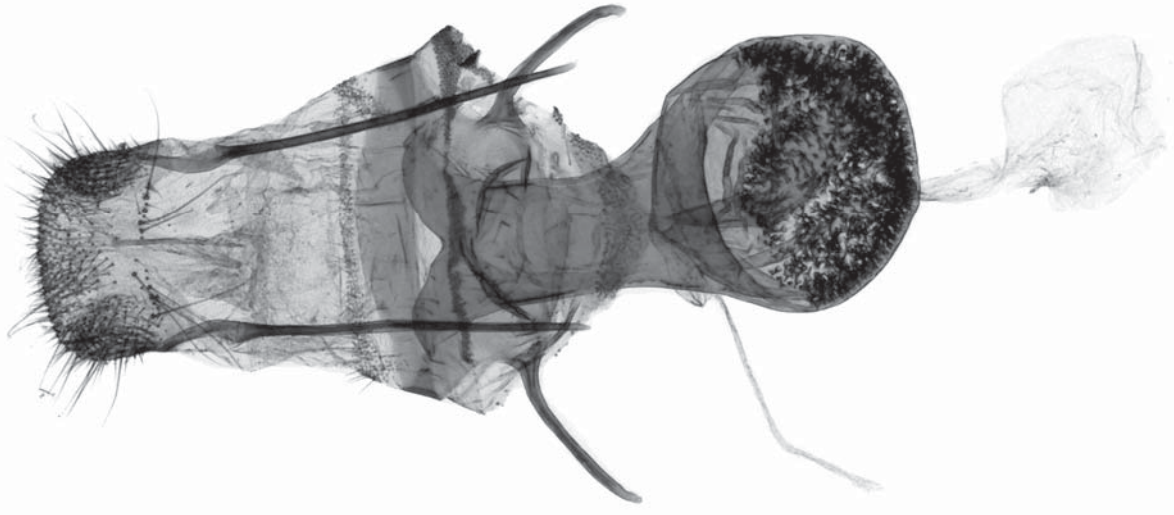
LG3445 Afghanistan, Paghman Mts

Gen. fig. 6. *Lithostege amoenata* Christoph, 1885



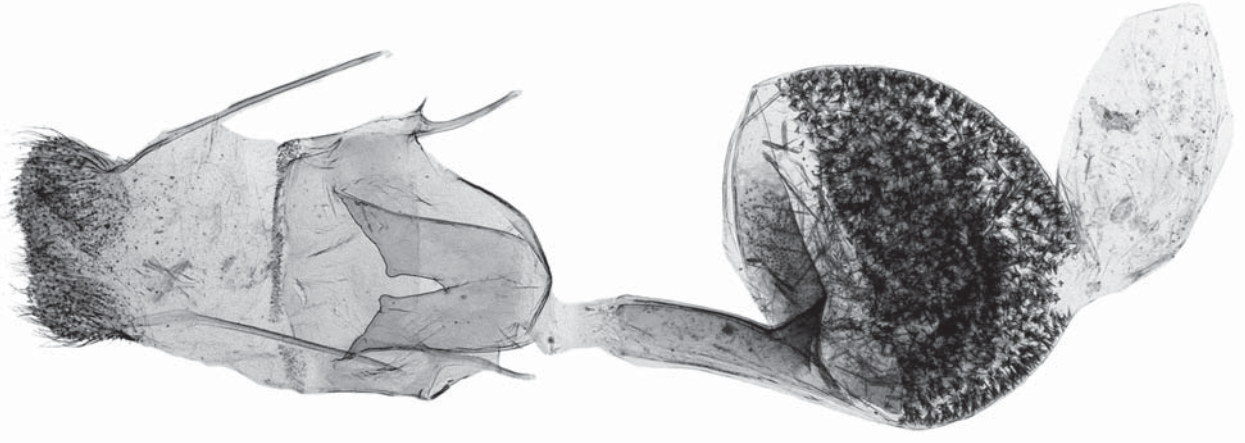
LG3446 Afghanistan, Dasht-i-Nawar

Gen. fig. 7. *Lithostege amseli* Wiltshire, 1967



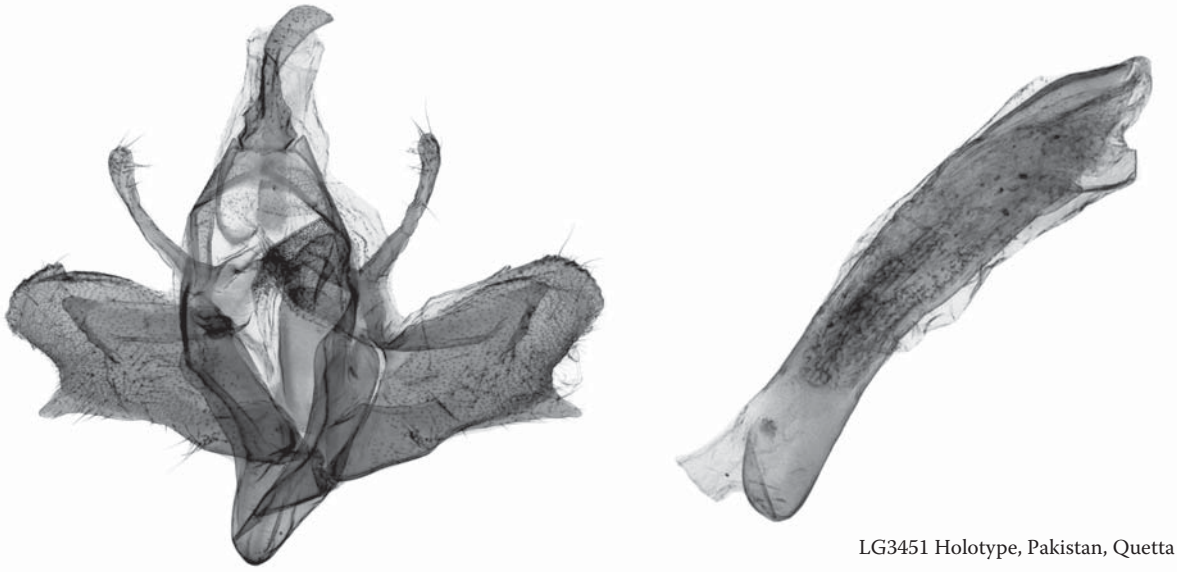
LG3449 Afghanistan, Safed-Koh

Gen. fig. 8. *Lithostege amseli* Wiltshire, 1967



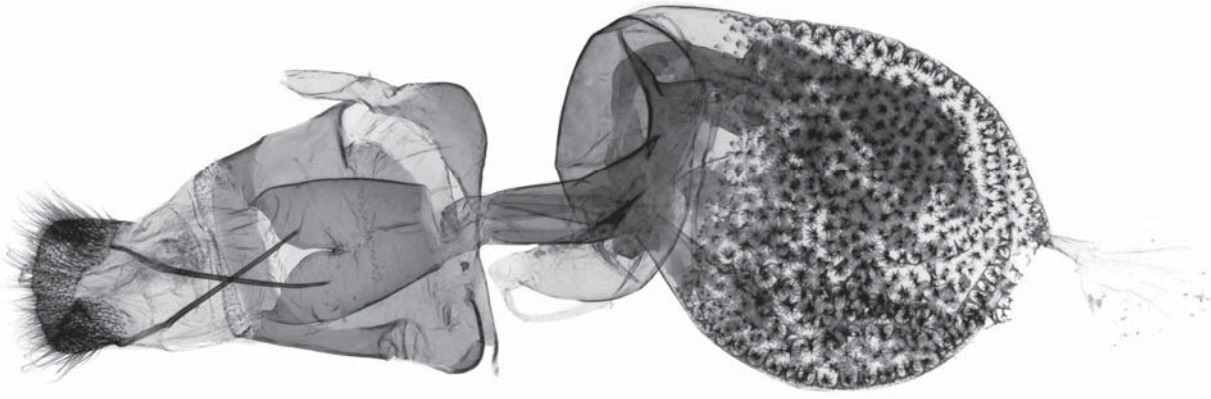
NHMW15877 Afghanistan, Paghman Mts

Gen. fig. 9. *Lithostege hreblayi* Rajaei & Viidalepp, 2011



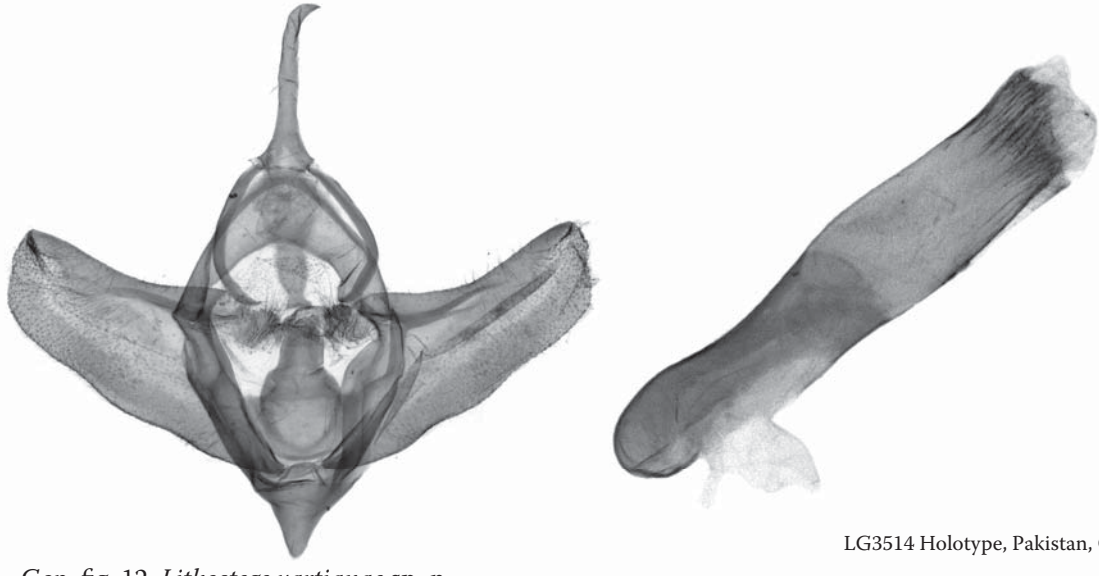
LG3451 Holotype, Pakistan, Quetta

Gen. fig. 10. *Lithostege rufovirgata* **sp. n.**



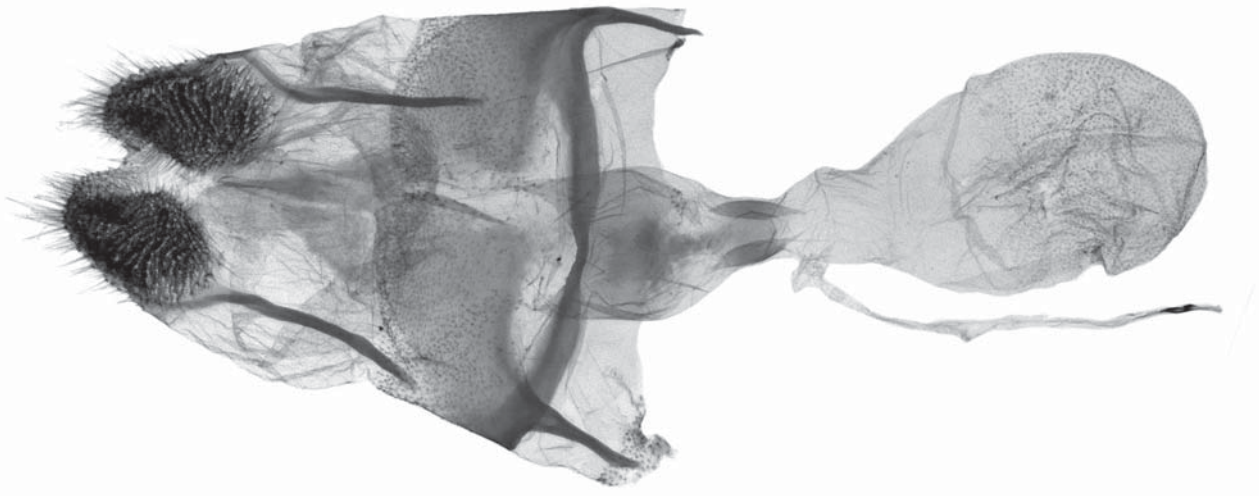
LG3450 Holotype, Pakistan, Quetta

Gen. fig. 11. *Lithostege wiltshirei* **sp. n.**



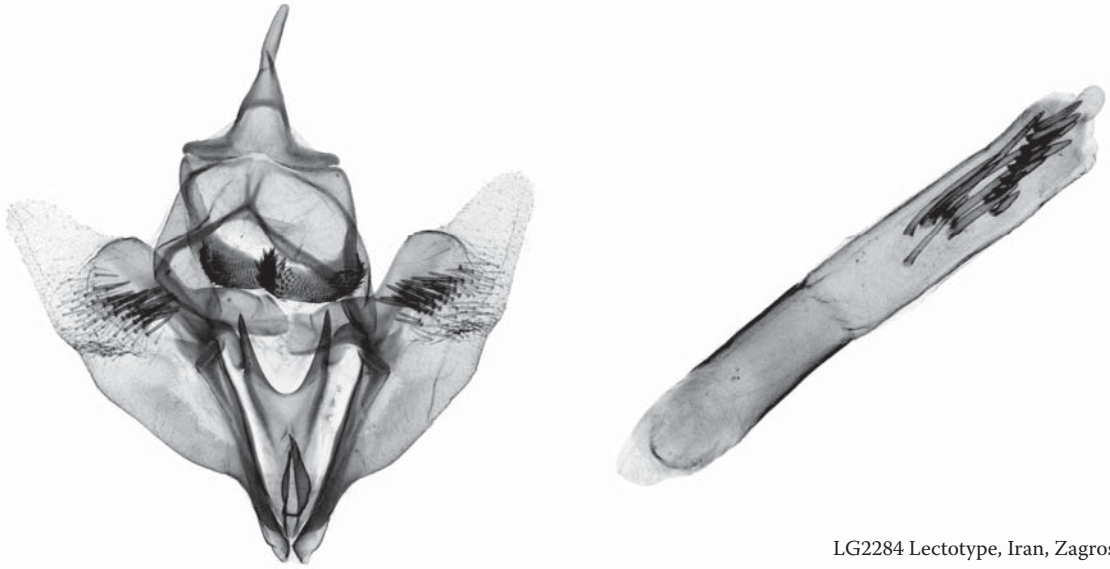
LG3514 Holotype, Pakistan, Quetta

Gen. fig. 12. *Lithostege vartianae* **sp. n.**



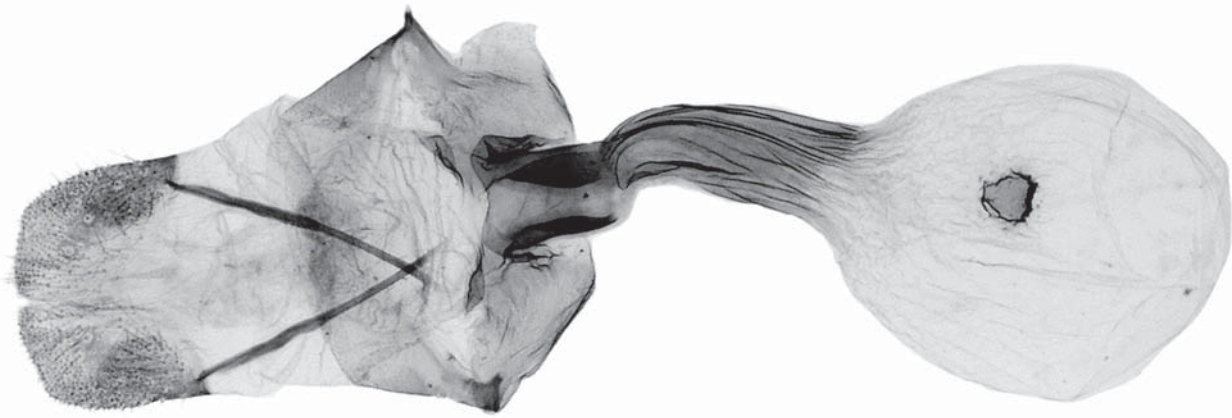
LG3512 Paratype, Pakistan, Quetta

Gen. fig. 13. *Lithostege vartianae* **sp. n.**



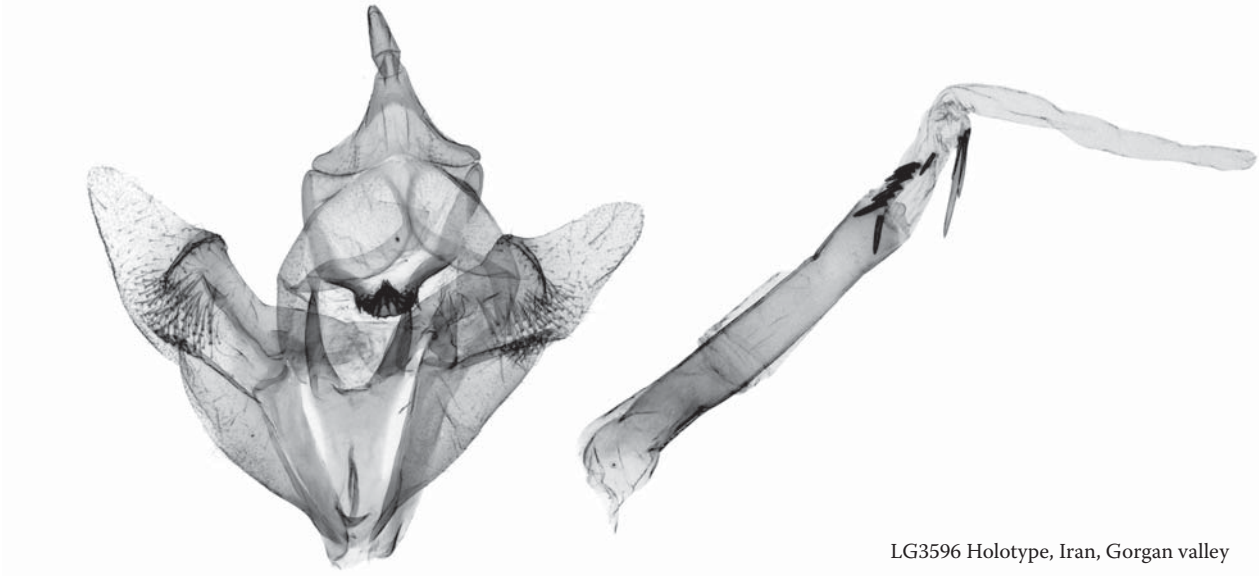
LG2284 Lectotype, Iran, Zagros Mts

Gen. fig. 14. *Ennomos quercaria olivaria* Brandt, 1938



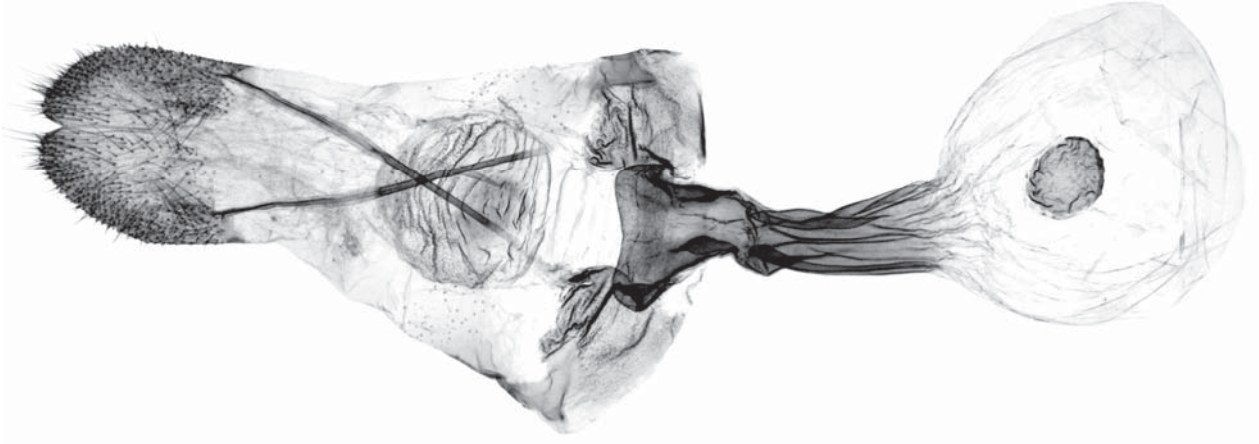
LG2283 Paralectotype, Iran, Zagros Mts

Gen. fig. 15. *Ennomos quercaria olivaria* Brandt, 1938



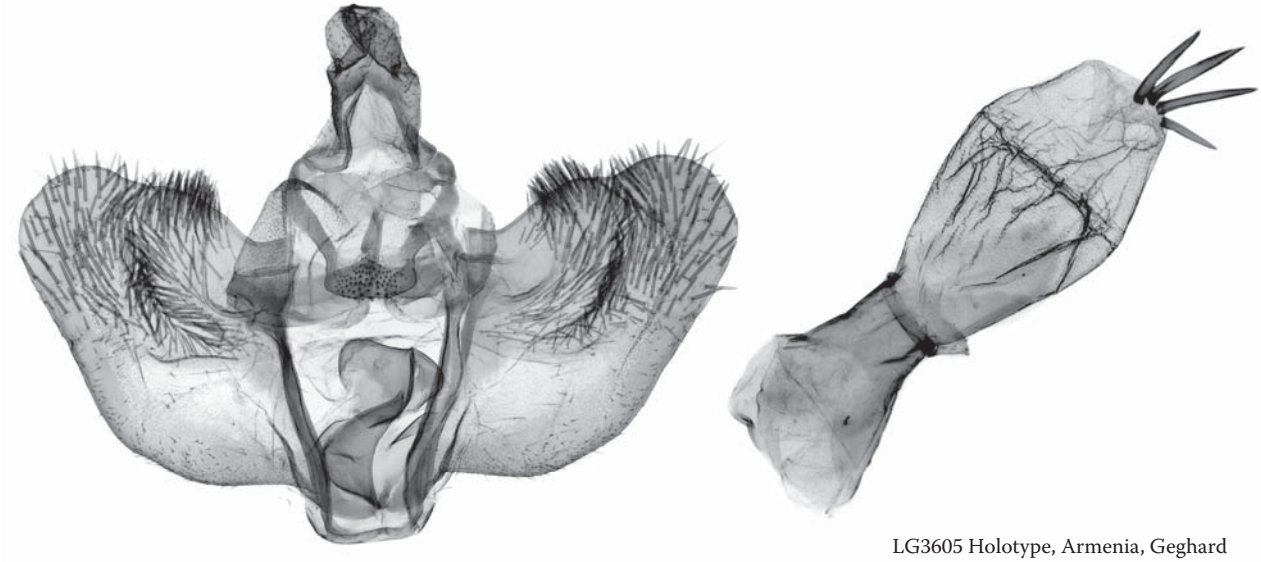
LG3596 Holotype, Iran, Gorgan valley

Gen. fig. 16. *Ennomos vartianae* **sp. n.**



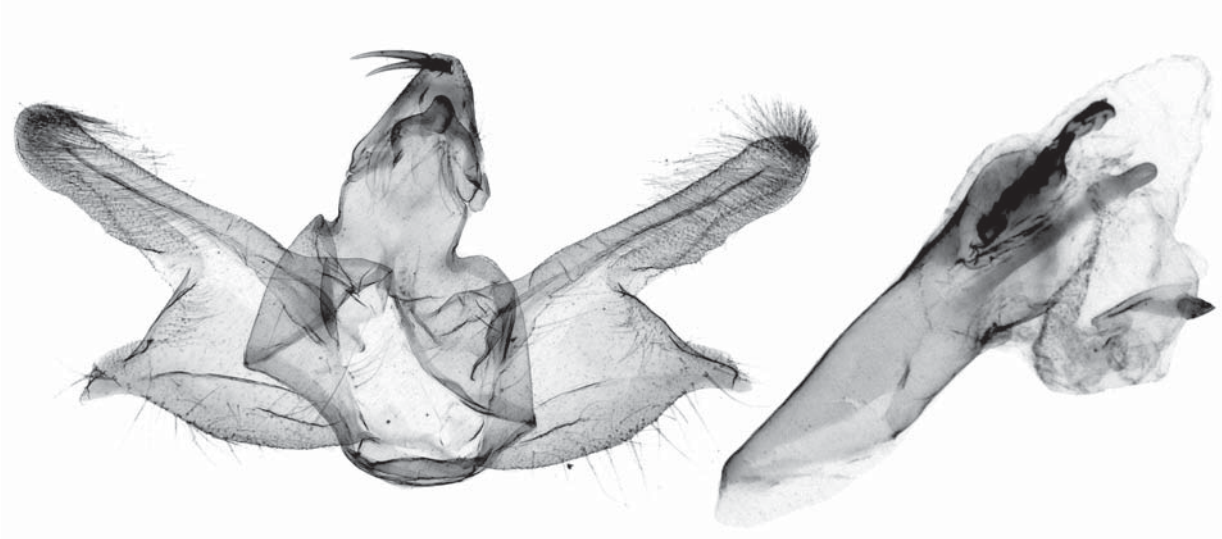
LG3696 Paratype, Turkmenistan, Kopet-Dagh

Gen. fig. 17. *Ennomos vartianae* **sp. n.**



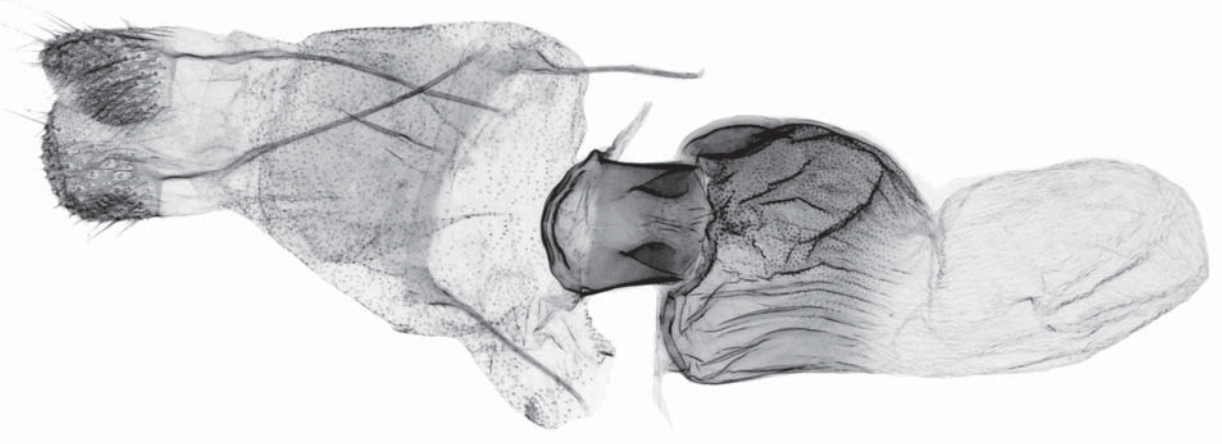
LG3605 Holotype, Armenia, Geghard

Gen. fig. 18. *Ennomos kasyi* **sp. n.**



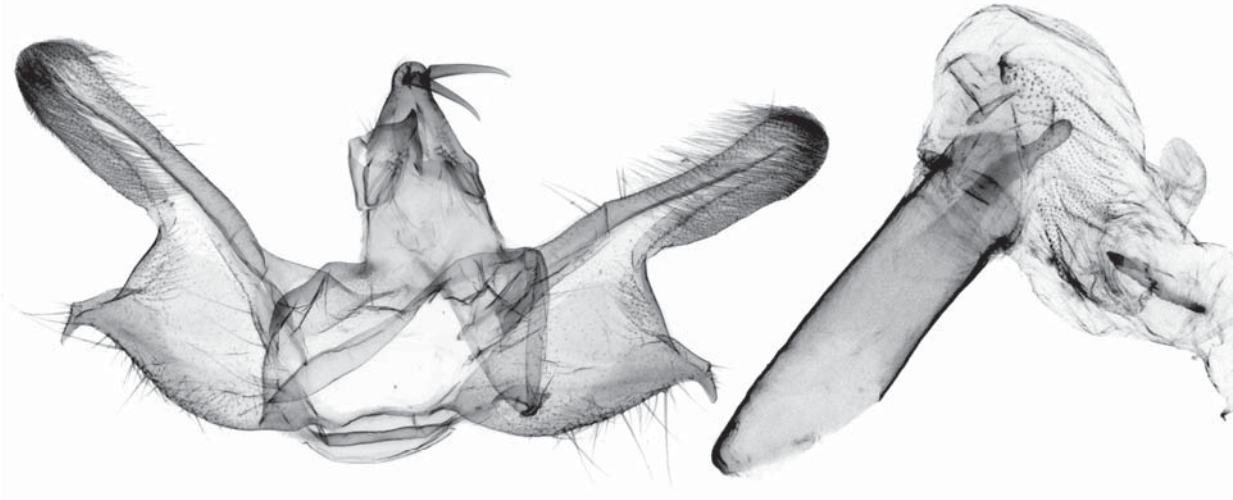
LG3651 France, Camargue

Gen. fig. 19. *Chiasmia aestimaria* (Hübner, 1809)



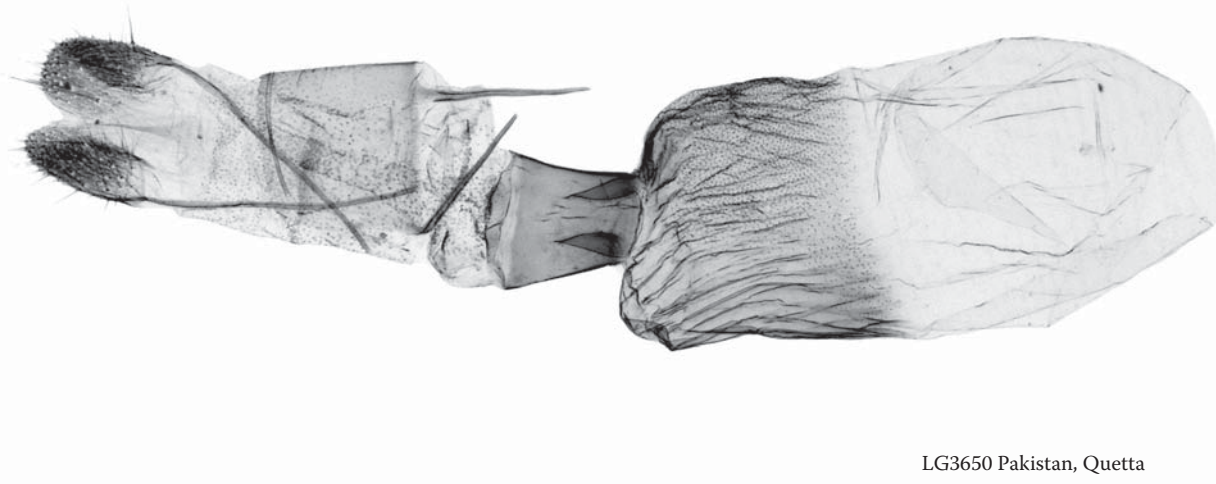
LG3652 France, Camargue

Gen. fig. 20. *Chiasmia aestimaria* (Hübner, 1809)



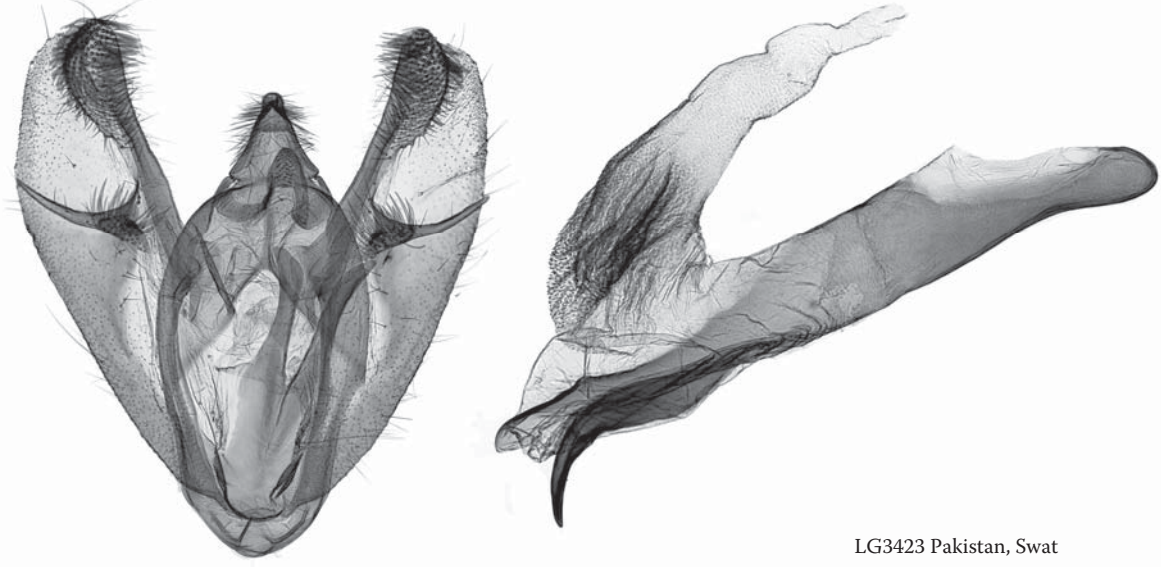
LG3649 Iran, Bandar Abbas

Gen. fig. 21. *Chiasmia sareptanaria* (Staudinger, 1871)



LG3650 Pakistan, Quetta

Gen. fig. 22. *Chiasmia sareptanaria* (Staudinger, 1871)



LG3423 Pakistan, Swat

Gen. fig. 23. *Alcis granitaria* (Moore, 1888)

LG3424 Pakistan, Swat

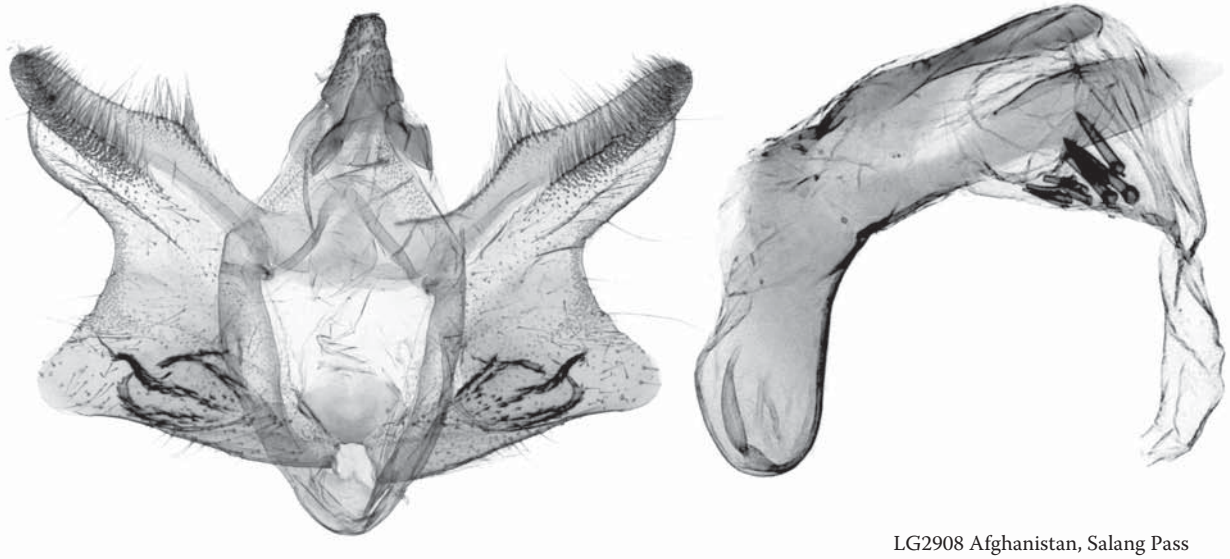
Gen. fig. 24. *Alcis granitaria* (Moore, 1888)

LG3425 Paratype, Afghanistan,Paghman

Gen. fig. 25. *Alcis klapperichi* Wiltshire, 1967

LG3426 Paratype, Afghanistan,Paghman

Gen. fig. 26. *Alcis klapperichi* Wiltshire, 1967

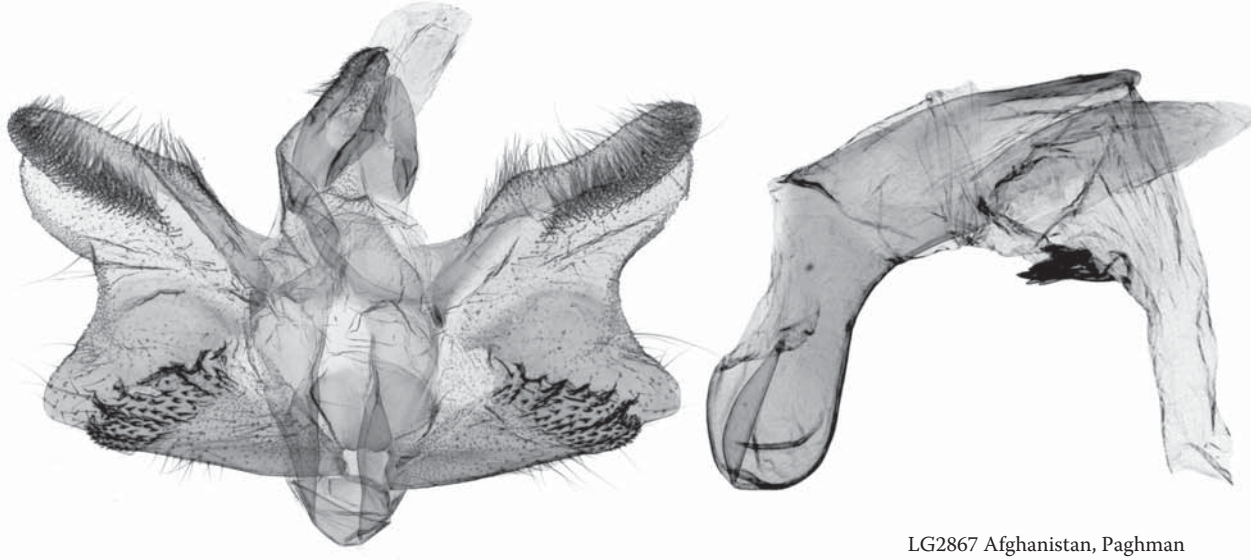


LG2908 Afghanistan, Salang Pass

Gen. fig. 27. *Gnophos* sp. near *nimbata* 1

LG2910 Afghanistan, Salang Pass

Gen. fig. 28. *Gnophos* sp. near *nimbata* 1

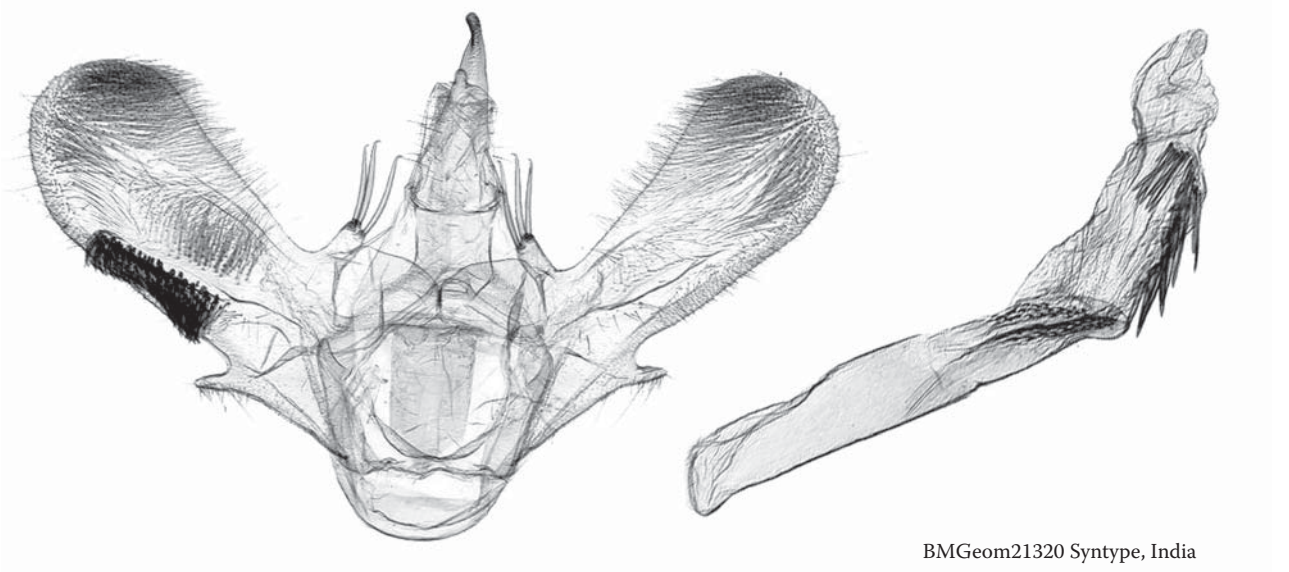


LG2867 Afghanistan, Paghman

Gen. fig. 29. *Gnophos* sp. near *nimbata* 2

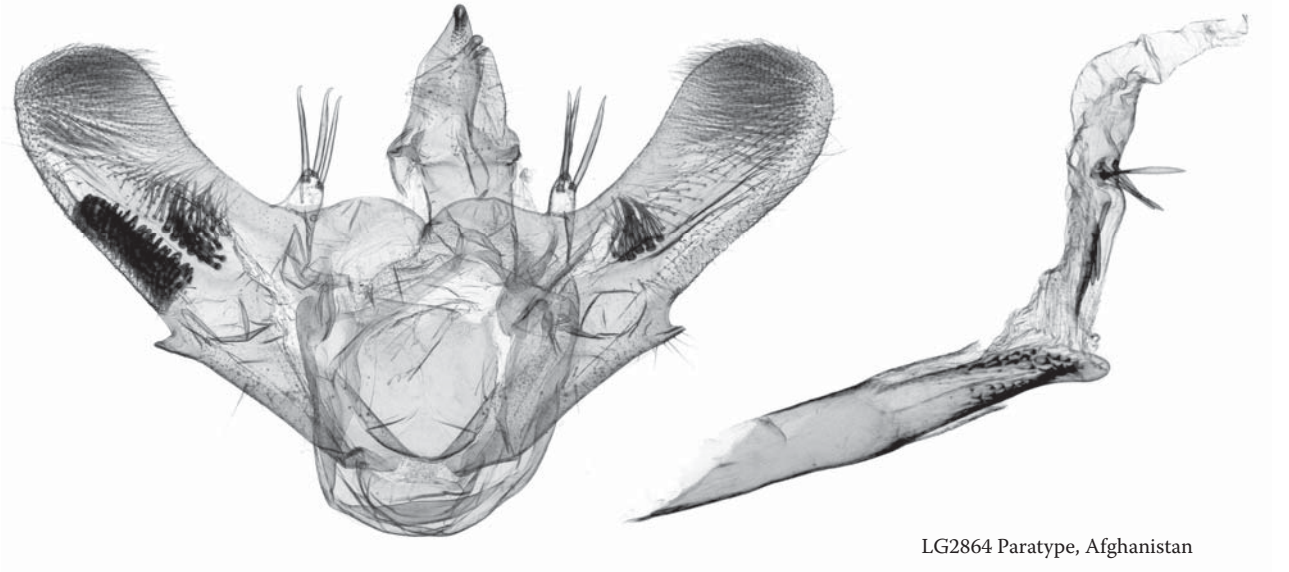
LG2907 Afghanistan, Paghman

Gen. fig. 30. *Gnophos* sp. near *nimbata* 2



BMGeom21320 Syntype, India

Gen. fig. 31. *Ctenognophos eolaria* (Guenée, 1858)



LG2864 Paratype, Afghanistan

Gen. fig. 32. *Ctenognophos anax* Wiltshire, 1966

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COLOUR PLATES

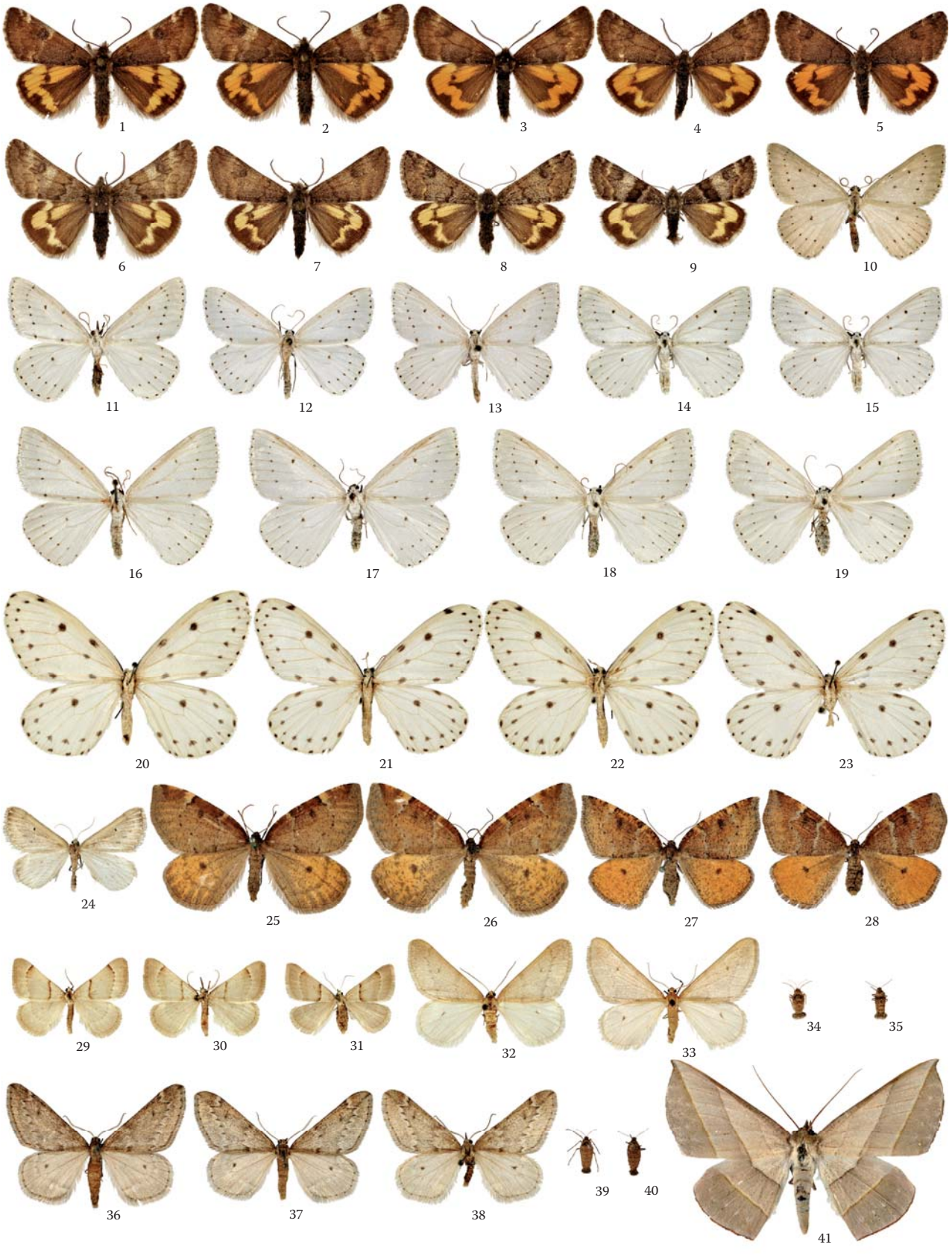

Plate 1: 1–2. *Archiearis parthenias*; 3–5. *Boudinotiana notha*; 6–9. *Boudinotiana puella*; 10. *Orthostixis cinerea*; 11–15. *Orthostixis calcularia*; 16–19. *Orthostixis cribraria*; 20–23. *Naxa seriaria*; 24. *Myinodes shohami*; 25–28. *Epirranthis diversata*; 29–31. *Eumegethes tenuis*; 32–35. *Alsophila aceraria*; 36–40. *Alsophila aescularia*; 41. *Sarcinodes yeni*.

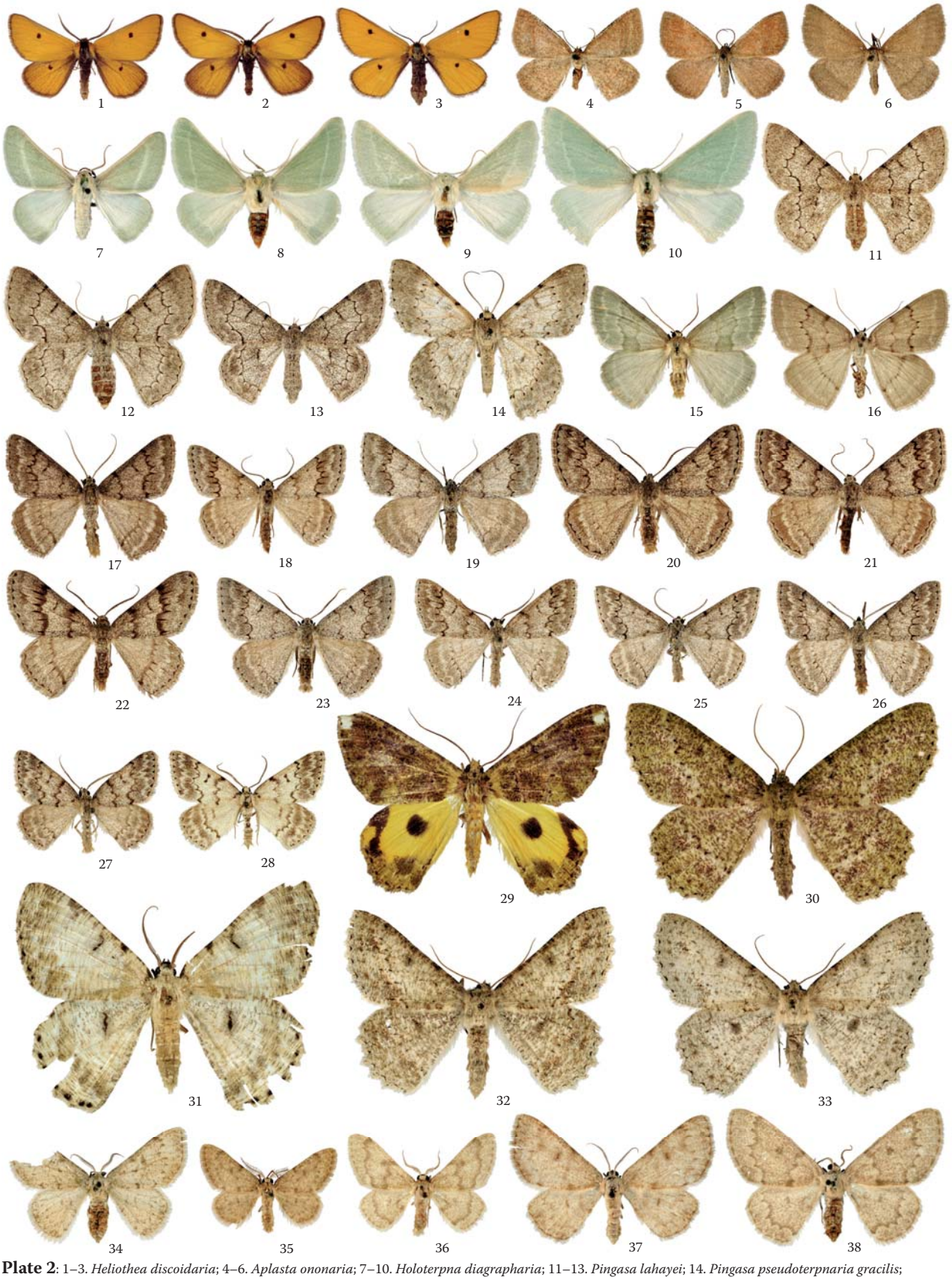

Plate 2: 1–3. *Heliothea discoidaria*; 4–6. *Aplasta ononaria*; 7–10. *Holoterpna diagrapharia*; 11–13. *Pingasa lahayei*; 14. *Pingasa pseudoterpnaria gracilis*; 15–16. *Pseudoterpna pruinata*; 17–19. *Pseudoterpna coronillaria coronillaria*; 20–22. *Pseudoterpna coronillaria algirica*; 23. *Pseudoterpna coronillaria axillaria*; 24–26. *Pseudoterpna coronillaria flamignii*; 27–28. *Pseudoterpna corsicaria*; 29. *Dindicodes crocina*; 30. *Herochroma usneata*; 31. *Pachista superans*; 32–33. *Herochroma crassipunctata*; 34. *Gnophosema isometra hansoni*; 35–38. *Gnophosema isometra mekrana*.

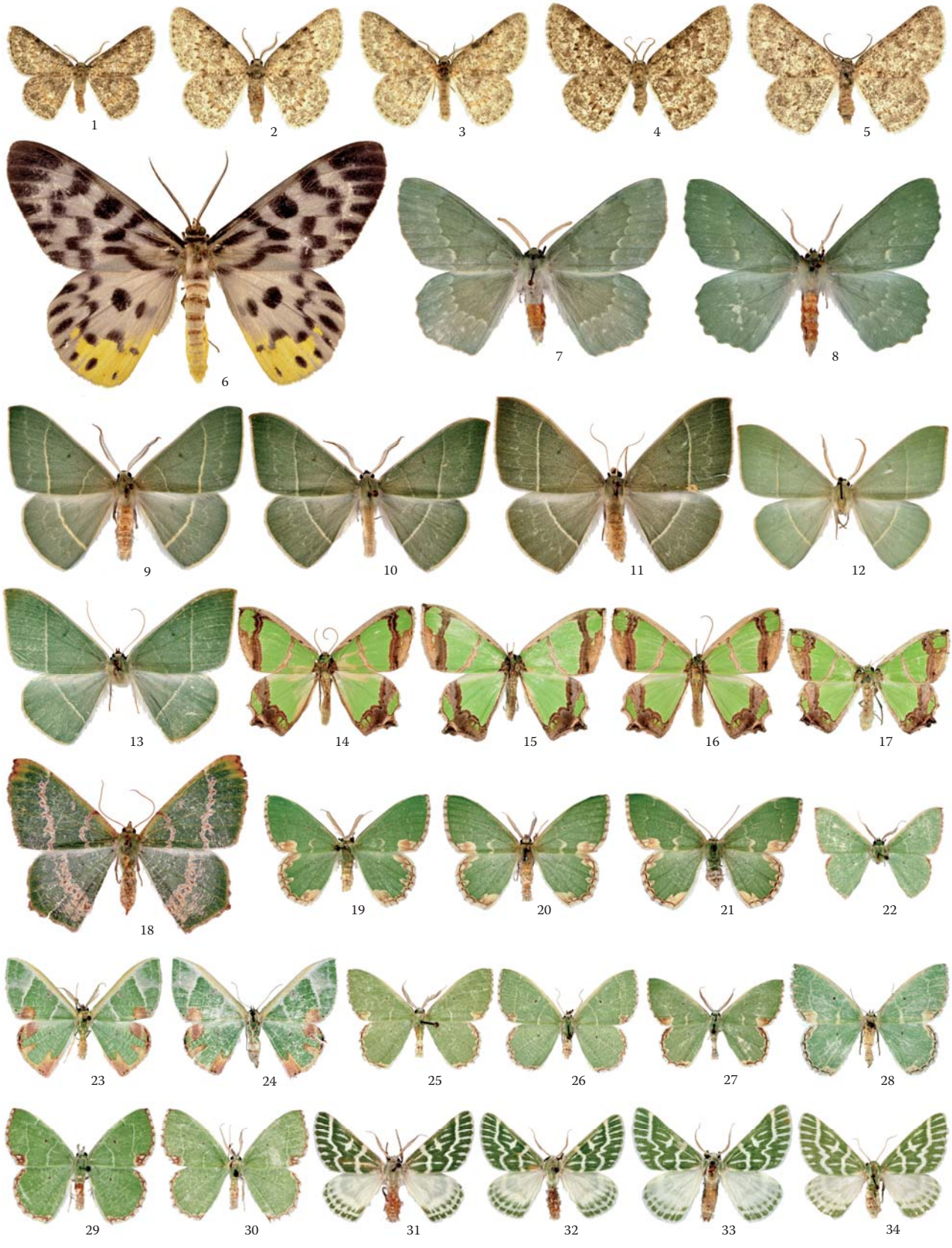

Plate 3: 1–5. *Praegnophosema drypepes*; 6. *Dysphania patula*; 7–8. *Geometra papilionaria*; 9–11. *Geometra flavifrontaria*; 12–13. *Geometra purissima* (12. Holotype); 14–17. *Agathia carissima*; 18. *Chloroglyphica variegata*; 19–21. *Comibaena bajularia*; 22. *Comibaena cassidaria*; 23–24. *Comibaena pictipennis*; 25–28. *Comibaena serrulata*; 29–30. *Proteuchloris neriara*; 31–34. *Thetidia crucigerata*.

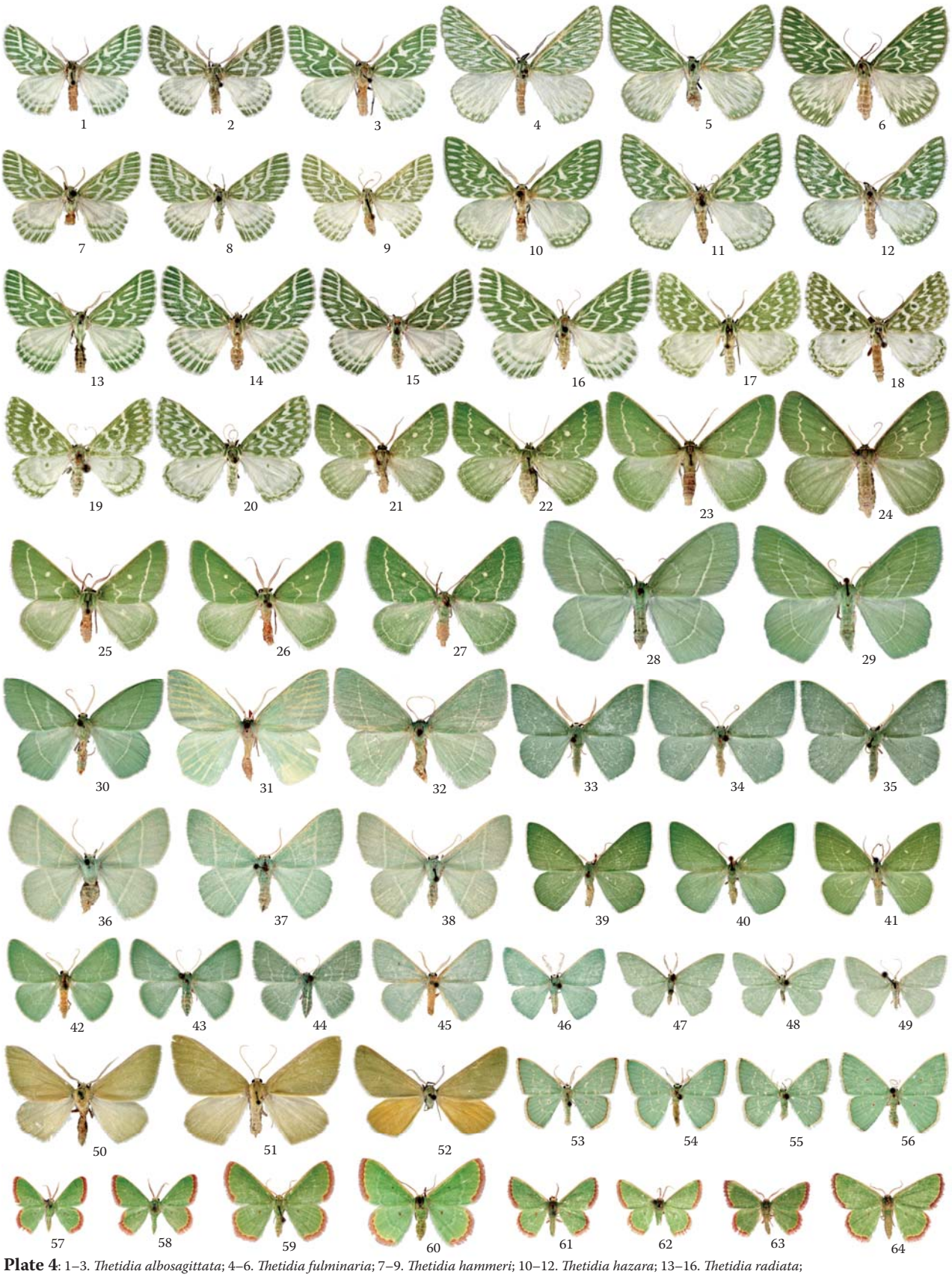

Plate 4: 1–3. *Thetidia albosagittata*; 4–6. *Thetidia fulminaria*; 7–9. *Thetidia hammeri*; 10–12. *Thetidia hazara*; 13–16. *Thetidia radiata*; 17–20. *Thetidia plusiaria*; 21–22. *Thetidia sardinica*; 23–24. *Thetidia smaragdaria*; 25–27. *Thetidia persica*; 28–30. *Hemistola chrysoprasaria chrysoprasaria*; 31–32. *Hemistola chrysoprasaria occidentalis*; 33–35. *Hemistola detracta*; 36–38. *Hemistola directa* (36. Holotype); 39–41. *Hemistola fletcheri*; 42–46. *Xenochlorodes olympiaria*; 47–49. *Xenochlorodes nubigena*; 50–51. *Xenochlorodes albicostaria*; 52. *Xenochlorodes gilvescens* (Holotype); 53–56. *Comostola hypotyphla*; 57–60. *Eucrostes indigenata indigenata*; 61–64. *Eucrostes indigenata lanjeronica*.

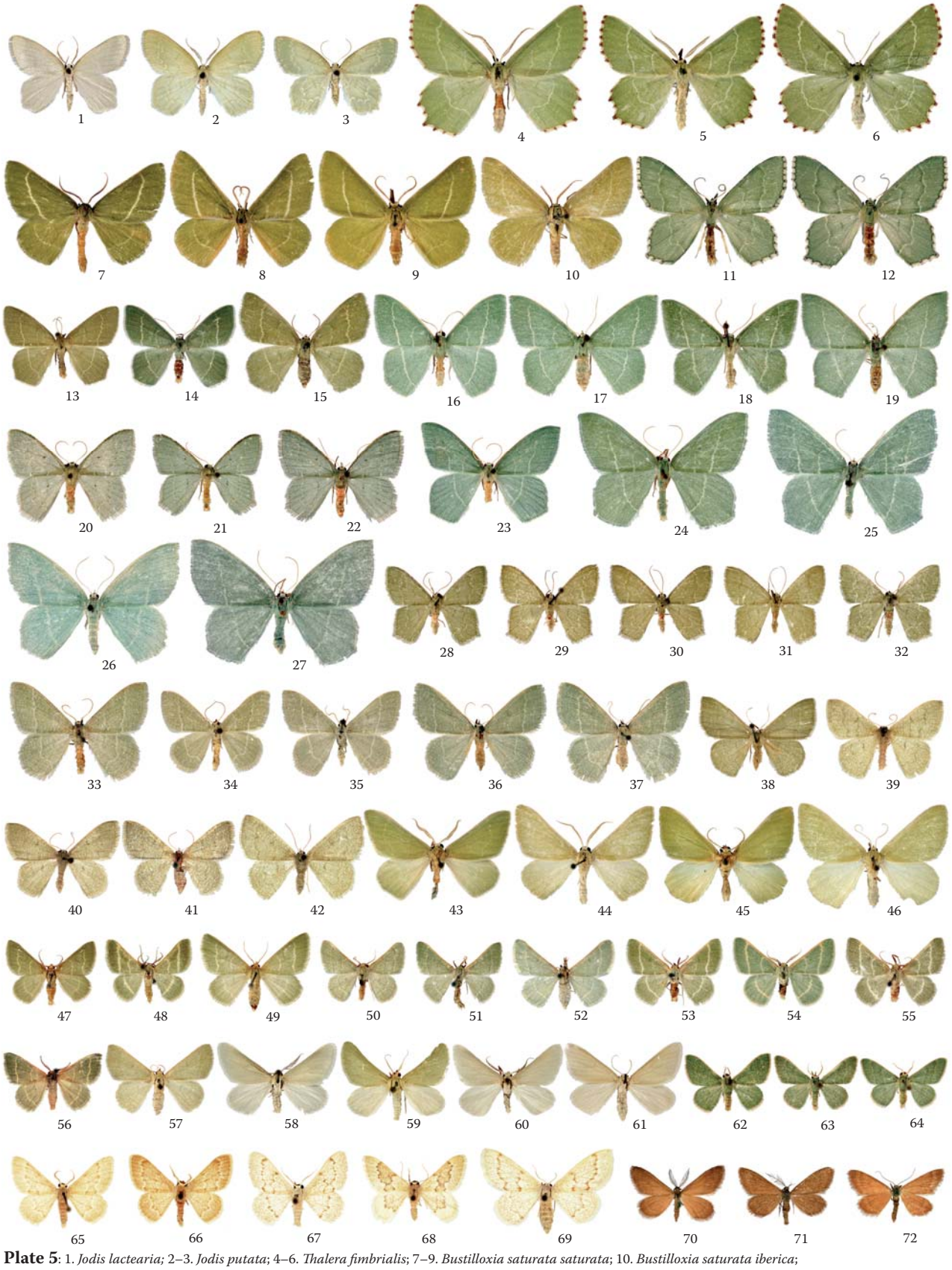

Plate 5: 1. *Jodis lactearia*; 2–3. *Jodis putata*; 4–6. *Thalera fimbrialis*; 7–9. *Bustilloxia saturata saturata*; 10. *Bustilloxia saturata iberica*; 11–12. *Hemithea aestivaria*; 13–15. *Chlorissa viridata*; 16–19. *Chlorissa gelida*; 20–22. *Chlorissa rubripicta*; 23. *Chlorissa asphaleia* (Holotype); 24–27. *Chlorissa pretiosaria*; 28–32. *Chlorissa sp. near distinctaria*; 33–37. *Phaiogramma etruscaria*; 38. *Phaiogramma polemia*; 39–42. *Phaiogramma faustinata*; 43–46. *Heteroculpinia prouti*; 47–49. *Microloxia herbaria herbaria*; 50–52. *Microloxia herbaria indecretata*; 53–55. *Microloxia herbaria advolata*; 56. *Microloxia herbaria virideciliata*; 57. *Microloxia ruficornis*; 58–61. *Microloxia simonyii*; 62–64. *Hemidromodes robusta*; 65–69. *Hemidromodes sabulifera*; 70–72. *Anthometra plumularia*.

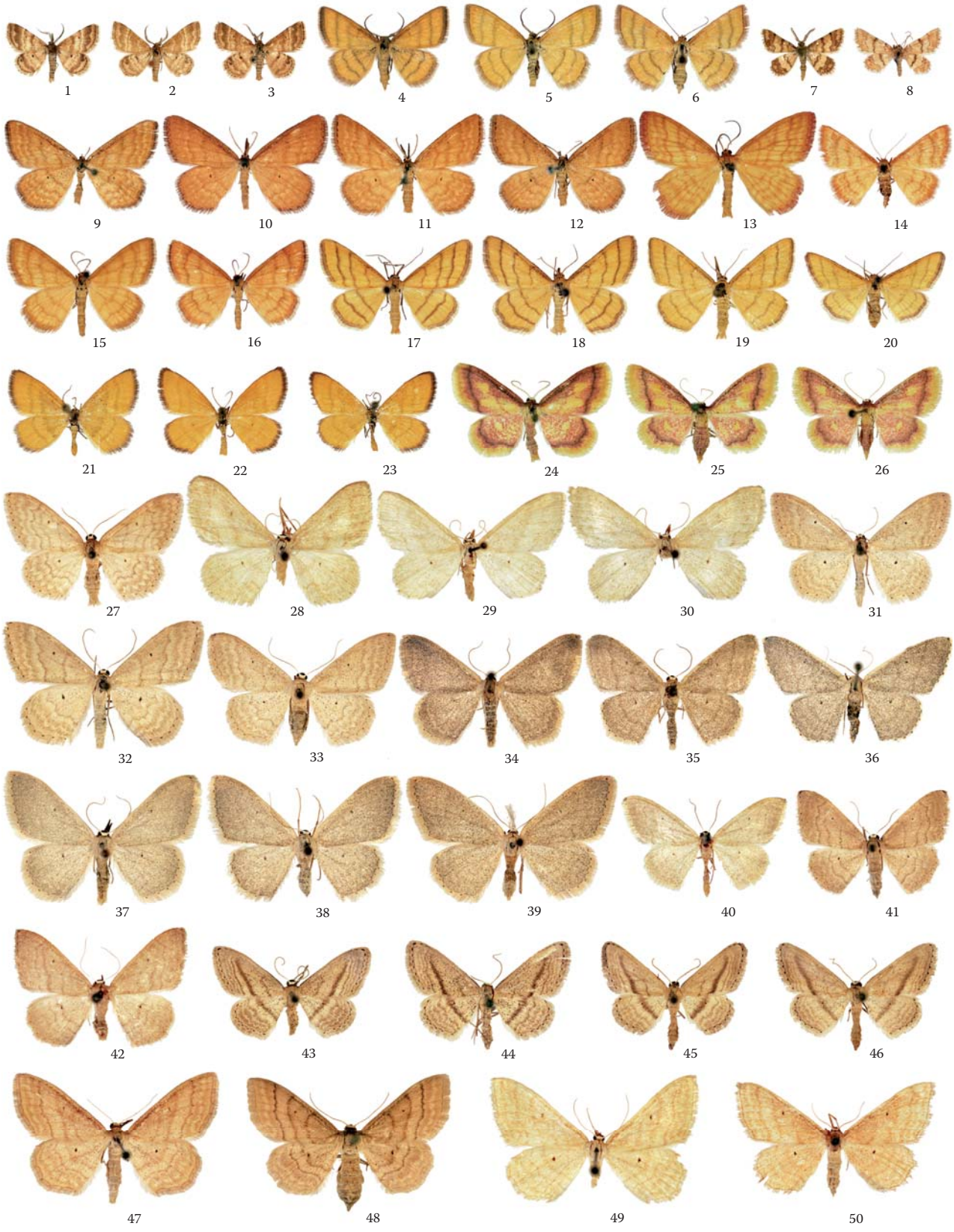

Plate 6 (1,5 x magnification): 1–3. *Emmiltis pygmaearia*; 4–6. *Cleta filacearia*; 7–8. *Cleta ramosaria*; 9–12. *Idaea serpentata*; 13. *Idaea numidaria*; 14–16. *Idaea luteolaria*; 17–20. *Idaea aureolaria*; 21–23. *Idaea flaveolaria*; 24–26. *Idaea muricata*; 27. *Idaea determinata*; 28–30. *Idaea maskina* (28. Holotype); 31–33. *Idaea litigiosaria*; 34–36. *Idaea lusohispanica*; 37–39. *Idaea lambessata*; 40–42. *Idaea sardoniata*; 43–44. *Idaea mediaria*; 45–46. *Idaea leipnitzi*; 47–48. *Idaea rufaria rufaria*; 49–50. *Idaea rufaria imami* (49. Holotype).

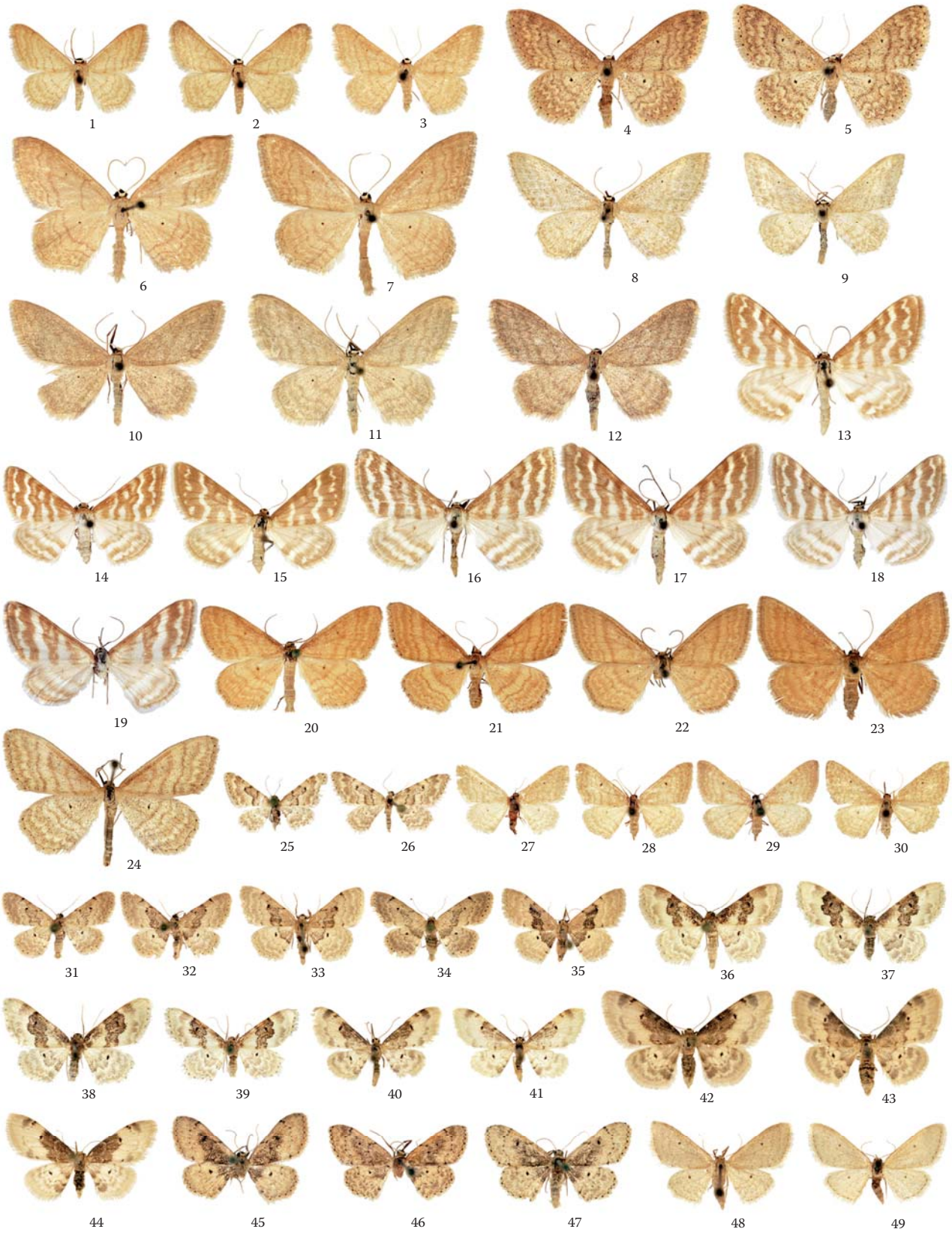

Plate 7 (1,5 x magnification): 1–3. *Idaea peluraria*; 4–5. *Idaea consanguinaria consanguinaria*; 6–7. *Idaea consanguinaria consecrata*; 8–9. *Idaea sp. near consanguinaria consecrata*; 10–12. *Idaea ossiculata*; 13–15. *Idaea sericeata sericeata*; 16–18. *Idaea sericeata calvaria*; 19. *Idaea allardiata*; 20–21. *Idaea ochrata ochrata*; 22–23. *Idaea ochrata albida*; 24. *Idaea macilentaria*; 25–26. *Idaea nevadata*; 27–30. *Idaea alicantaria*; 31–35. *Idaea intermedia*; 36–39. *Idaea rusticata*; 40–44. *Idaea filicata*; 45–47. *Idaea affinitata*; 48–49. *Idaea troglodytaria*.

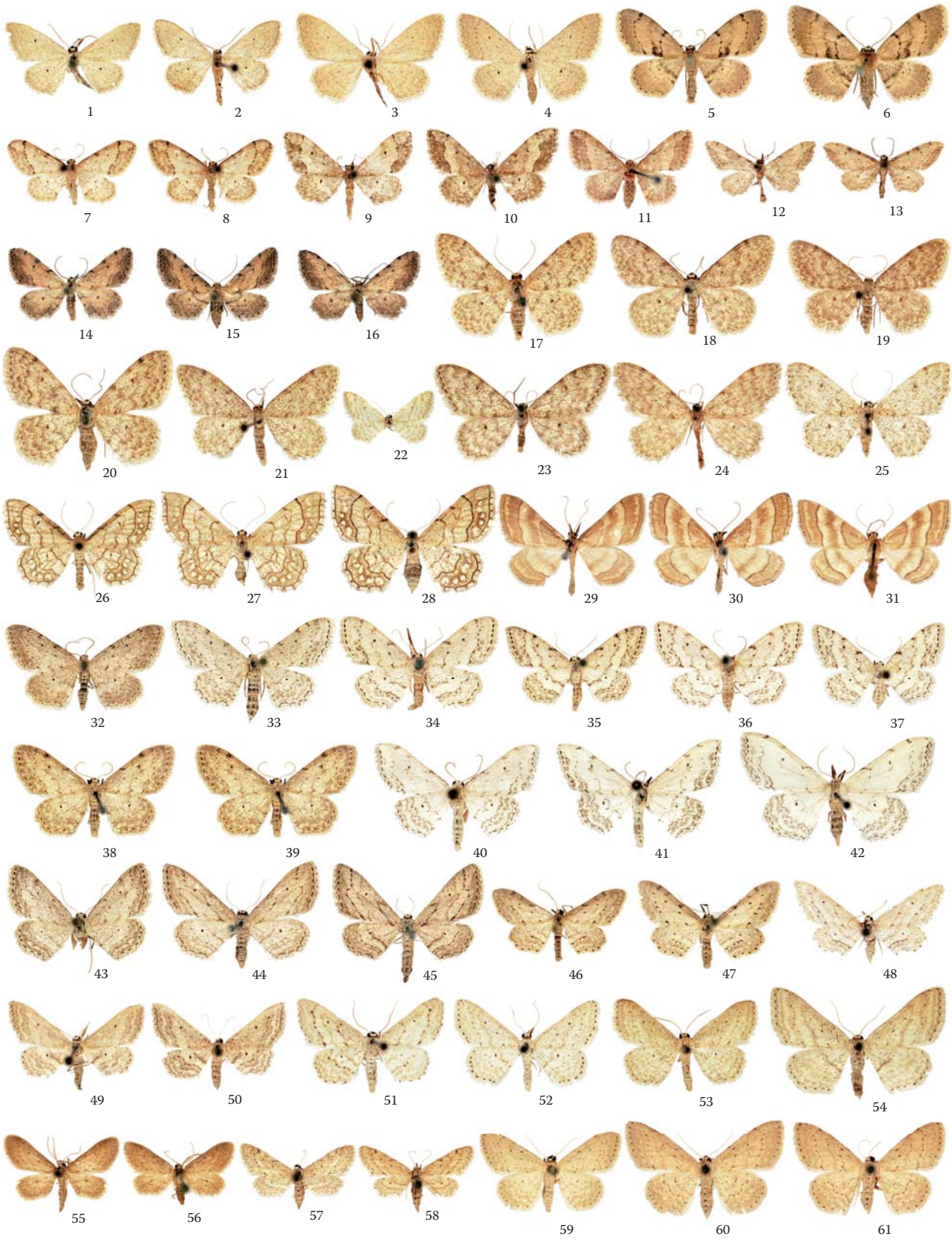

Plate 8 (1,5 x magnification): 1–4. *Idaea barikotensis* (1. Holotype); 5–6. *Idaea laevigata*; 7–11. *Idaea efflorata*; 12–13. *Idaea attenuaria*; 14–16. *Idaea incalcarata*; 17. *Idaea typicata typicata*; 18–19. *Idaea typicata hornigaria*; 20–21. *Idaea alyssumata*; 22. *Idaea micropaga* (Holotype); 23–25. *Idaea dyraria*; 26–28. *Idaea moniliata*; 29–31. *Idaea circuitaria*; 32–33. *Idaea albarracina*; 34–37. *Idaea incisaria praecisa*; 38–39. *Idaea incisaria pulverulenta*; 40–42. *Idaea textaria*; 43–45. *Idaea calunetaria*; 46–48. *Idaea atlantica*; 49–50. *Idaea palmata*; 51–54. *Idaea elongaria*; 55–58. *Idaea abnorma*; 59–61. *Idaea palaestinensis*.

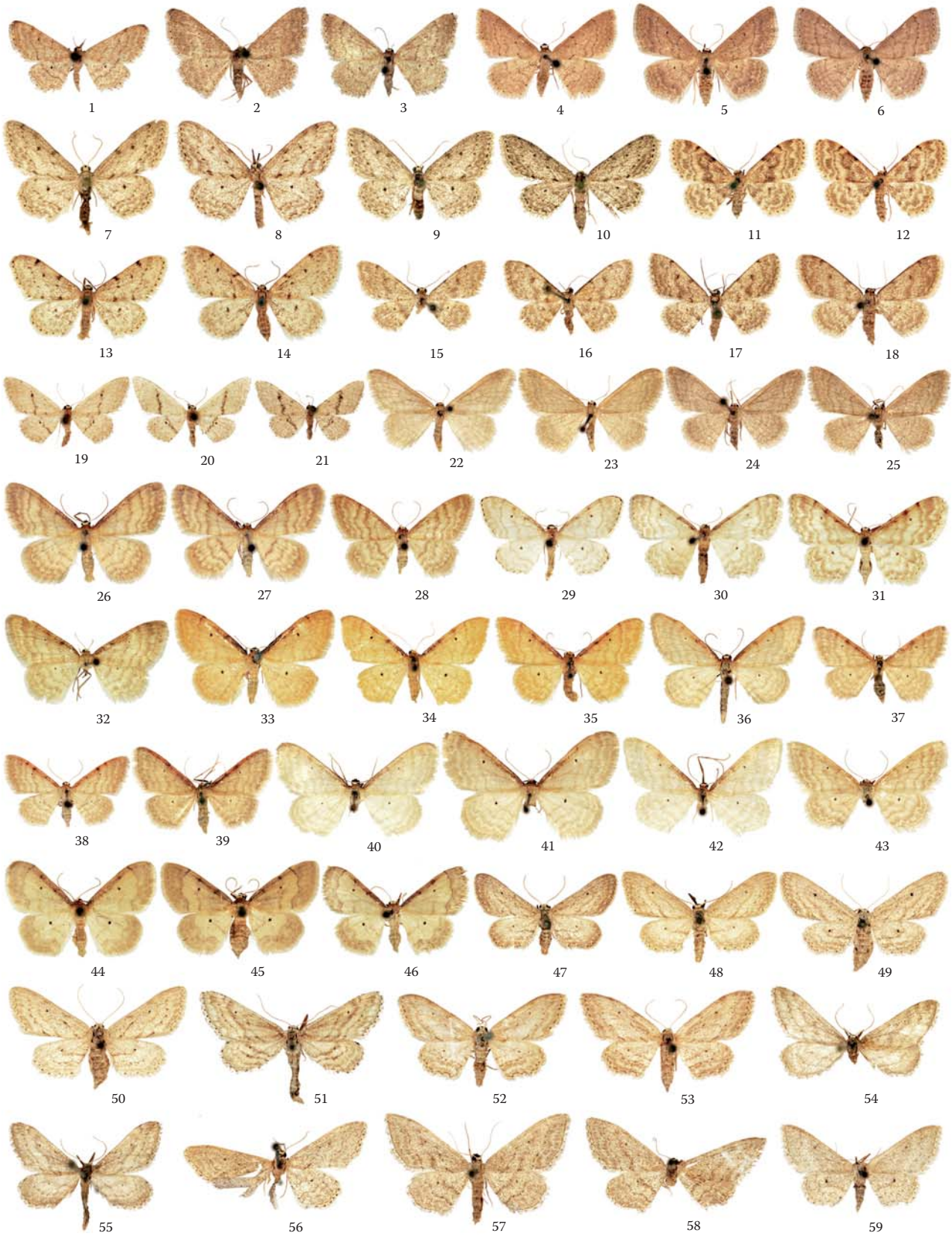

Plate 9 (1,5 x magnification): 1–3. *Idaea obsoletaria lilaceola*; 4–6. *Idaea obsoletaria rufularia*; 7–10. *Idaea obliquaria*; 11–12. *Idaea inquinata inquinata*; 13–14. *Idaea inquinata adherbariata*; 15–18. *Idaea hathor*; 19–21. *Idaea mesodela*; 22–25. *Idaea proclivata*; 26–28. *Idaea dilutaria*; 29–31. *Idaea fuscovenosa*; 32. *Idaea* sp. near *fuscovenosa*; 33–35. *Idaea lutulentaria*; 36–39. *Idaea humiliata*; 40–43. *Idaea bigladiata*; 44–46. *Idaea politaria*; 47–50. *Idaea longaria*; 51. *Idaea* sp. near *longaria*; 52–53. *Idaea mareotica*; 54–55. *Idaea allongata*; 56–59. *Idaea arenophana* (56. Holotype).

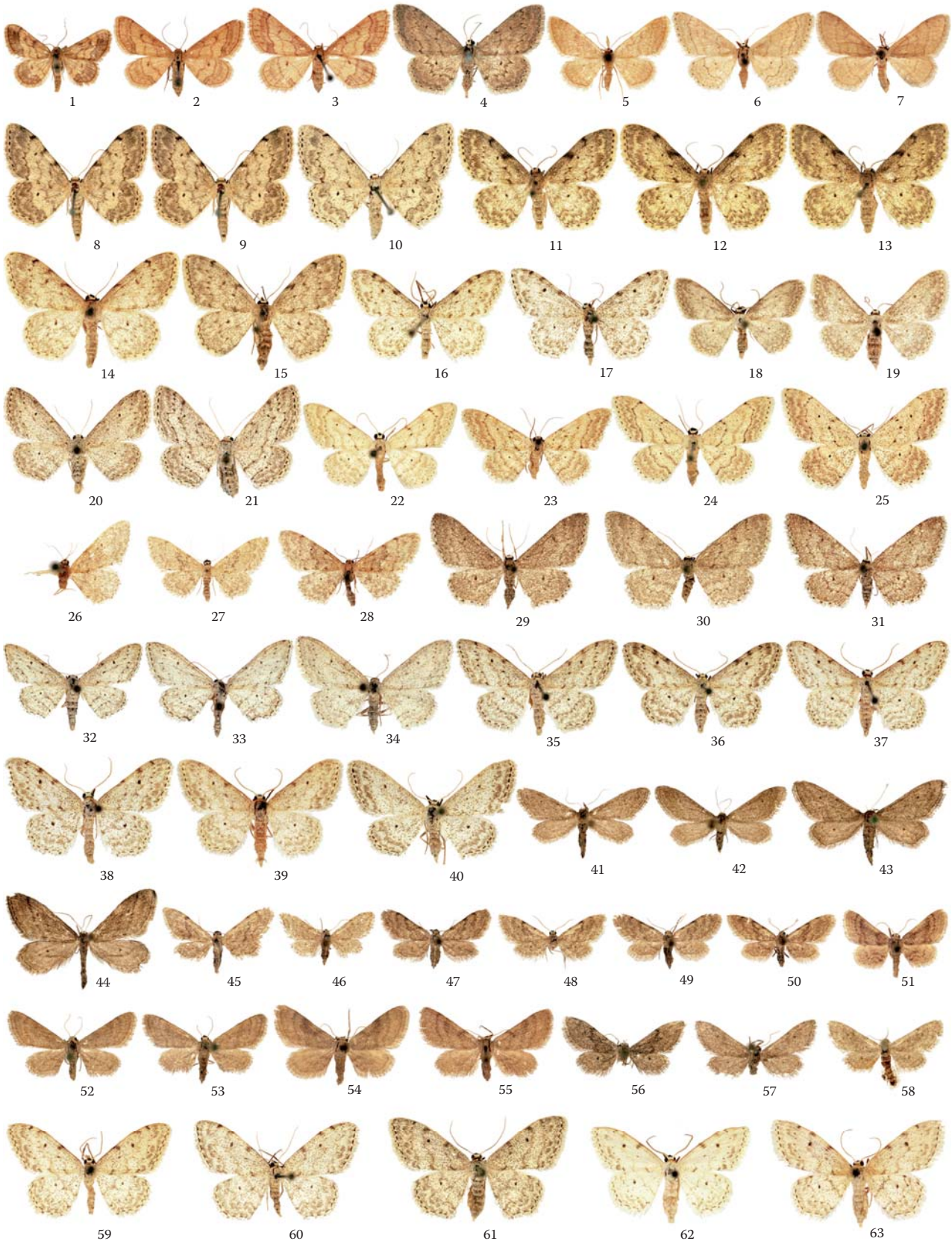

Plate 10 (1,5 x magnification): 1–3. *Idaea manicaria*; 4. *Idaea descitaria*; 5–7. *Idaea forsteri*; 8–10. *Idaea vesubiata*; 11–13. *Idaea libycata*; 14–17. *Idaea consolidata*; 18–19. *Idaea seriata seriata*; 20–21. *Idaea seriata canteneraria*; 22–25. *Idaea persidis*; 26–28. *Idaea macropaga* (26. Holotype); 29–31. *Idaea soldaitisi*; 32–34. *Idaea minuscularia*; 35–37. *Idaea albitorquata albitorquata*; 38–40. *Idaea albitorquata madoniensis*; 41–43. *Idaea carvalhoi*; 44. *Idaea fathmaria*; 45–47. *Idaea illustris*; 48–50. *Idaea microptera*; 51–55. *Idaea mimetes*; 56–58. *Idaea nigrella* (56. Holotype); 59–61. *Idaea camparia camparia*; 62–63. *Idaea camparia sodaliaria*.

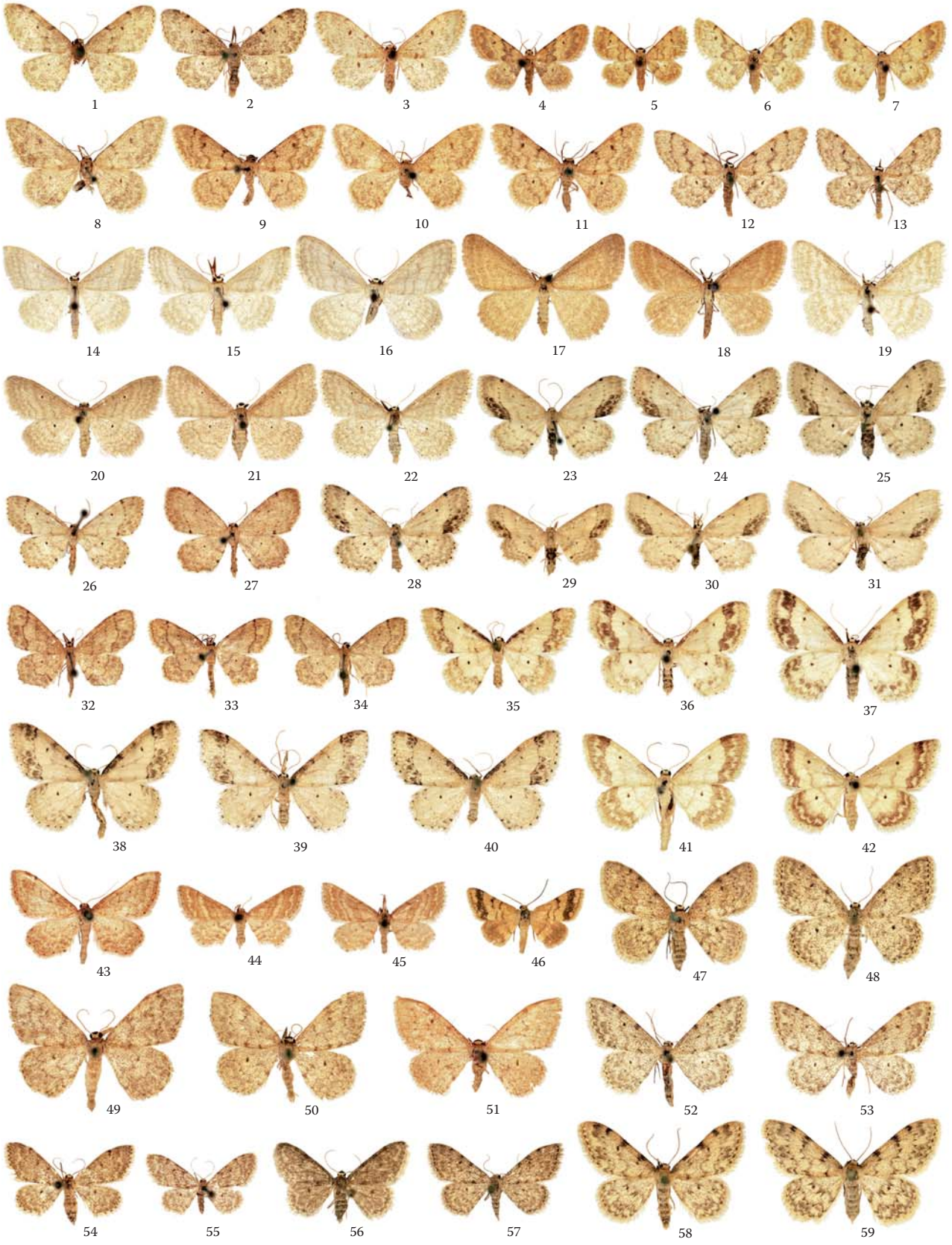

Plate 11 (1,5 x magnification): 1–3. *Idaea saida*; 4–7. *Idaea sanctaria*; 8–11. *Idaea vartianae* (8. Holotype); 12–13. *Idaea* sp. near *volloni*; 14–16. *Idaea subsericeata*; 17–19. *Idaea pallidata*; 20–22. *Idaea sylvestraria*; 23–25. *Idaea dimidiata dimidiata*; 26–29. *Idaea dimidiata antitaurica*; 30–31. *Idaea* sp. near *dimidiata*; 32–34. *Idaea subsaturata*; 35–37. *Idaea trigeminata trigeminata*; 38–40. *Idaea trigeminata tenuirussata*; 41–42. *Idaea biselata*; 43. *Idaea fractilineata fractilineata*; 44–45. *Idaea fractilineata subrufaria*; 46. *Idaea exilaria*; 47–48. *Idaea cervantaria cervantaria*; 49–51. *Idaea cervantaria carneotincta*; 52–53. *Idaea* sp. near *cervantaria*; 54–55. *Idaea vilaflorensis*; 56–57. *Idaea* sp. near *vilaflorensis;* 58–59. *Idaea contiguaria*.

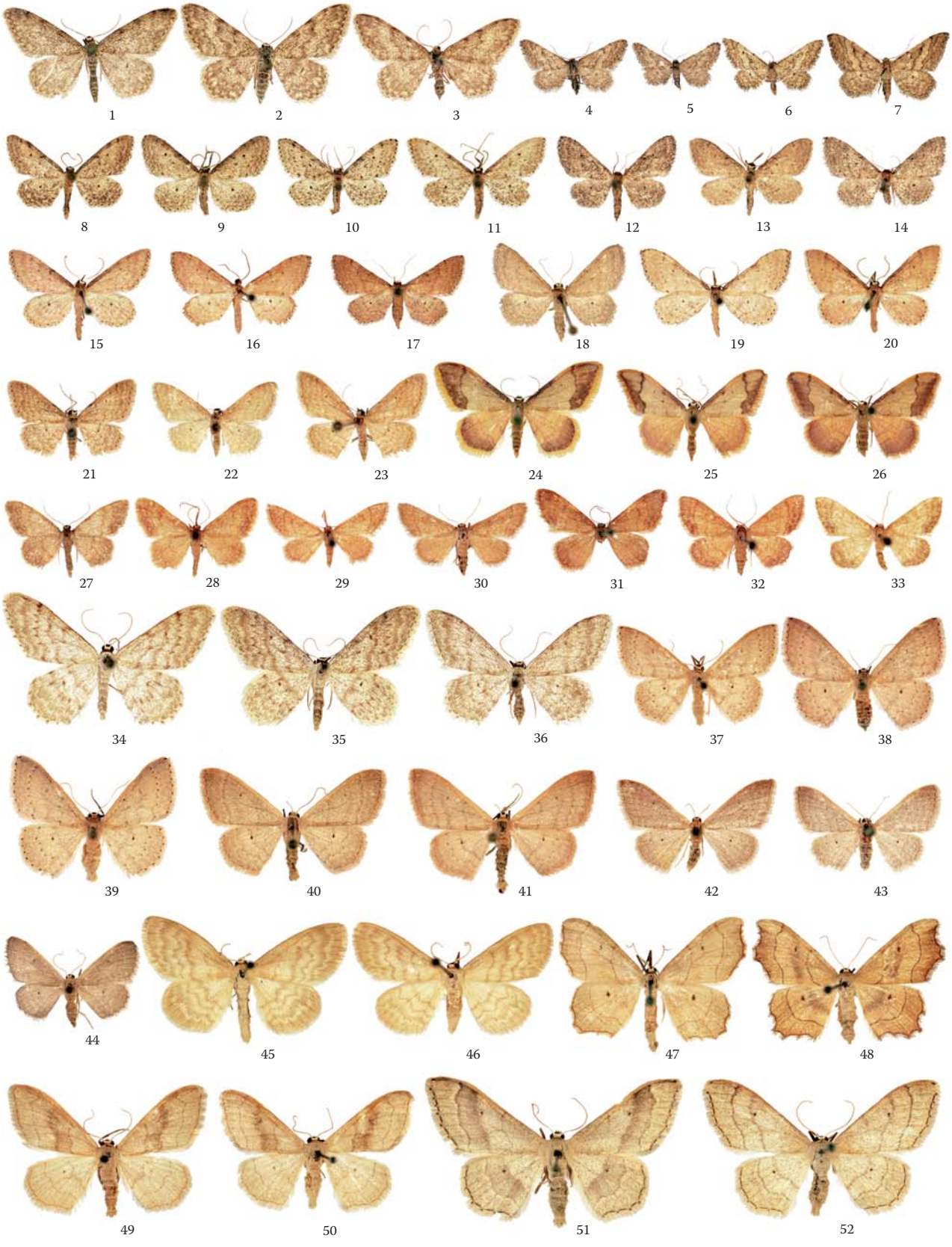

Plate 12 (1,5 x magnification): 1–3. *Idaea rupicolaria*; 4–7. *Idaea deitanaria*; 8–11. *Idaea tineata*; 12–14. *Idaea maronitaria*; 15–18. *Idaea infirmaria infirmaria*; 19. *Idaea infirmaria mitescens*; 20. *Idaea rhodogrammaria*; 21–23. *Idaea charitata*; 24–26. *Idaea ostrinaria*; 27–28. *Idaea capnaria*; 29–30. *Idaea* sp. near *capnaria*; 31–33. *Idaea purpureomarginata*; 34–36. *Idaea metohiensis*; 37–39. *Idaea eugeniata*; 40–43. *Idaea distinctaria*; 44. *Idaea predotaria*; 45–46. *Idaea nitidata*; 47–48. *Idaea emarginata*; 49–50. *Idaea rubraria*; 51–52. *Idaea aversata*.

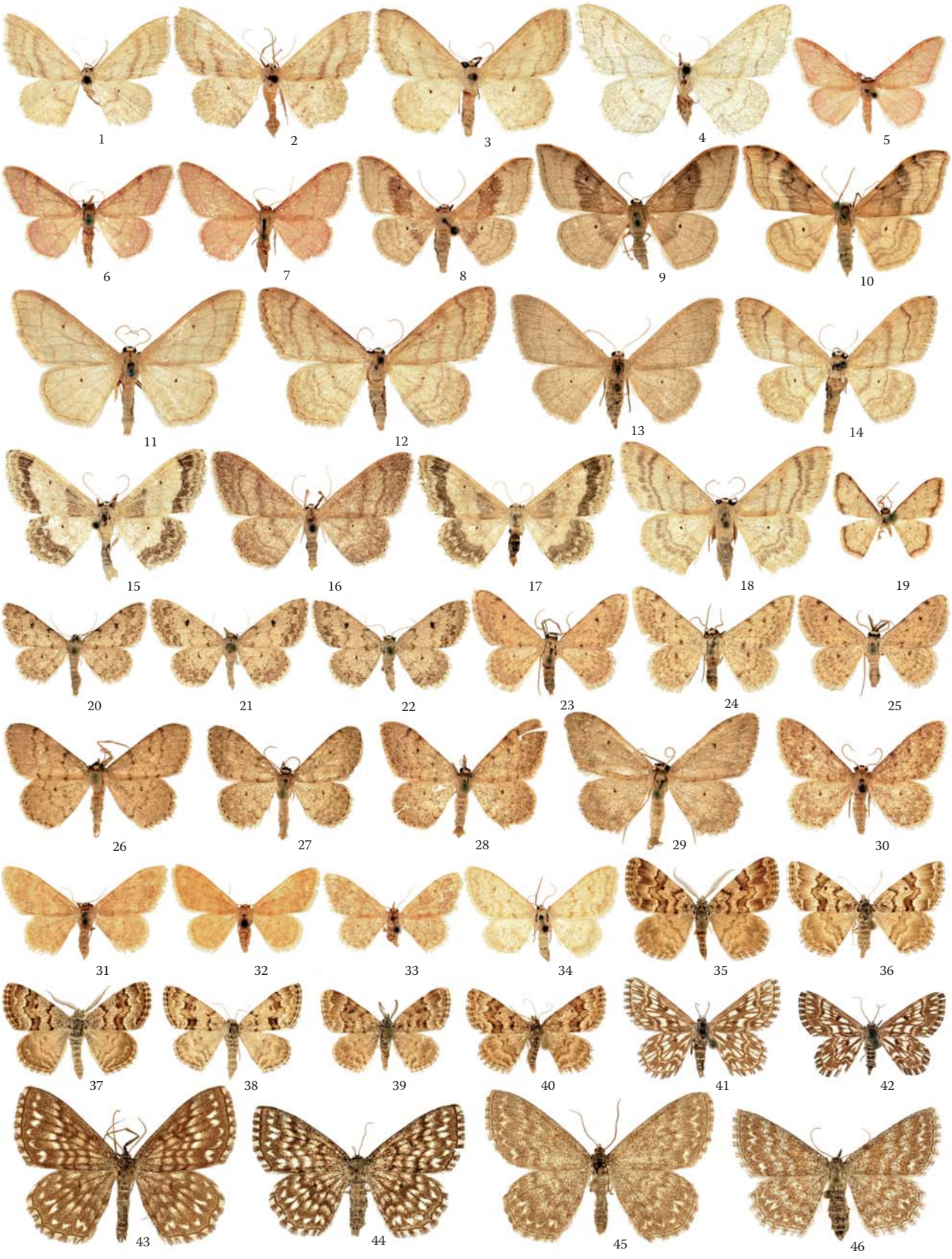

Plate 13 (1,5 x magnification): 1–3. *Idaea angustifrons* (1. Holotype); 4. *Idaea indecorata*; 5–7. *Idaea wiltshirei*; 8–10. *Idaea degeneraria*; 11–13. *Idaea straminata*; 14–18. *Idaea deversaria*; 19. *Idaea craspedota*; 20–22. *Brachyglossina* sp. near *sonyae*; 23–25. *Brachyglossina chaspia*; 26–29. *Brachyglossina culoti*; 30. *Brachyglossina vindicata*; 31–34. *Brachyglossina sciasmatica*; 35–36. *Oar reaumuraria*; 37–38. *Oar pratana pratana*; 39–40. *Oar pratana baezi*; 41–42. *Cinglis andalusiaria*; 43–44. *Scopula immorata*; 45–46. *Scopula tessellaria*.

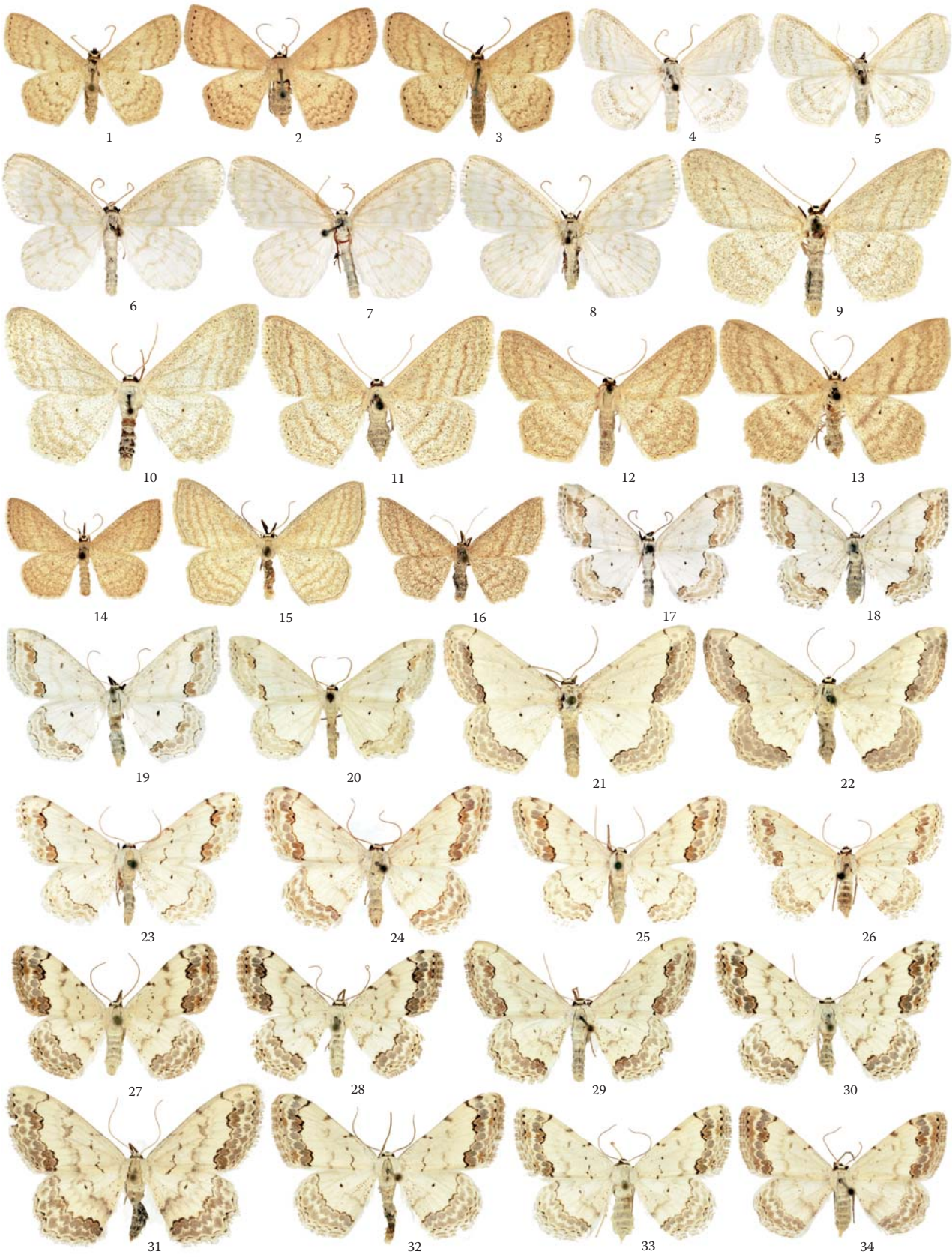

Plate 14 (1,5 x magnification): 1–3. *Scopula corrivalaria*; 4–5. *Scopula caricaria*; 6–8. *Scopula nemoraria*; 9–11. *Scopula umbelaria*; 12–13. *Scopula nigropunctata*; 14–16. *Scopula virgulata*; 17–18. *Scopula ornata ornata*; 19–20. *Scopula ornata enzela*; 21–22. *Scopula concinnaria universaria*; 23–26. *Scopula orientalis*; 27–28. *Scopula decorata decorata*; 29–31. *Scopula decorata armeniaca*; 32–34. *Scopula decorata congruata*.

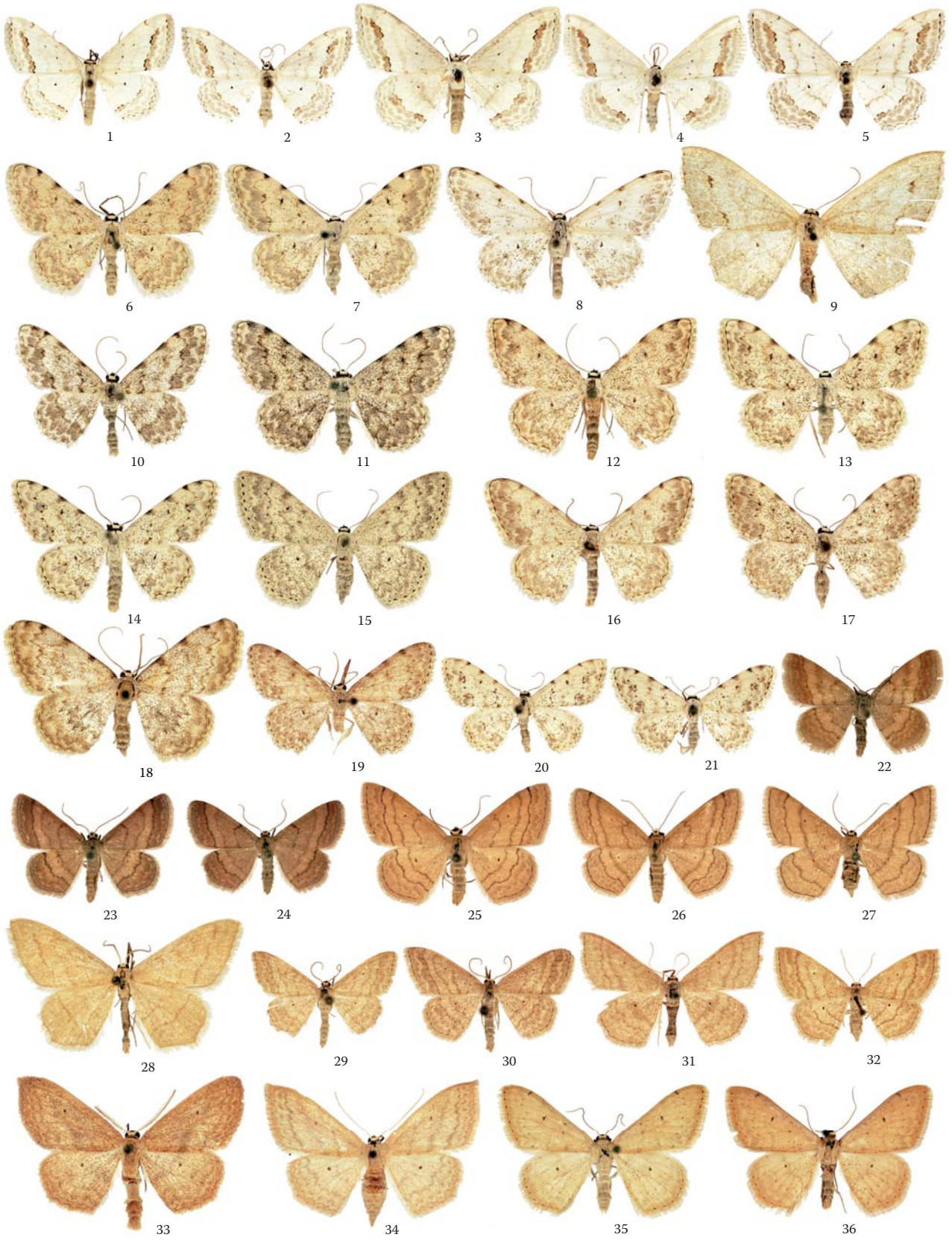

Plate 15 (1,5 x magnification): 1–5. *Scopula kashmirensis*; 6–8. *Scopula transcaspica*; 9. *Scopula achrosta*; 10–11. *Scopula submutata submutata*; 12–13. *Scopula submutata nivellearia*; 14–15. *Scopula submutata taurilibanotica*; 16–17. *Scopula submutata roseonitens*; 18. *Scopula submutata gedrensis*; 19. *Scopula cleoraria*; 20–21. *Scopula vigilata*; 22–24. *Scopula rubiginata*; 25–27. *Scopula turbidaria*; 28. *Scopula nigrociliata*; 29–31. *Scopula turbulentaria turbulentaria*; 32. *Scopula turbulentaria steinbacheri*; 33–34. *Scopula irrorata*; 35–36. *Scopula rubellata*.

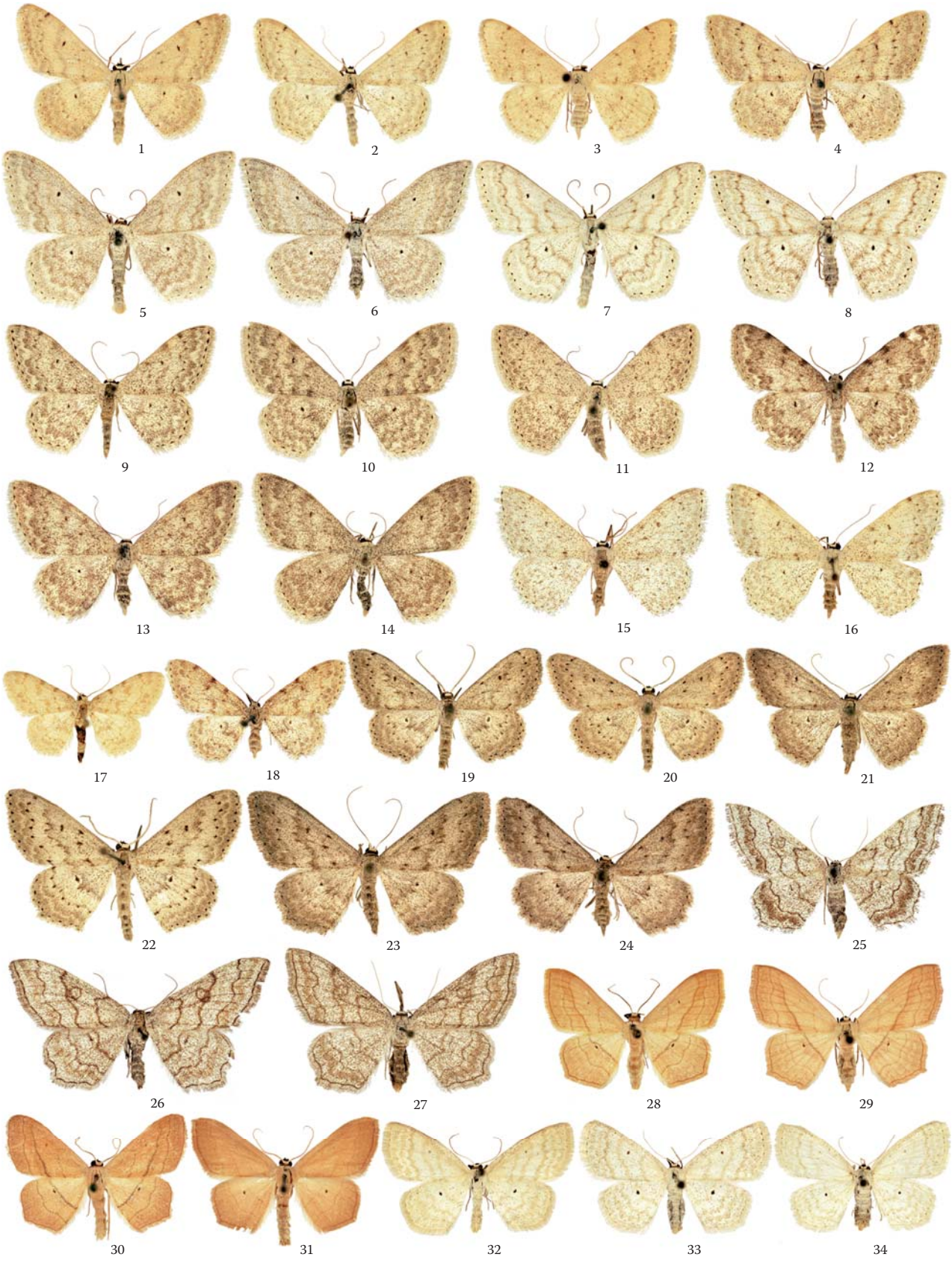

Plate 16 (1,5 x magnification): 1–4. *Scopula beckeraria*; 5–6. *Scopula incanata incanata*; 7–8. *Scopula incanata ibericata*; 9–11. *Scopula marginepunctata marginepunctata*; 12–14. *Scopula marginepunctata terrigena*; 15–16. *Scopula marginepunctata argillacea*; 17–18. *Scopula luridata*; 19–21. *Scopula guancharia uniformis*; 22–24. *Scopula guancharia illustris*; 25–27. *Scopula eberti*; 28–29. *Scopula imitaria imitaria*; 30–31. *Scopula imitaria syriacaria*; 32–34. *Scopula immutata*.

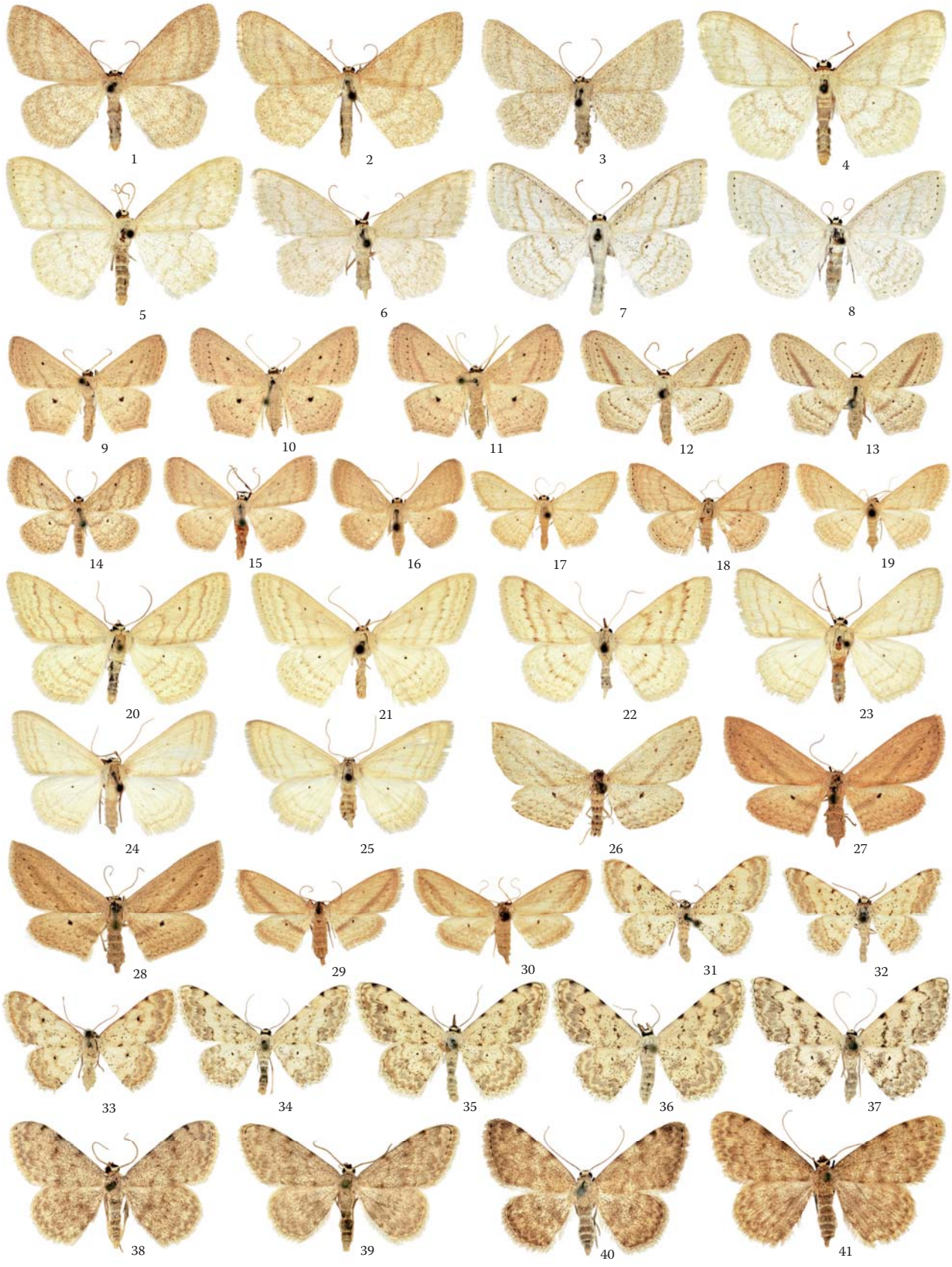

Plate 17 (1,5 x magnification): 1–3. *Scopula ternata*; 4–6. *Scopula floslactata*; 7–8. *Scopula subpunctaria*; 9–11. *Scopula flaccidaria*; 12–13. *Scopula emutaria*; 14–16. *Scopula minorata*; 17–19. *Scopula adelpharia pharaonis*; 20–22. *Scopula immistaria immistaria*; 23–25. *Scopula immistaria lehmanni*; 26–30. *Scopula donovani*; 31–33. *Scopuloides origalis danieli*; 34–37. *Scopuloides origalis safida*; 38–41. *Glossotrophia confinaria*.

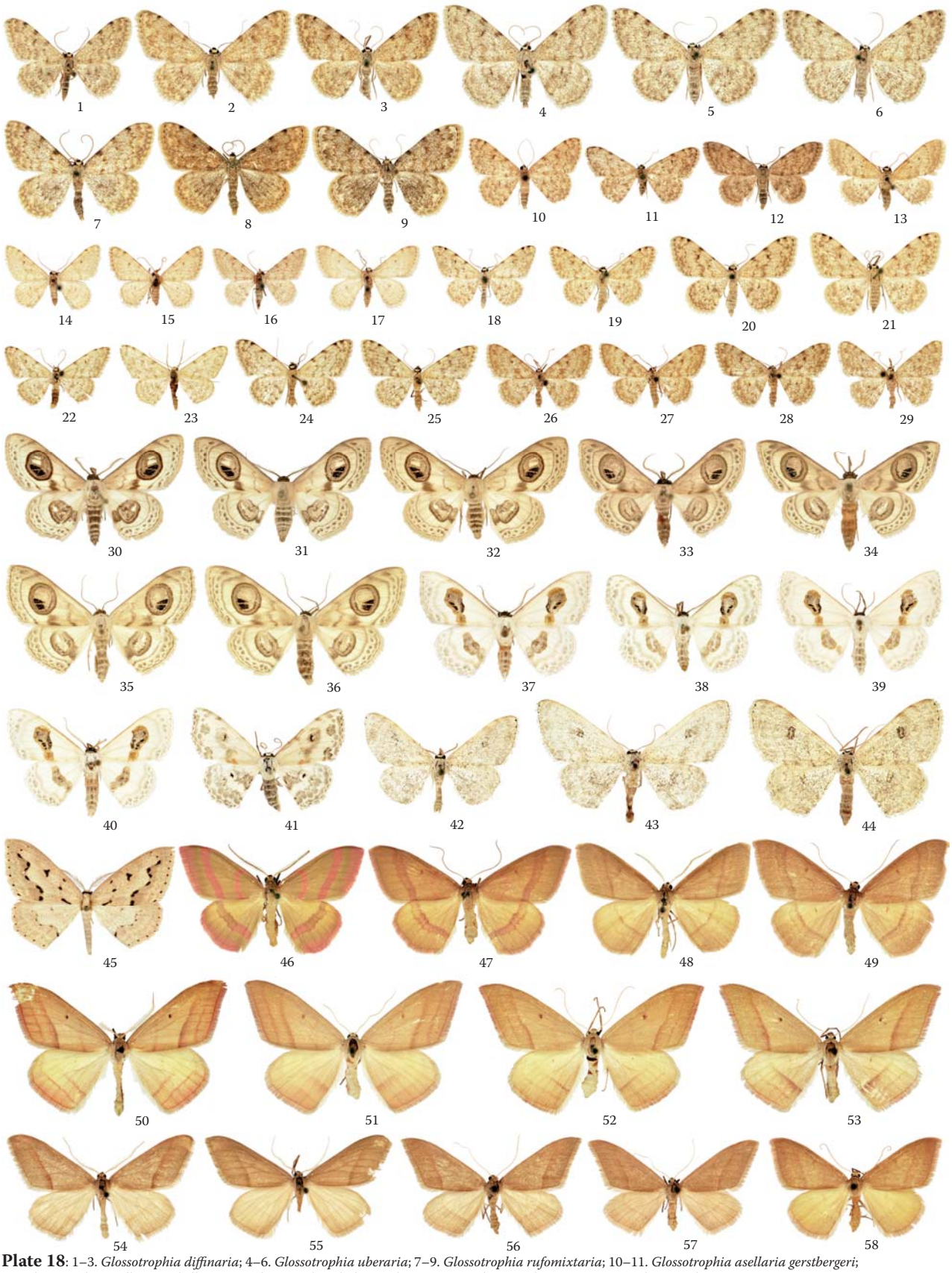

Plate 18: 1–3. *Glossotrophia diffinaria*; 4–6. *Glossotrophia uberaria*; 7–9. *Glossotrophia rufomixtaria*; 10–11. *Glossotrophia asellaria gerstbergeri*; 12. *Glossotrophia asellaria isabellaria*; 13. *Glossotrophia chalcographata*; 14–17. *Glossotrophia jacta*; 18–21. *Glossotrophia semitata semitata*; 22–25. *Glossotrophia semitata ariana* (Paratypes of *G. ghirshmani*); 26–29. *Glossotrophia terminata* (26. Holotype); 30–32. *Problepsis ocellata ocellata*; 33–36. *Problepsis ocellata cinerea*; 37–40. *Problepsis vulgaris*; 41. *Somatina indicataria morata*; 42–44. *Somatina wiltshirei*; 45. *Craspediopsis sinuosaria*; 46–47. *Rhodostrophia calabra calabra*; 48–49. *Rhodostrophia calabra separata*; 50–53. *Rhodostrophia auctata*; 54–57. *Rhodostrophia adauctata*; 58. *Rhodostrophia pudorata perezaria*.

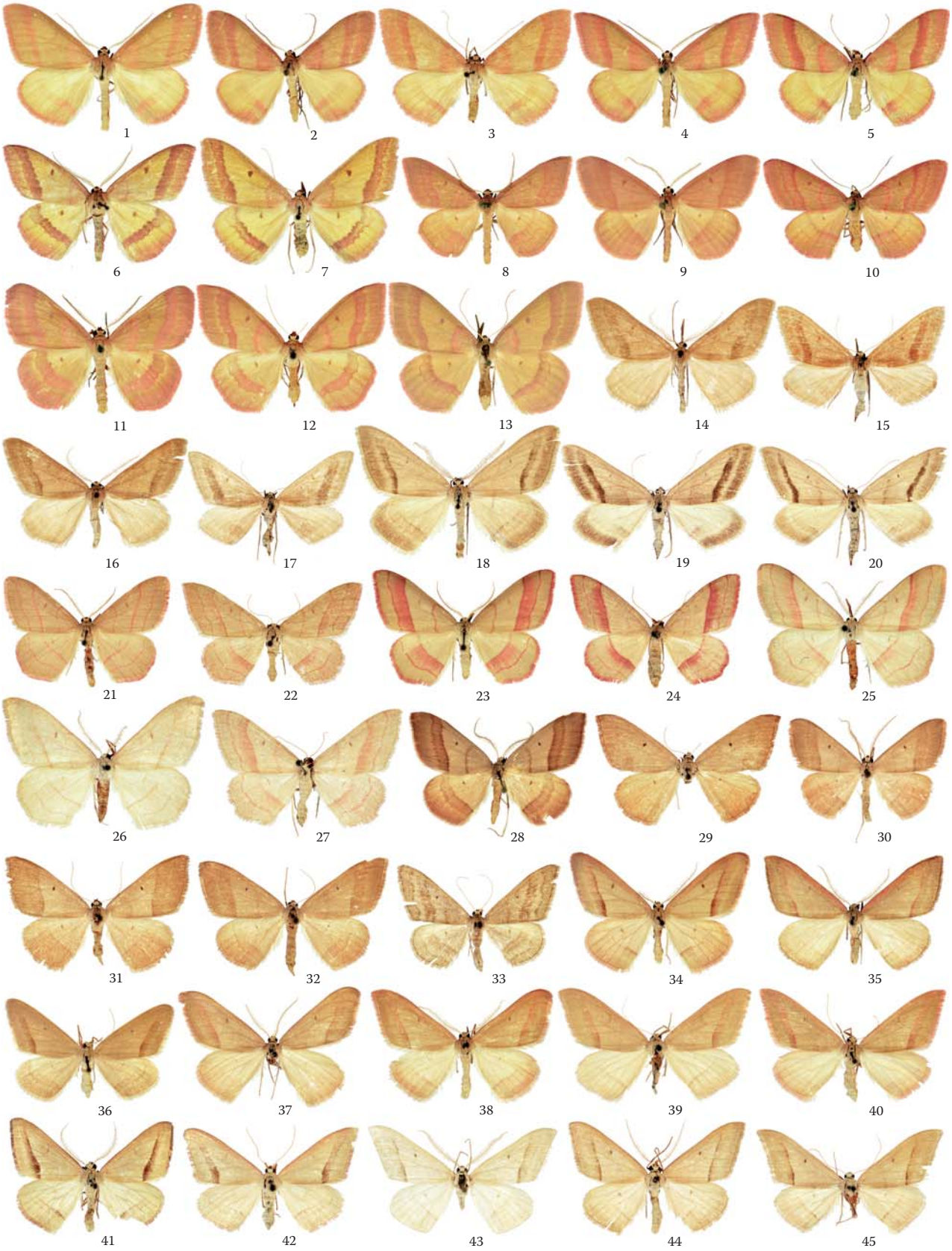

Plate 19: 1–3. *Rhodostrophia pudorata pudorata*; 4–5. *Rhodostrophia pudorata sicanaria*; 6–7. *Rhodostrophia sieversi*; 8–10. *Rhodostrophia cretacaria*; 11–13. *Rhodostrophia discopunctata*; 14–17. *Rhodostrophia terrestraria*; 18–20. *Rhodostrophia* sp. near *terrestraria* from Iran; 21–24. *Rhodostrophia vibicaria vibicaria*; 25–27. *Rhodostrophia vibicaria strigata*; 28–29. *Rhodostrophia inconspicua*; 30–32. *Rhodostrophia subconspicua*; 33. *Rhodostrophia herbicolens*; 34–36. *Rhodostrophia cinerascens*; 37–40. *Rhodostrophia linguata* (37. Holotype); 41–42. *Rhodostrophia meonaria meonaria*; 43–45. *Rhodostrophia meonaria pallidior* (43. Holotype).

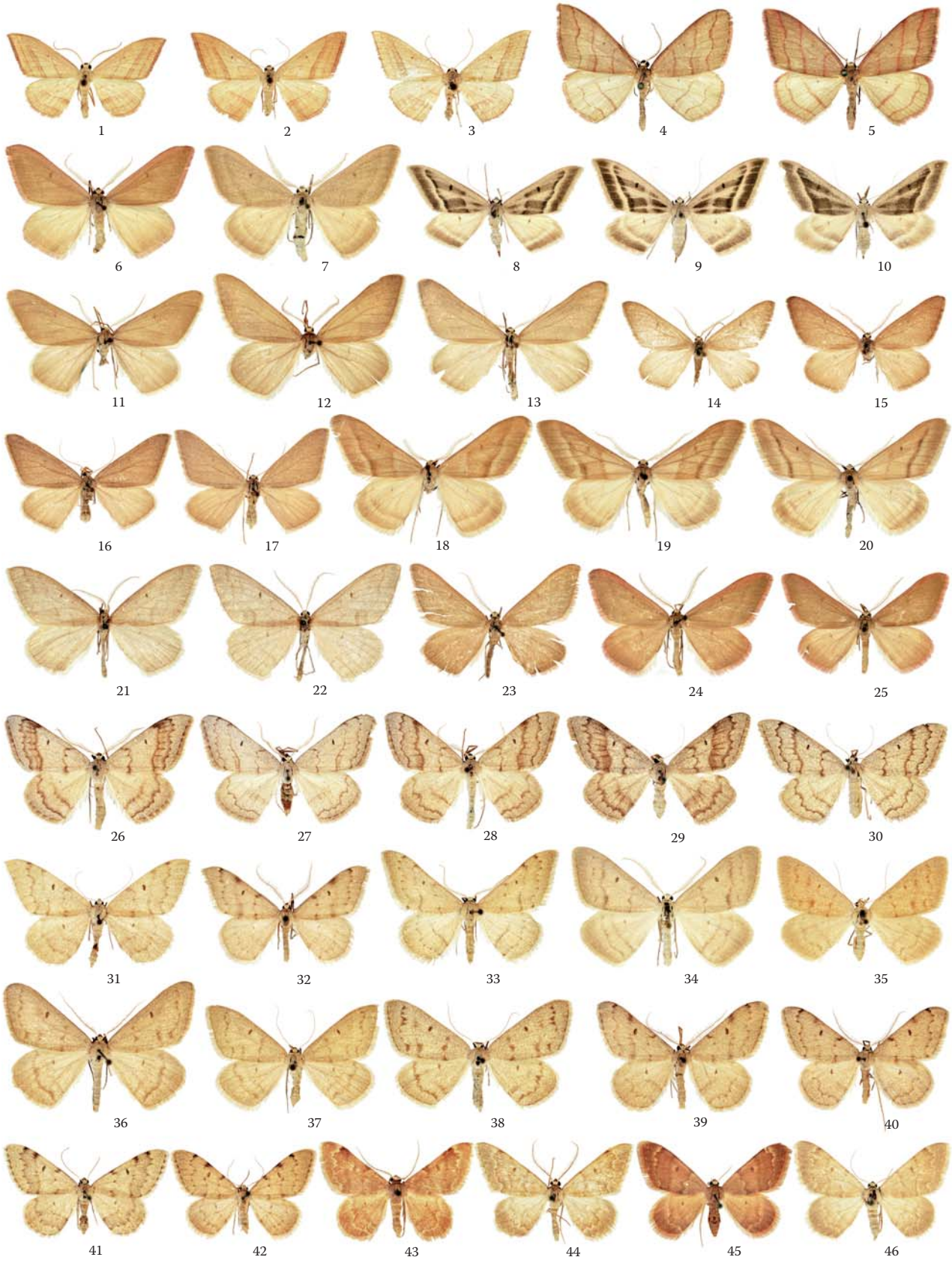

Plate 20: 1–3. *Rhodostrophia tristrigalis*; 4–5. *Rhodostrophia* sp. near *stigmatica* from China; 6–10. *Rhodostrophia oxyntis*; 11–13. *Rhodostrophia vartianae* (11. Holotype); 14–17. *Rhodostrophia lenis* (14. Holotype); 18–20. *Rhodostrophia olivopallens* (18. Holotype); 21–22. *Rhodostrophia froitzheimi froitzheimi*; 23–25. *Rhodostrophia froitzheimi salangensis* (23. Holotype); 26–30. *Rhodostrophia kabulensis*; 31–33. *Rhodostrophia* sp. near *kabulensis* from Afghanistan; 34–35. *Rhodostrophia badiaria*; 36–38. *Rhodostrophia bahara*; 39–42. *Rhodostrophia praecisaria badakhschana*; 43–46. *Rhodostrophia cuprinaria*.

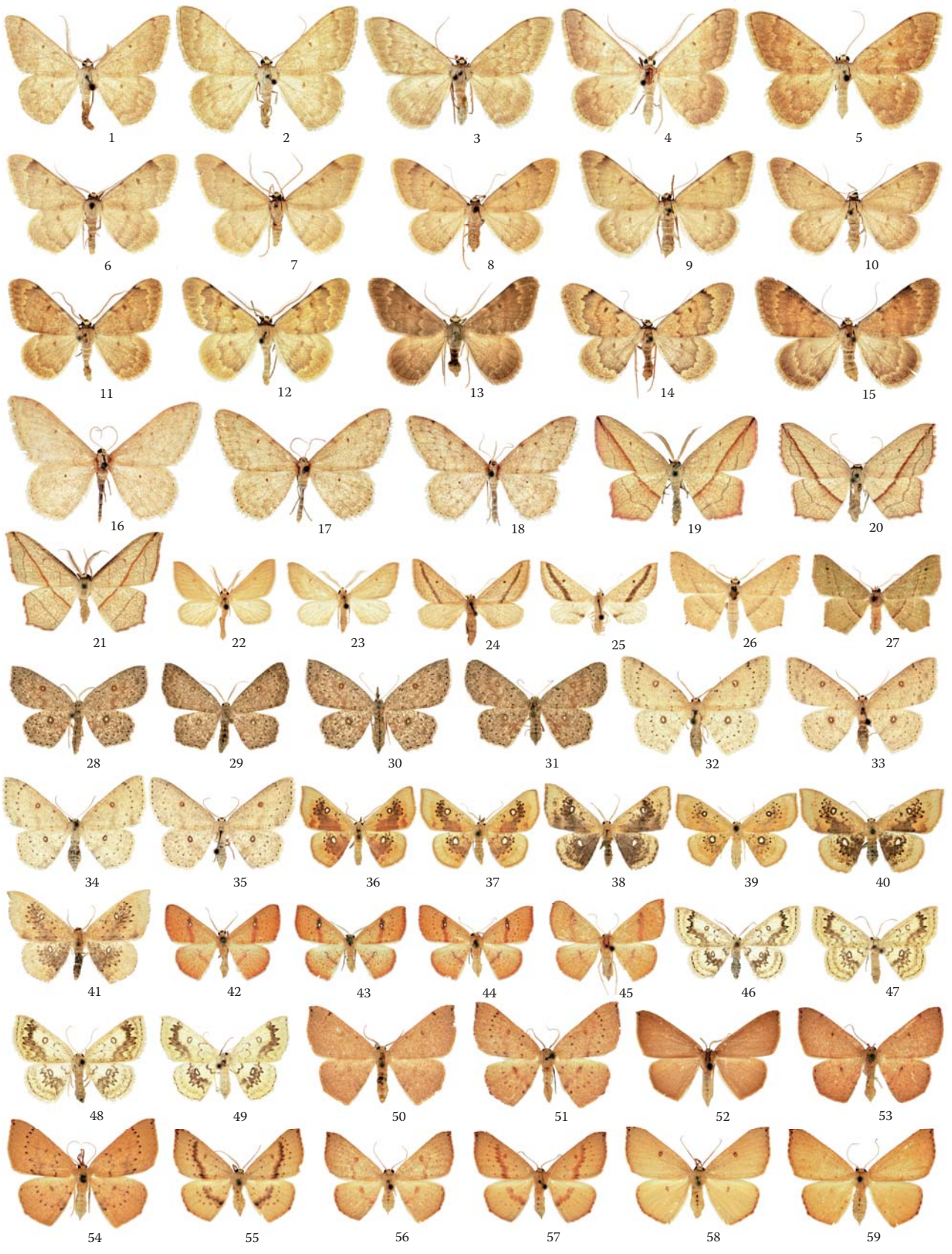

Plate 21: 1–3. *Rhodostrophia nesam nesam*; 4–5. *Rhodostrophia nesam fuscata*; 6–10. *Rhodostrophia nubifera nubifera*; 11–15. *Rhodostrophia nubifera klapperichi*; 16–18. *Rhodostrophia anjumana*; 19–20. *Timandra comae*; 21. *Timandra correspondens*; 22–25. *Pseudosterrha paulula*; 26–27. *Traminda mundissima*; 28–31. *Cyclophora pendularia*; 32–35. *Cyclophora albipunctata*; 36–40. *Cyclophora albiocellaria*; 41. *Cyclophora lennigiaria mauretanica*; 42–45. *Cyclophora ariadne*; 46–49. *Cyclophora annularia*; 50–54. *Cyclophora puppillaria puppillaria*; 55–59. *Cyclophora puppillaria lilacinipes*.

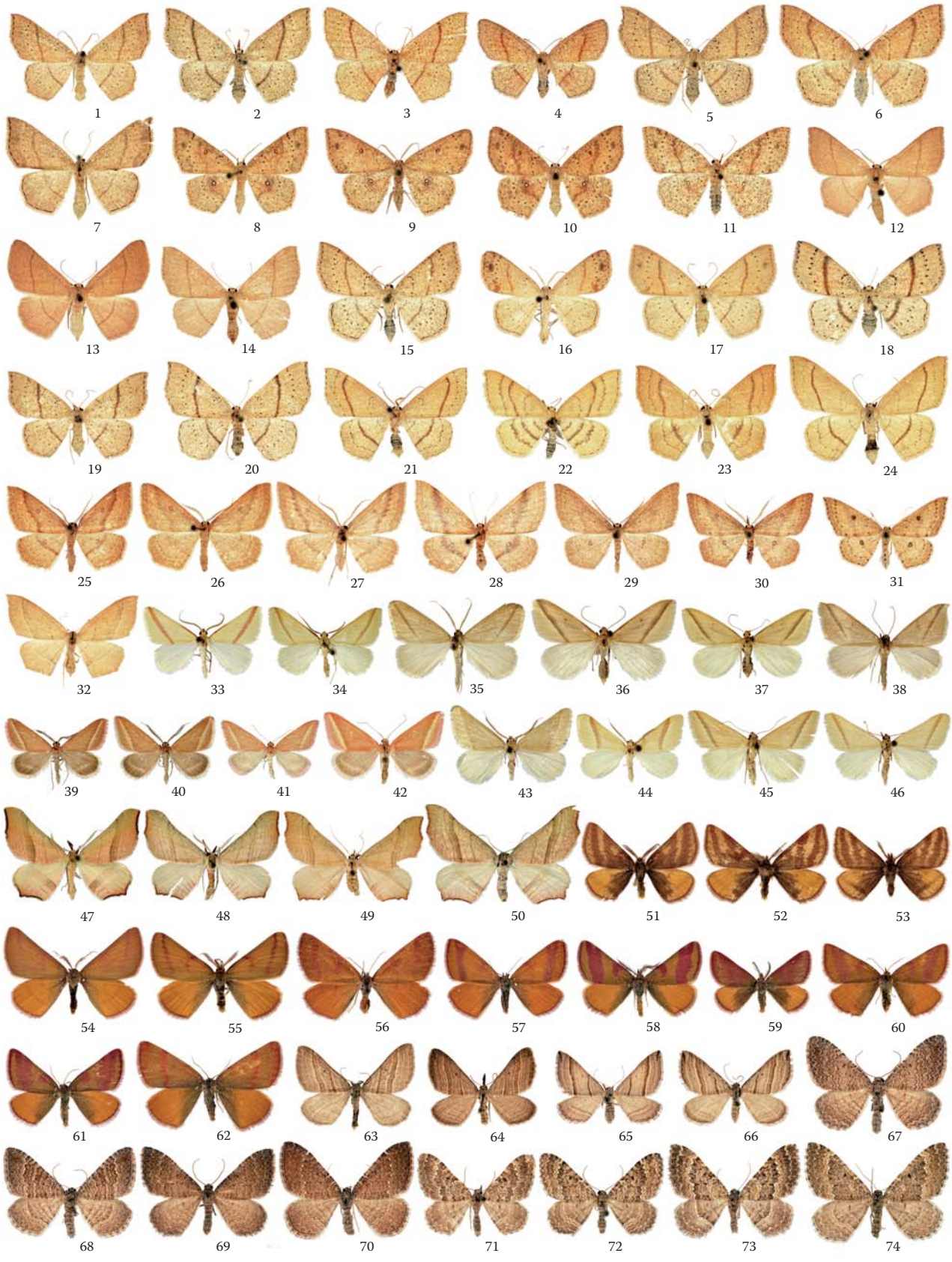

Plate 22: 1–4. *Cyclophora quercimontaria*; 5–7. *Cyclophora ruficiliaria*; 8–11. *Cyclophora porata*; 12–14. *Cyclophora suppunctaria*; 15–18. *Cyclophora punctaria punctaria*; 19–20. *Cyclophora punctaria fritzae*; 21–24. *Cyclophora linearia*; 25–28. *Cyclophora maderensis*; 29–31. *Cyclophora* sp. near *maderensis* from Canary Islands; 32. *Cyclophora sympathica*; 33–38. *Rhodometra sacraria*; 39–42. *Casilda antophilaria rosearia*; 43–46. *Casilda consecraria*; 47–50. *Ochodontia adustaria*; 51–53. *Lythria plumularia*; 54–57. *Lythria purpuraria*; 58–61. *Lythria cruentaria*; 62. *Lythria sanguinaria*; 63–66. *Phibalapteryx virgata*; 67–70. *Cataclysme riguata riguata*; 71–74. *Cataclysme riguata elbursica*.

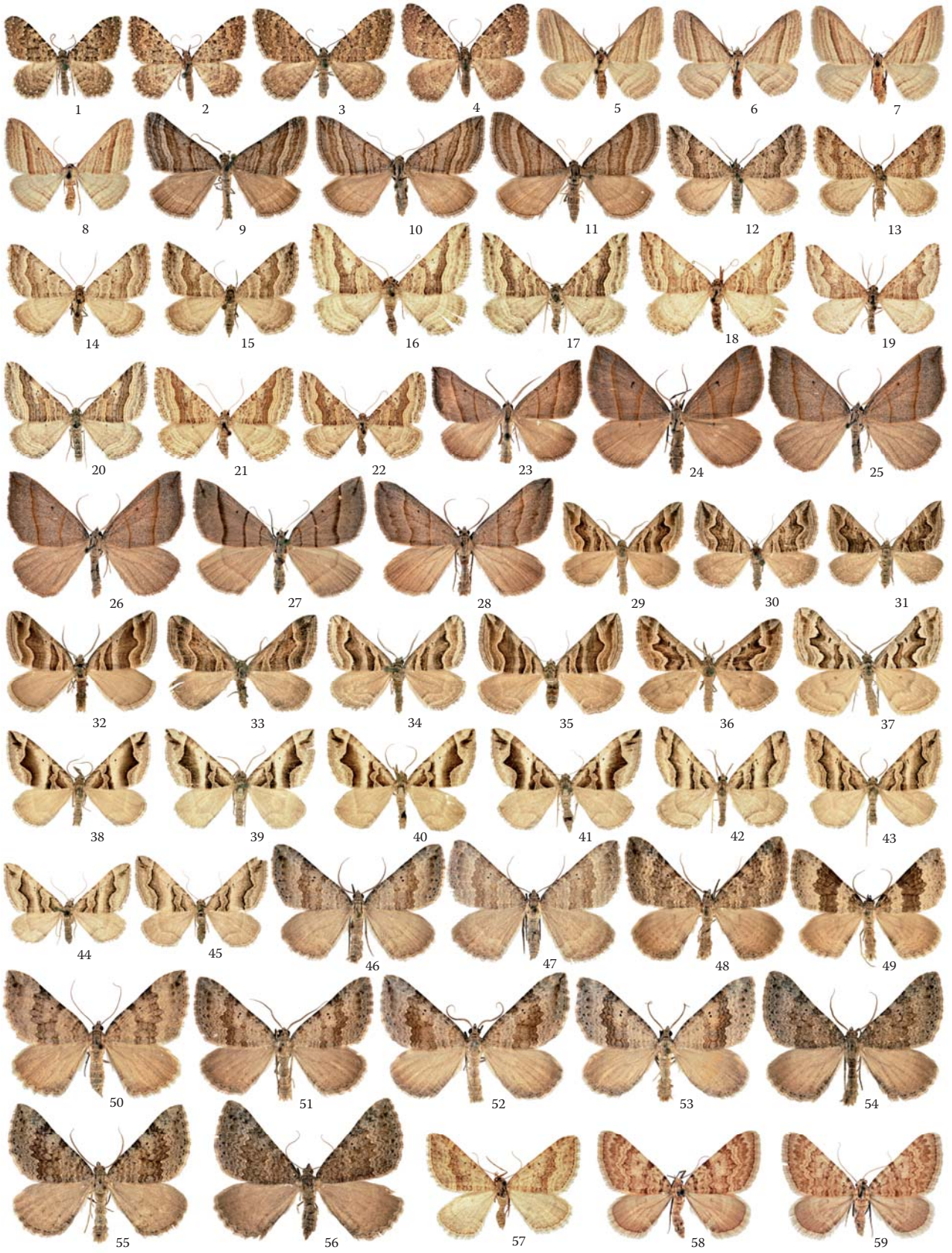

Plate 23: 1–2. *Cataclysme dissimilata*; 3–4. *Cataclysme uniformata*; 5–8. *Cataclysme obliquilineata*; 9–11. *Scotopteryx coarctaria*; 12–15. *Scotopteryx vicinaria vicinaria*; 16–18. *Scotopteryx vicinaria hyrcanaria*; 19–22. *Scotopteryx elbursica*; 23. *Scotopteryx mucronata*; 24–27. *Scotopteryx luridata*; 28. *Scotopteryx ignorata*; 29–31. *Scotopteryx peribolata peribolata*; 32–35. *Scotopteryx peribolata chouika*; 36–37. *Scotopteryx proximaria*; 38–41. *Scotopteryx nasifera*; 42–45. *Scotopteryx safedkohensis* **sp. n.** (42. Holotype); 46–47. *Scotopteryx bipunctaria*; 48–50. *Scotopteryx octodurensis*; 51–53. *Scotopteryx olympia*; 54–56. *Scotopteryx aelptes*; 57. *Scotopteryx subvicinaria libanaria*; 58–59. *Scotopteryx fuscofasciata subardua*.

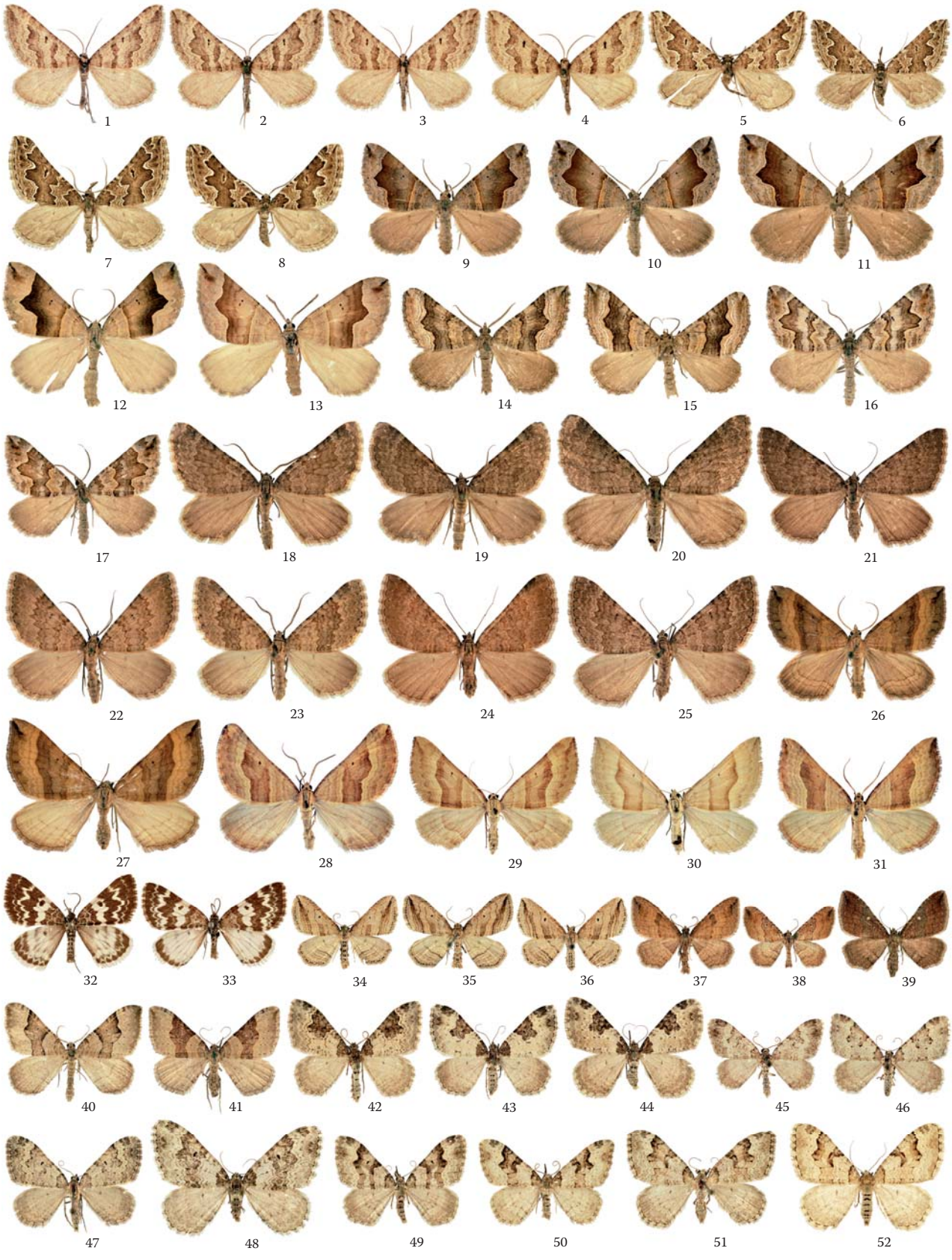

Plate 24: 1–4. *Scotopteryx sartata*; 5–8. *Scotopteryx sinuosa* (5. Holotype); 9–11. *Scotopteryx moeniata*; 12–13. *Scotopteryx angularia*; 14–15. *Scotopteryx coelinaria*; 16–17. *Scotopteryx obvallaria*; 18–21. *Scotopteryx alfacaria alfacaria*; 22–25. *Scotopteryx alfacaria transmarina*; 26–27. *Scotopteryx chenopodiata*; 28–30. *Scotopteryx sterilis*; 31. *Scotopteryx langi*; 32–33. *Scotopteryx semenovi*; 34–36. *Orthonama vittata*; 37–39. *Orthonama obstipata*; 40–41. *Xanthorhoe decoloraria*; 42–44. *Xanthorhoe fluctuata fluctuata*; 45–47. *Xanthorhoe fluctuata iberiata*; 48. *Xanthorhoe fluctuata herculeana*; 49–52. *Xanthorhoe acutangulata*.

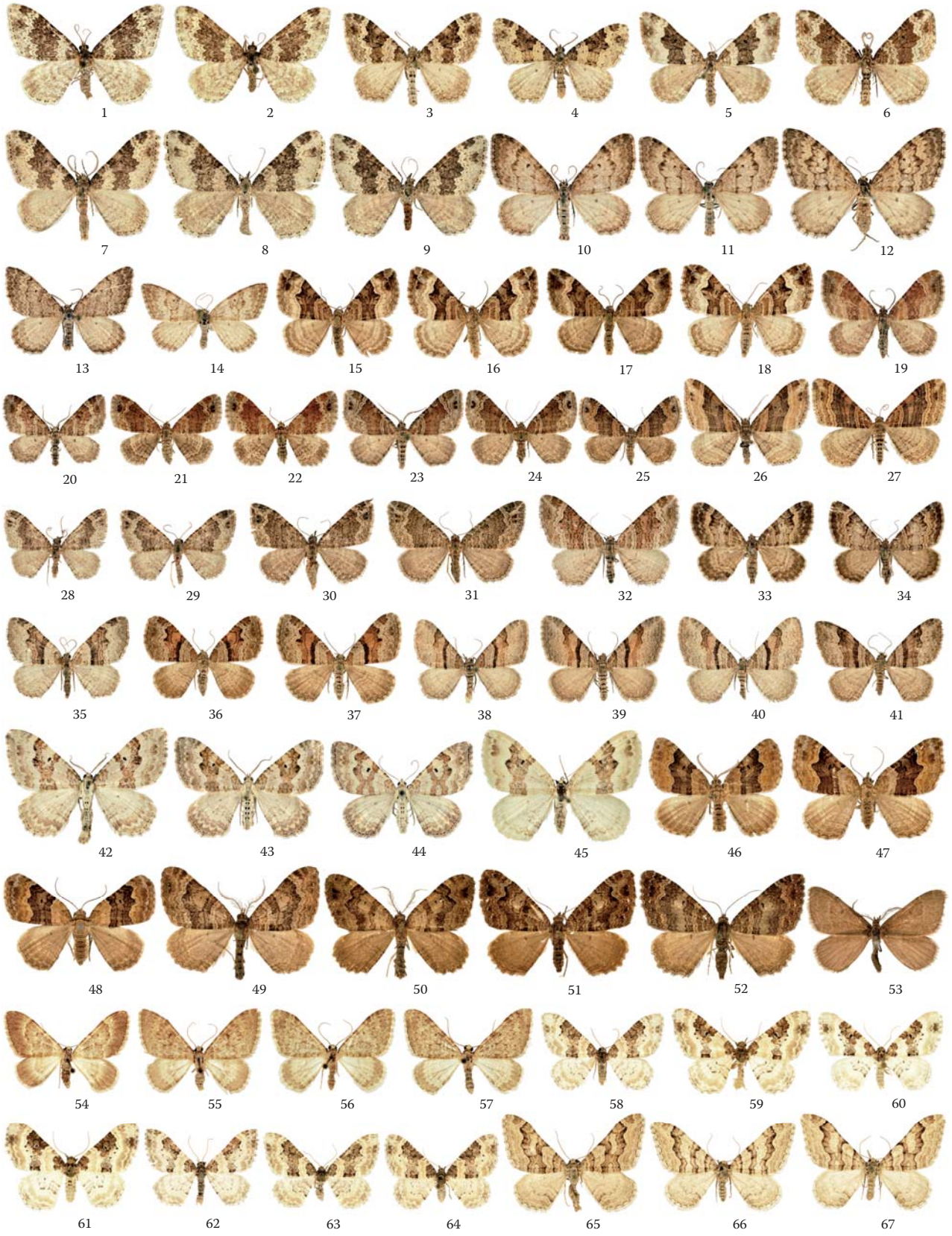

Plate 25: 1–2. *Xanthorhoe skoui*; 3–4. *Xanthorhoe disjunctaria*; 5–6. *Xanthorhoe oxybiata*; 7–9. *Xanthorhoe pseudogaliata*; 10–12. *Xanthorhoe incursata*; 13–14. *Xanthorhoe annotinata*; 15–18. *Xanthorhoe biriviata*; 19–22. *Xanthorhoe spadicearia*; 23–25. *Xanthorhoe ferrugata*; 26–27. *Xanthorhoe rectifasciaria*; 28–31. *Xanthorhoe saturata*; 32. *Xanthorhoe stupida*; 33–34. *Xanthorhoe abrasaria*; 35–37. *Xanthorhoe designata*; 38–41. *Xanthorhoe mecoterma*; 42–45. *Xanthorhoe montanata*; 46–48. *Xanthorhoe quadrifasiata*; 49–52. *Xanthorhoe rupicola*; 53. *Xanthorhoe tauaria*; 54. *Xanthorhoe rhodoides*; 55–57. *Xanthorhoe wiltshirei*; 58–61. *Protorhoe corollaria*; 62–64. *Protorhoe unicata*; 65–67. *Protorhoe tangaba*.

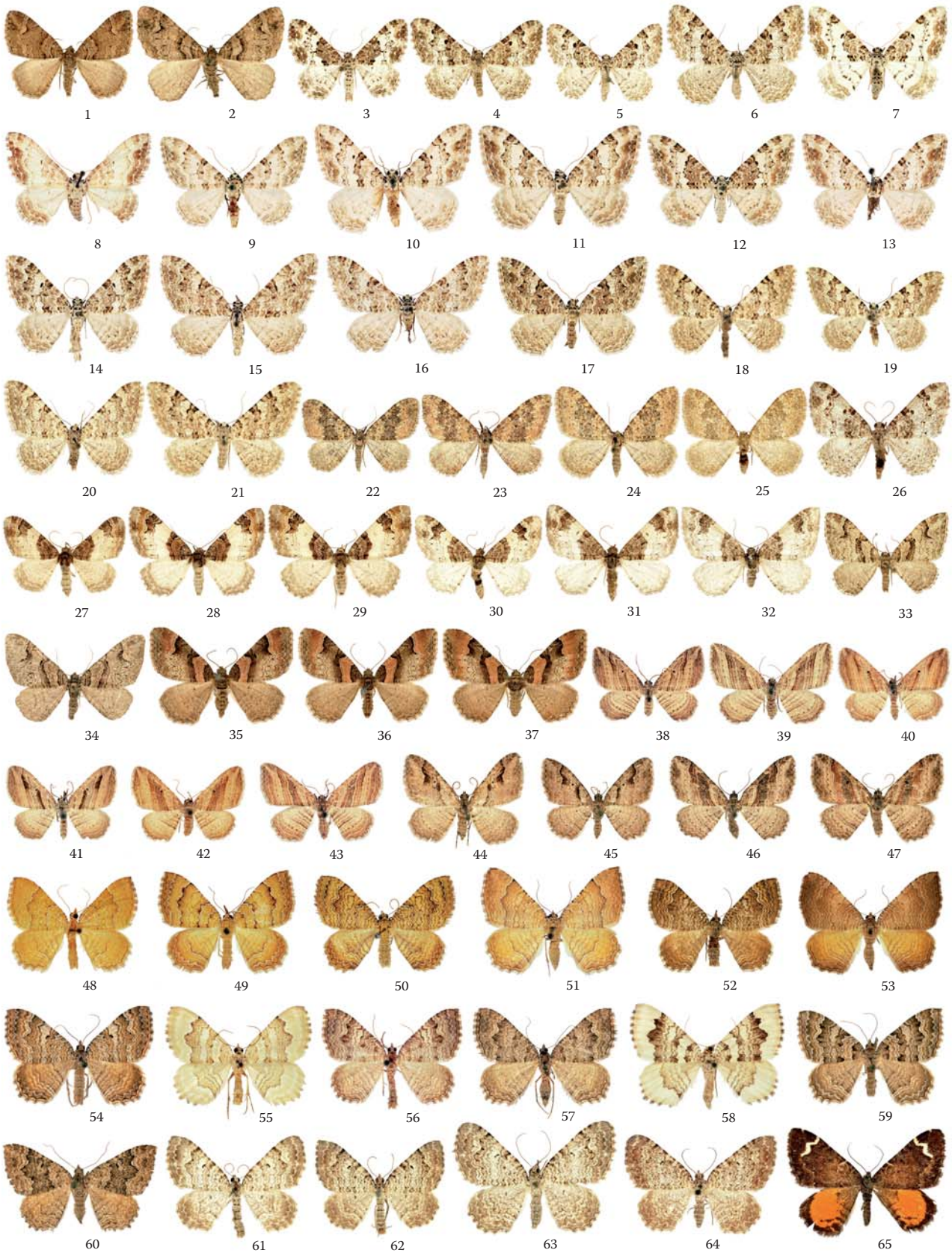

Plate 26: 1–2. *Catarhoe basochesiata*; 3–7. *Catarhoe putridaria*; 8. *Catarhoe* sp. near *semnana* from Iran; 9–13. *Catarhoe semnana* (9. Holotype); 14–17. *Catarhoe arachne*; 18–21. *Catarhoe renodata*; 22–25. *Catarhoe mosulensis*; 26. *Catarhoe mazeli*; 27–29. *Catarhoe cuculata cuculata*; 30–32. *Catarhoe cuculata decolor*; 33–34. *Catarhoe bahrama*; 35–37. *Catarhoe rubidata*; 38–39. *Costaconvexa polygrammata polygrammata*; 40–43. *Costaconvexa polygrammata rosea*; 44–47. *Costaconvexa centrostrigaria*; 48–52. *Camptogramma bilineata bilineata*; 53. *Camptogramma bilineata numidica*; 54–59. *Camptogramma grisescens*; 60. *Camptogramma bistrigata*; 61–64. *Camptogramma scripturata*; 65. *Phoenissa uber*.

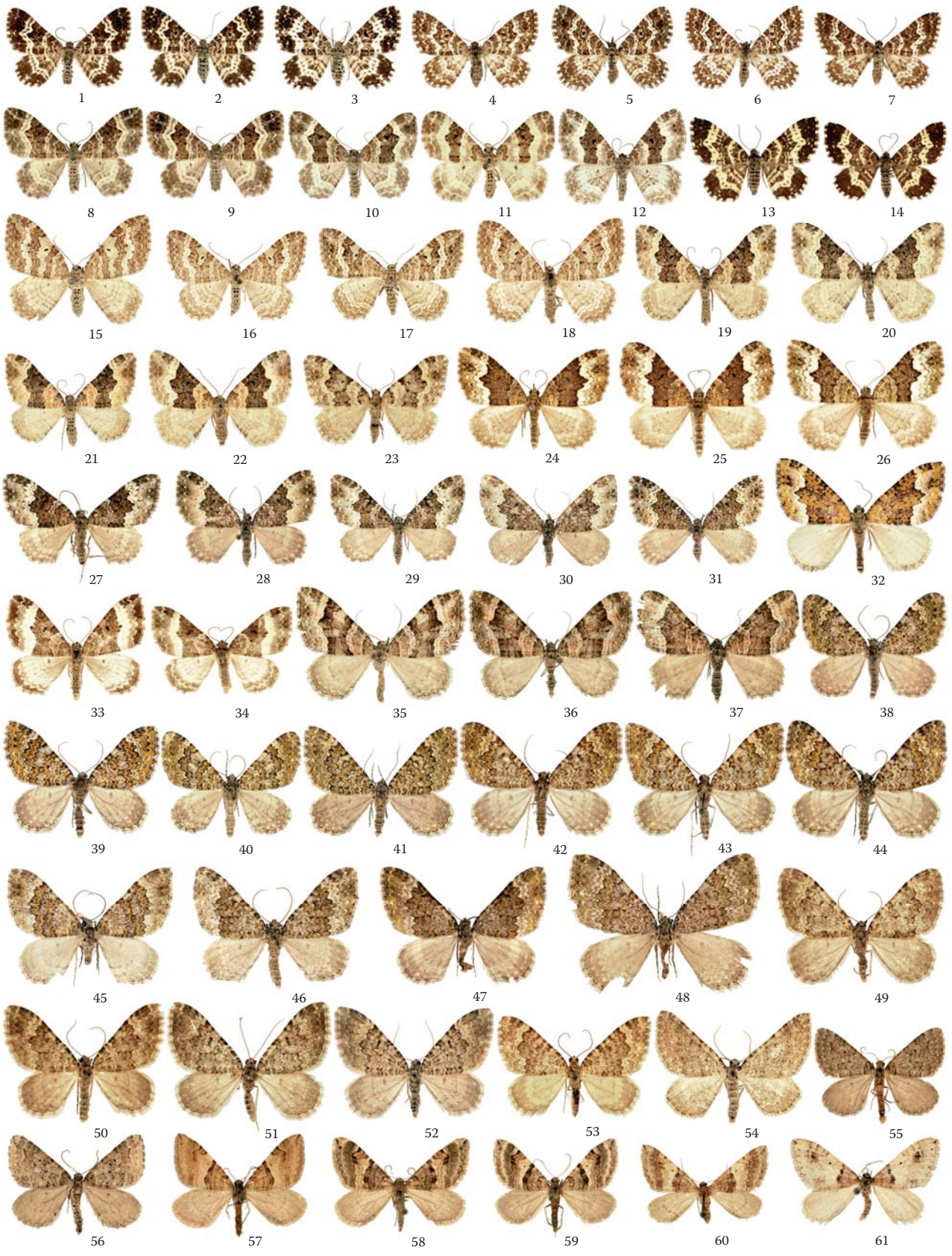

Plate 27: 1–3. *Epirrhoe tristata*; 4–7. *Epirrhoe pupillata*; 8–10. *Epirrhoe alternata*; 11–12. *Epirrhoe rivata*; 13–14. *Epirrhoe hastulata*; 15–18. *Epirrhoe molluginata*; 19–22. *Epirrhoe galiata*; 23. *Epirrhoe timozzaria*; 24–26. *Euphyia biangulata*; 27–31. *Euphyia submarginata*; 32. *Euphyia ochreata*; 33–34. *Euphyia unangulata*; 35–37. *Euphyia cinnamifusa*; 38–41. *Euphyia frustata frustata*; 42–44. *Euphyia frustata fulvocinctata*; 45–48. *Euphyia chalusata*; 49–52. *Euphyia sintenisi*; 53. *Euphyia maximiliana*; 54. *Euphyia intersecta*; 55–56. *Mattia callidaria*; 57–60. *Antilurga alhambrata alhambrata*; 61. *Antilurga alhambrata altatlas*.

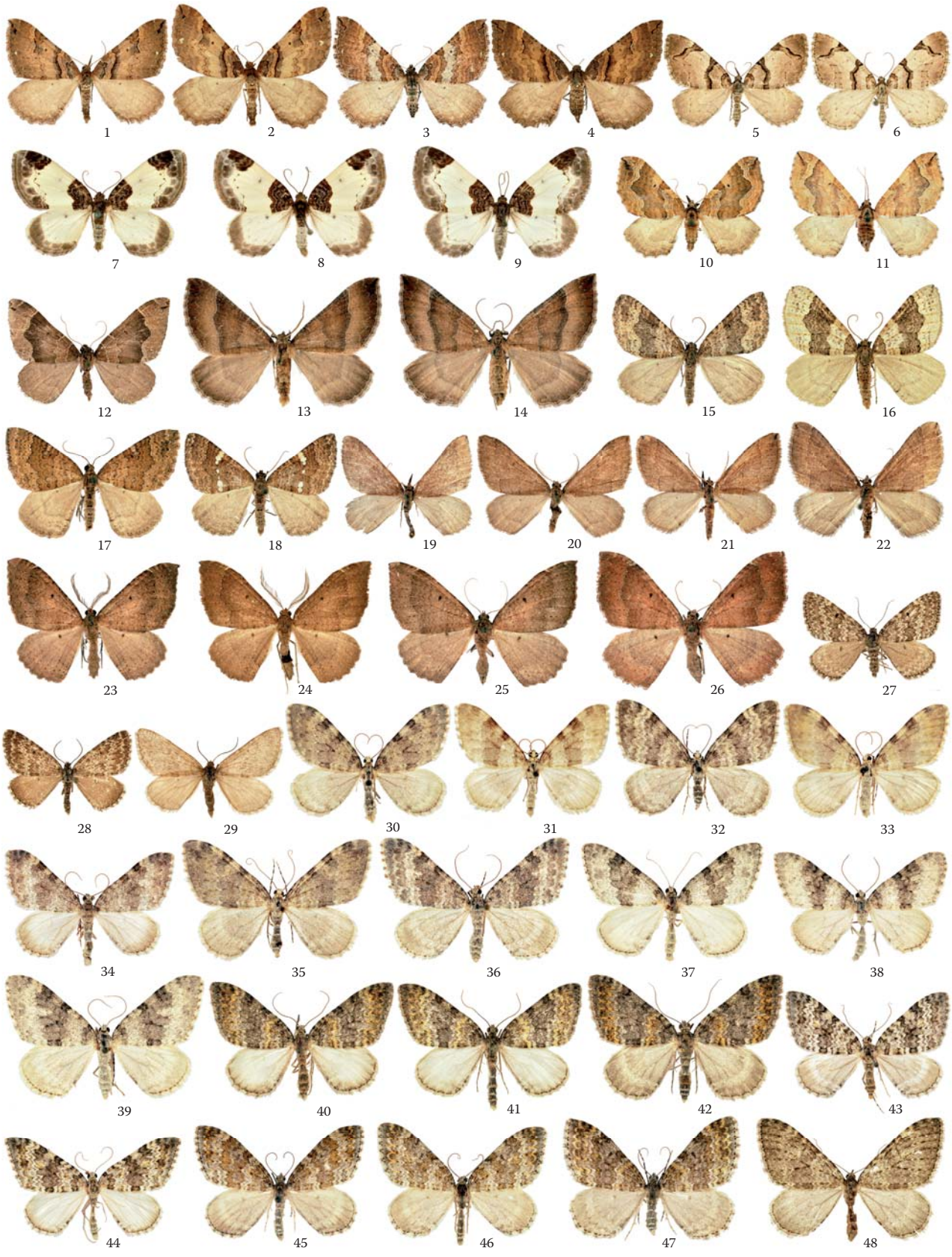

Plate 28: 1–4. *Earophila badiata*; 5–6. *Anticlea derivata*; 7–9. *Mesoleuca albicillata*; 10–11. *Pelurga comitata*; 12. *Xenortholitha latifusata*; 13–14. *Larentia clavaria*; 15–18. *Larentia malvata*; 19–22. *Larentia berberina*; 23–26. *Herbulotina grandis lapalmae*; 27–28. *Entephria polata*; 29. *Entephria punctipes*; 30–33. *Entephria nobiliaria*; 34–36. *Entephria flavata*; 37–39. *Entephria cyanata cyanata*; 40–42. *Entephria cyanata bubaceki*; 43–44. *Entephria cyanata leucocyanata*; 45–47. *Entephria flavicinctata*; 48. *Entephria muscosaria*.

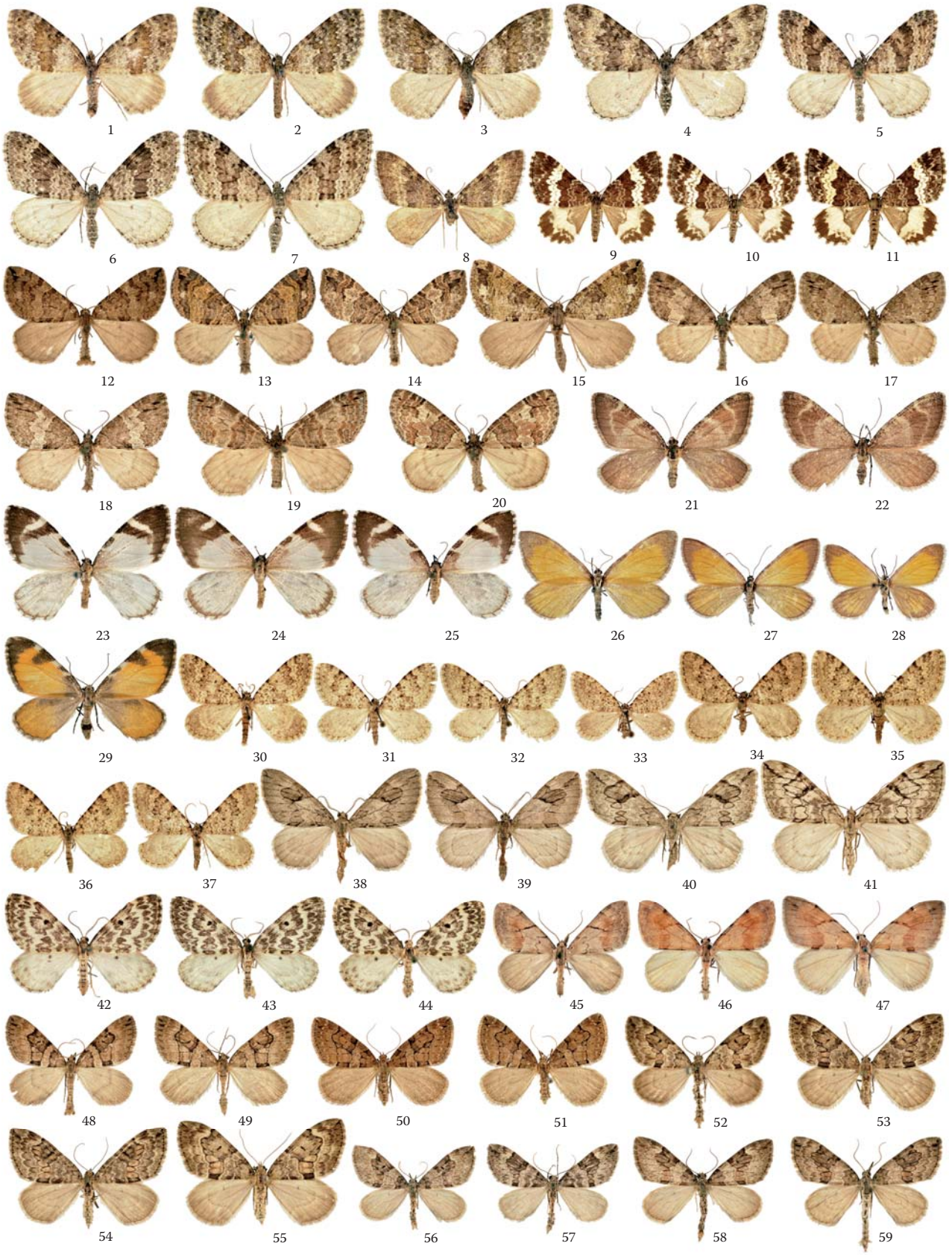

Plate 29: 1–3. *Entephria infidaria*; 4. *Entephria poliotaria*; 5–7. *Entephria caesiata*; 8. *Entephria catochra*; 9–11. *Spargania luctuata*; 12–15. *Hydriomena furcata*; 16–19. *Hydriomena impluviata*; 20. *Hydriomena ruberata*; 21–22. *Stamnodes depeculata*; 23–25. *Stamnodes lusoria*; 26–29. *Stamnodes pauperaria*; 30–33. *Almeria kalischata kalischata*; 34–37. *Almeria kalischata rubrotincta*; 38–41. *Heterothera consimilis*; 42–44. *Heterothera serraria*; 45–47. *Pennithera firmata*; 48–51. *Thera cognata*; 52–55. *Thera variata variata*; 56–58. *Thera variata subtaurica*; 59. *Thera variata balcanicola*.

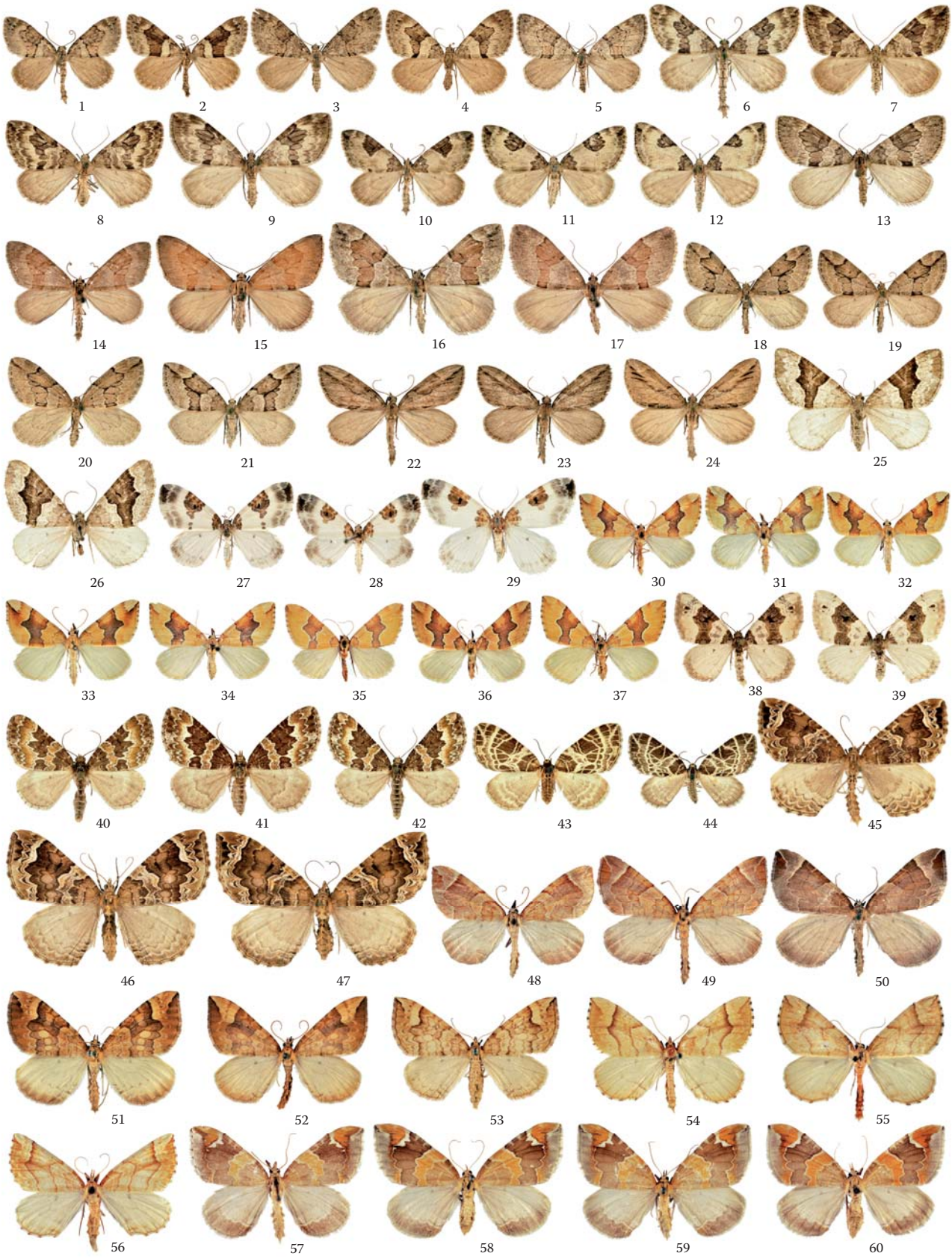

Plate 30: 1–5. *Thera variolata*; 6–9. *Thera britannica*; 10–12. *Thera vetustata*; 13. *Thera cembrae*; 14–17. *Thera obeliscata*; 18–21. *Thera juniperata*; 22–24. *Thera cupressata*; 25–26. *Costicoma exangulata*; 27–29. *Plemyria rubiginata*; 30–34. *Cidaria fulvata*; 35–37. *Cidaria nugata*; 38–39. *Cosmorhoe ocellata*; 40–42. *Electrophaes corylata*; 43–44. *Eustroma reticulata*; 45–47. *Eulithis prunata*; 48–50. *Eulithis testata*; 51–53. *Eulithis populata*; 54–56. *Eulithis mellinata*; 57–60. *Eulithis pyropata pyropata*.

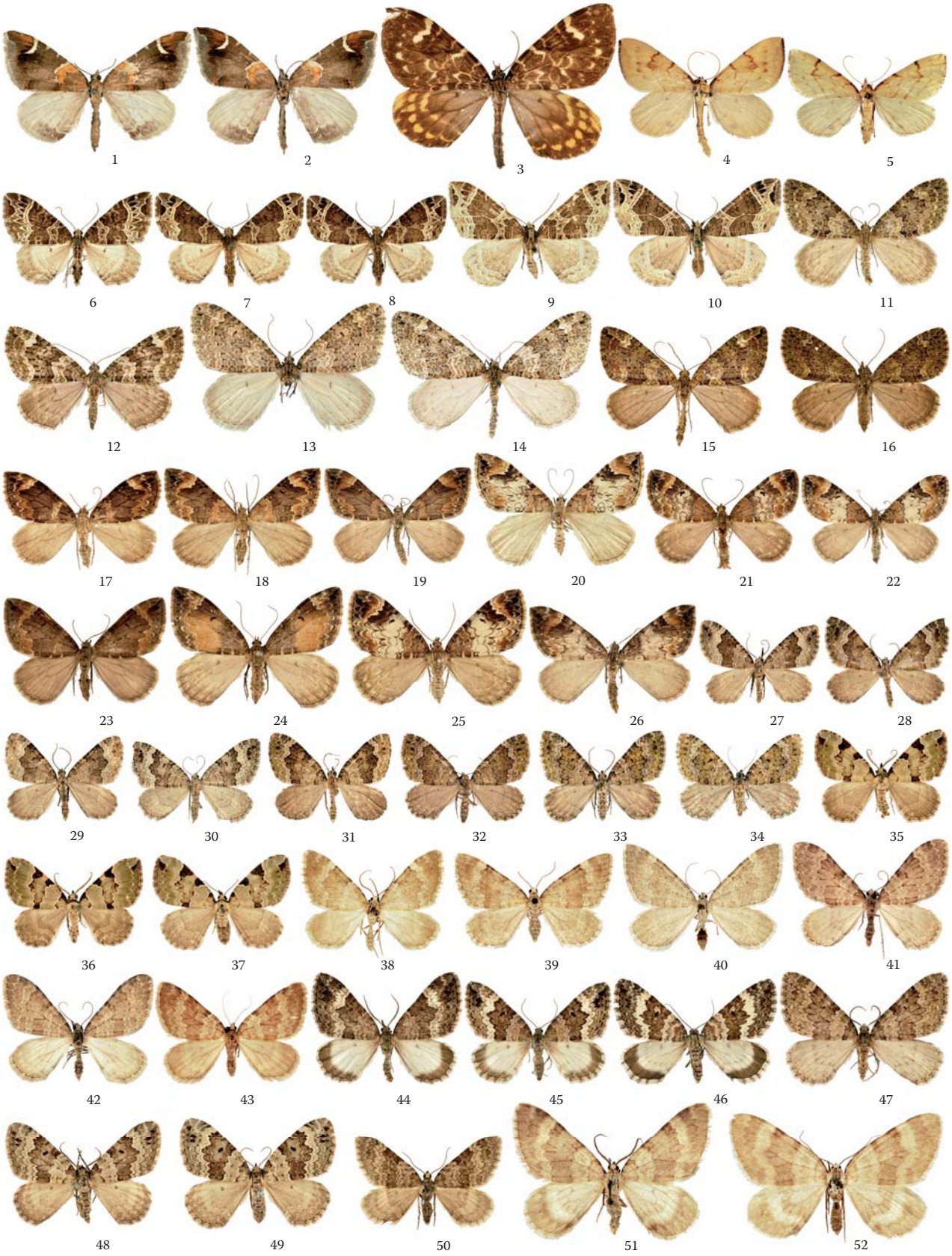

Plate 31: 1–2. *Eulithis pyropata sugitanii*; 3. *Eulithis flavomacularia*; 4–5. *Gandaritis pyraliata*; 6–8. *Ecliptopera silaceata*; 9–10. *Ecliptopera postpallida nuristana*; 11–12. *Chloroclysta miata miata*; 13–14. *Chloroclysta miata buzurga* (13. Holotype); 15–16. *Chloroclysta siterata*; 17–20. *Dysstroma citrata*; 21–25. *Dysstroma truncata*; 26. *Dysstroma latefasciata*; 27–30. *Colostygia aptata*; 31–32. *Colostygia olivata*; 33–34. *Colostygia wolfschlaegerae*; 35–37. *Colostygia pectinataria*; 38–40. *Colostygia aquaeata aquaeata*; 41–43. *Colostygia aquaeata hercegovinensis*; 44–45. *Colostygia turbata turbata*; 46. *Colostygia turbata pyrenaeata*; 47. *Colostygia kollariaria*; 48–49. *Colostygia laetaria*; 50. *Colostygia austriacaria*; 51–52. *Colostygia tempestaria*.

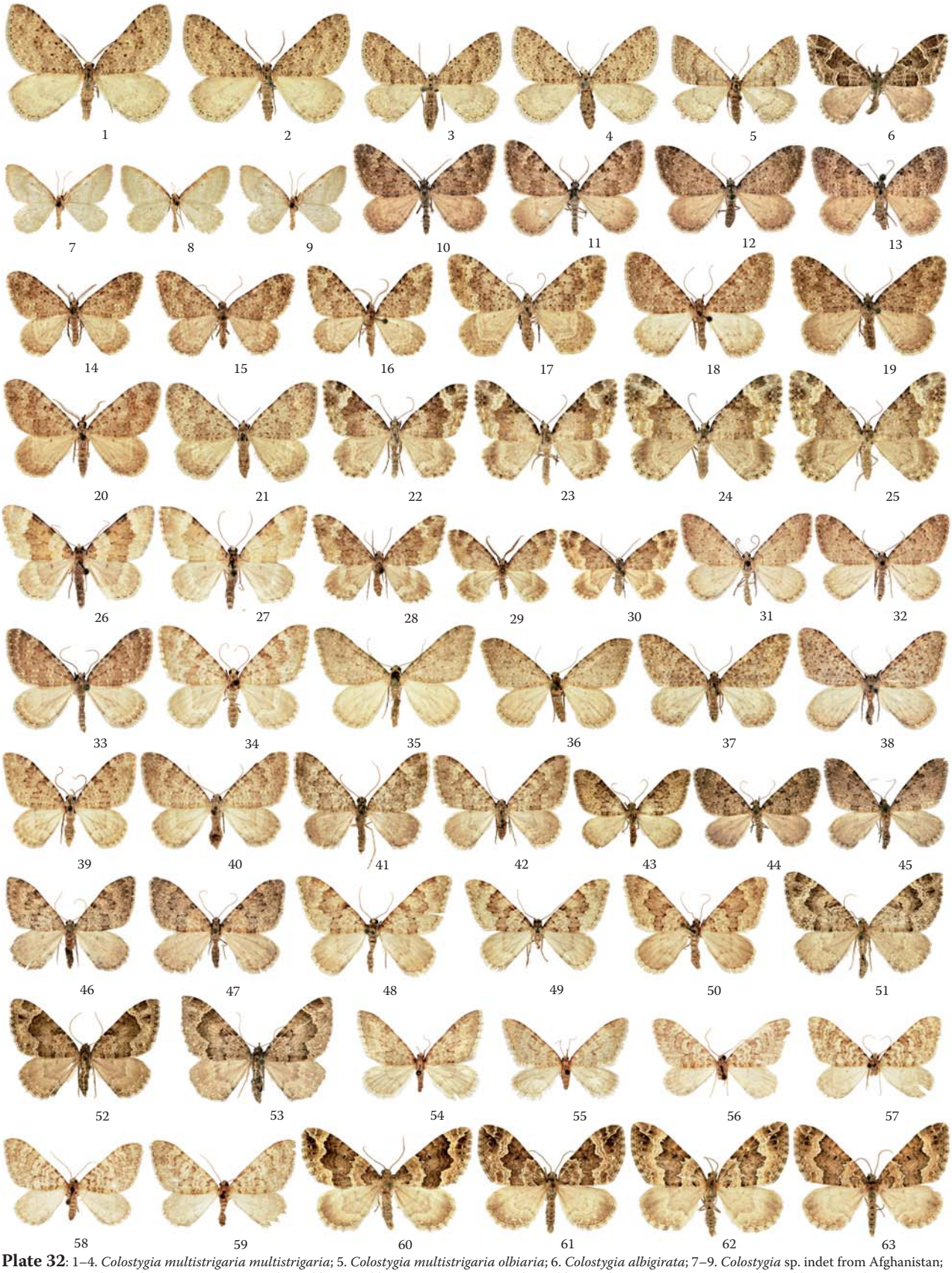

Plate 32: 1–4. *Colostygia multistrigaria multistrigaria*; 5. *Colostygia multistrigaria olbiaria*; 6. *Colostygia albigirata*; 7–9. *Colostygia* sp. indet from Afghanistan; 10–13. *Coenotephria salicata*; 14–15. *Coenotephria ablutaria ablutaria*; 16–19. *Coenotephria ablutaria hangayi*; 20–21. *Coenotephria ablutaria probaria*; 22–25. *Coenotephria tophaceata*; 26–27. *Coenotephria* sp. indet from Italy; 28. *Coenotephria schneideraria schneideraria*; 29–30. *Coenotephria schneideraria eteocretica*; 31–34. *Nebula nebulata*; 35–38. *Nebula senectaria*; 39–40. *Nebula achromaria*; 41–42. *Nebula* sp. near *achromaria* from Armenia; 43–47. *Nebula ibericata numidiata*; 48–50. *Nebula apiciata pamirica*; 51–53. *Nebula homophana*; 54–55. *Nebula triciliata*; 56–59. *Nebula vartianata* (56. Holotype); 60–63. *Lampropteryx suffumata*.

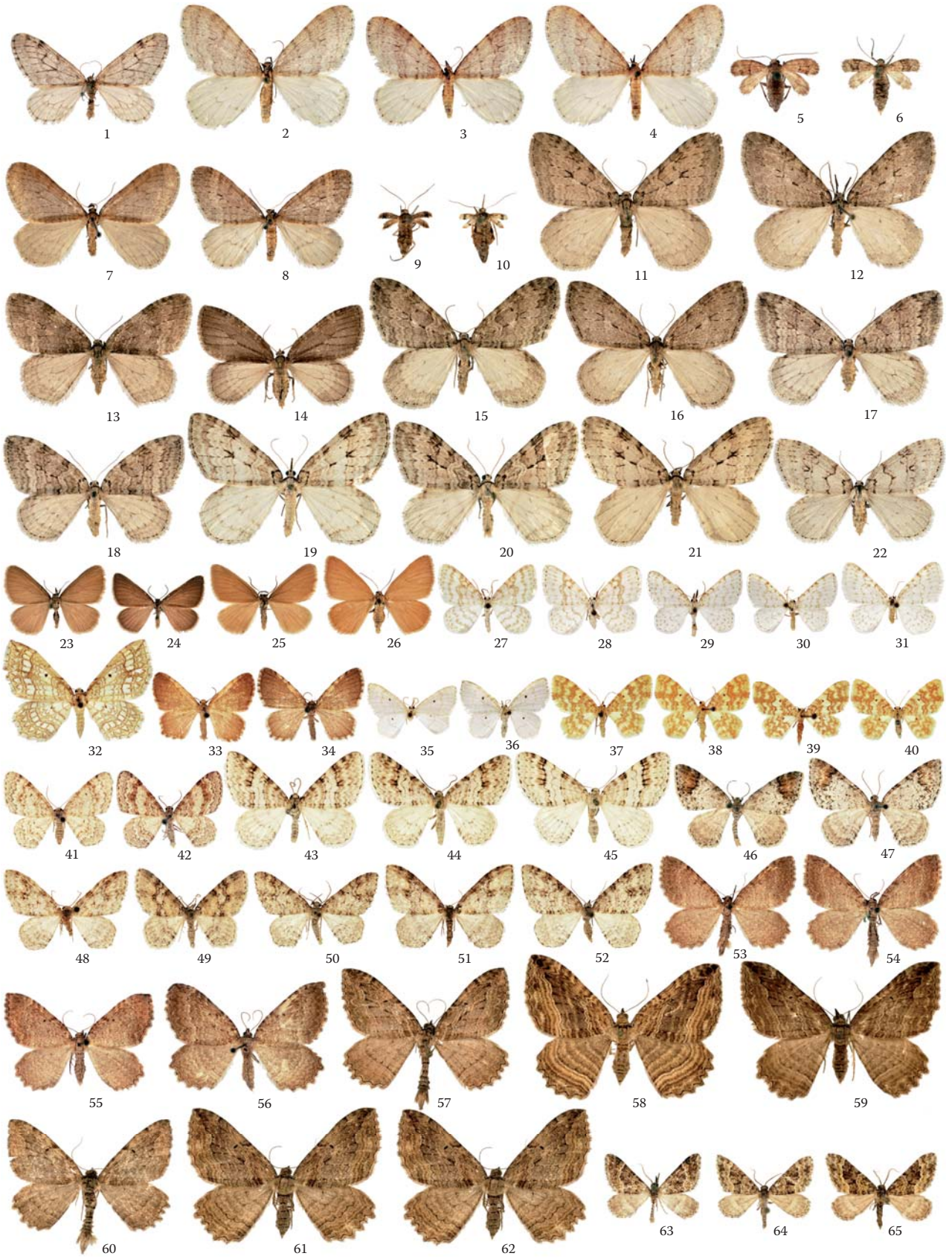

Plate 33: 1. *Malacodea regelaria*; 2–6. *Operophthera fagata*; 7–10. *Operophthera brumata*; 11–14. *Epirrita dilutata*; 15–18. *Epirrita christyi*; 19–22. *Epirrita autumnata*; 23–24. *Minoa murinata murinata*; 25–26. *Minoa murinata monochroaria*; 27–28. *Asthena albulata*; 29–31. *Asthena anseraria candidissima*; 32. *Laciniodes denigrata*; 33–34. *Euchoeca nebulata*; 35–36. *Hydrelia chionata*; 37–40. *Hydrelia flammeolaria*; 41–42. *Hydrelia sylvata*; 43–45. *Venusia cambrica*; 46–47. *Venusia blomeri*; 48–52. *Venusia kasyata* (48. Holotype); 53–56. *Philereme vetulata*; 57–59. *Philereme transversata*; 60–62. *Philereme senescens*; 63–65. *Hospitalia flavolineata*.

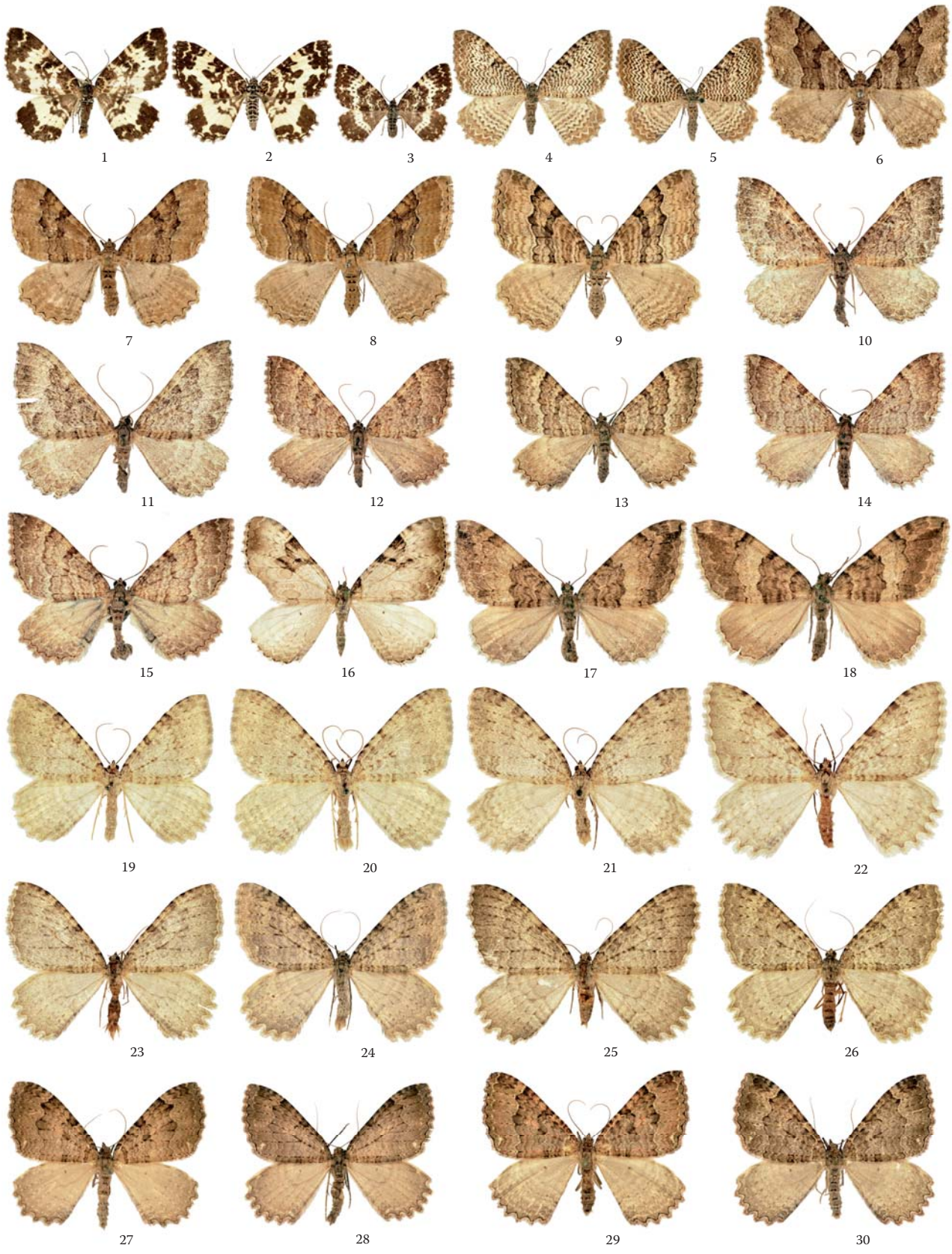

Plate 34: 1–2. *Rheumaptera hastata*; 3. *Rheumaptera subhastata*; 4–5. *Hydria undulata*; 6–9. *Hydria cervinalis*; 10–11. *Hydria montivagata hyrcana*; 12–15. *Hydria montivagata andalusica*; 16. *Hydria moniliferaria*; 17–18. *Hydria alternata*; 19–22. *Triphosa sabaudiata*; 23–26. *Triphosa taochata*; 27–30. *Triphosa dubitata*.

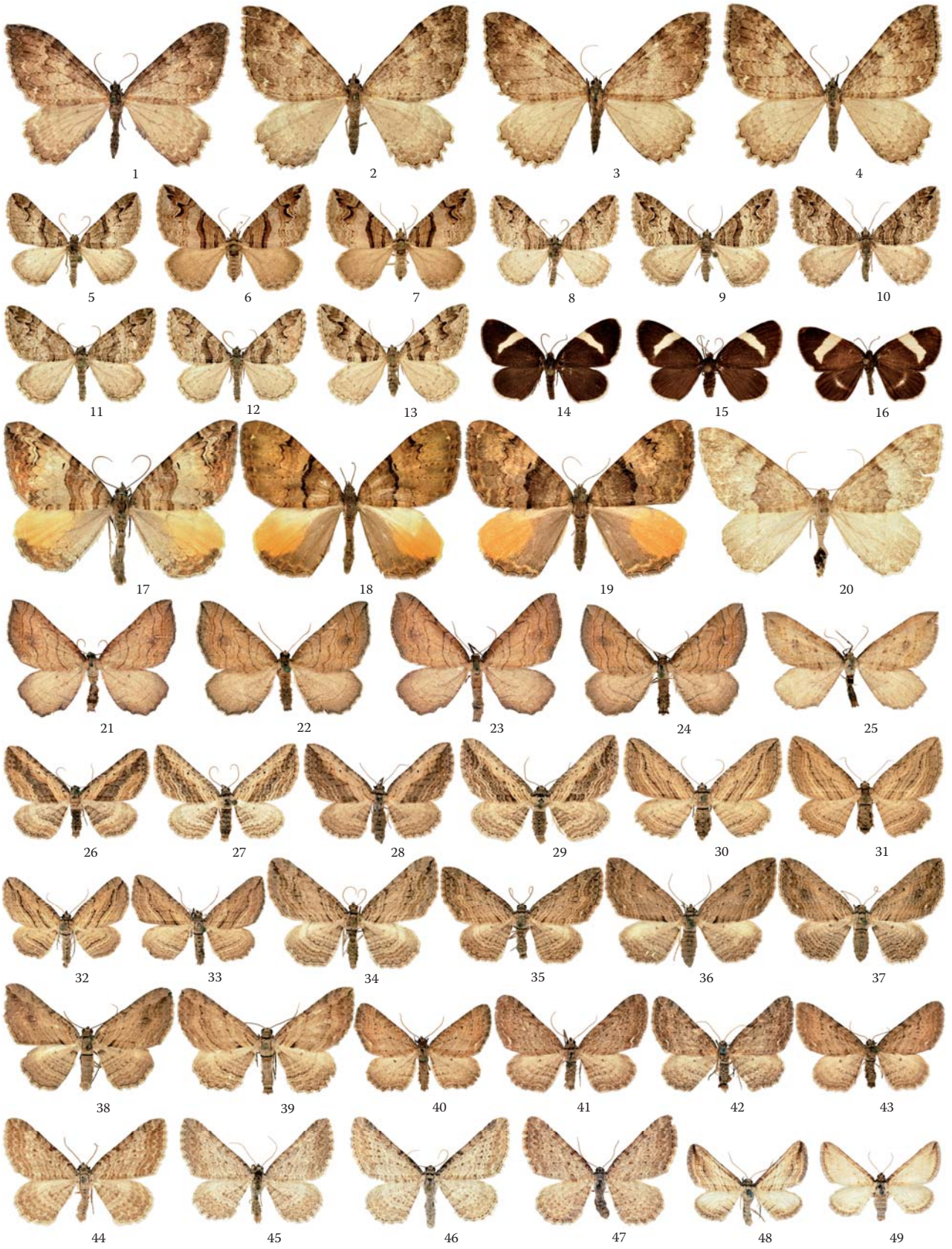

Plate 35: 1–4. *Triphosa expansa*; 5–7. *Pareulype berberata berberata*; 8–10. *Pareulype berberata nevadensis*; 11–13. *Pareulype lasithiotica*; 14–15. *Baptria tibiale tibiale*; 16. *Baptria tibiale mychioleuca*; 17. *Amnesicoma simplex*; 18–19. *Photoscotosia dejuta*; 20. *Photoscotosia palaearctica*; 21–24. *Coenocalpe lapidata*; 25. *Coenocalpe millierata zerhounaria*; 26–29. *Horisme vitalbata*; 30–33. *Horisme corticata*; 34–37. *Horisme tersata*; 38–39. *Horisme radicaria*; 40. *Horisme exoletata*; 41–43. *Horisme aemulata*; 44–47. *Horisme calligraphata*; 48–49. *Horisme aquata*.

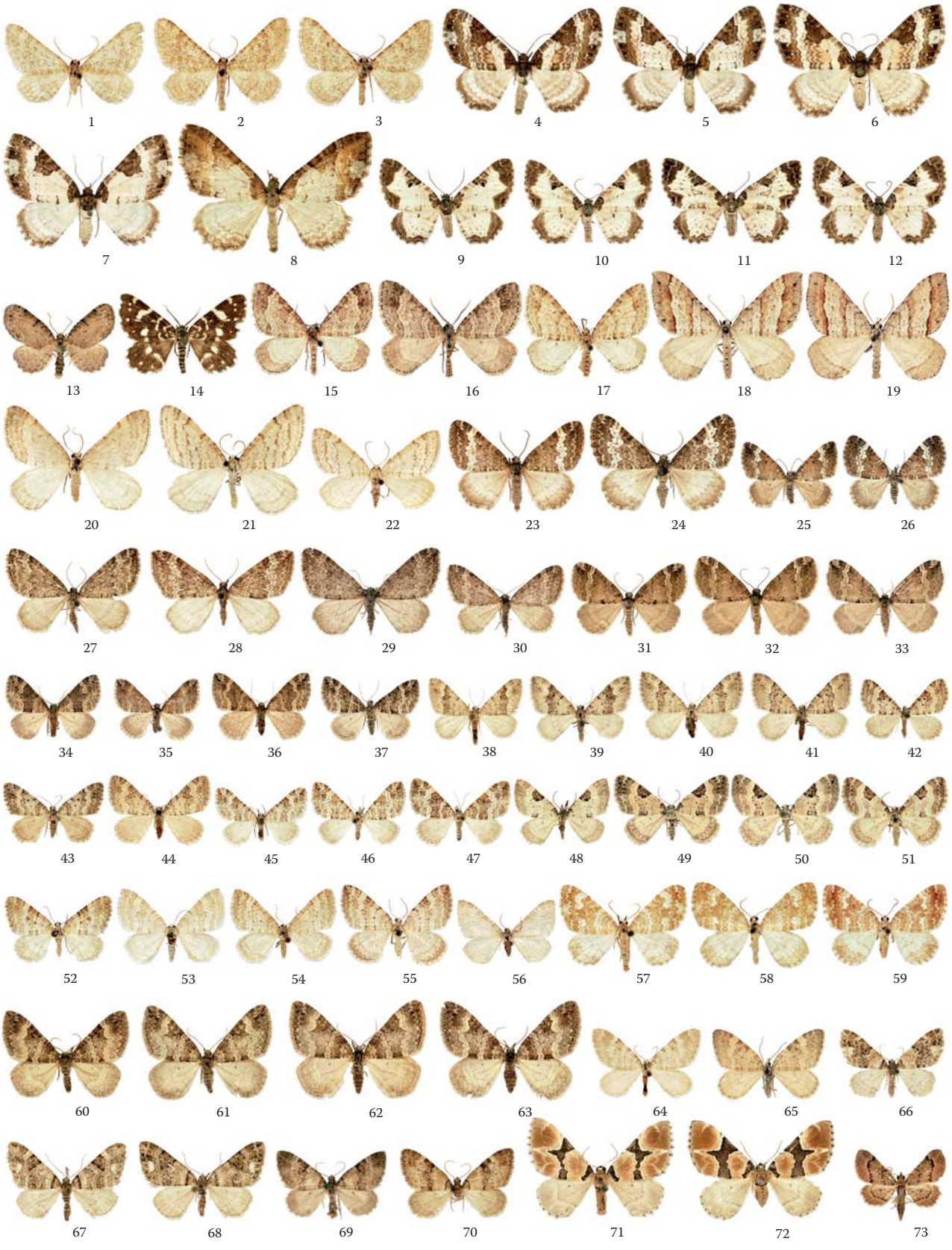

Plate 36: 1–3. *Horisme bamiana* (1. Holotype); 4–7. *Melanthia procellata*; 8. *Melanthia catenaria*; 9–12. *Melanthia alaudaria*; 13. *Anticollix sparsata*; 14. *Pseudobaptria bogumilaria*; 15–17. *Mesotype didymata*; 18–19. *Mesotype parallelolineata*; 20–22. *Mesotype verberata*; 23–24. *Perizoma affinitata*; 25–26. *Perizoma alchemillata*; 27–30. *Perizoma hydrata*; 31–33. *Perizoma lugdunaria*; 34–37. *Perizoma bifaciata*; 38–41. *Perizoma flavosparsata*; 42–44. *Perizoma minorata*; 45–47. *Perizoma* sp. near *minorata* from Iran; 48–51. *Perizoma blandiata*; 52–56. *Perizoma albulata*; 57–59. *Perizoma flavofasciata*; 60–63. *Perizoma obsoletata*; 64–65. *Perizoma incultaria*; 66–68. *Martania seriata*; 69–70. *Martania taeniata*; 71–72. *Gagitodes sagittata*; 73. *Gymnoscelis schulzi*.

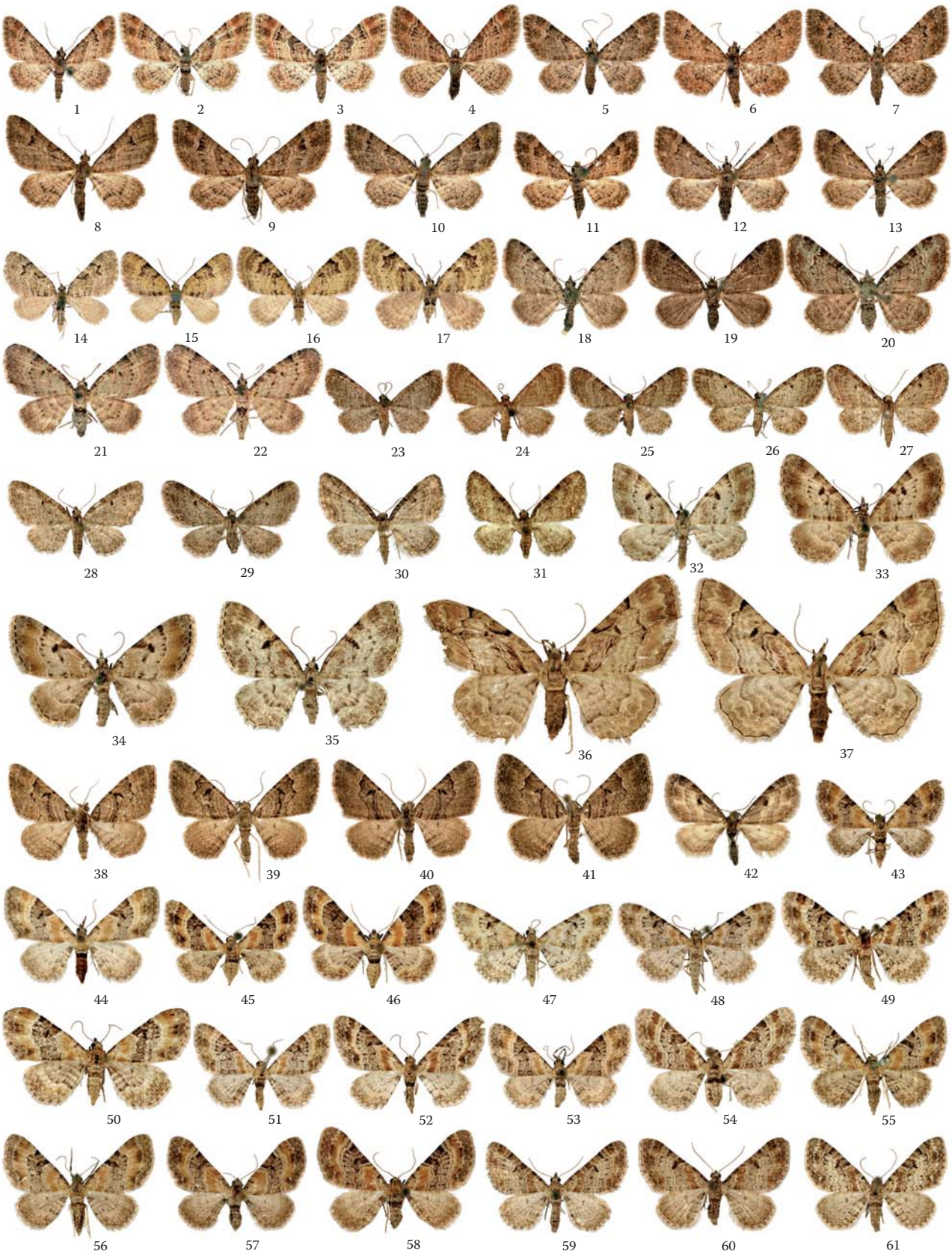

Plate 37 (1,5 x magnification): 1–4. *Gymnoscelis rufifasciata*; 5–7. *Gymnoscelis lundbladi lundbladi*; 8–10. *Gymnoscelis lundbladi palmata*; 11–13. *Gymnoscelis insulariata fernandezi*; 14–17. *Chloroclystis v–ata*; 18–20. *Pasiphila rectangulata*; 21–22. *Pasiphila debiliata*; 23–25. *Eupithecia haworthiata*; 26–29. *Eupithecia tenuiata*; 30–31. *Eupithecia inturbata*; 32–35. *Eupithecia abietaria*; 36–37. *Eupithecia interrubrescens*; 38–41. *Eupithecia subrubrescens*; 42. *Eupithecia albibaltea* (Paratype of *E. multa*); 43–46. *Eupithecia linariata*; 47–50. *Eupithecia pulchellata iberica*; 51–54. *Eupithecia* sp. near *pulchellata* from Afghanistan; 55–58. *Eupithecia pyrenaeata*; 59–61. *Eupithecia laquaearia*.

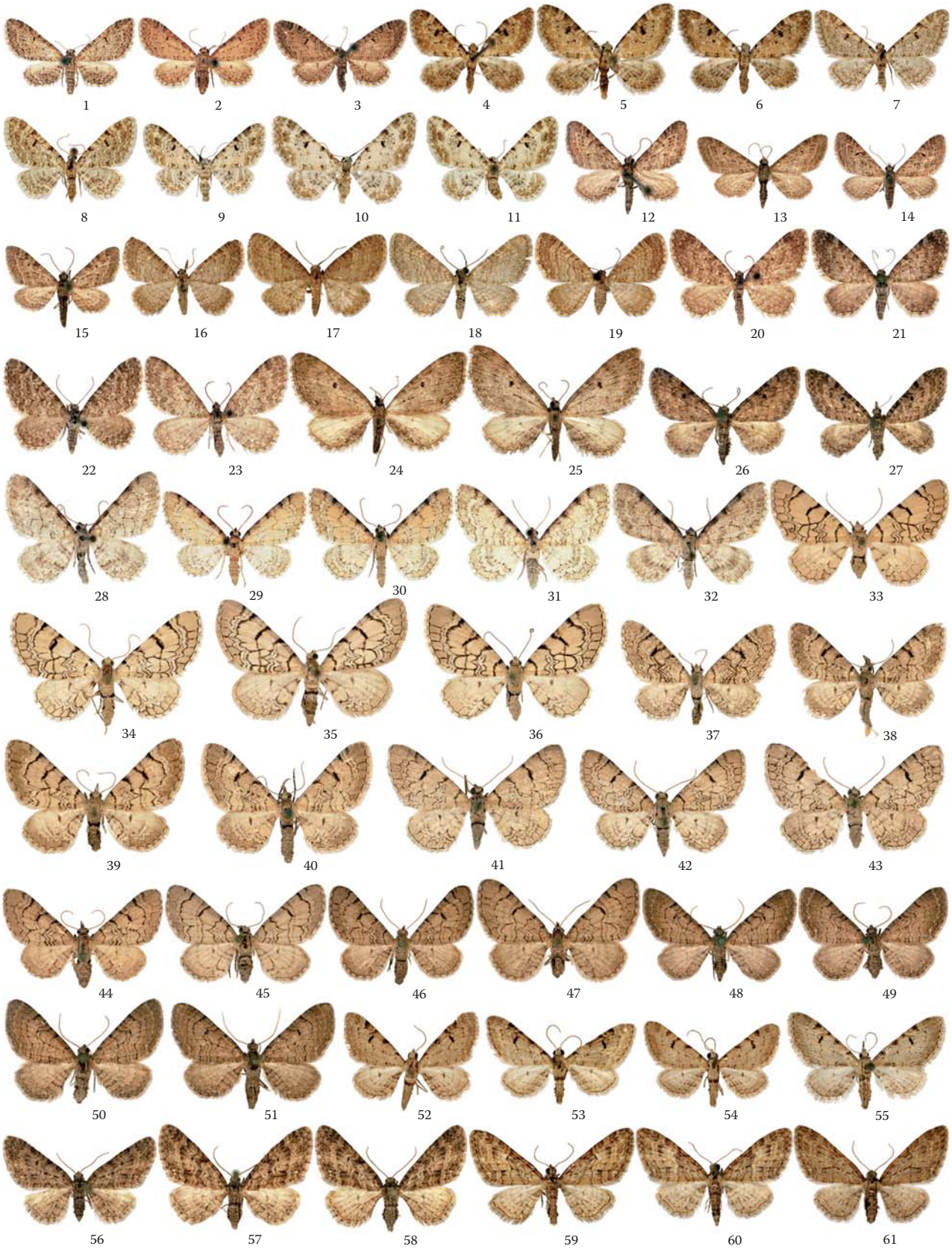

Plate 38 (1,5 x magnification): 1–3. *Eupithecia ultimaria*; 4–6. *Eupithecia pantellata canariata*; 7–11. *Eupithecia* sp. near *pantellata* from Iran; 12–15. *Eupithecia boryata*; 16–19. *Eupithecia plumbeolata*; 20–23. *Eupithecia undata*; 24–25. *Eupithecia mustangata*; 26–27. *Eupithecia silenata*; 28–32. *Eupithecia carpophagata*; 33–36. *Eupithecia venosata*; 37–40. *Eupithecia* sp. near *venosata* from Afghanistan; 41–43. *Eupithecia schiefereri*; 44–47. *Eupithecia silenicolata*; 48–51. *Eupithecia alliaria*; 52–55. *Eupithecia rosai*; 56–58. *Eupithecia cocciferata*; 59–61. *Eupithecia abbreviata*.

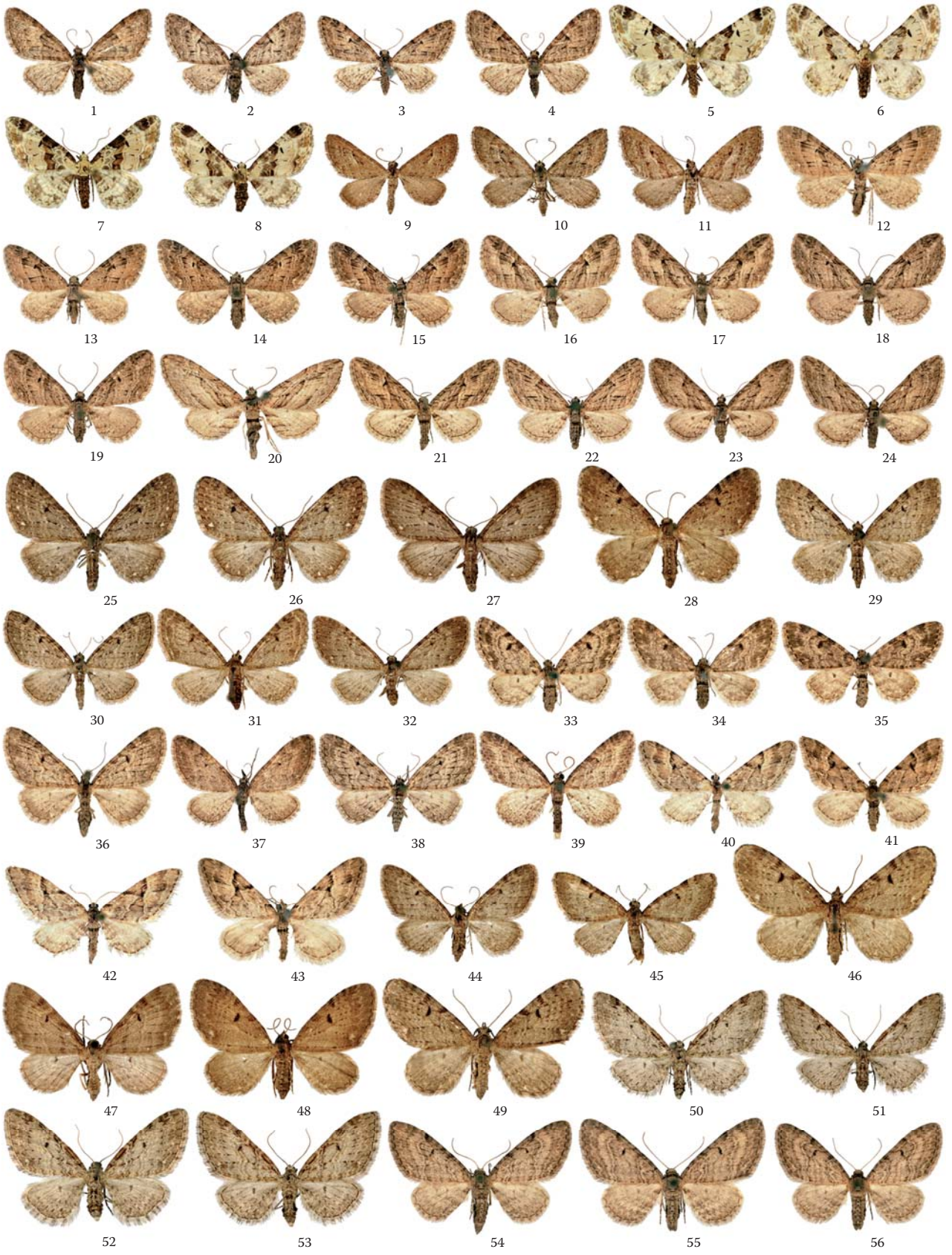

Plate 39 (1,5 x magnification): 1–4. *Eupithecia dodoneata*; 5–8. *Eupithecia extremata*; 9–11. *Eupithecia scopariata*; 12–15. *Eupithecia pusillata*; 16–19. *Eupithecia ericeata*; 20. *Eupithecia phoeniceata*; 21–24. *Eupithecia oxycedrata*; 25–28. *Eupithecia tripunctaria*; 29–32. *Eupithecia virgaureata*; 33–35. *Eupithecia tantillaria*; 36–39. *Eupithecia lariciata*; 40–43. *Eupithecia lanceata*; 44–45. *Eupithecia selinata*; 46–49. *Eupithecia actaeata*; 50–53. *Eupithecia quercetica*; 54–56. *Eupithecia egenaria*.

Plate 40 (1,5 x magnification): 1–4. *Eupithecia pimpinellata*; 5–6. *Eupithecia* sp. near *pimpinellata* from Greece; 7–8. *Eupithecia latipennata*; 9–10. *Eupithecia schutzeata*; 11–14. *Eupithecia tenerifensis* ; 15. *Eupithecia torva*; 16. *Eupithecia recens*; 17–20. *Eupithecia simpliciata*; 21–22. *Eupithecia nanata*; 23–26. *Eupithecia sinuosaria*; 27–32. *Eupithecia innotata*; 33–36. *Eupithecia ochridata*; 37–40. *Eupithecia graphata*; 41–44. *Eupithecia inconspicuata* (Paratypes of *E. thurnerata*); 45–49. *Eupithecia gemellata*.

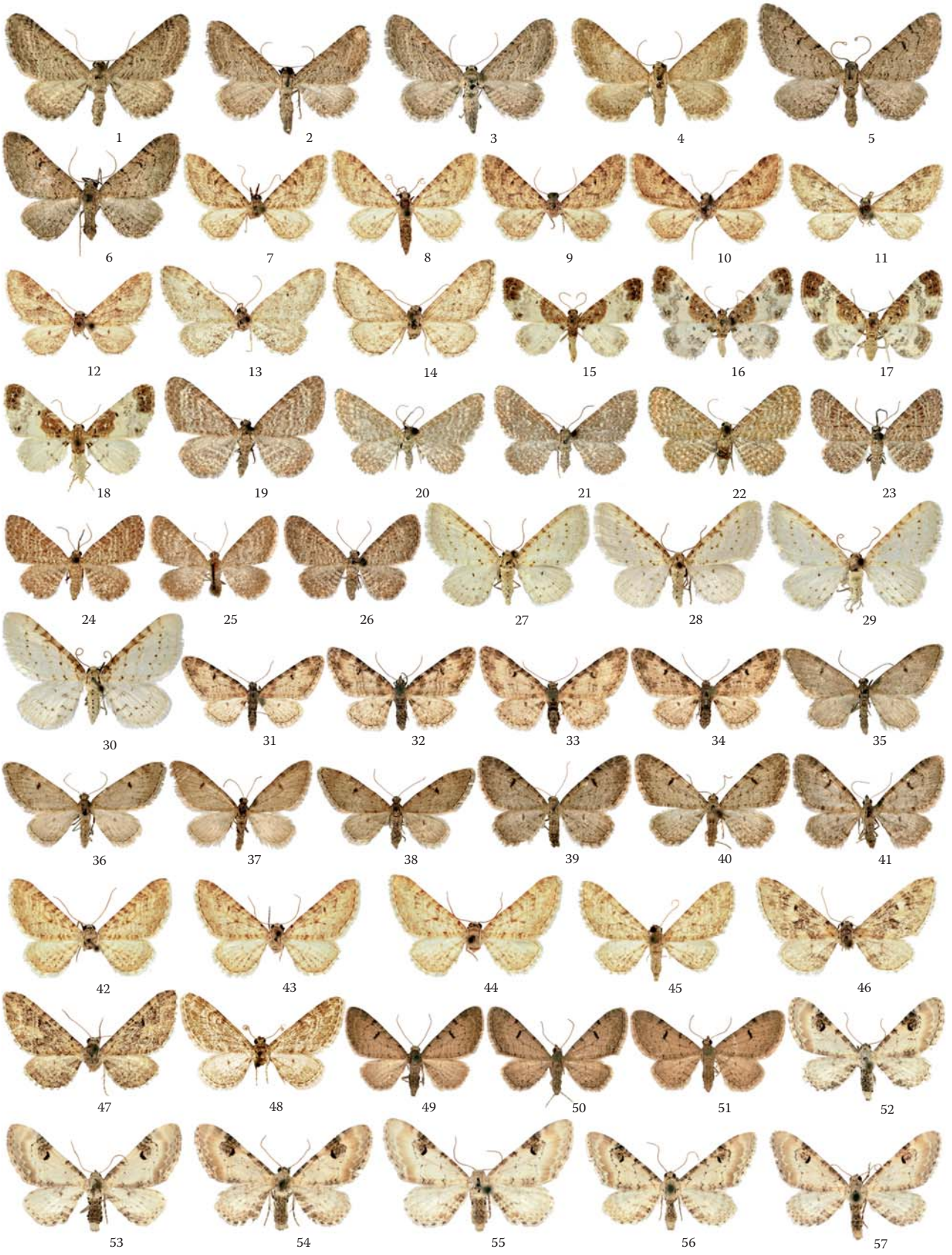

Plate 41 (1,5 x magnification): 1–4. *Eupithecia subsequaria*; 5–6. *Eupithecia* sp. near *subsequaria* from Turkey; 7–10. *Eupithecia convallata convallata*; 11–12. *Eupithecia convallata terricolor* (11. Holotype); 13–14. *Eupithecia edaphopteryx* (13. Holotype); 15–18. *Eupithecia breviculata*; 19–22. *Eupithecia spissilineata*; 23–26. *Eupithecia cuculliaria*; 27–30. *Eupithecia cerussaria*; 31–34. *Eupithecia irriguata*; 35–38. *Eupithecia indigata*; 39–41. *Eupithecia distinctaria*; 42–45. *Eupithecia elbursi* (42. Holotype); 46–47. *Eupithecia xanthomixta xanthomixta* (46. Holotype); 48. *Eupithecia xanthomixta derbendi* (Holotype); 49–51. *Eupithecia extraversaria*; 52–57. *Eupithecia centaureata*.

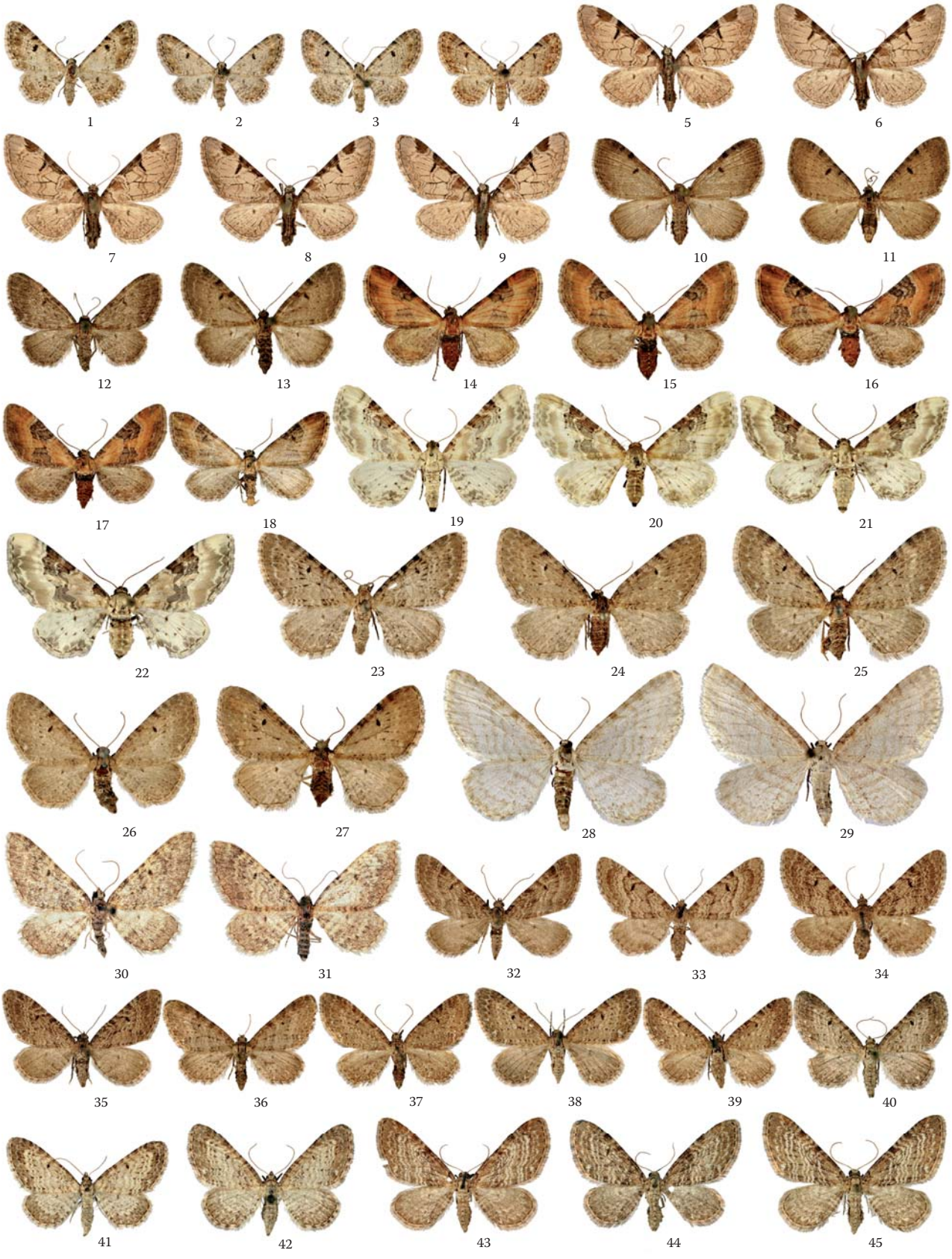

Plate 42 (1,5 x magnification): 1–4. *Eupithecia limbata*; 5–9. *Eupithecia insigniata*; 10–13. *Eupithecia trisignaria*; 14–17. *Eupithecia gueneata gueneata*; 18. *Eupithecia gueneata busambraria*; 19–22. *Eupithecia gratiosata*; 23–27. *Eupithecia veratraria*; 28–29. *Eupithecia cretaceata fenestrata*; 30–31. *Eupithecia praealta rerayata*; 32–35. *Eupithecia intricata*; 36–39. *Eupithecia satyrata*; 40–42. *Eupithecia cauchiata*; 43–45. *Eupithecia pernotata*.

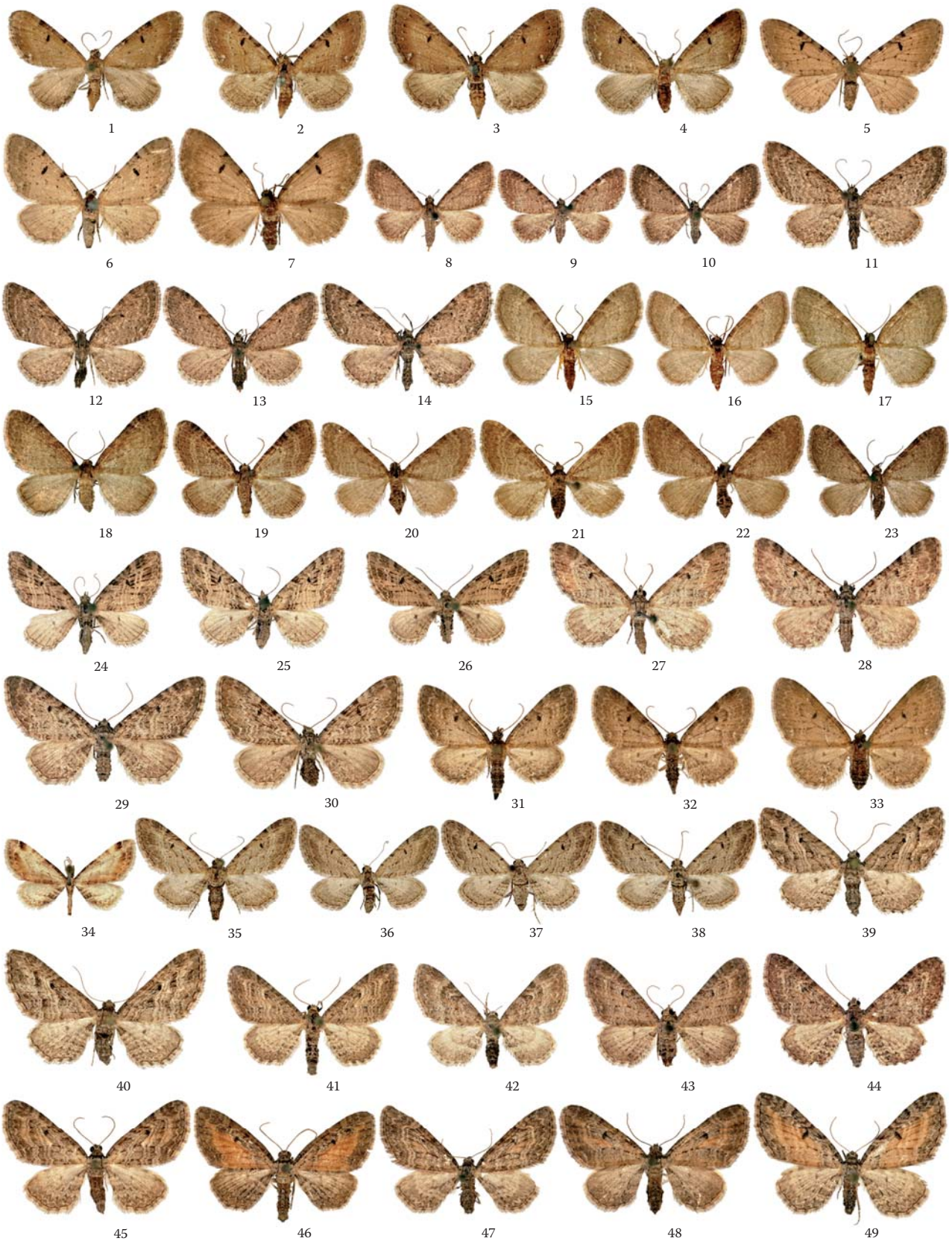

Plate 43 (1,5 x magnification): 1–4. *Eupithecia absinthiata*; 5–7. *Eupithecia expallidata*; 8–10. *Eupithecia valerianata*; 11–14. *Eupithecia vulgata*; 15–18. *Eupithecia immundata*; 19–23. *Eupithecia thalictrata*; 24–26. *Eupithecia exiguata*; 27–30. *Eupithecia druentiata*; 31–33. *Eupithecia denotata*; 34. *Eupithecia leucethensis* (Paratype of *E. albicans*); 35–38. *Eupithecia pauxillaria*; 39–40. *Eupithecia santolinata*; 41–44. *Eupithecia millefoliata*; 45–49. *Eupithecia icterata*.

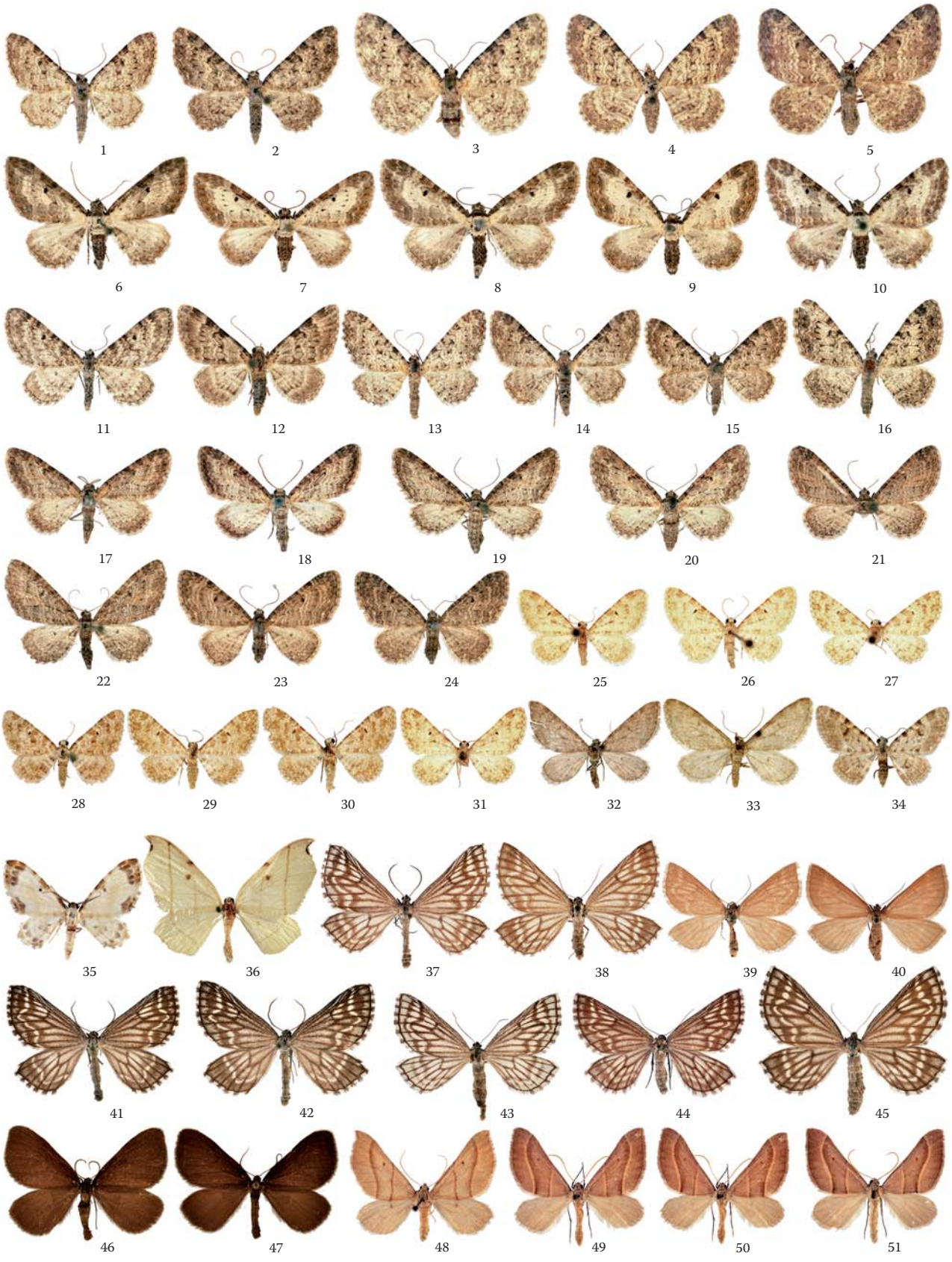

Plate 44 (1,5 x magnification above the line): 1–5. *Eupithecia impurata*; 6–10. *Eupithecia succenturiata*; 11–16. *Eupithecia semigraphata*; 17–20. *Eupithecia subumbrata*; 21. *Eupithecia orphnata*; 22–24. *Eupithecia subfuscata*; 25–31. *Eupithecia brunneata*; 32–33. *Eupithecia* sp. indet from Greece; 34. *Eupithecia* sp. indet Iran, Elburz; 35. *Tyloptera bella*; 36. *Emmesomia bilinearia*; 37–40. *Schistostege decussata decussata*; 41–45. *Schistostege decussata dinarica*; 46–47. *Odezia atrata*; 48. *Docirava dervenaria*; 49–51. *Docirava mundata*.

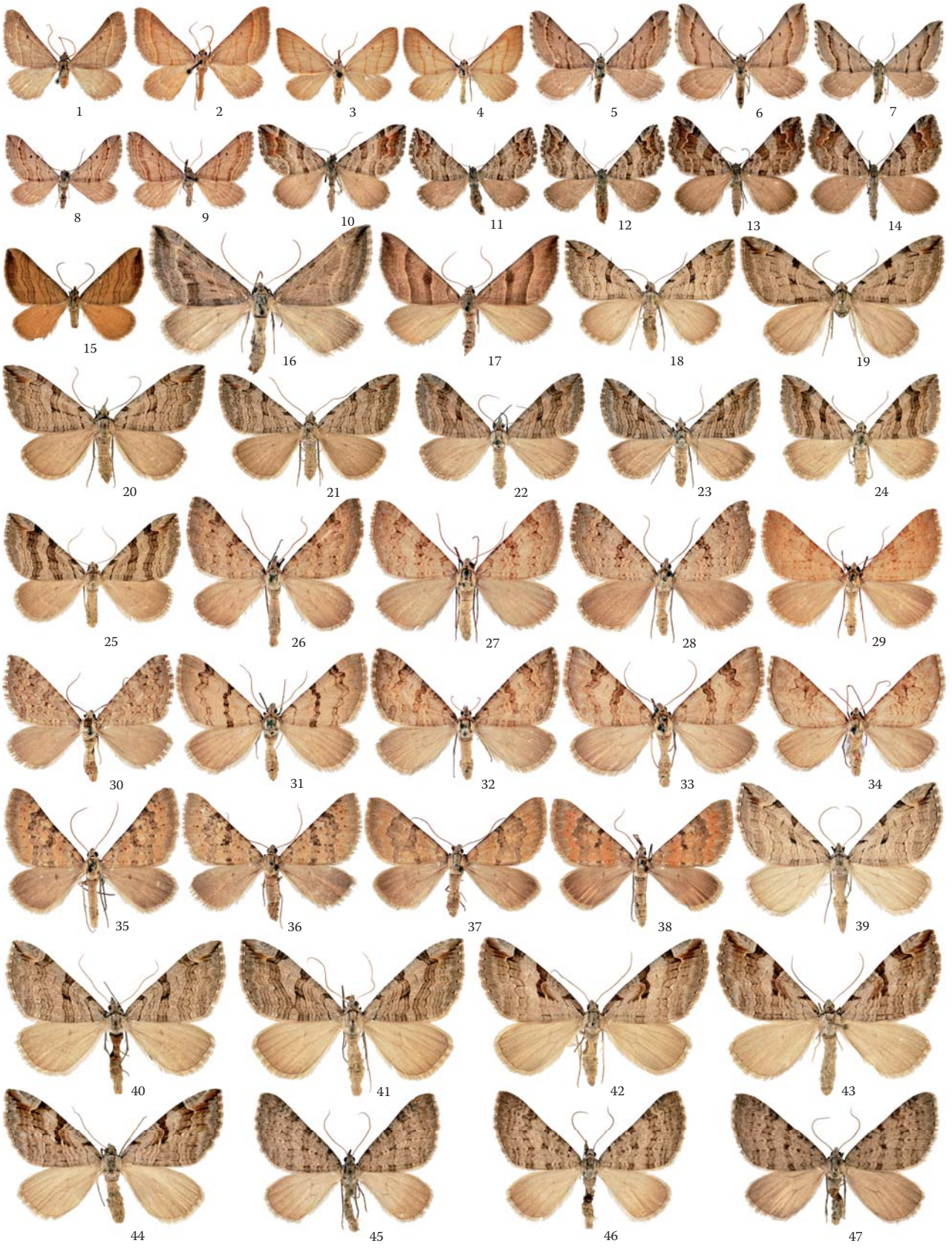

Plate 45: 1–4. *Docirava mundulata*; 5–9. *Docirava musculata*; 10–14. *Carsia sororiata imbutata*; 15. *Carsia lythoxylata*; 16. *Aplocera annexata*; 17. *Aplocera columbata*; 18–21. *Aplocera cretica*; 22–25. *Aplocera efformata*; 26–29. *Aplocera obsitaria obsitaria*; 30. *Aplocera obsitaria anatolica*; 31–34. *Aplocera obsitaria evanescens*; 35–38. *Aplocera opificata*; 39–41. *Aplocera plagiata*; 42–44. *Aplocera praeformata*; 45–47. *Aplocera simpliciata*.

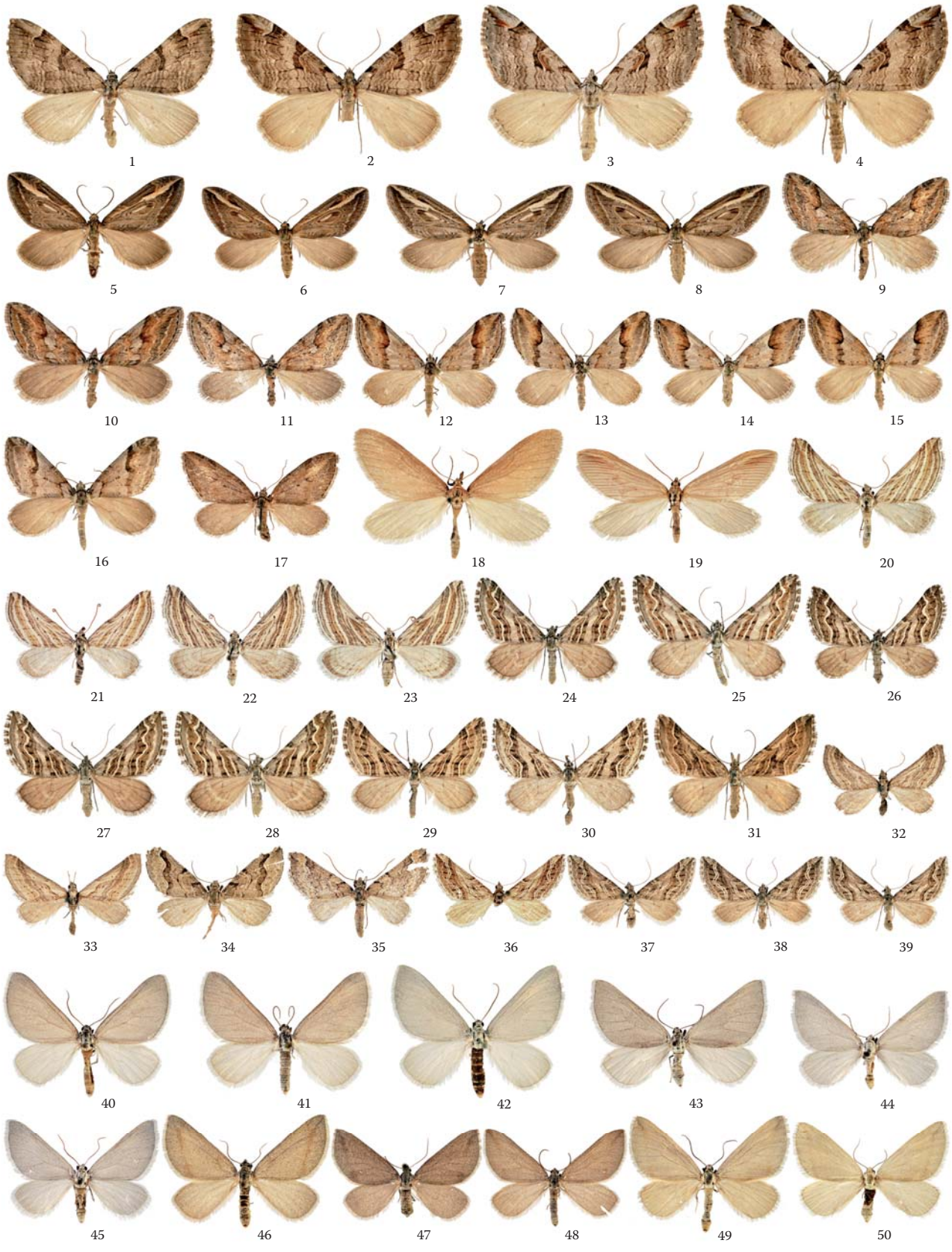

Plate 46: 1–4. *Aplocera uniformata*; 5–8. *Chesias legatella*; 9–11. *Chesias plumbeata*; 12–16. *Chesias rufata rufata*; 17. *Chesias rufata cinereata*; 18. *Chesistege korbi korbi*; 19. *Chesistege korbi taurica*; 20–23. *Lithostege witzenmanni*; 24–28. *Lithostege amoenata*; 29–31. *Lithostege amseli*; 32–33. *Lithostege usgentaria*; 34. *Lithostege hreblayi*; 35. *Lithostege rufovirgata* **sp. n.** (Holotype); 36–39. *Lithostege wiltshirei* **sp. n.** (36. Holotype); 40–43. *Lithostege farinata*; 44–45. *Lithostege ancyrana*; 46–48. *Lithostege griseata griseata*; 49–50. *Lithostege griseata cycnaria*.

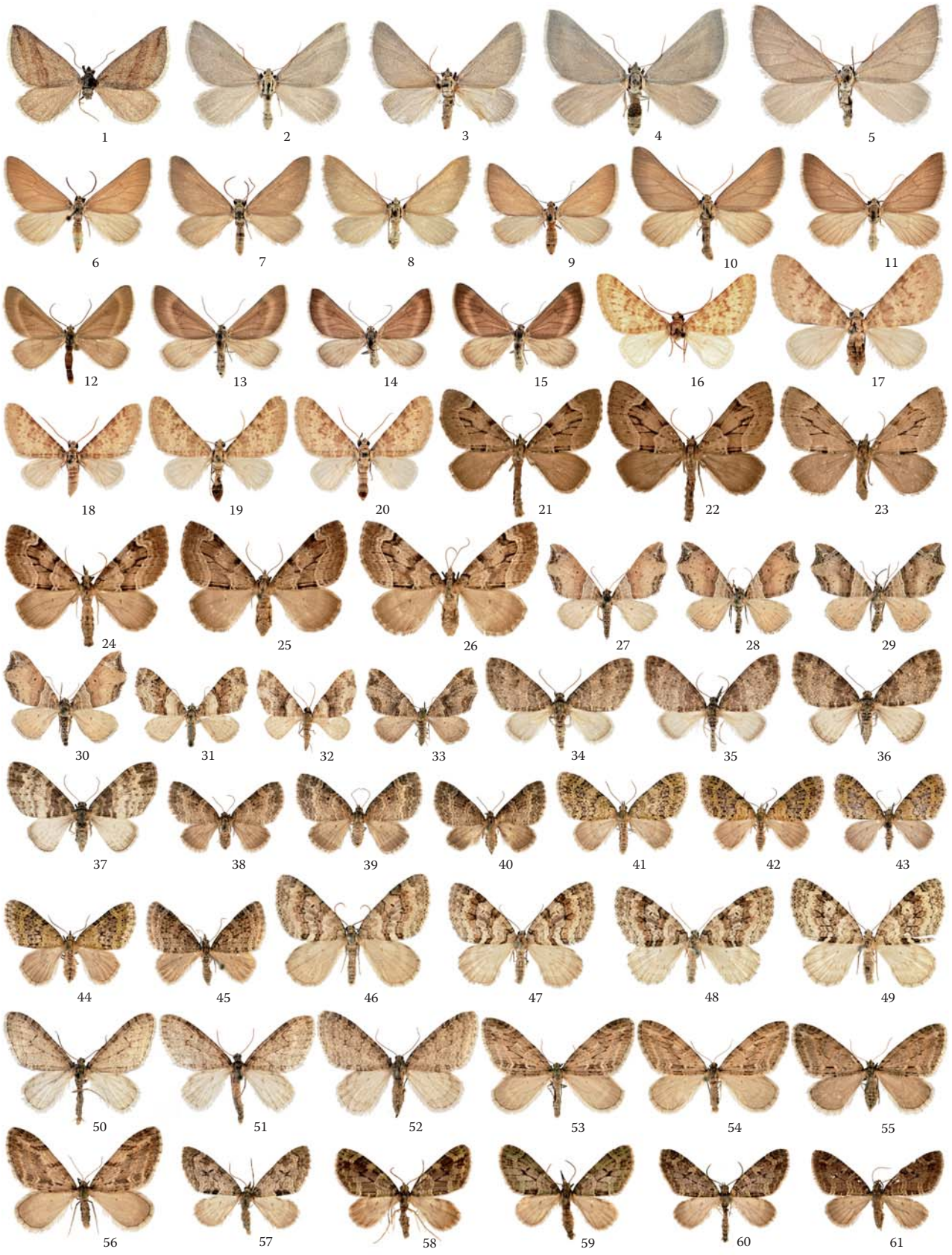

Plate 47: 1. *Lithostege* sp. near *coassata* from Jordan; 2-5. *Lithostege palaestinensis*; 6-9. *Lithostege infuscata*; 10-11. *Lithostege flavicornata*; 12-15. *Lithostege castiliaria*; 16-20. *Lithostege vartianae* **sp. n.** (16. Holotype); 21-23. *Epilobophora sabinata sabinata*; 24-26. *Epilobophora sabinata teriolensis*; 27-30. *Oulobophora internata*; 31. *Oulobophora externaria externaria*; 32-33. *Oulobophora externaria turcosyrica*; 34-37. *Lobophora halterata*; 38-40. *Pterapherapteryx sexalata*; 41-44. *Acasis viretata*; 45. *Acasis appensata*; 46-49. *Nothocasis sertata*; 50-52. *Trichopteryx carpinata*; 53-56. *Trichopteryx polycommata*; 57-61. *Episauris kiliani*.

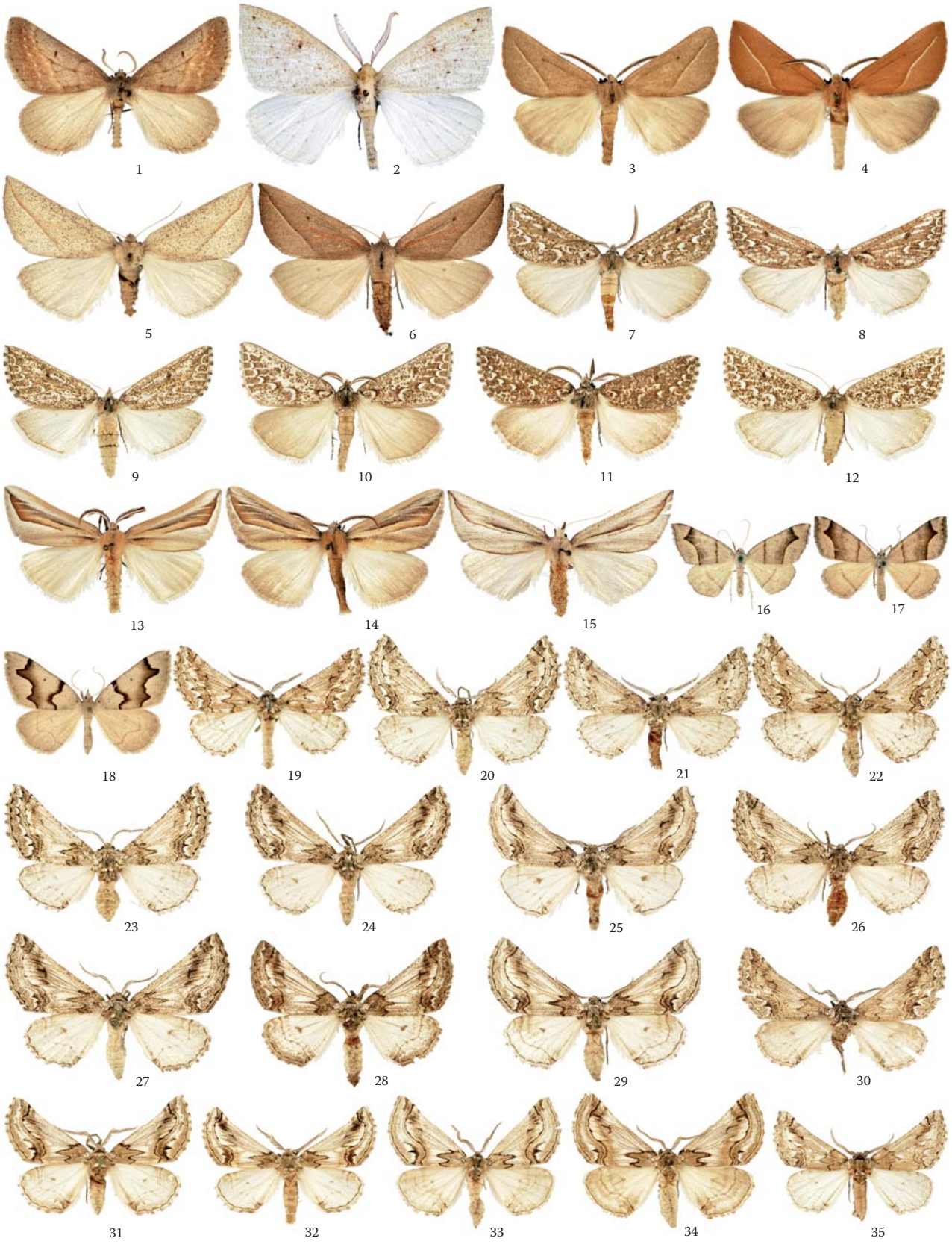

Plate 48: 1. *Chemerina caliginearia*; 2. *Descoreba simplex*; 3–6. *Compsoptera opacaria*; 7–9. *Compsoptera jourdanaria jourdanaria*; 10–12. *Compsoptera jourdanaria anargyra*; 13–15. *Compsoptera argentaria*; 16–17. *Anonychia grisea*; 18. *Anonychia rostrifera*; 19. *Phaselia serrularia serrularia*; 20–23. *Phaselia serrularia catharia*; 24–29. *Phaselia erika*; 30. *Phaselia kasyi* (Holotype); 31–32. *Phaselia deliciosaria*; 33–34. *Phaselia joestleinae*; 35. *Phaselia algiricaria gigantaria*.

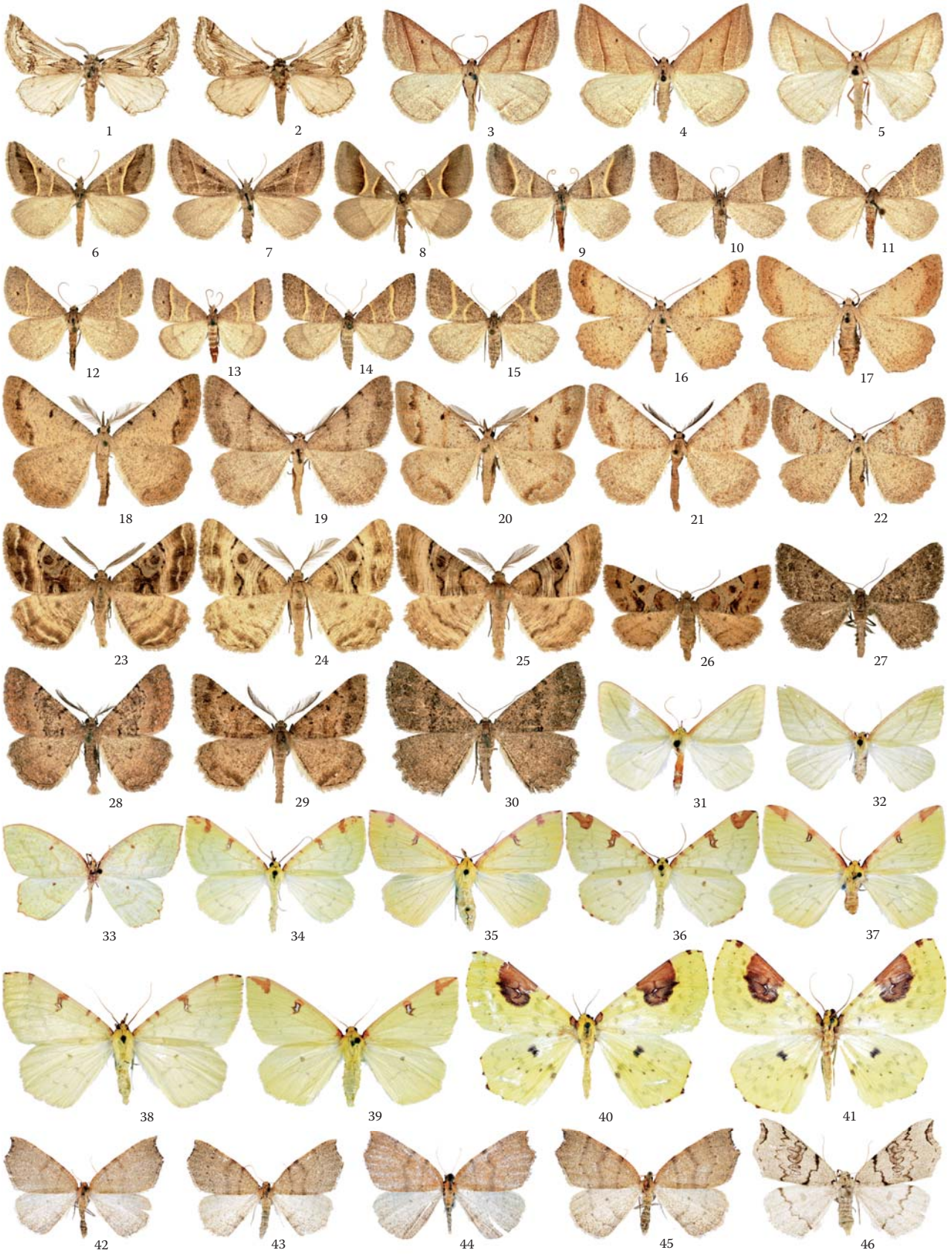

Plate 49: 1–2. *Phaselia algiricaria aragona*; 3–5. *Petrophora chlorosata*; 6–7. *Perigune fraternaria*; 8–11. *Perigune convergata*; 12–15. *Perigune narbonea*; 16–18. *Selidosema brunnearia*; 19–22. *Selidosema plumaria*; 23–26. *Selidosema ambustaria*; 27–30. *Selidosema taeniolaria*; 31–32. *Sirinopteryx ablunata*; 33. *Sirinopteryx rosinaria*; 34–39. *Opisthograptis luteolata*; 40–41. *Opisthograptis swanni*; 42–45. *Toulgoetia cauteriata*; 46. *Eilicrinia orias*.

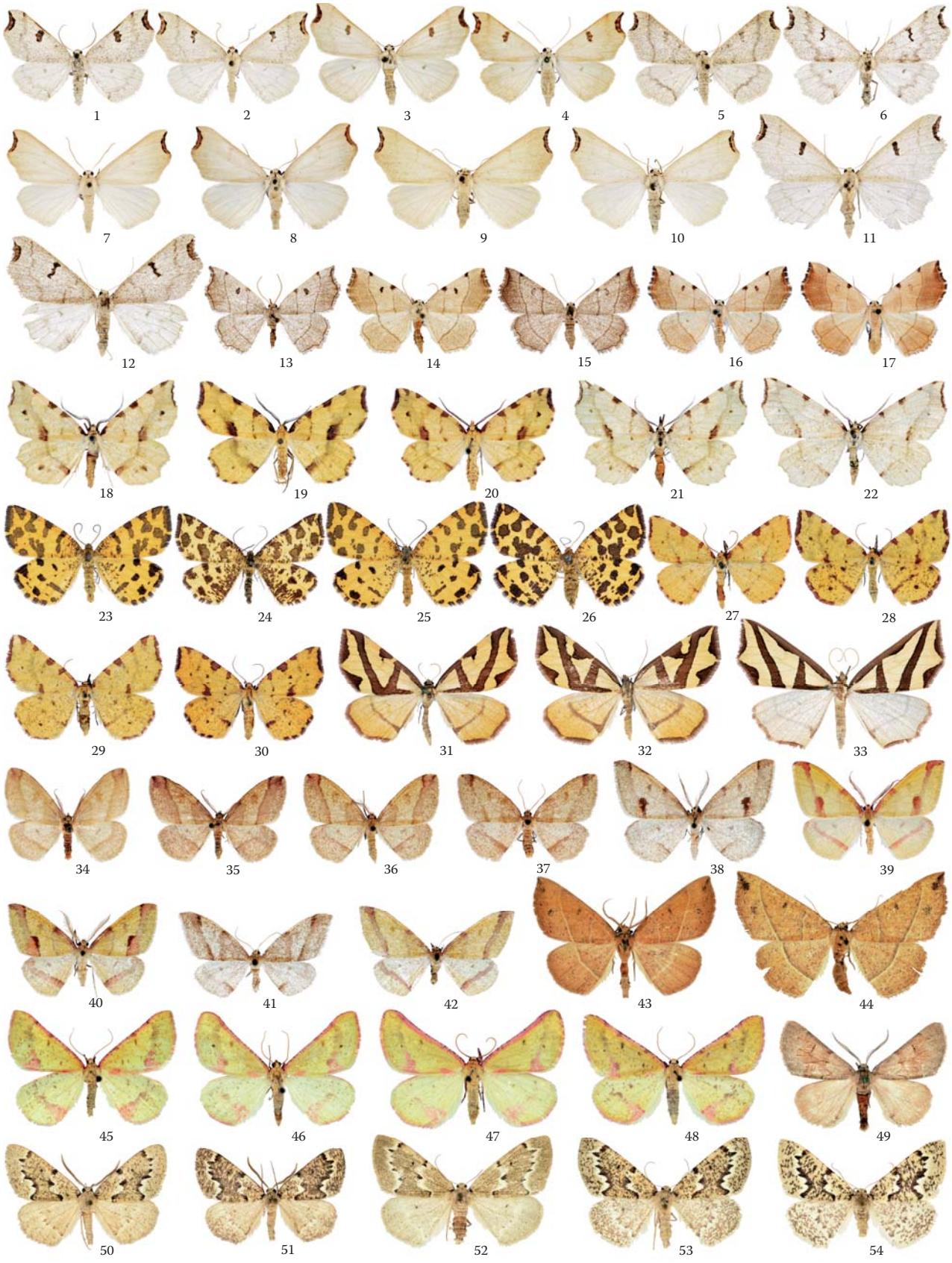

Plate 50: 1–6. *Eilicrinia cordiaria cordiaria*; 7–10. *Eilicrinia subcordaria acardia*; 11–12. *Eilicrinia cordiaria signigera*; 13–17. *Eilicrinia trinotata*; 18–22. *Therapis flavicaria*; 23–26. *Pseudopanthera macularia*; 27–30. *Pseudopanthera syriacata*; 31–32. *Pseudopanthera oberthueri*; 33. *Pseudopanthera triangulum*; 34–37. *Heterolocha laminaria*; 38–42. *Heterolocha phoenicotaeniata*; 43–44. *Anthyperythra caladsaota*; 45–48. *Enanthyperythra legataria*; 49. *Adalbertia castiliaria*; 50–54. *Pungeleria poeymiraui*.

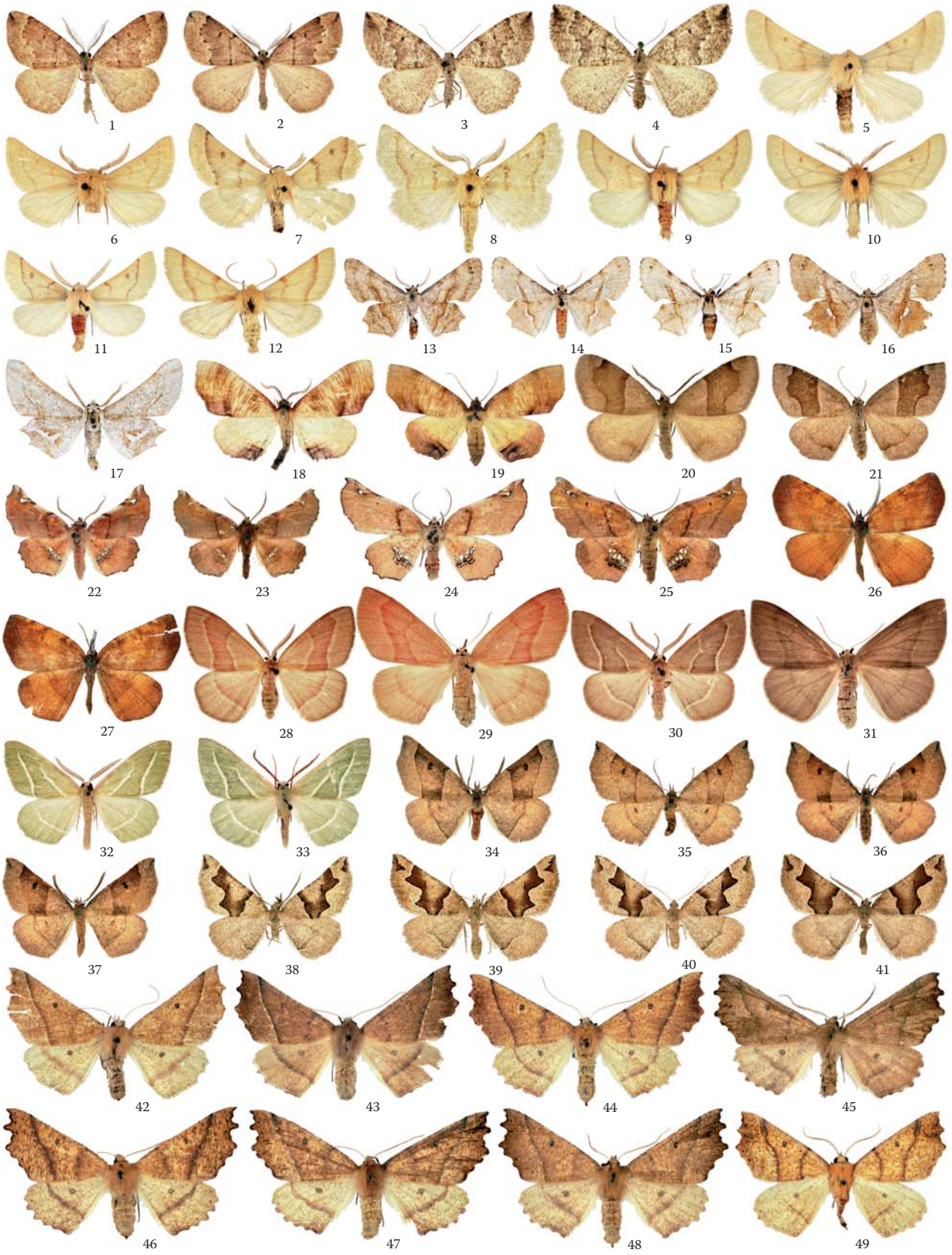

Plate 51: 1–4. *Pungeleria capreolaria*; 5–8. *Scodiomima crocallaria*; 9–12. *Scodiomima afghana*; 13–16. *Coenina dentataria*; 17. *Coenina collenettei*; 18–19. *Plagodis dolabraria*; 20–21. *Plagodis pulveraria*; 22–25. *Garaeus albipunctatus*; 26–27. *Garaeus lateritiaria*; 28–31. *Hylaea fasciaria*; 32–33. *Hylaea pinicolaria*; 34–37. *Artemidora disistaria*; 38–41. *Artemidora vartianae* (38. Holotype); 42–44. *Odontopera* sp. near *blaisa* from Afghanistan; 45–48. *Odontopera* sp. near *muscularia* from Pakistan; 49. *Odontopera alienata*.

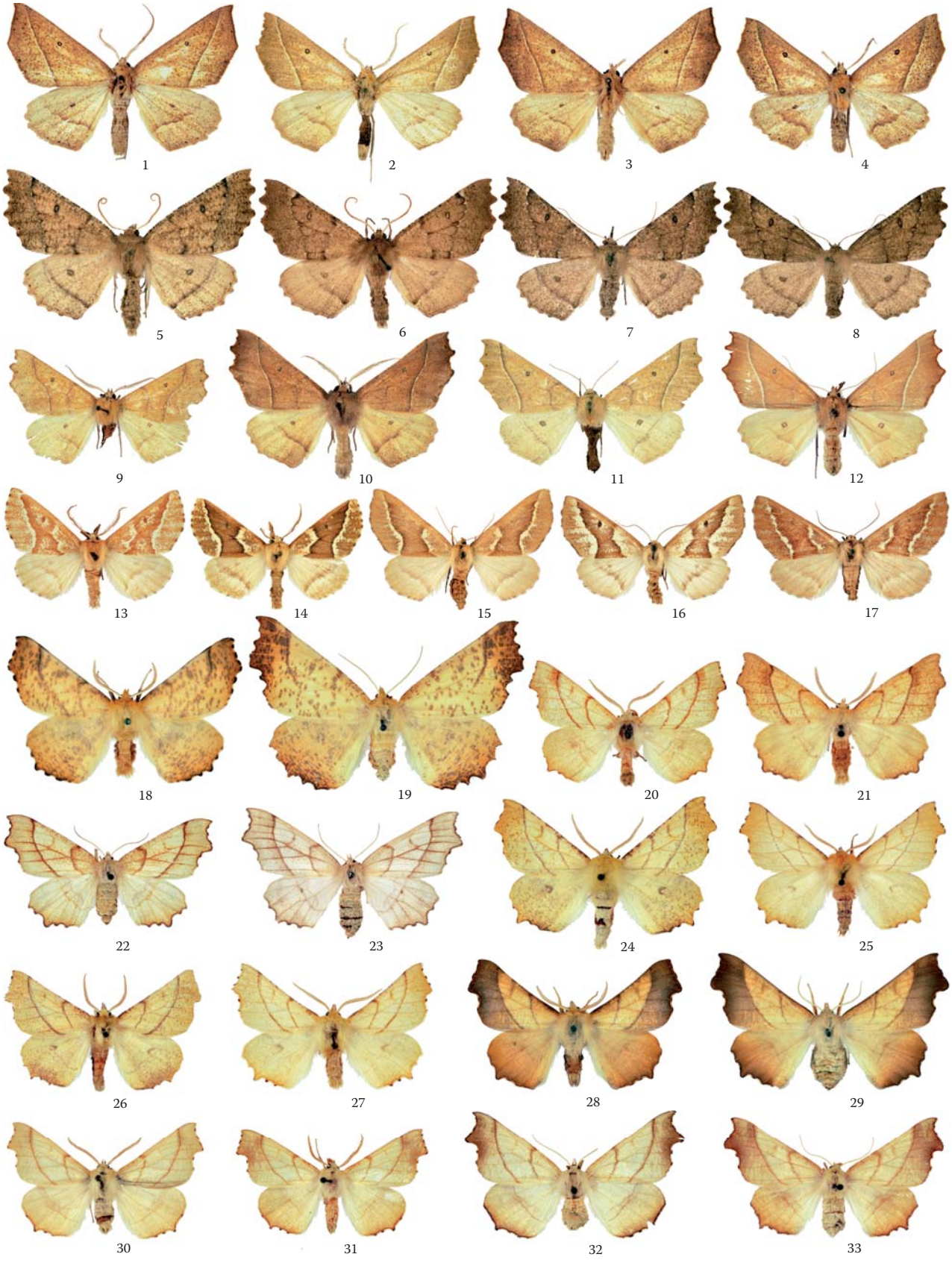

Plate 52: 1–4. *Odontopera acutaria*; 5–8. *Odontopera bidentata*; 9–12. *Odontopera xenobia* (9. Holotype); 13–17. *Odontopera kametaria*; 18–19. *Ennomos autumnaria*; 20–23. *Ennomos quercinaria*; 24–27. *Ennomos alniaria*; 28–30. *Ennomos fuscantaria*; 31–33. *Ennomos fraxineti*.

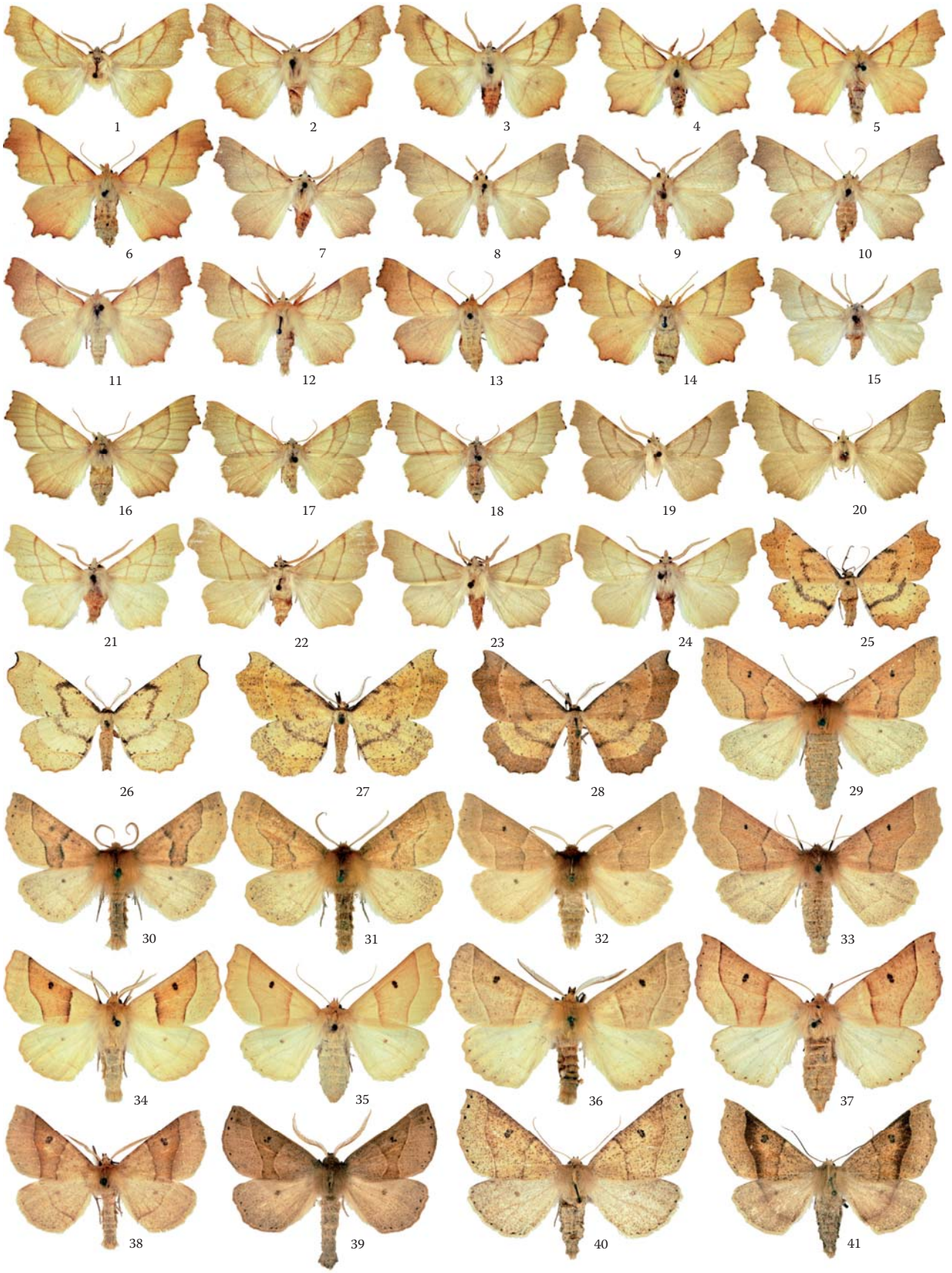

Plate 53: 1–3. *Ennomos kasyi* **sp. n.** (1. Holotype); 4–6. *Ennomos erosaria erosaria*; 7–10. *Ennomos erosaria ifranaria*; 11–14. *Ennomos quercaria quercaria*; 15–18. *Ennomos quercaria olivaria*; 19-20. *Ennomos quercaria olivaria* Lectotype male and Paralectotype female ex coll. Brandt; 21–23. *Ennomos vartianae* **sp. n.** (21. Holotype); 24. *Ennomos duercki*; 25–28. *Artiora evonymaria*; 29–33. *Crocallis tusciaria*; 34–37. *Crocallis elinguaria*; 38–41. *Crocallis dardoinaria*.

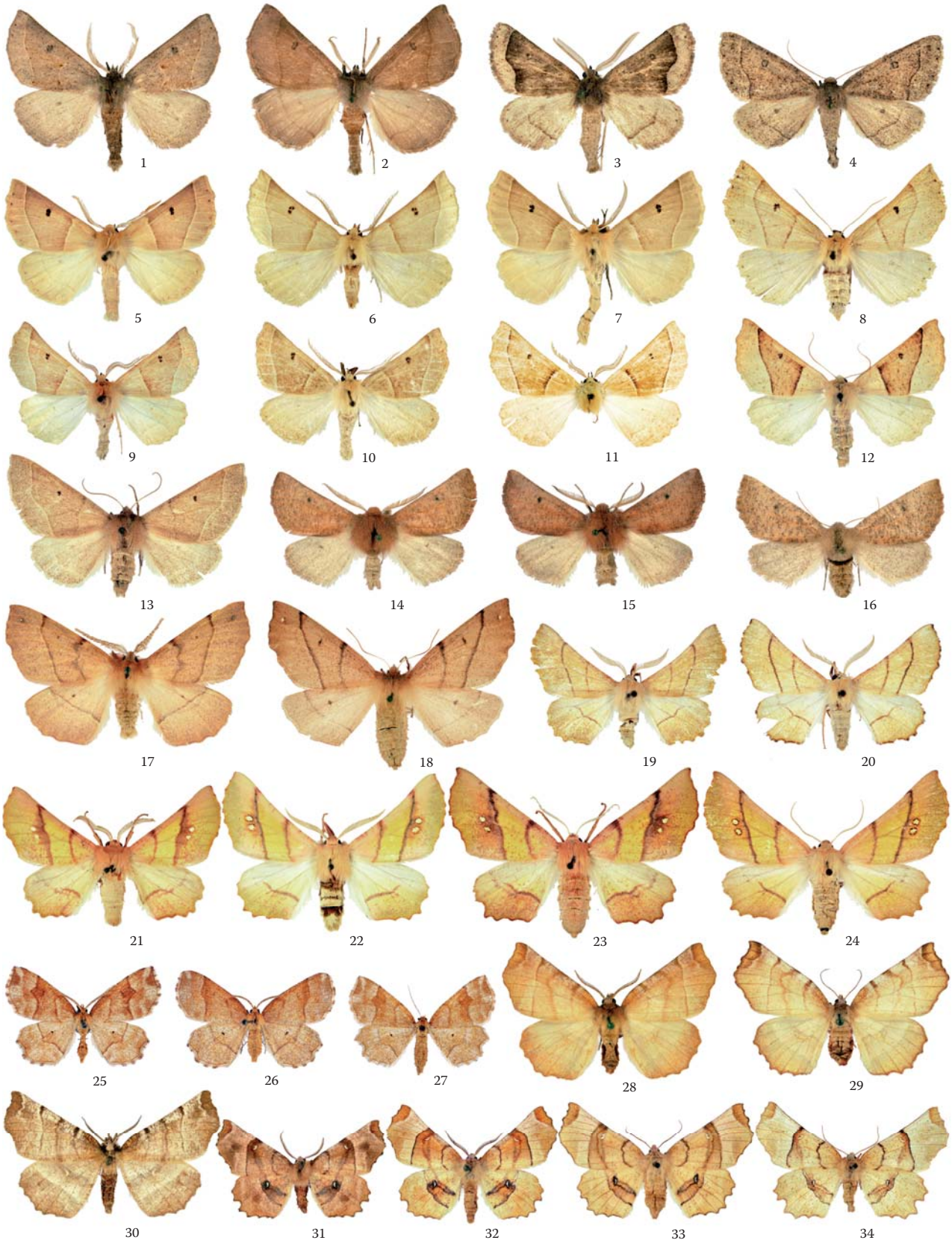

Plate 54: 1–2. *Crocallis auberti*; 3–4. *Crocallis boisduvalaria*; 5–8. *Crocallis inexpectata*; 9–12. *Crocallis elingomorpha*; 13. *Crocallis transcaucasica*; 14–16. *Dasycorsa modesta*; 17–18. *Colotois pennaria*; 19–20. *Eumera hoferi transcaucasica*; 21–24. *Eumera regina*; 25–27. *Cepphis advenaria*; 28–30. *Selenia dentaria*; 31–34. *Selenia lunularia lunularia*.

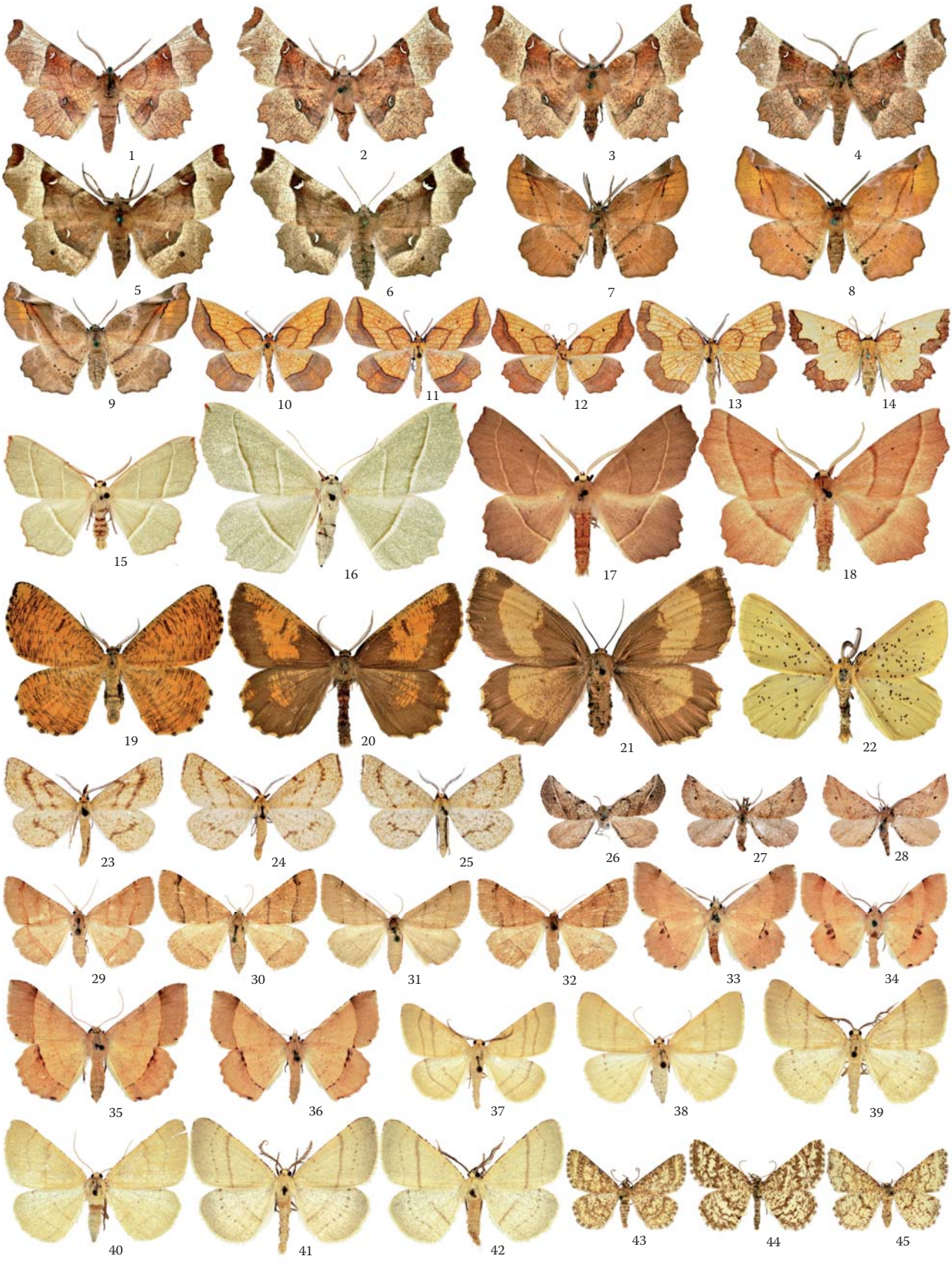

Plate 55: 1-4. *Selenia lunularia gamra*; 5-6. *Selenia tetralunaria*; 7-9. *Apeira syringaria*; 10-12. *Epione repandaria*; 13-14. *Epione vespertaria*; 15-16. *Campaea margaritaria*; 17-18. *Gerinia honoraria*; 19-21. *Angerona prunaria*; 22. *Angerona nigrisparsa*; 23-25. *Hypoxystis pluviaria*; 26-28. *Pynthanosis henricaria*; 29-32. *Lhommeia biskraria*; 33-36. *Hyperythra swinhoei*; 37-40. *Adactylotis gesticularia gesticularia*; 41-42. *Adactylotis gesticularia umgemachi*; 43-45. *Heliomata glarearia*.

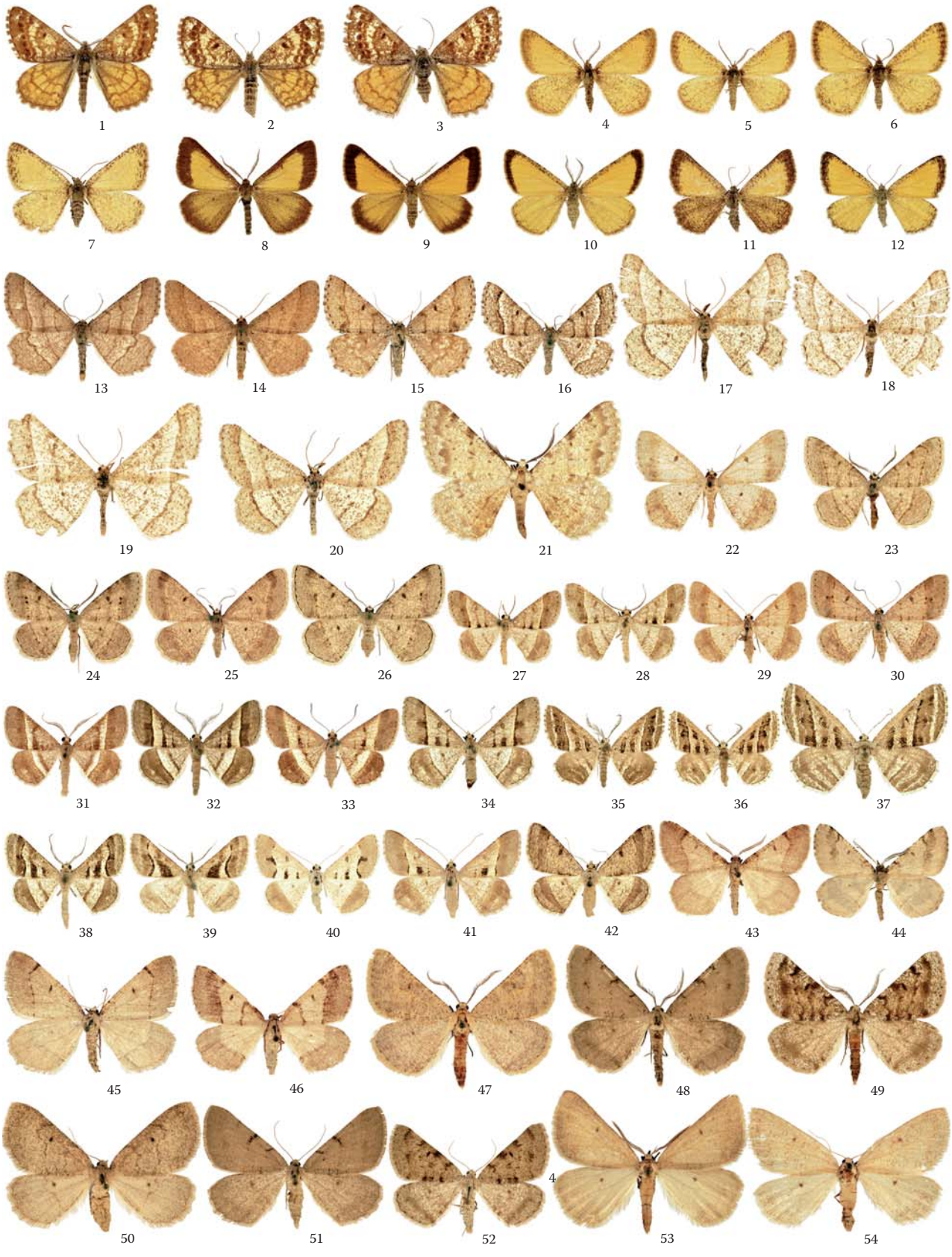

Plate 56: 1–3. *Isturgia famula*; 4–7. *Isturgia roraria*; 8–12. *Isturgia limbaria*; 13–16. *Isturgia murinaria*; 17–20. *Isturgia suleiman*; 21. *Isturgia tengistanica*; 22. *Isturgia* sp. near *sublimbata* from Morocco; 23–26. *Isturgia klapperichi*; 27–30. *Isturgia deerraria*; 31–34. *Isturgia perviaria*; 35–37. *Isturgia wehrlii*; 38–42. *Isturgia disputaria*; 43–46. *Isturgia spodiaria*; 47–52. *Isturgia miniosaria miniosaria*; 53–54. *Isturgia miniosaria rungsi*.

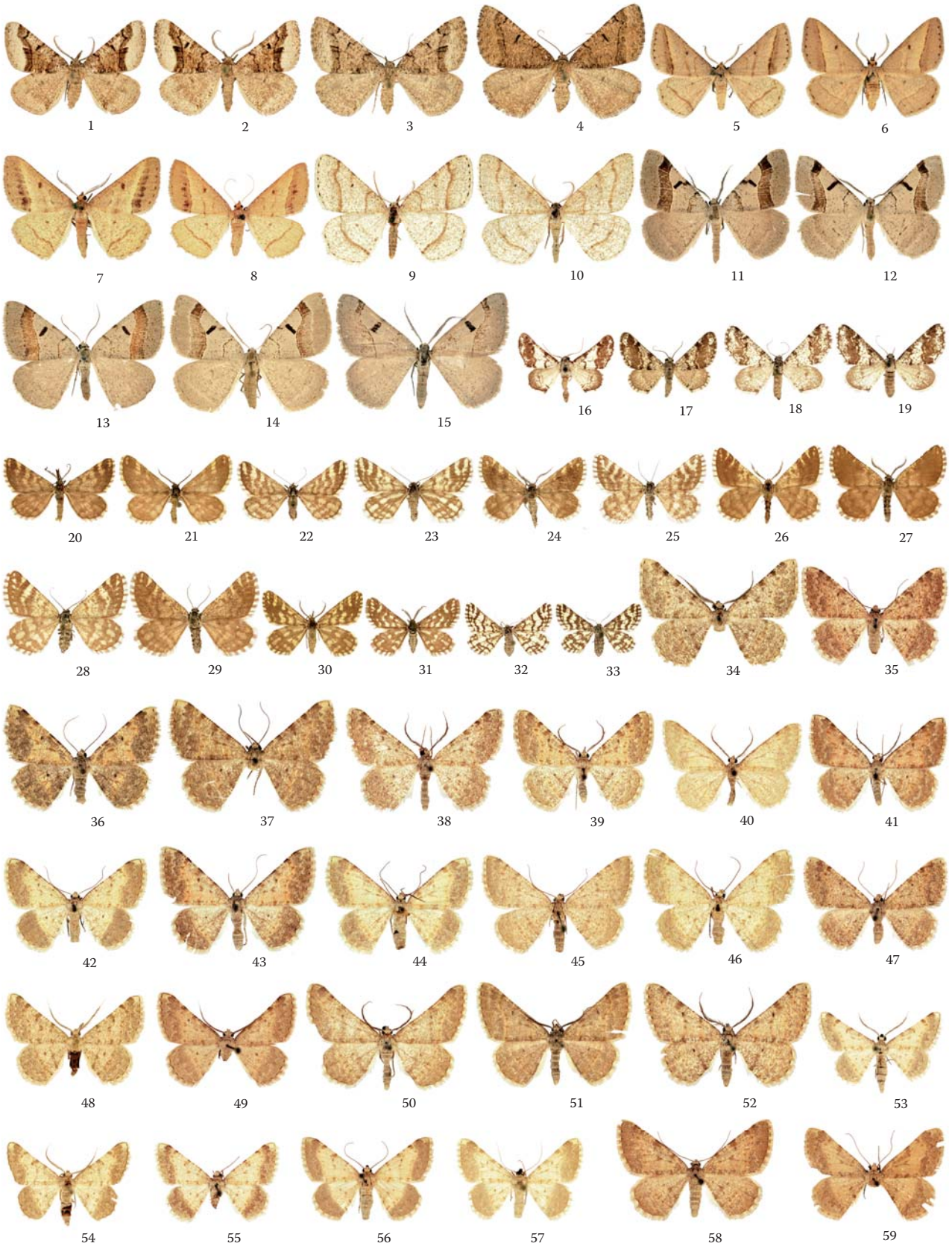

Plate 57: 1–4. *Isturgia rubrior*; 5–8. *Isturgia arenacearia*; 9–10. *Isturgia sparsaria*; 11–14. *Itame vincularia vincularia*; 15. *Itame vincularia mrassinaria*; 16–19. *Isturgia hedemanni*; 20–23. *Narraga fasciolaria*; 24–25. *Narraga nelvae cappadocica*; 26–29. *Narraga nelvae catalaunica*; 30–33. *Narraga tessularia*; 34–37. *Gnopharmia colchidaria colchidaria*; 38–47. *Gnopharmia colchidaria sinesefida;* 48–59. *Gnopharmia colchidaria objectaria* (48. Holotype of *G. maculifera kasyi* Wiltshire, 1970; 49. Holotype of *G. inermis vartianae* Wiltshire, 1970; 53-57. Paratypes of *G. eberti* Wiltshire, 1967; 59. Paratype of *G. inermis vartianae* Wiltshire, 1970).

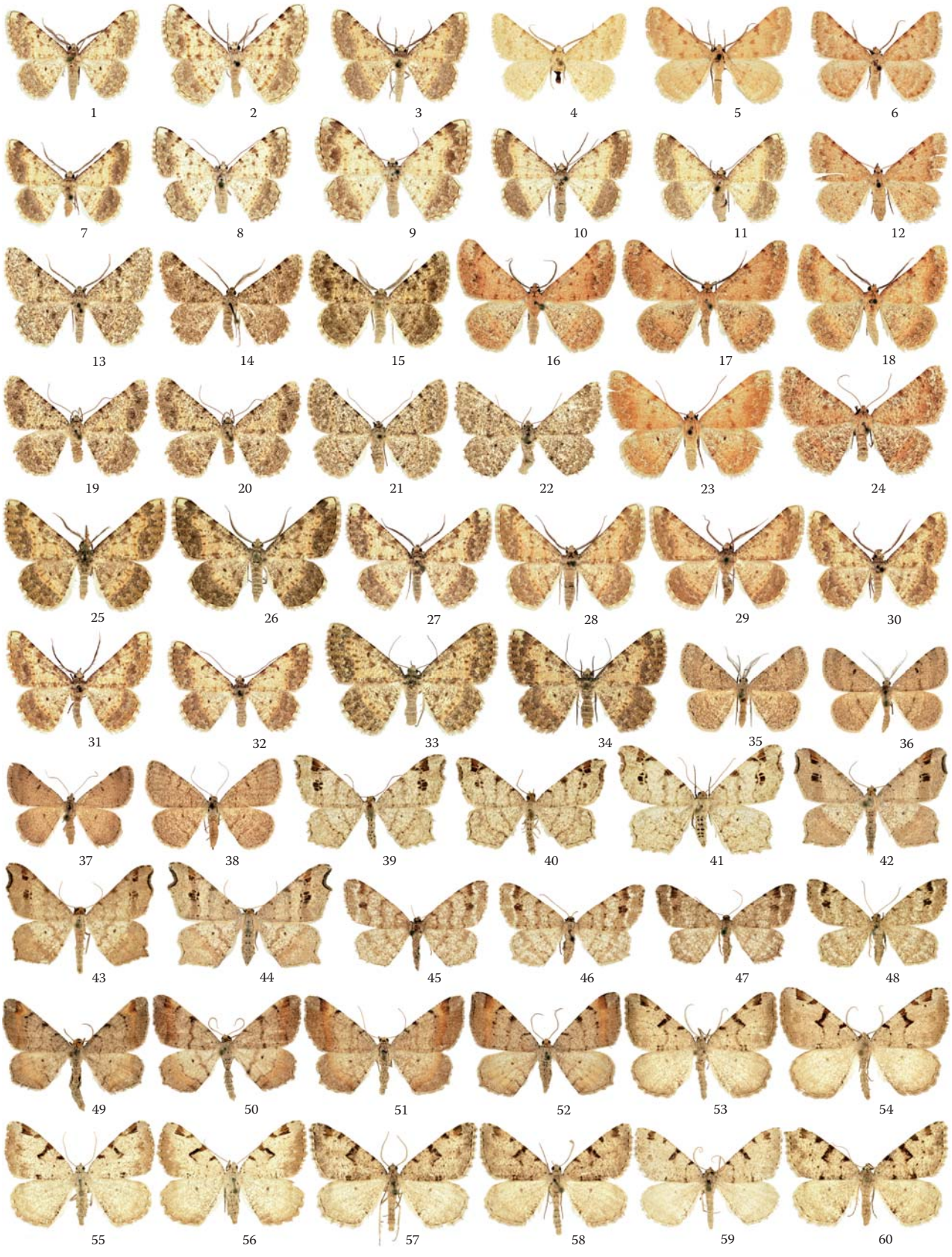

Plate 58: 1–12. *Gnopharmia kasrunensis*; 13–24. *Gnopharmia rubraria*; 25–34. *Gnopharmia sarobiana* (25-26, 33-34. Paratypes of *G. objectaria luxuriosa*); 35–38. *Acanthovalva inconspicuaria*; 39–41. *Macaria notata*; 42–44. *Macaria alternata*; 45–48. *Macaria signaria*; 49–52. *Macaria liturata*; 53. *Macaria wauaria erevanica*; 54–56. *Macaria wauaria wauaria*; 57–60. *Macaria wauaria africana*.

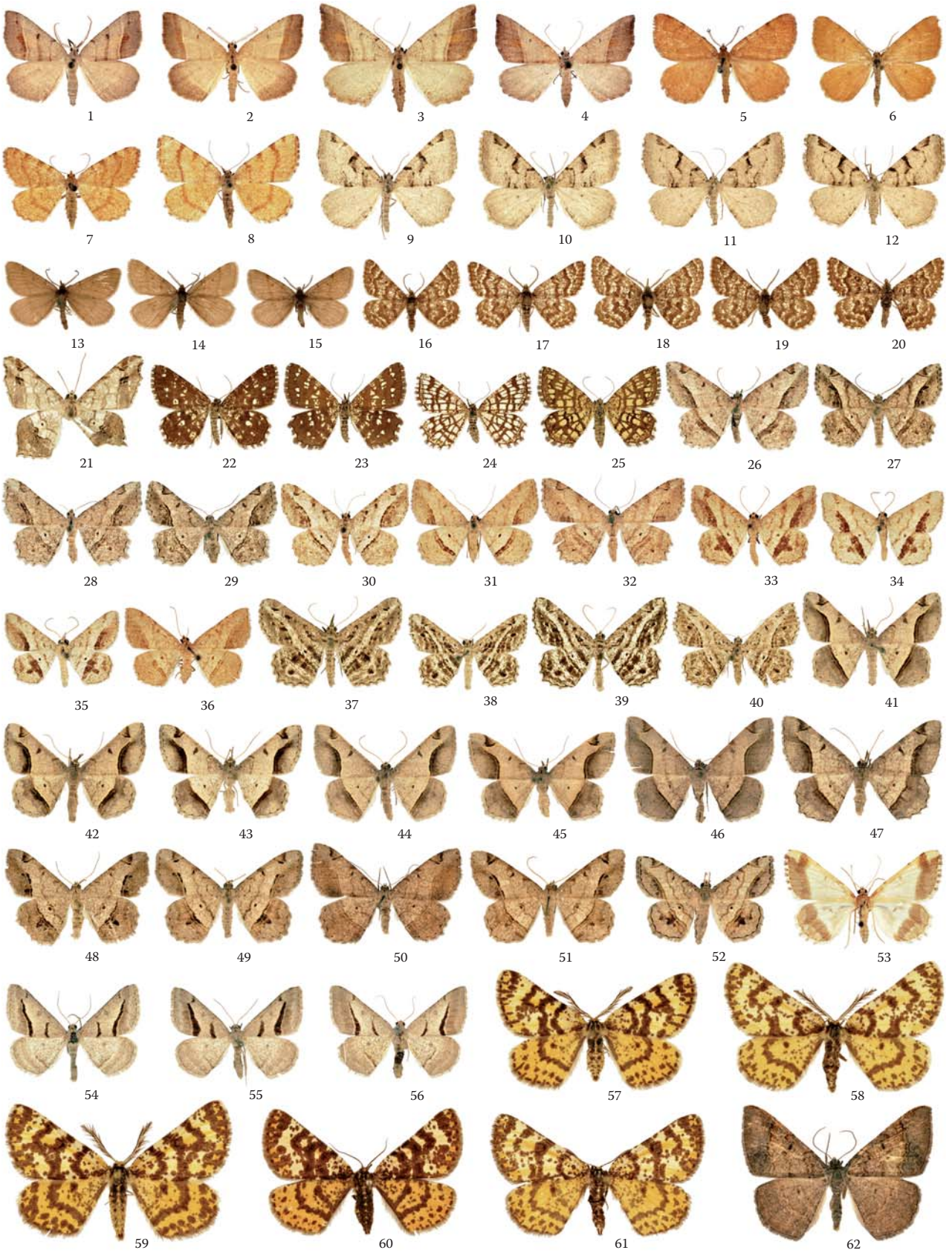

Plate 59: 1–4. *Macaria artesiaria*; 5–8. *Macaria brunneata*; 9–12. *Macaria* sp. near *halituaria* from Afghanistan; 13–15. *Macaria fusca*; 16– 20. *Macaria carbonaria*; 21. *Macaria* sp. indet from Thailand; 22–25. *Chiasmia clathrata*; 26–32. *Chiasmia aestimaria*; 33–36. *Chiasmia syriacaria*; 37–40. *Chiasmia sareptanaria*; 41–47. *Chiasmia fuscomarginata*; 48–51. *Chiasmia myandaria*; 52. *Chiasmia hebesata*; 53. *Chiasmia latimarginaria*; 54–56. *Digrammia rippertaria*; 57–61. *Eurranthis plummistaria*; 62. *Hypephyra terrosa*.

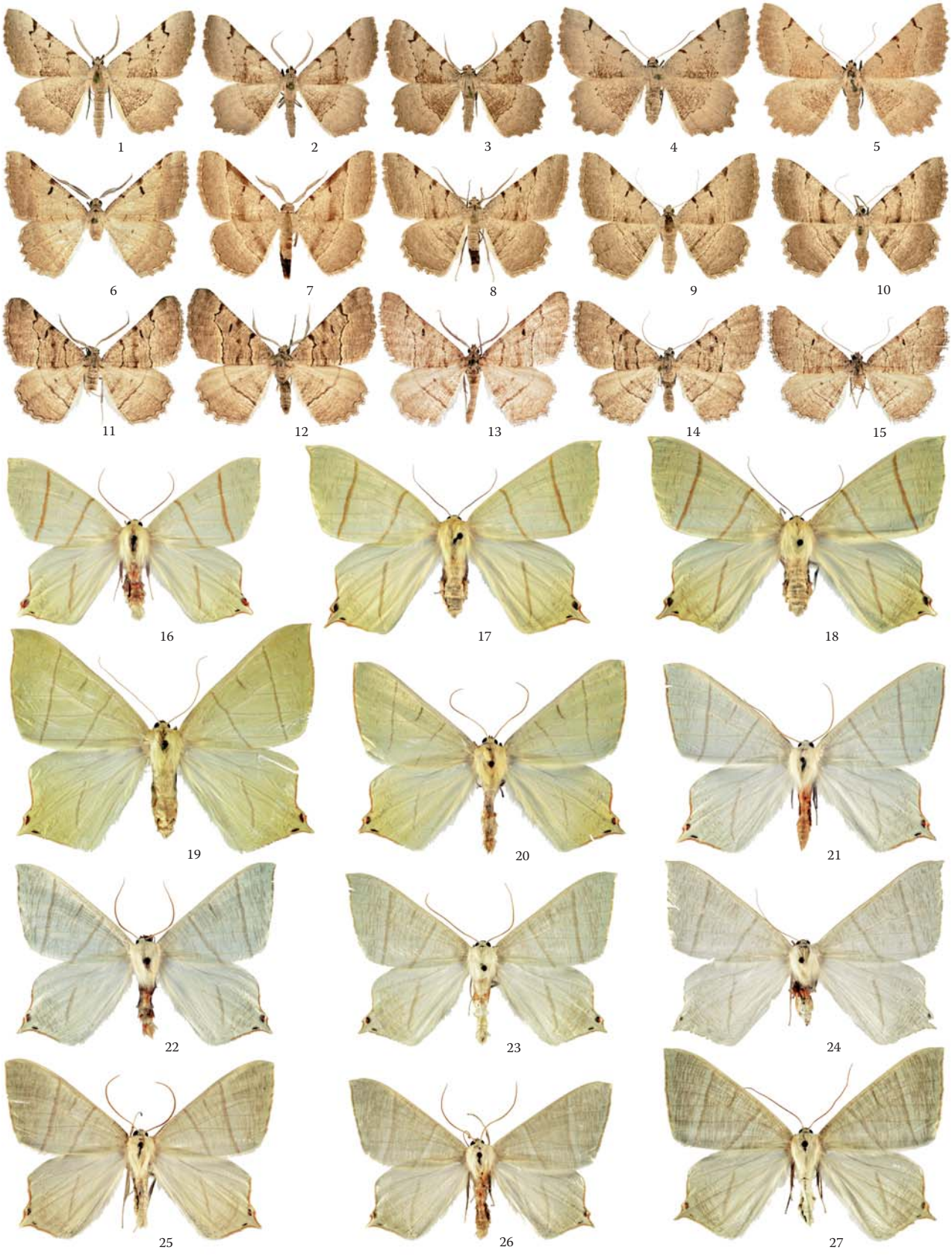

Plate 60: 1–5. *Neognopharmia stevenaria*; 6. *Neognopharmia hoerhammeri*; 7–10. *Neognopharmia cataleucaria*; 11–15. *Neognopharmia* sp. n. by Pöll from Afghanistan; 16–18. *Ourapteryx sambucaria*; 19–20. *Ourapteryx malatyensis*; 21–24. *Ourapteryx persica*; 25–27. *Ourapteryx ebuleata*.

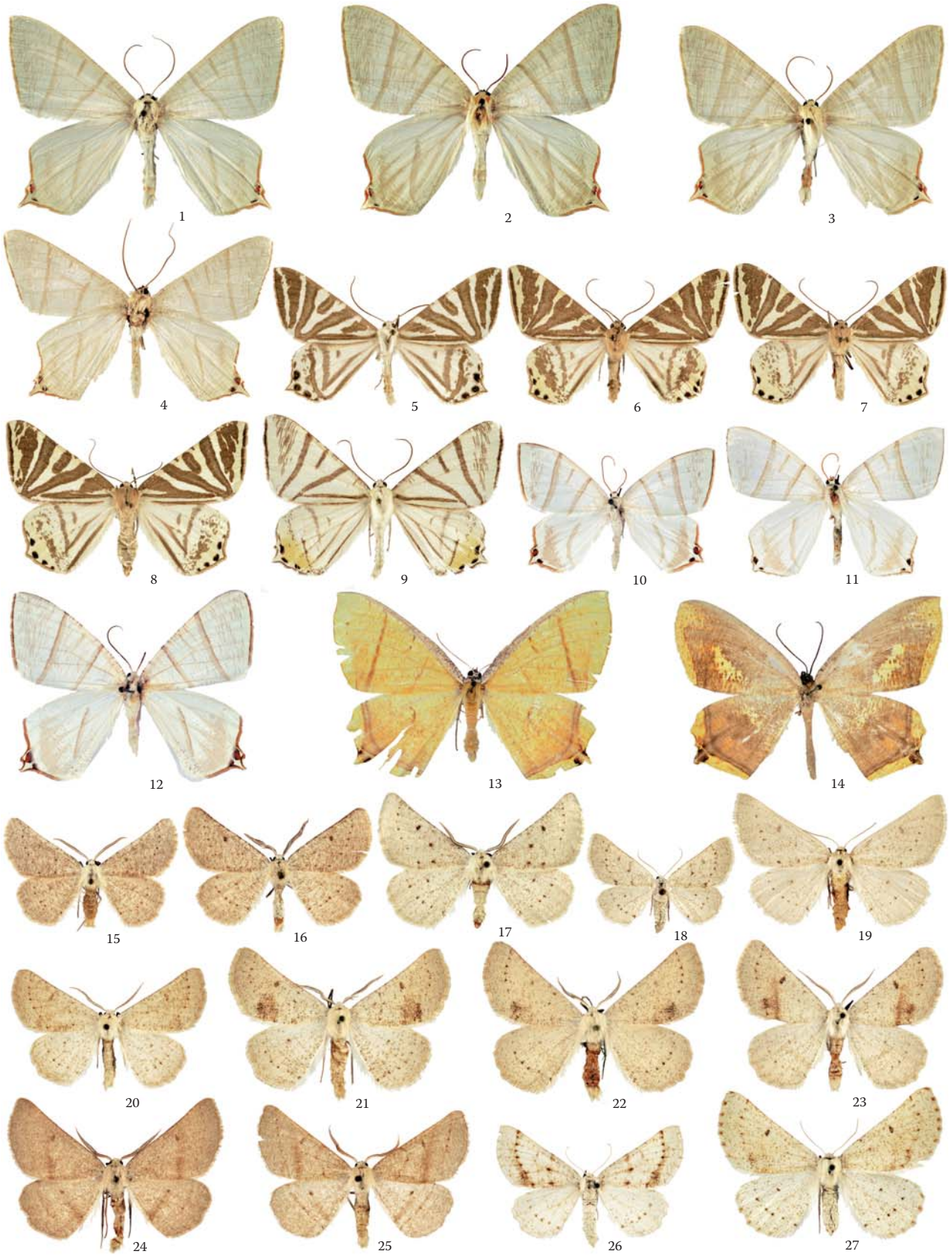

Plate 61: 1–3. *Ourapteryx pluristrigata*; 4. *Ourapteryx* sp. indet from Taiwan; 5–8. *Ourapteryx convergens*; 9. *Ourapteryx excellens*; 10–11. *Ourapteryx* sp. indet male from W China; 12. *Ourapteryx maculicaudaria*; 13. *Thinopteryx crocoptera*; 14. *Thinopteryx delectans*; 15–19. *Dyscia raunaria*; 20–27. *Dyscia innocentaria*.

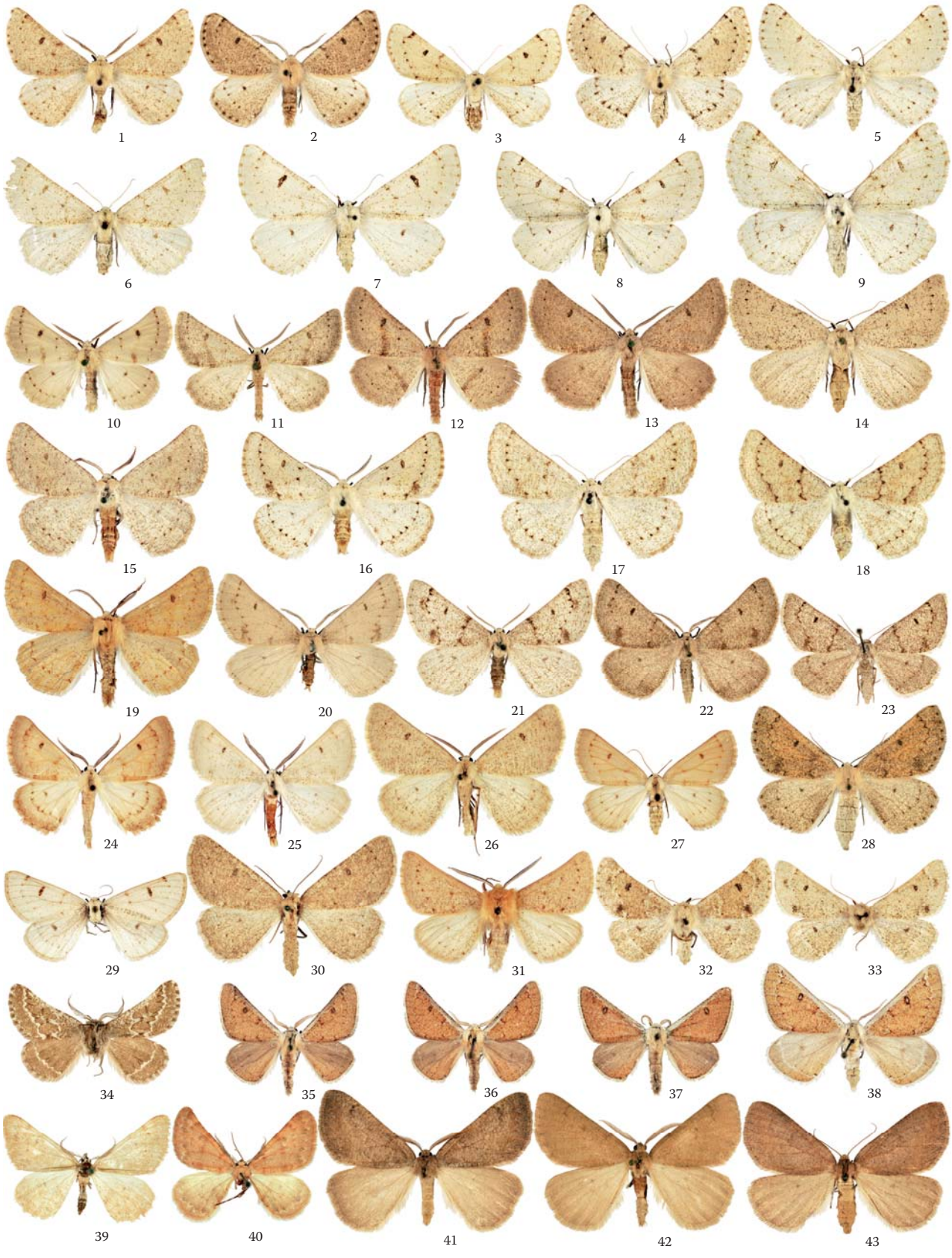

Plate 62: 1–5. *Dyscia malatyana malatyana*; 6–9. *Dyscia malatyana albersaria*; 10–14. *Dyscia crassipunctaria*; 15–18. *Dyscia conspersaria conspersaria*; 19. *Dyscia conspersaria sultanica*; 20–23. *Dyscia fagaria*; 24–28. *Dyscia penulataria*; 29. *Dyscia plebejaria*; 30. *Dyscia atlantica*; 31. *Dyscia lentiscaria*; 32–33. *Dyscia negrama*; 34. *Dyscia leucogrammaria*; 35–38. *Dyscia nobilaria*; 39–40. *Scodionista amoritaria*; 41–43. *Onychora agaritharia*.

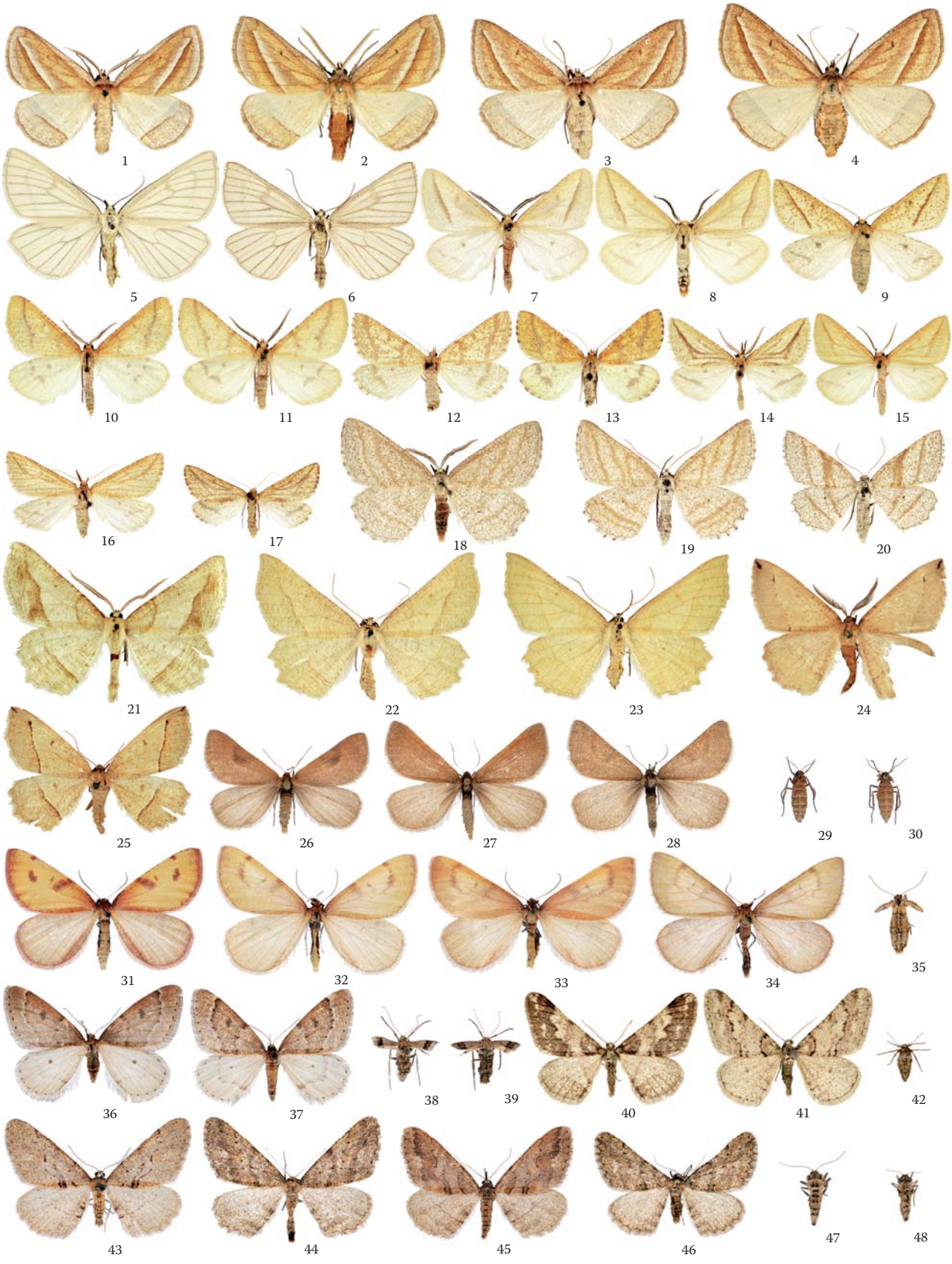

Plate 63: 1–4. *Chariaspilates formosaria;* 5–6. *Siona lineata*; 7–9. *Aspitates gilvaria*; 10–13. *Aspitates ochrearia*; 14–17. *Aspitates collinaria*; 18–20. *Perconia strigillaria*; 21–23. *Aspitates stschurovskyi*; 24–25. *Wehrliola revocaria*; 26–30. *Lignyoptera fumidaria*; 31–35. *Lignyoptera thaumastaria*; 36–39. *Theria rupicapraria*; 40–42. *Agriopis leucophaearia*; 43–48. *Agriopis bajaria*.

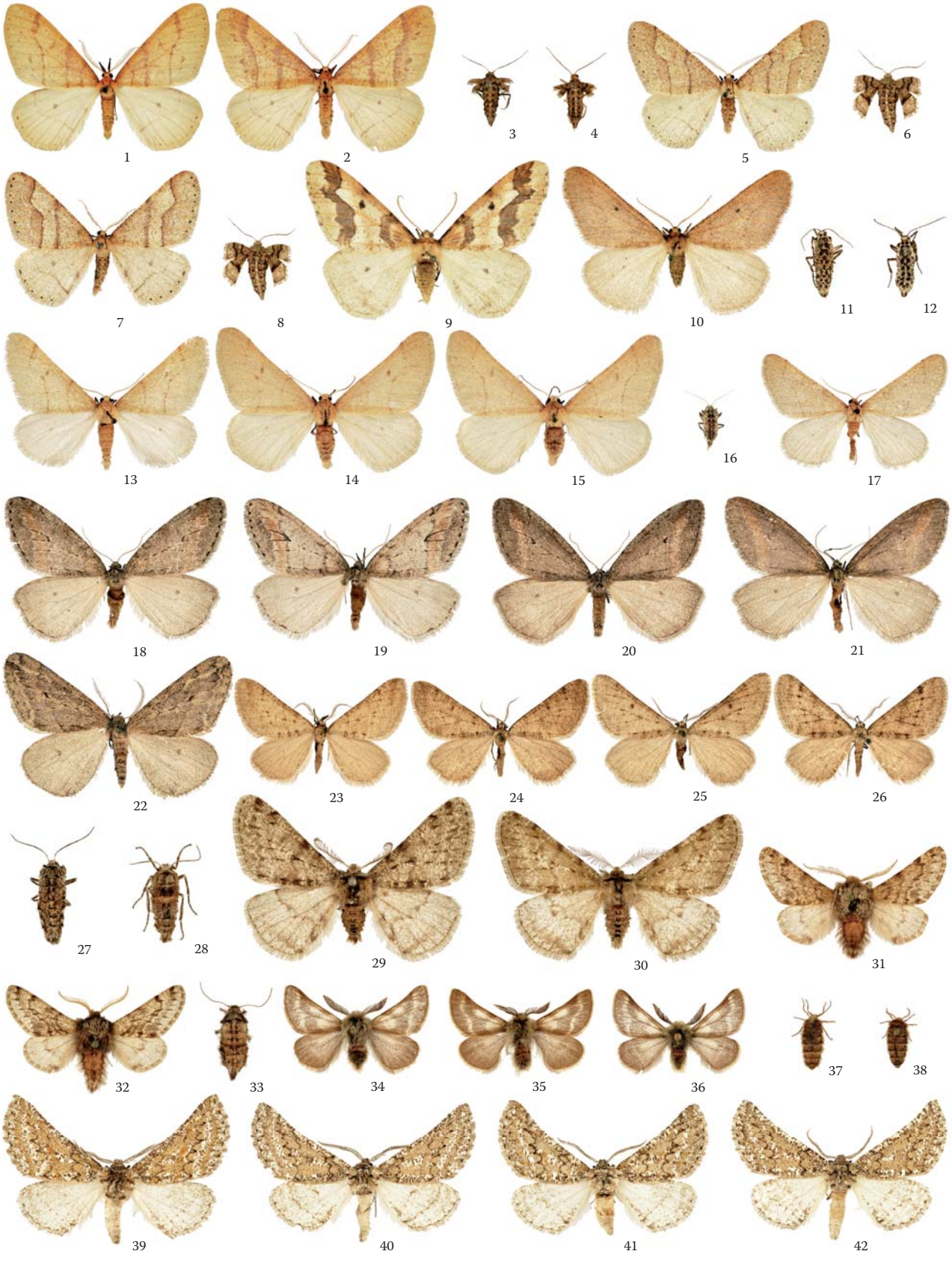

Plate 64: 1–4. *Agriopis aurantiaria*; 5–8. *Agriopis marginaria*; 9–12. *Erannis defoliaria*; 13–16. *Erannis ankeraria ankeraria*; 17. *Erannis ankeraria bervaensis*; 18–21. *Erannis declinans*; 22. *Phigalia declinata*; 23–26. *Contropis modestaria tagana*; 27–30. *Phigalia pilosaria*; 31–33. *Apocheima hispidaria*; 34–38. *Chondrosoma fiduciaria*; 39–42. *Acrobiston aestivalis*.

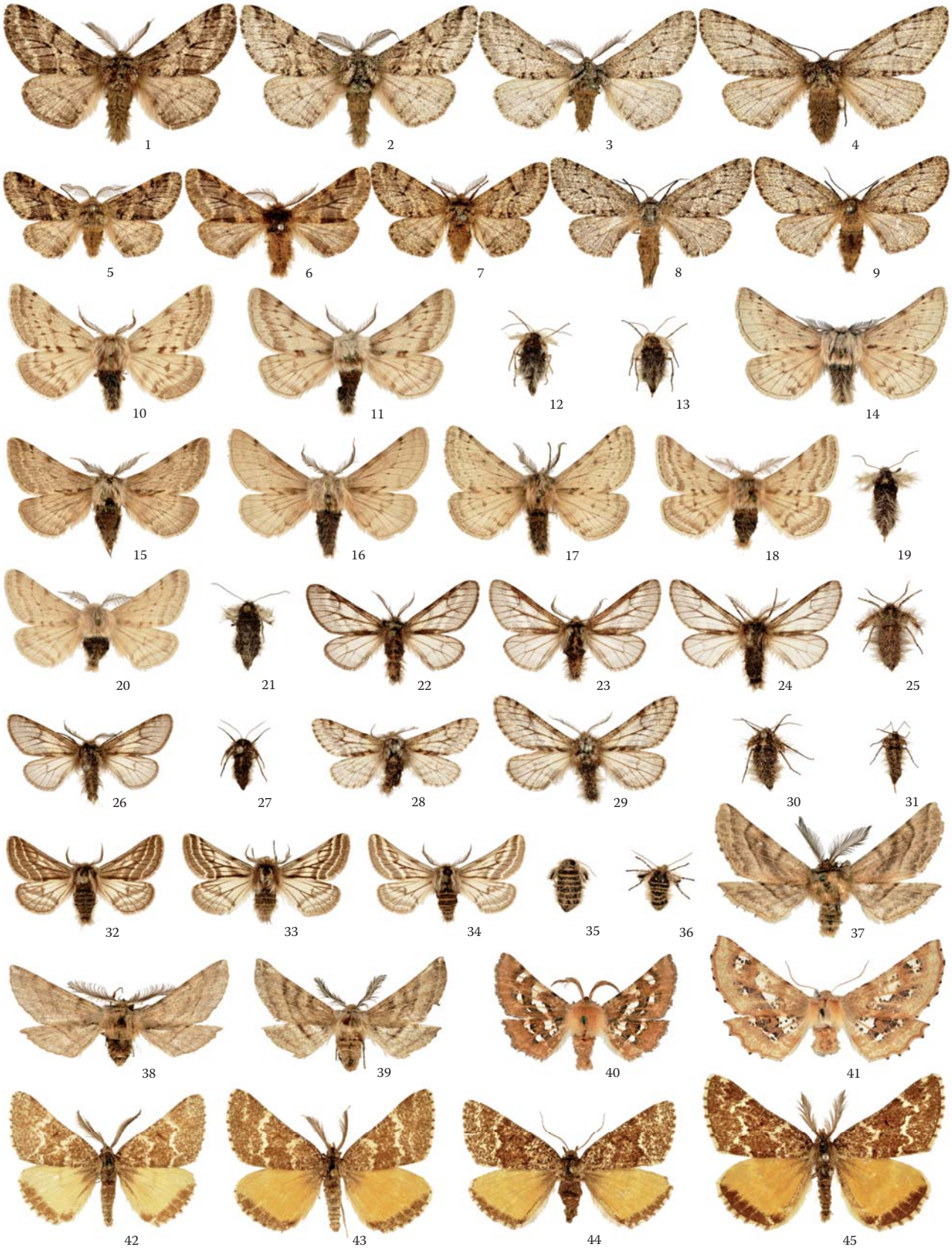

Plate 65: 1–4. *Lycia hirtaria*; 5–9. *Lycia hanoviensis*; 10–13. *Lycia alpina*; 14–17. *Lycia florentina*; 18–21. *Lycia graecarius istrianus*; 22–25. *Lycia isabellae*; 26–27. *Lycia lapponaria*; 28–31. *Lycia pomonaria*; 32–36. *Lycia zonaria*; 37–39. *Apochima flabellaria*; 40–41. *Apochima diaphanaria rjabovi*; 42–44. *Athroolopha chrysitaria*; 45. *Athroolopha pennigeraria kabylaria*.

Plate 66: 1–4. *Athroolopha pennigeraria pennigeraria*; 5–9. *Ematurga atomaria atomaria*; 10. *Ematurga atomaria iliaria*; 11–14. *Bupalus piniaria piniaria*; 15–16. *Bupalus piniaria espagnolus*; 17–19. *Biston strataria*; 20. *Biston robustum*; 21–24. *Biston betularia betularia*; 25–27. *Biston betularia fumosarius*.

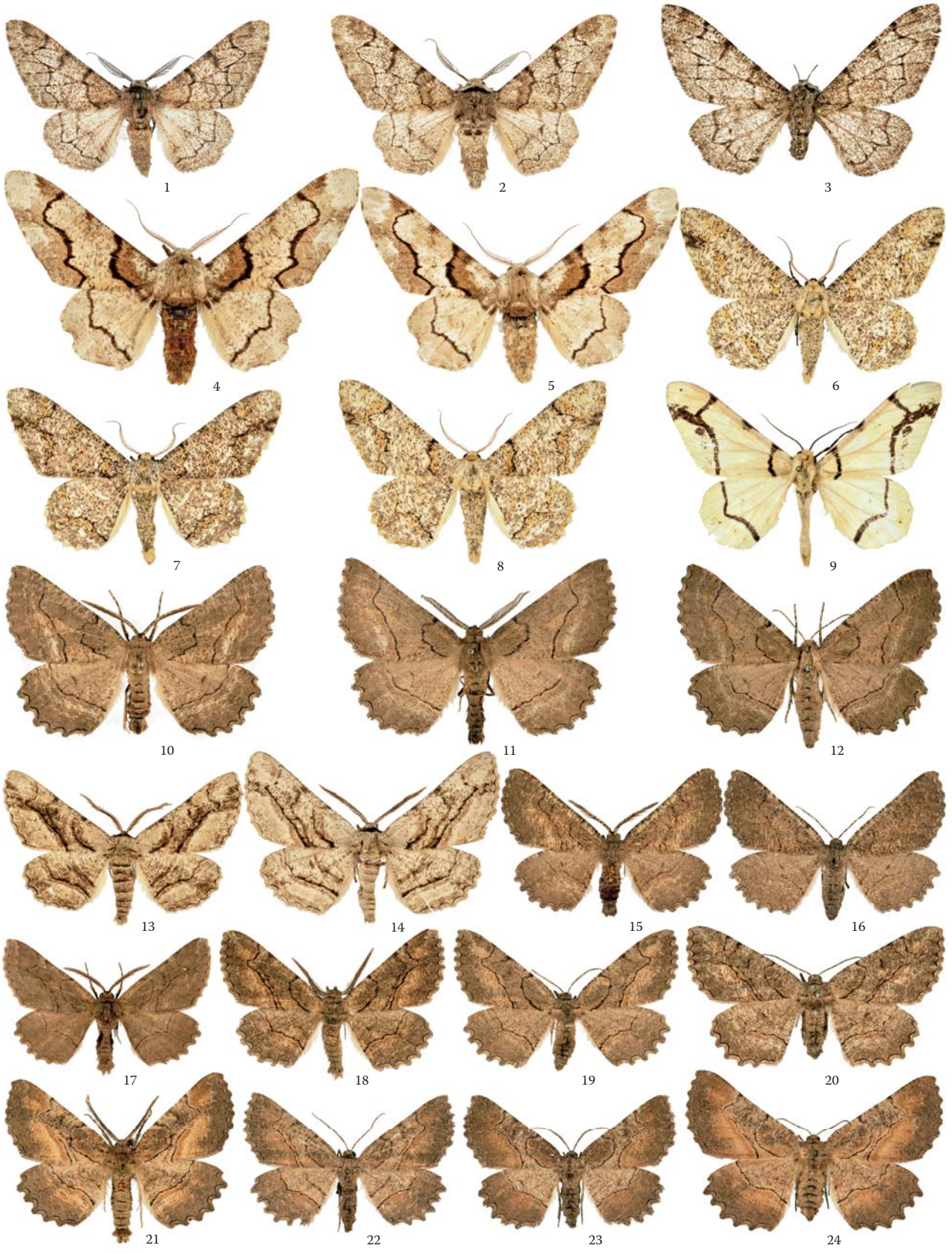

Plate 67

: 1–3. *Biston betularia parva*; 4–5. *Biston regalis*; 6–8. *Biston suppressaria*; 9. *Biston perclara*; 10–12. *Nychiodes obscuraria*; 13. *Nychiodes amygdalaria almensis*; 14. *Nychiodes amygdalaria malatyaca*; 15–16. *Nychiodes mauretanica*; 17–20. *Nychiodes dalmatina*; 21–24. *Nychiodes waltheri*.

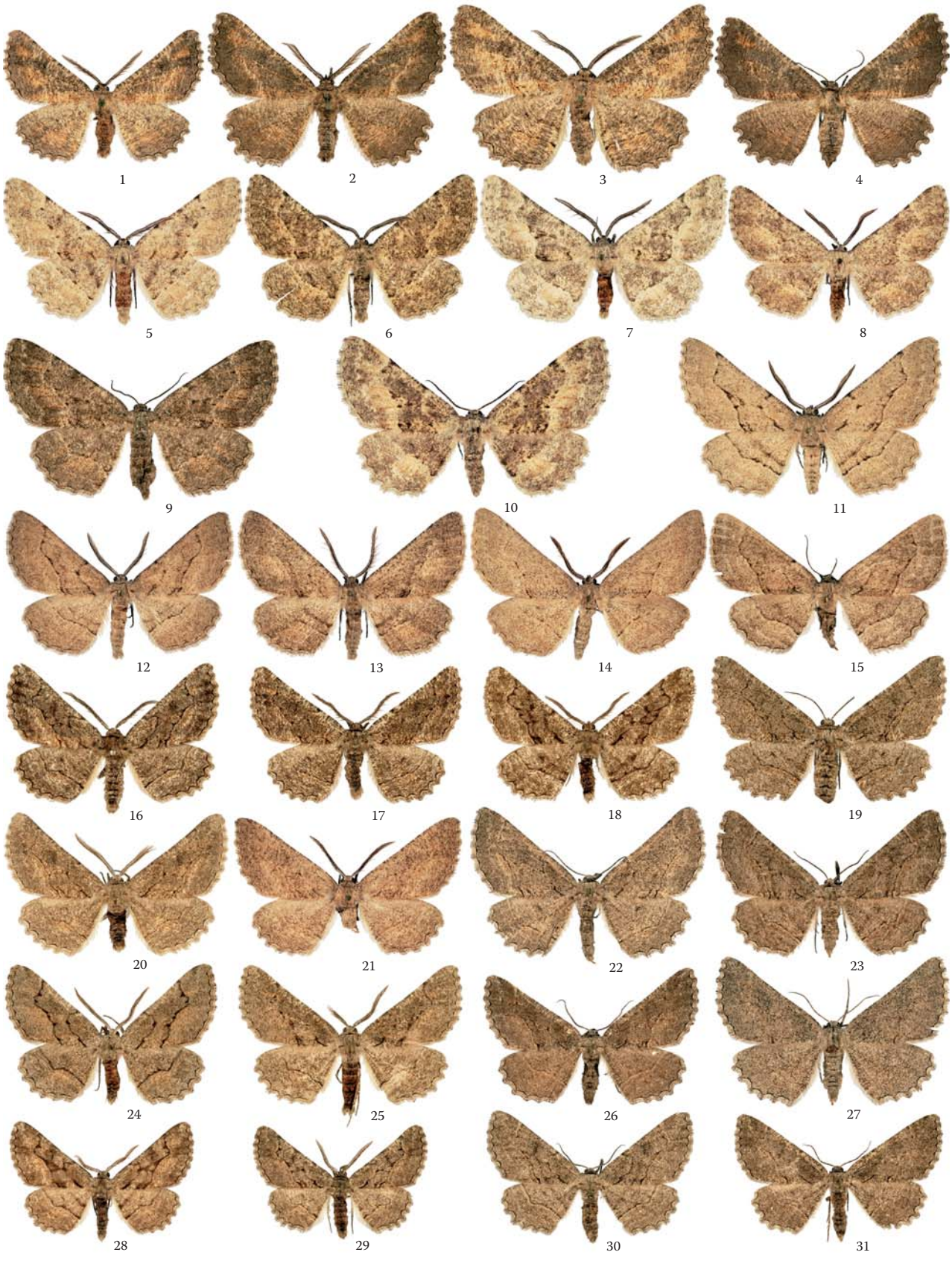

Plate 68: 1–4. *Nychiodes persuavis*; 5–10. *Nychiodes antiquaria*; 11–15. *Nychiodes* sp. near *antiquaria* from Afghanistan; 16–19. *Nychiodes divergaria divergaria*; 20–23. *Nychiodes divergaria elbursica*; 24–27. *Nychiodes divergaria achtyca*; 28–31. *Nychiodes variabila*.

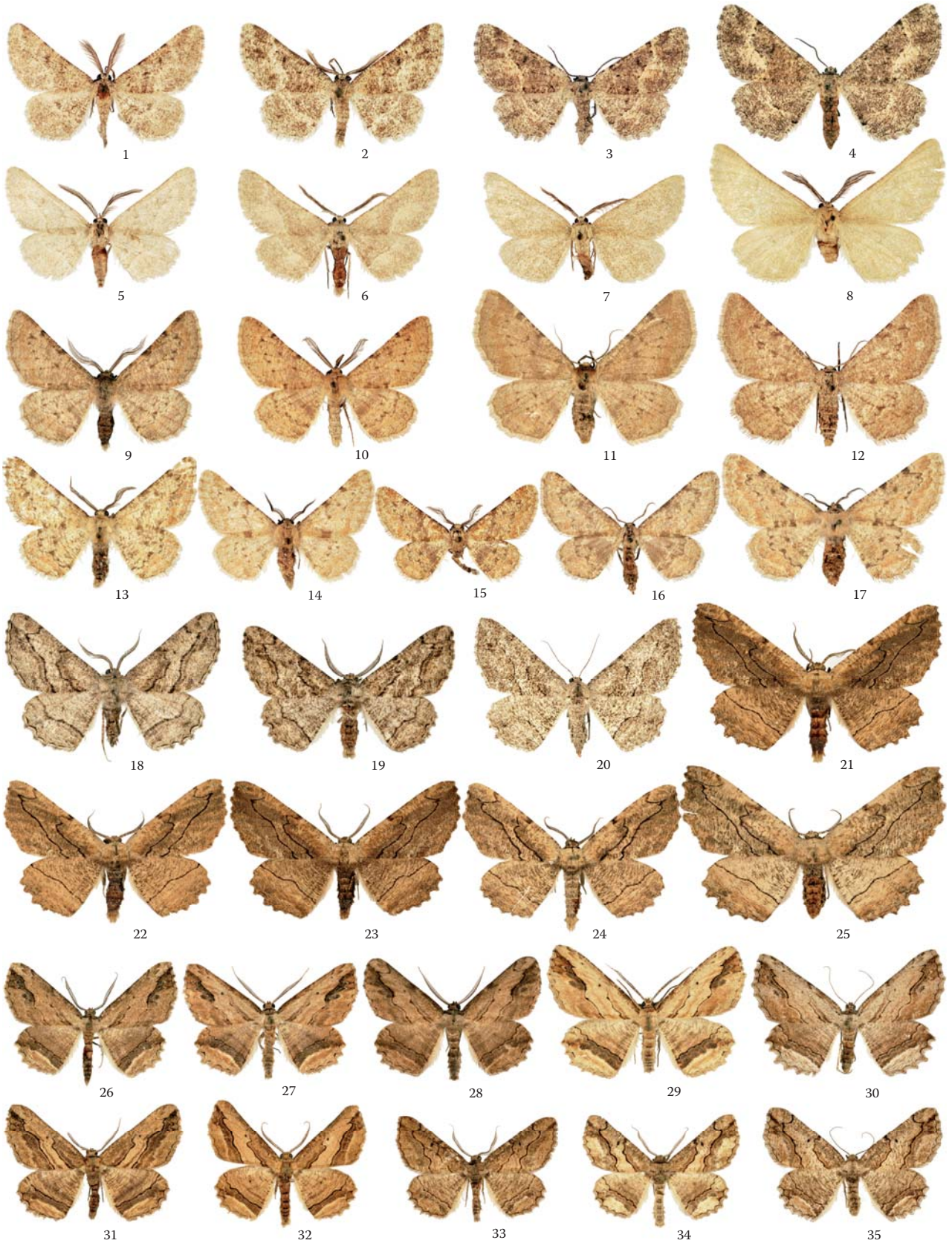

Plate 69: 1–4. *Nychiodes subvirida*; 5–7. *Nychiodes quettensis* (5. Holotype); 8. *Nychiodes princeps* (Holotype); 9–12. *Synopsidia phasidaria phasidaria*; 13–17. *Synopsidia phasidaria afghana* (13. Holotype); 18–20. *Synopsia sociaria*; 21–25. *Phthonandria atrilineata indica*; 26–30. *Menophra abruptaria abruptaria*; 31–32. *Menophra abruptaria canariensis*; 33–35. *Menophra japygiaria*.

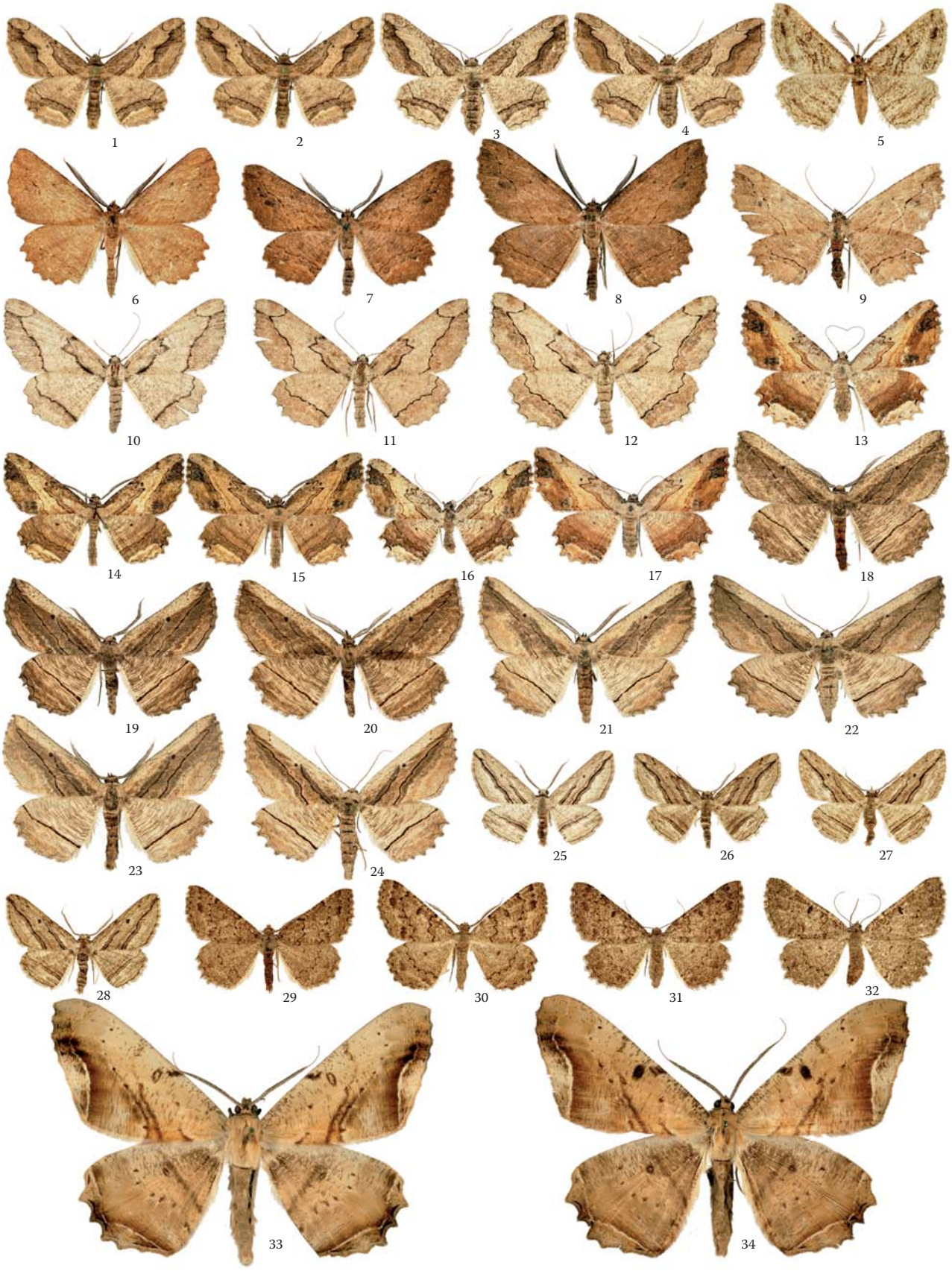

Plate 70: 1–4. *Menophra trypanaria cretacaria*; 5. *Menophra erebaria*; 6–9. *Menophra maderae*; 10–12. *Menophra* sp. near *senilis* from Pakistan; 13–17. *Menophra* sp. near *bicornuta* from Pakistan; 18–24. *Menophra nycthemeraria dinicola*; 25–28. *Menophra harterti*; 29–32. *Menophra punctilinearia*; 33–34. *Chorodna metaphaearia*.

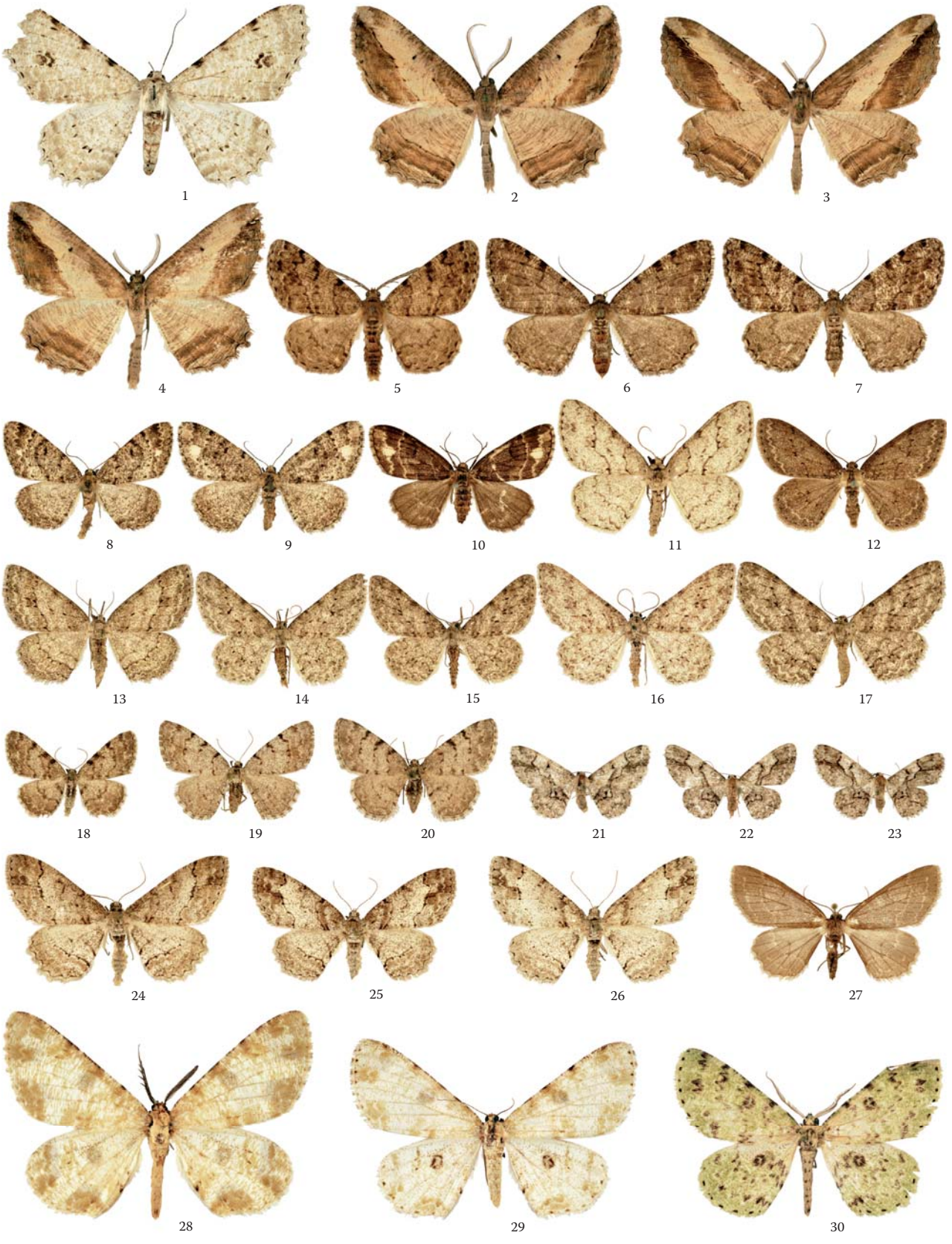

Plate 71: 1. *Lassaba albidaria*; 2–4. *Alloharpina dejeani*; 5–7. *Deileptenia ribeata*; 8–10. *Parectropis similaria*; 11–13. *Ectropis crepuscularia*; 14–17. *Ectropis dentilineata*; 18–20. *Aethalura punctulata*; 21–23. *Satoblephara parvularia*; 24–27. *Paradarisa consonaria*; 28–29. *Ophthalmitis irrorataria*; 30. *Ophthalmitis sinensium*.

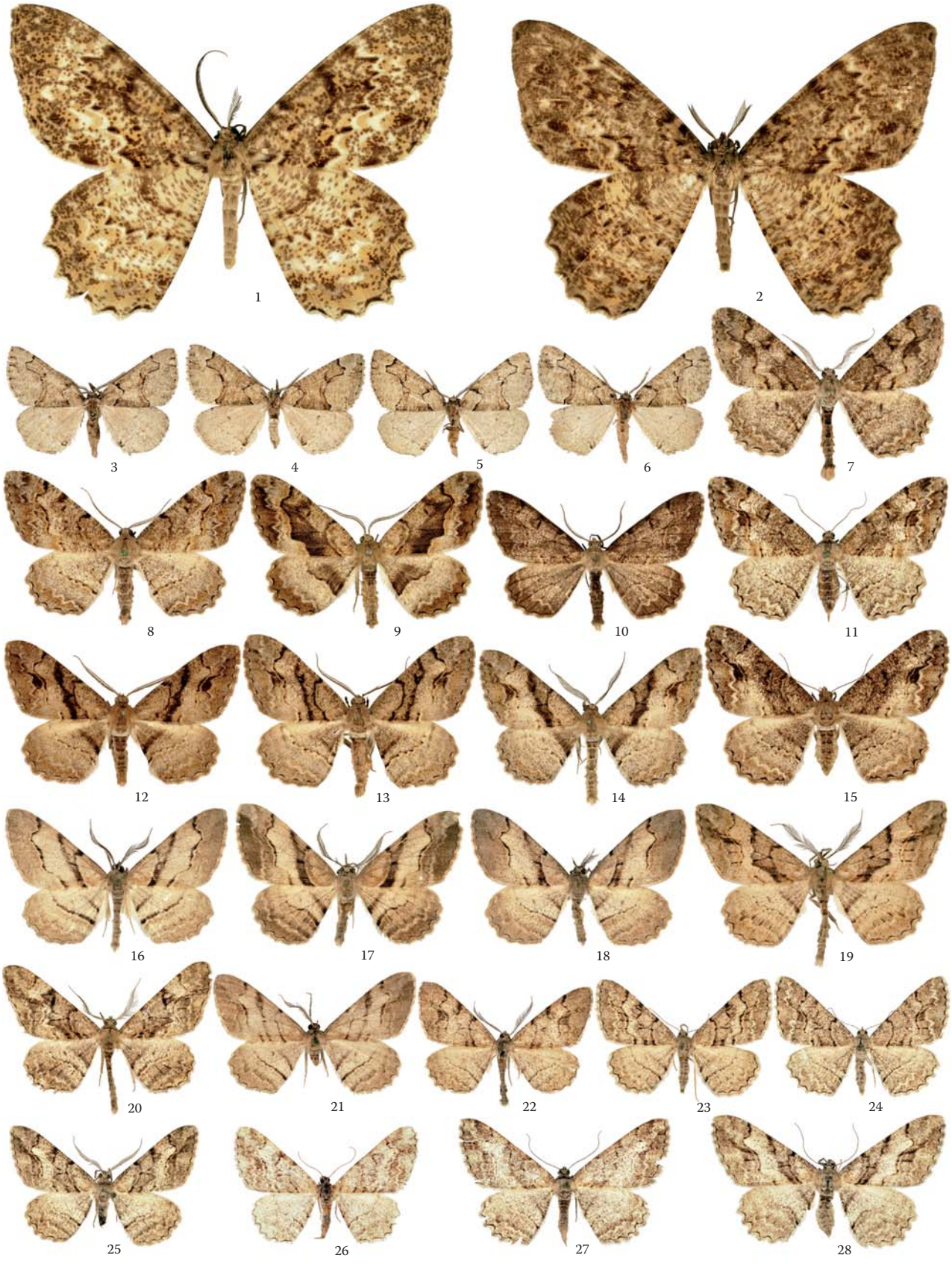

Plate 72: 1–2. *Amblychia insueta sinensis*; 3–6. *Asovia maeoticaria*; 7–11. *Alcis repandata*; 12–15. *Alcis bastelbergeri*; 16–18. *Alcis* sp. near *nepalensis* from Pakistan; 19. *Alcis iterata*; 20. *Alcis* sp. near *iterata* from Afghanistan; 21. *Alcis nudipennis*; 22–24. *Alcis* sp. near *subrepandata* from Afghanistan; 25–28. *Alcis paghmana*.

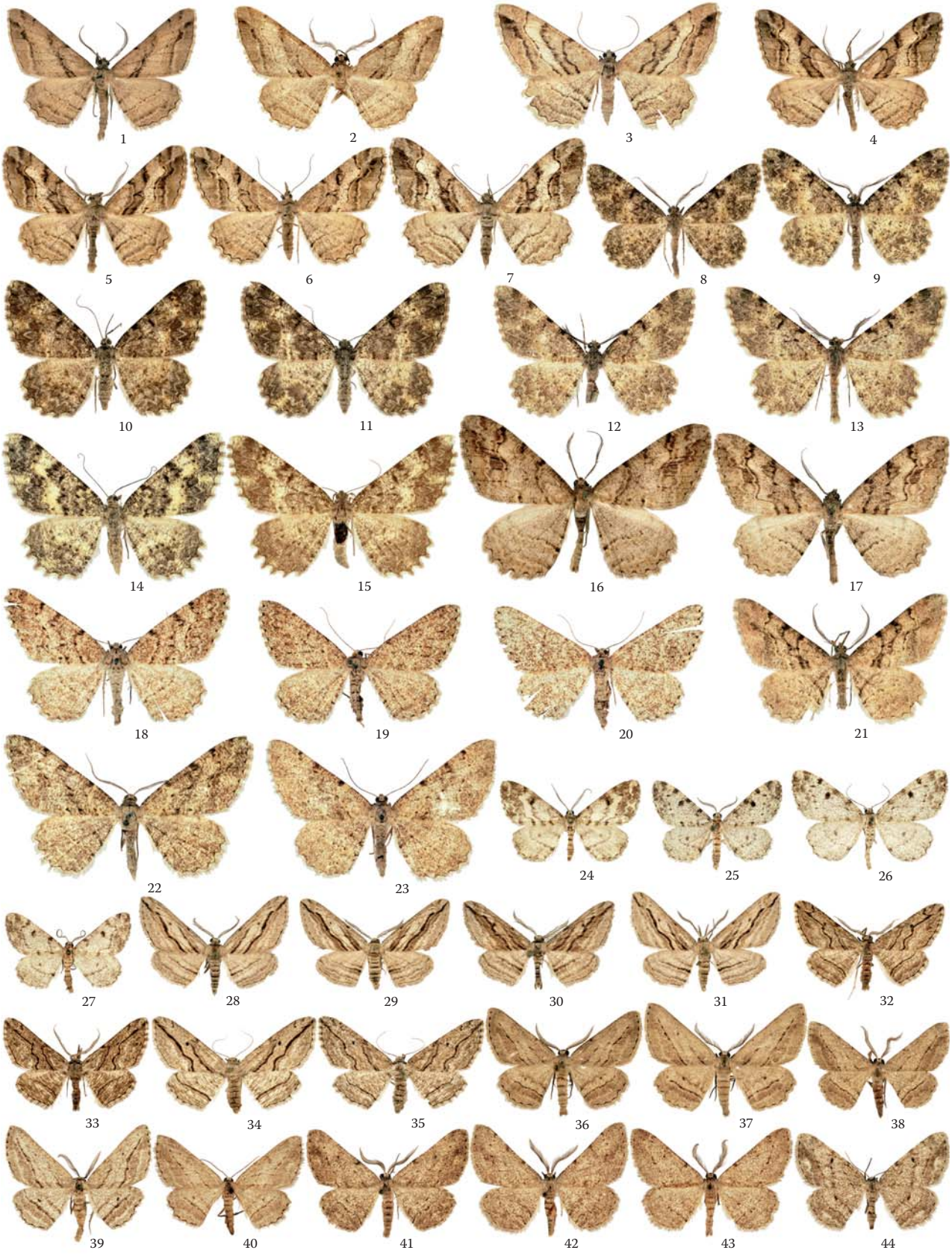

Plate 73: 1–3. *Alcis trikotaria limitropha*; 4–7. *Alcis depravata*; 8–11. *Alcis granitaria*; 12–15. *Alcis klapperichi* (12. Holotype); 16–17. *Alcis sinadmissa*; 18–20. *Alcis* sp. near *songarica* from Afghanistan; 21. *Alcis evae* (Holotype); 22–23. *Alcis* sp. near *shivae* from Afghanistan; 24–27. *Alcis jubata*; 28–31. *Ecleora solieraria*; 32–35. *Ecleora undulosa*; 36–40. *Afriberina tenietaria*; 41–44. *Afriberina rungsi*.

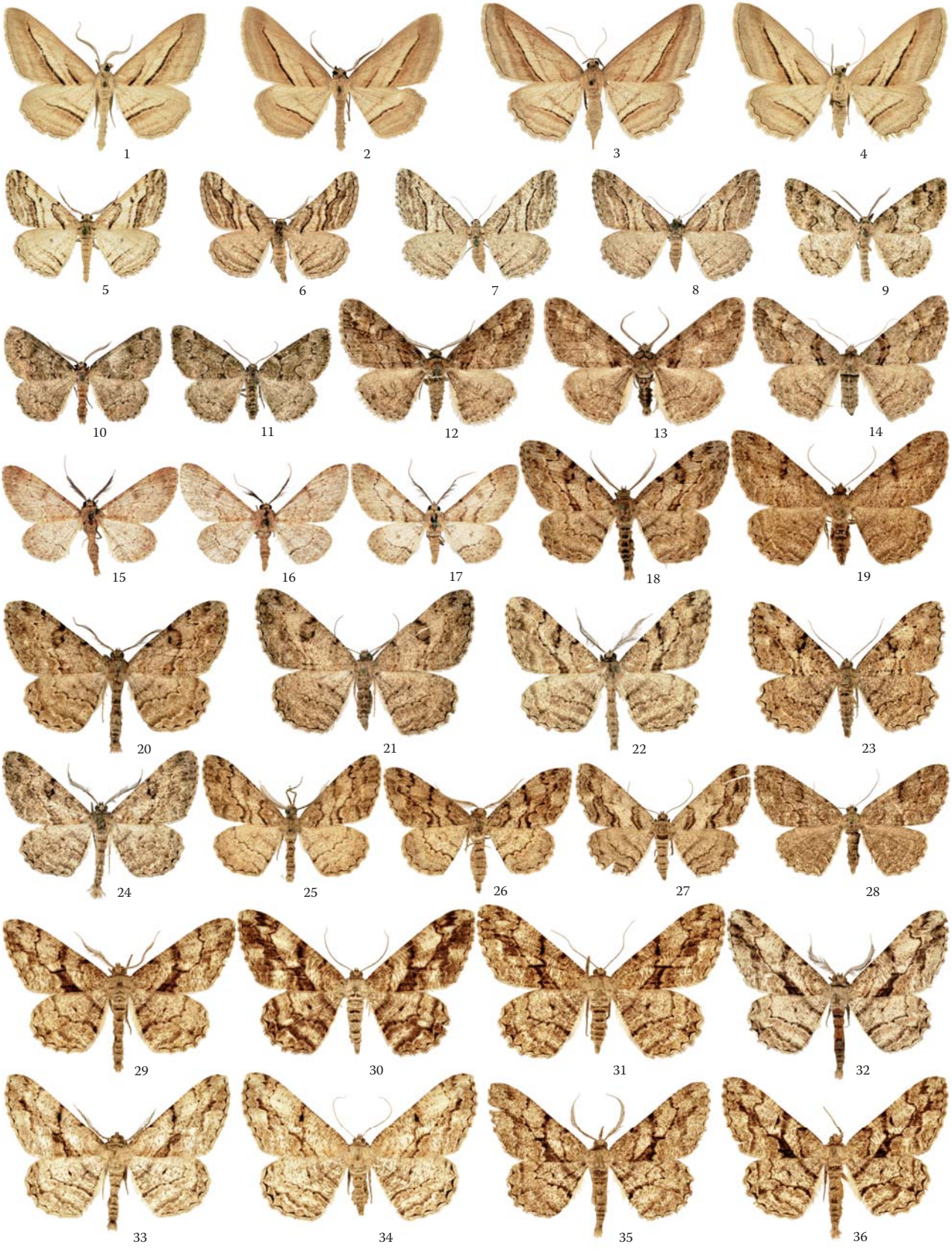

Plate 74: 1–4. *Afriberina nobilitaria*; 5–8. *Calamodes occitanaria*; 9–11. *Cleorodes lichenaria*; 12–14. *Cleora cinctaria*; 15–17. *Cleora cornaria*; 18–19. *Peribatodes rhomboidaria rhomboidaria*; 20–21. *Peribatodes rhomboidaria saerdabensis*; 22–23. *Peribatodes rhomboidaria sublutearia*; 24. *Peribatodes rhomboidaria syritaurica*; 25–28. *Peribatodes secundaria*; 29–31. *Peribatodes umbraria umbraria*; 32–34. *Peribatodes umbraria syrirana*; 35–36. *Peribatodes umbraria mimeuri*.

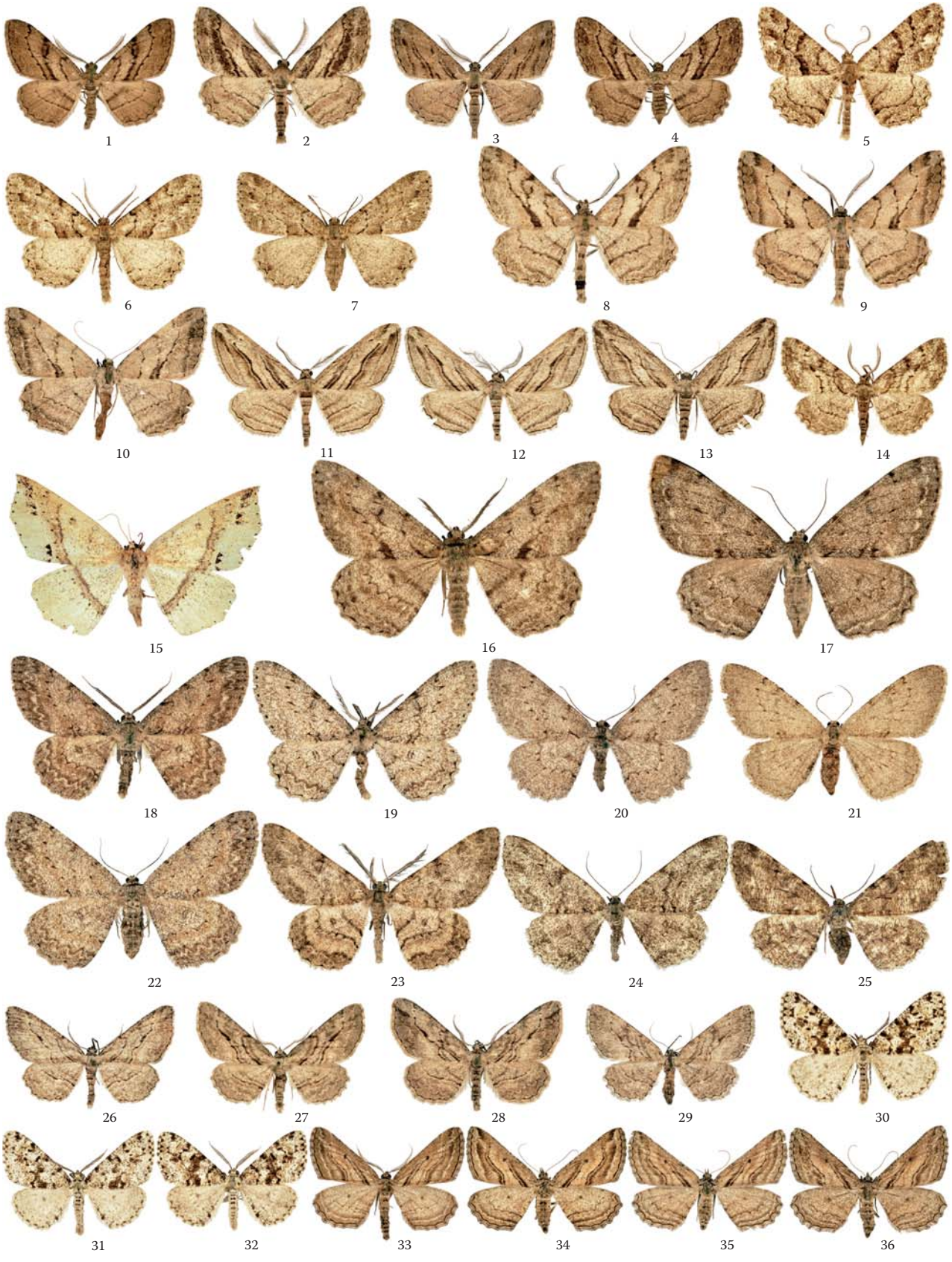

Plate 75: 1–4. *Peribatodes correptaria*; 5–7. *Peribatodes ilicaria*; 8–10. *Peribatodes perversaria*; 11–13. *Peribatodes powelli*; 14. *Paraboarmia viertlii*; 15. *Psyra rufolinearia*; 16–17. *Hypomecis roboraria*; 18–22. *Hypomecis punctinalis*; 23–24. *Hypomecis cineracea*; 25. *Hypomecis* sp. near *cineracea* from Afghanistan; 26–29. *Hypomecis arcearia*; 30–32. *Fagivorina arenaria*; 33–36. *Sardocyrnia fortunaria*.

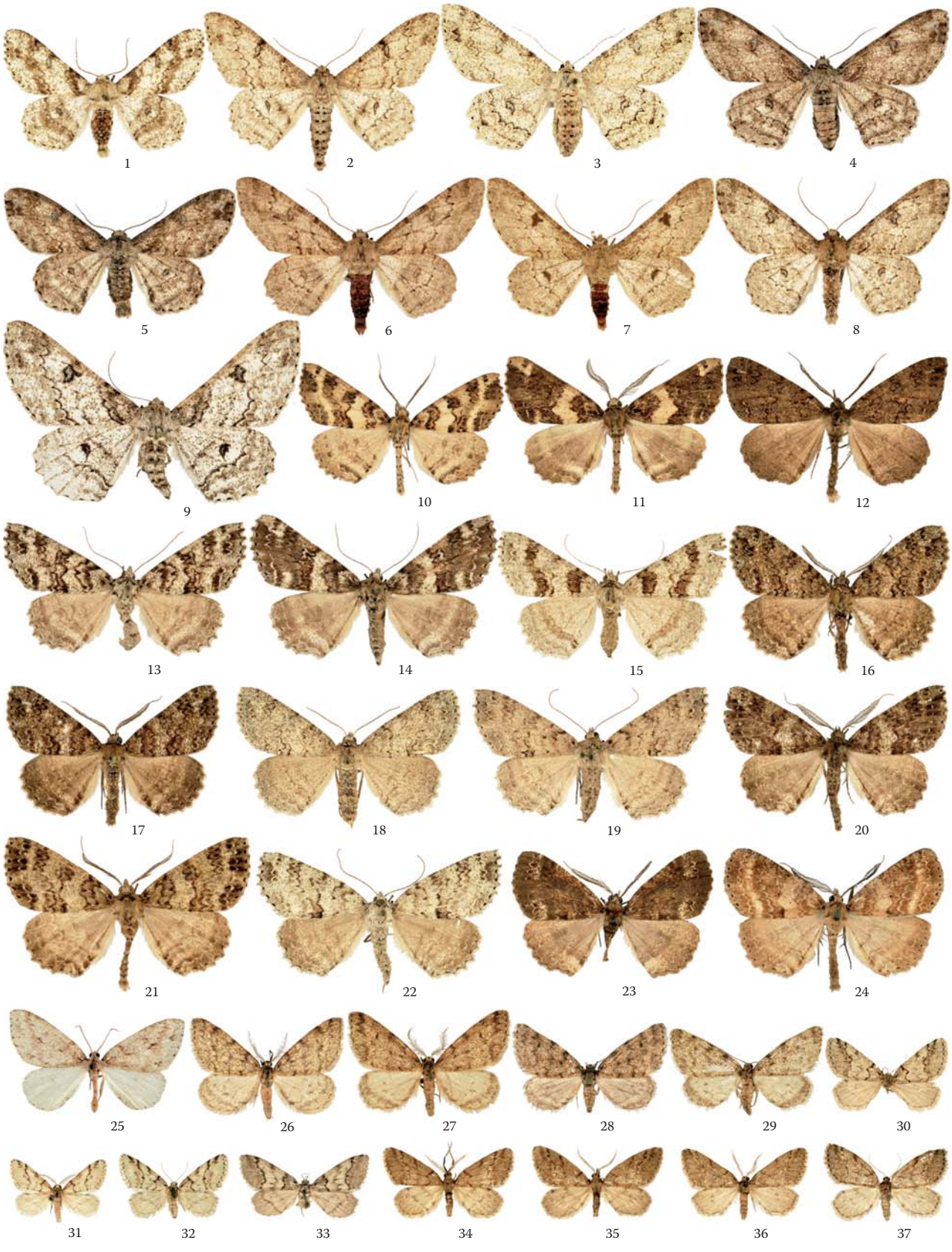

Plate 76: 1–3. *Ascotis selenaria selenaria*; 4–5. *Ascotis selenaria cretacea*; 6–9. *Ascotis imparata*; 10–15. *Ascotis fortunata flavonigrata*; 16–19. *Ascotis fortunata fortunata*; 20–22. *Ascotis fortunata wollastoni*; 23–24. *Ascotis fortunata azorica*; 25. *Micrabraxas tenuis*; 26–29. *Tephronia duercki*; 30–33. *Tephronia codetaria*; 34–37. *Tephronia sepiaria* ssp. from Canary Islands.

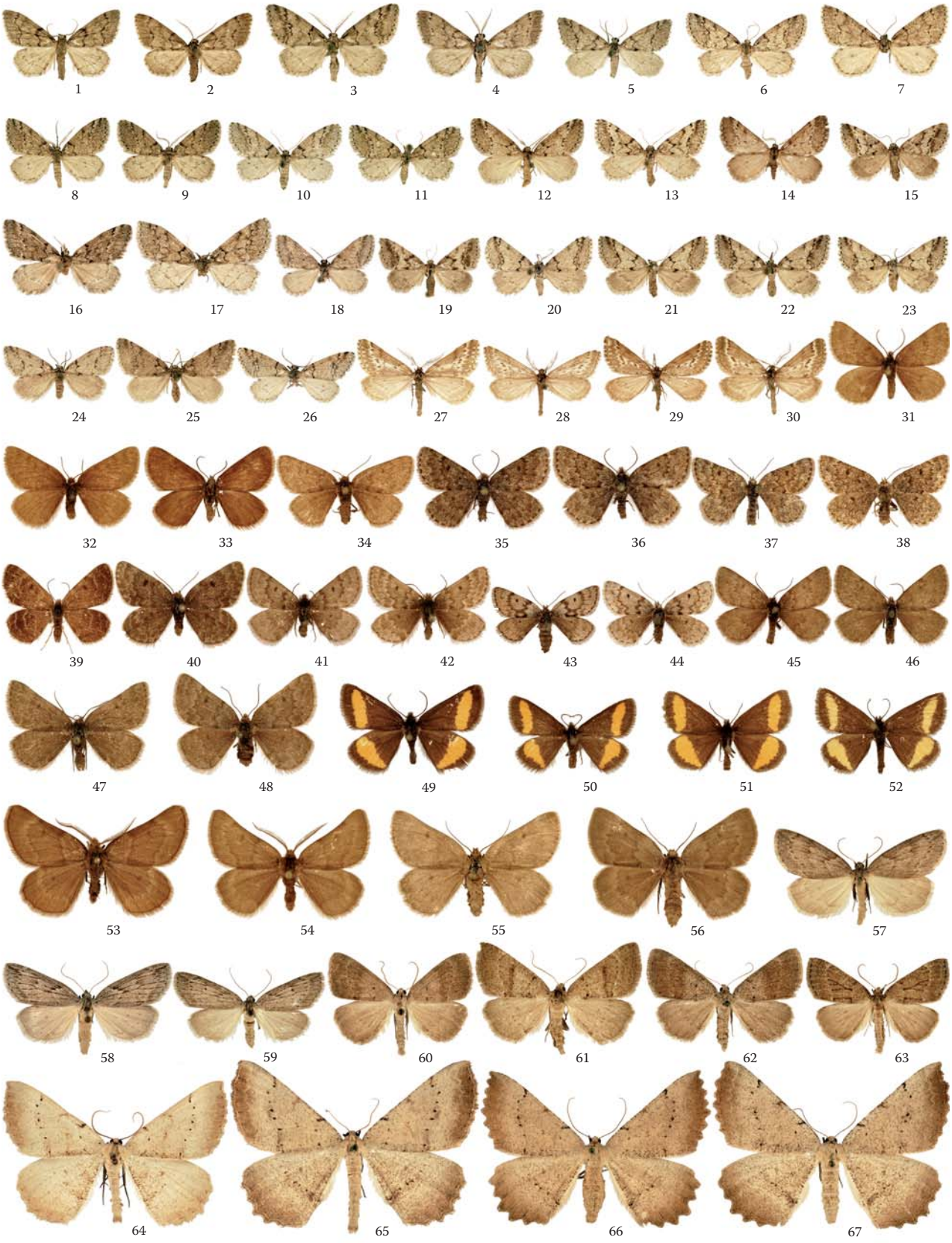

Plate 77: 1–7. *Tephronia sepiaria sepiaria*; 8–11. *Tephronia sepiaria* ssp. from Morocco; 12–13. *Tephronia oranaria oranaria*; 14–15. *Tephronia oranaria castiliaria*; 16–17. *Eumannia* sp. indet from Morocco; 18–19. *Eumannia arenbergeri*; 20–25. *Eumannia oppositaria*; 26. *Eumannia psyloritaria*; 27–30. *Phyllometra gracilaria*; 31–34. *Glacies alpinata*; 35–38. *Glacies canaliculata*; 39. *Glacies baldensis*; 40. *Glacies spitzi*; 41–44. *Glacies coracina*; 45–48. *Glacies noricana*; 49–52. *Psodos quadrifaria*; 53–56. *Sciadia tenebraria*; 57–59. *Pachycnemia hippocastanaria*; 60–62. *Pachycnemia tibiaria tibiaria*; 63. *Pachycnemia tibiaria benesignata*; 64–67. *Odontognophos dumetata*.

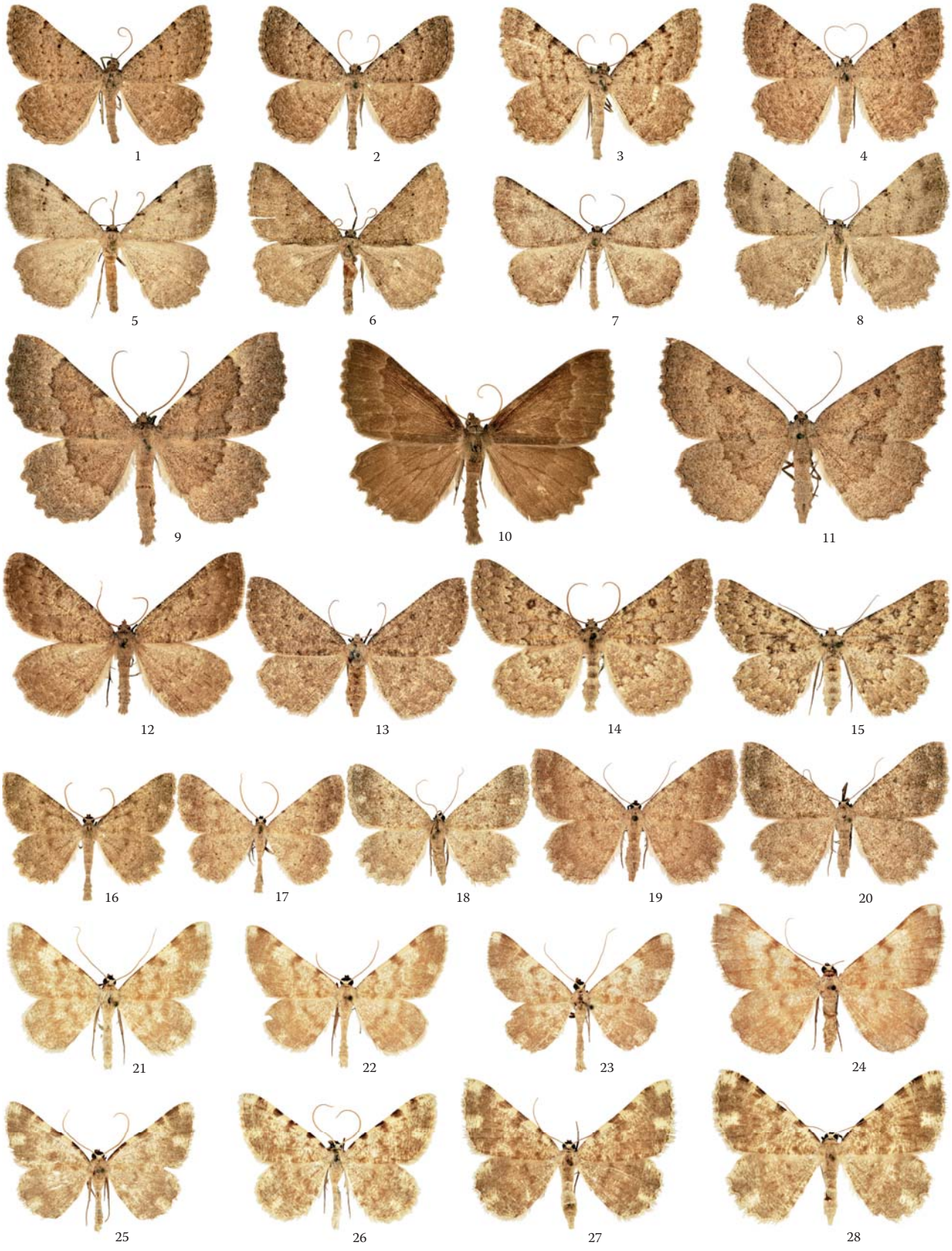

Plate 78: 1–4. *Odontognophos perspersata*; 5–8. *Odontognophos zacharia*; 9–11. *Gnophos furvata*; 12–13. *Gnophos obfuscata obfuscata*; 14–15. *Gnophos obfuscata androgynus*; 16–20. *Gnophos sartata*; 21–24. *Gnophos brandtorum*; 25–28. *Gnophos gorgata*.

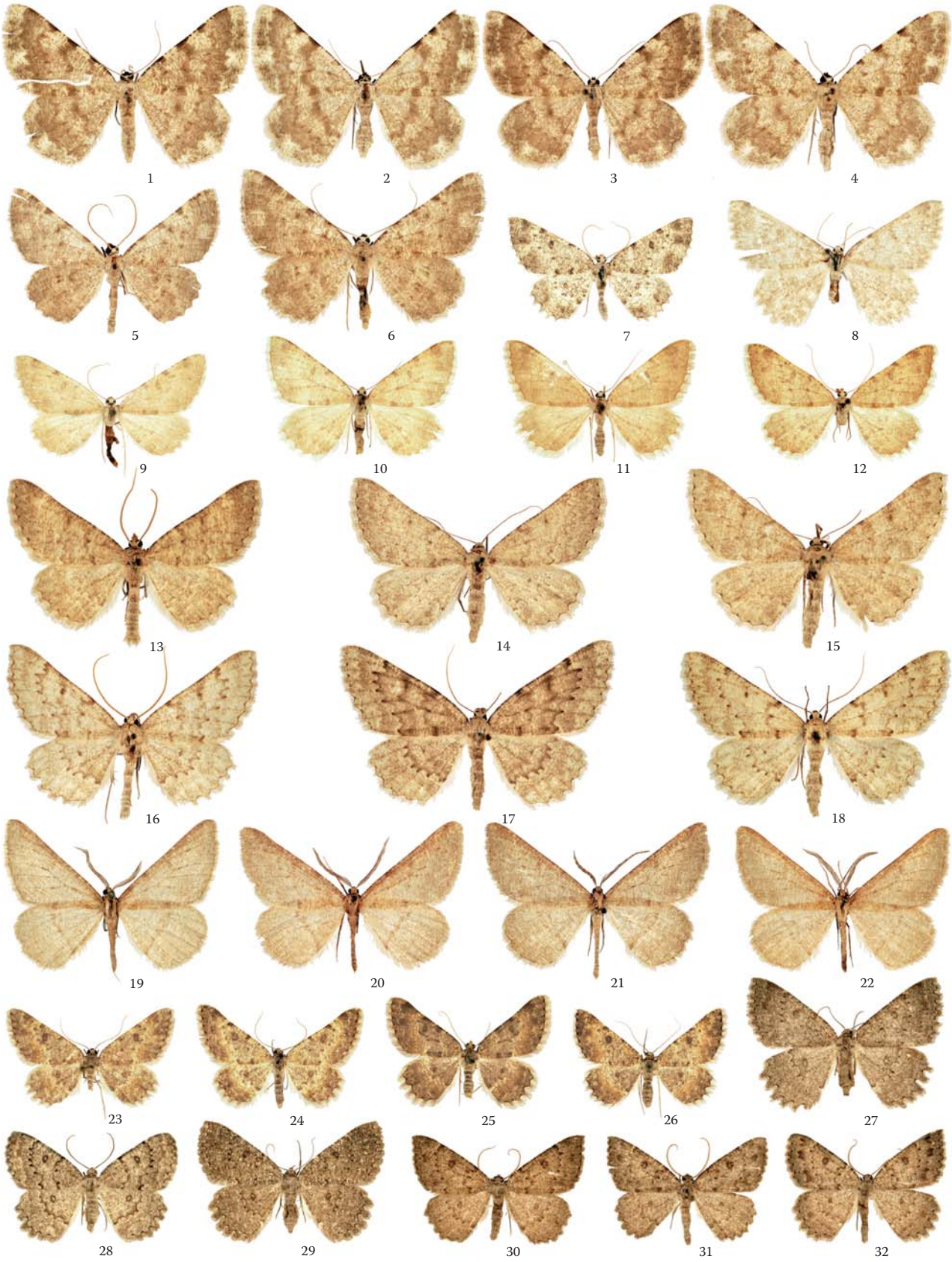

Plate 79: 1–4. *Gnophos klapperichi*; 5–6. *Gnophos snelleni*; 7. *Gnophos* sp. indet 1 from Afghanistan; 8. *Gnophos* sp. indet 2 from Afghanistan; 9–12. *Gnophos* sp. near *rubefactaria* from Afghanistan; 13–15. *Gnophos* sp. near *nimbata* 1 from Afghanistan; 16–18. *Gnophos* sp. near *nimbata* 2 from Afghanistan; 19–22. *Gnophos boarmioides*; 23–26. *Gnophos pagranitus* (23. Holotype); 27–29. *Charissa obscurata*; 30–32. *Charissa canariensis*.

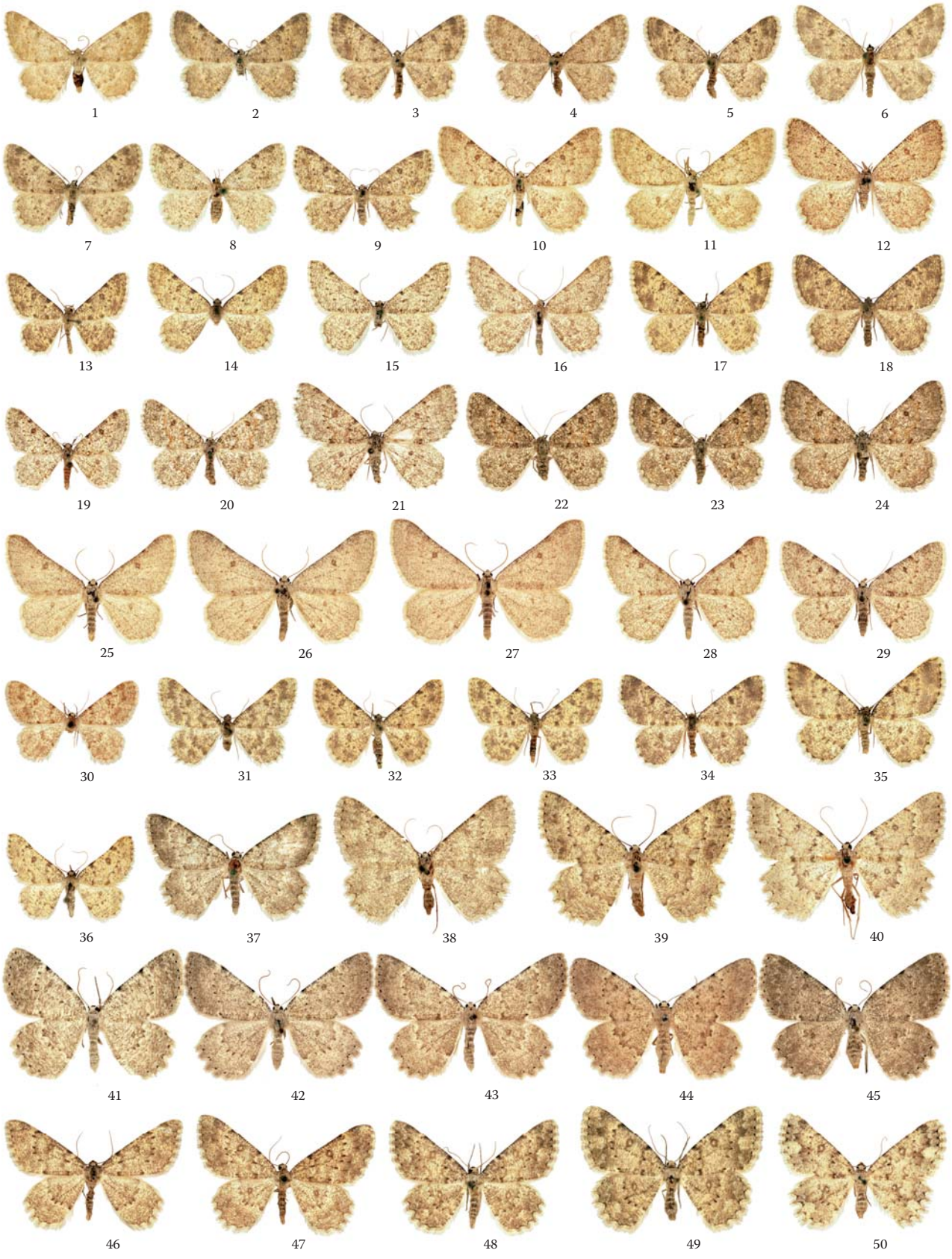

Plate 80: 1–6. *Charissa annubilata*; 7–9. *Charissa darashama*; 10–12. *Charissa libanotica*; 13–18. *Charissa luticiliata*; 19–24. *Charissa mutilata*; 25–29. *Charissa pentheri*; 30. *Charissa subvariegata*; 31–36. *Charissa taftana* (31. Holotype of *C. brachyphora*); 37–40. *Charissa crenulata*; 41–45. *Charissa pullata*; 46–50. *Charissa difficillimus*.

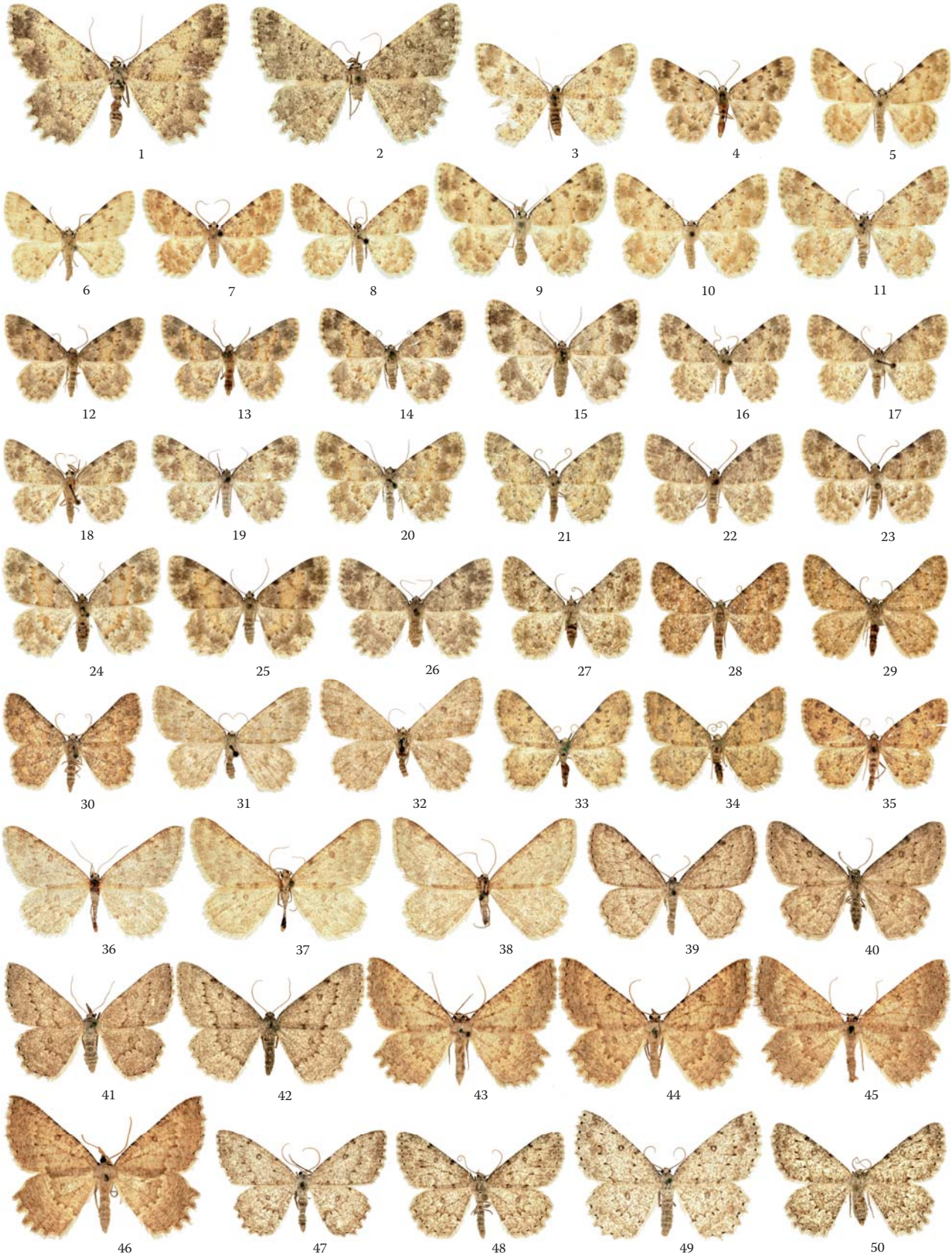

Plate 81: 1. *Charissa sibiriata*; 2. *Charissa wanensis*; 3. *Charissa amseli*; 4. *Charissa corsica*; 5–11. *Charissa dubitaria dubitaria*; 12–15. *Charissa dubitaria staudingeri*; 16–20. *Charissa subtaurica*; 21. *Charissa symmicta*; 22–26. *Charissa variegata*; 27–32. *Charissa mucidaria*; 33–35. *Charissa porphyratus*; 36–38. *Charissa badakhshanus*; 39–42. *Charissa ambiguata*; 43–46. *Charissa argillata*; 47–50. *Charissa onustaria*.

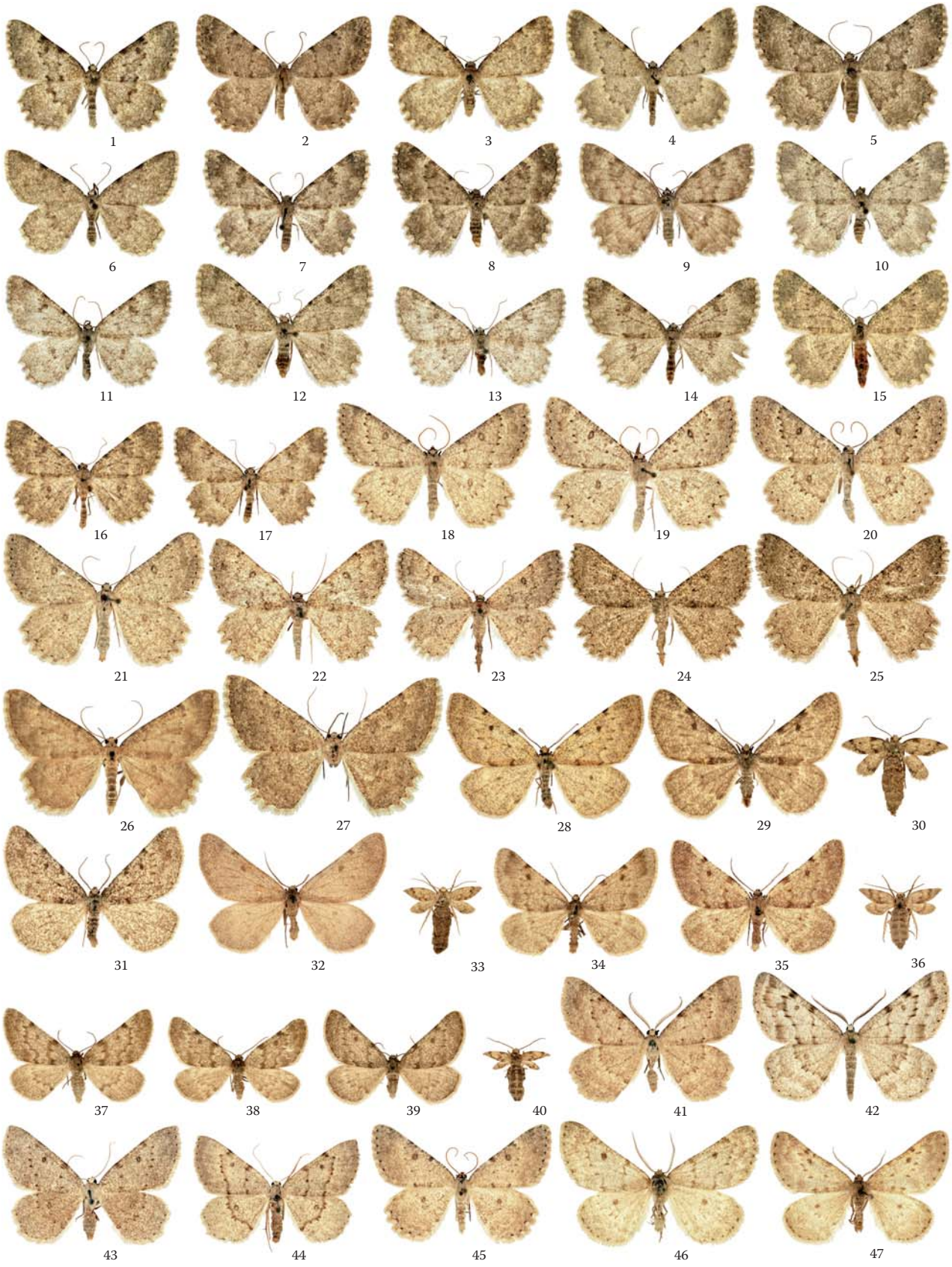

Plate 82: 1–5. *Charissa glaucinaria*; 6–10. *Charissa intermedia*; 11–14. *Charissa* sp. near *intermedia* from Lebanon; 15–17. *Charissa pfeifferi*; 18–21. *Charissa certhiatus certhiatus*; 22–25. *Charissa certhiatus minorasiaticus*; 26–27. *Charissa pollinaria*; 28–30. *Elophos spurcaria*; 31–33. *Elophos caelibaria caelibaria*; 34–36. *Elophos caelibaria senilaria*; 37–40. *Elophos zirbitzensis*; 41–44. *Elophos dilucidaria dilucidaria*; 45. *Elophos dilucidaria alagnensis*; 46–47. *Elophos operaria operaria*.

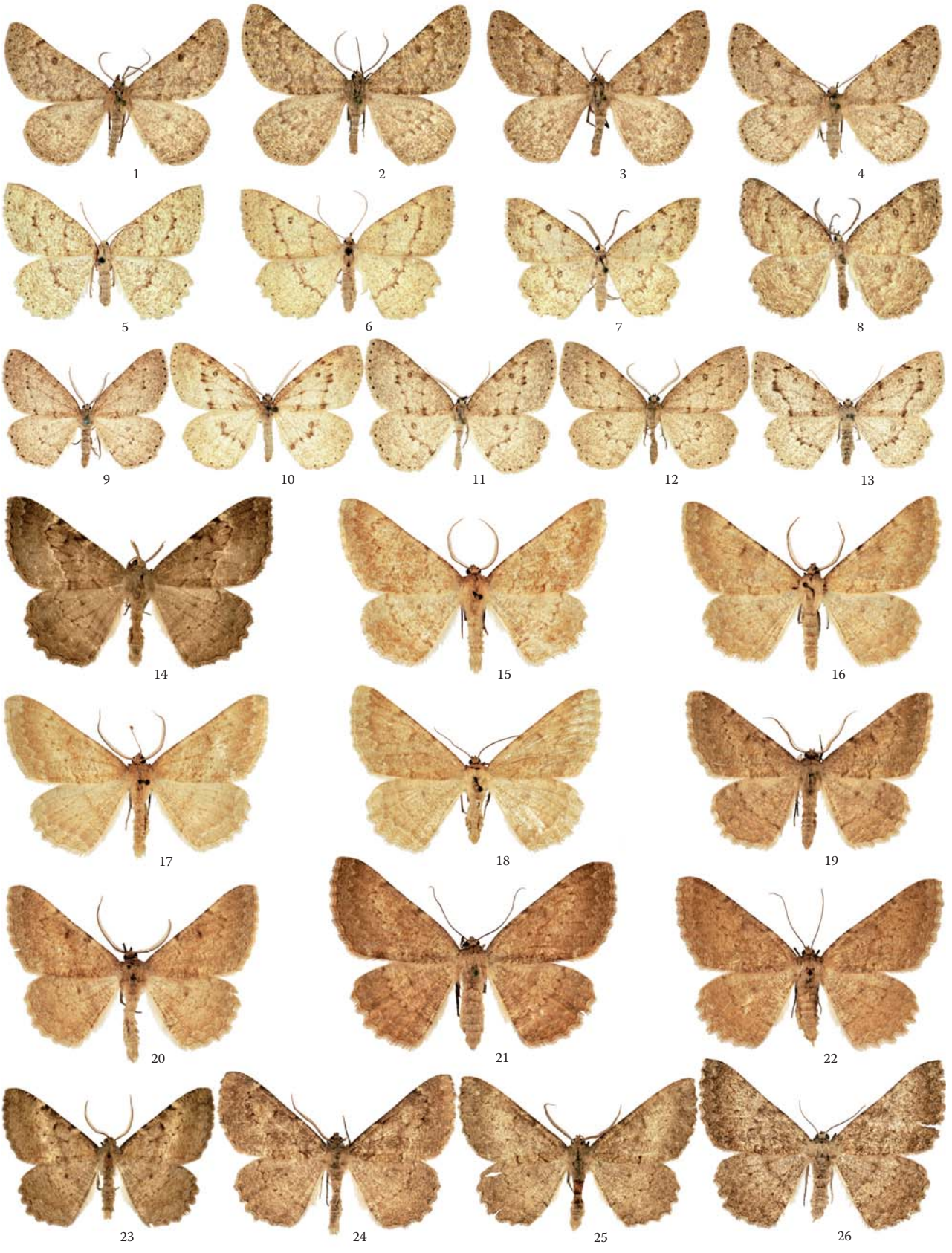

Plate 83: 1–4. *Elophos operaria hoefneri*; 5–8. *Elophos serotinaria*; 9. *Elophos vittaria vittaria*; 10–13. *Elophos vittaria mendicaria*; 14. *Ctenognophos eolaria*; 15–18. *Ctenognophos anax anax* (15. Holotype); 19–22. *Ctenognophos anax* ssp. from Afghanistan; 23–26. *Ctenognophos paerlita*.

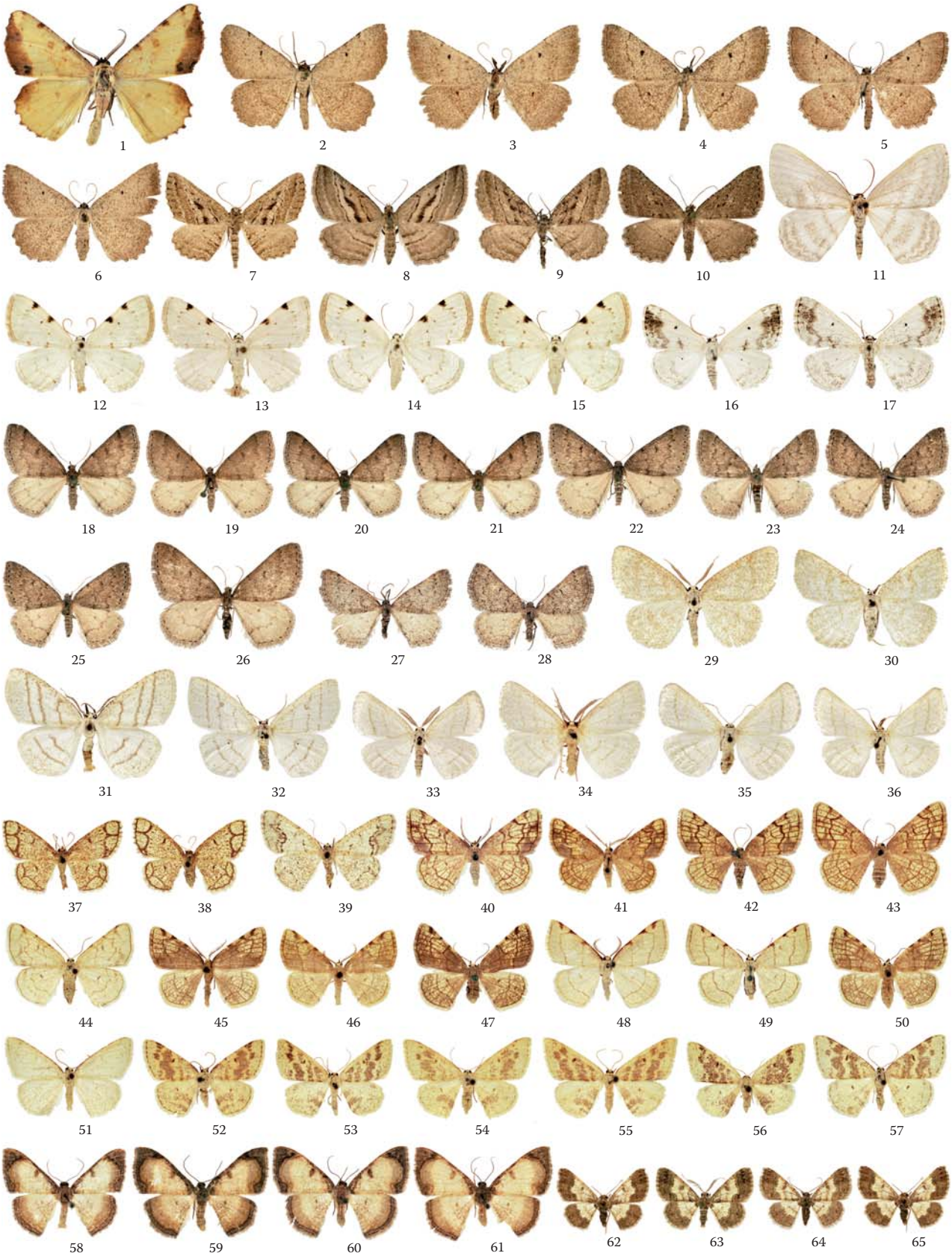

Plate 84: 1. *Bizia aexaria*; 2–3. *Stueningia poggearia poggearia*; 4–5. *Stueningia poggearia meyi*; 6. *Stueningia wolfi*; 7–10. *Rhoptria asperaria*; 11. *Taeniophila unio*; 12–15. *Lomographa bimaculata*; 16–17. *Lomographa temerata*; 18–21. *Aleucis distinctata*; 22–25. *Aleucis orientalis*; 26. *Aleucis* sp. near *orientalis* from Iran; 27–28. *Aleucis mimetes*; 29–30. *Cabera exanthemata*; 31–32. *Cabera pusaria*; 33–36. *Cabera leptographa*; 37–38. *Stegania cararia*; 39. *Stegania dalmataria*; 40–43. *Stegania dilectaria dilectaria*; 44. *Stegania dilectaria trimaculoides*; 45–49. *Stegania trimaculata trimaculata*; 50. *Stegania trimaculata ochrearia*; 51–57. *Stegania mesonephele*; 58–61. *Hydatocapnia nebulosa*; 62–65. *Zamarada minimaria*.

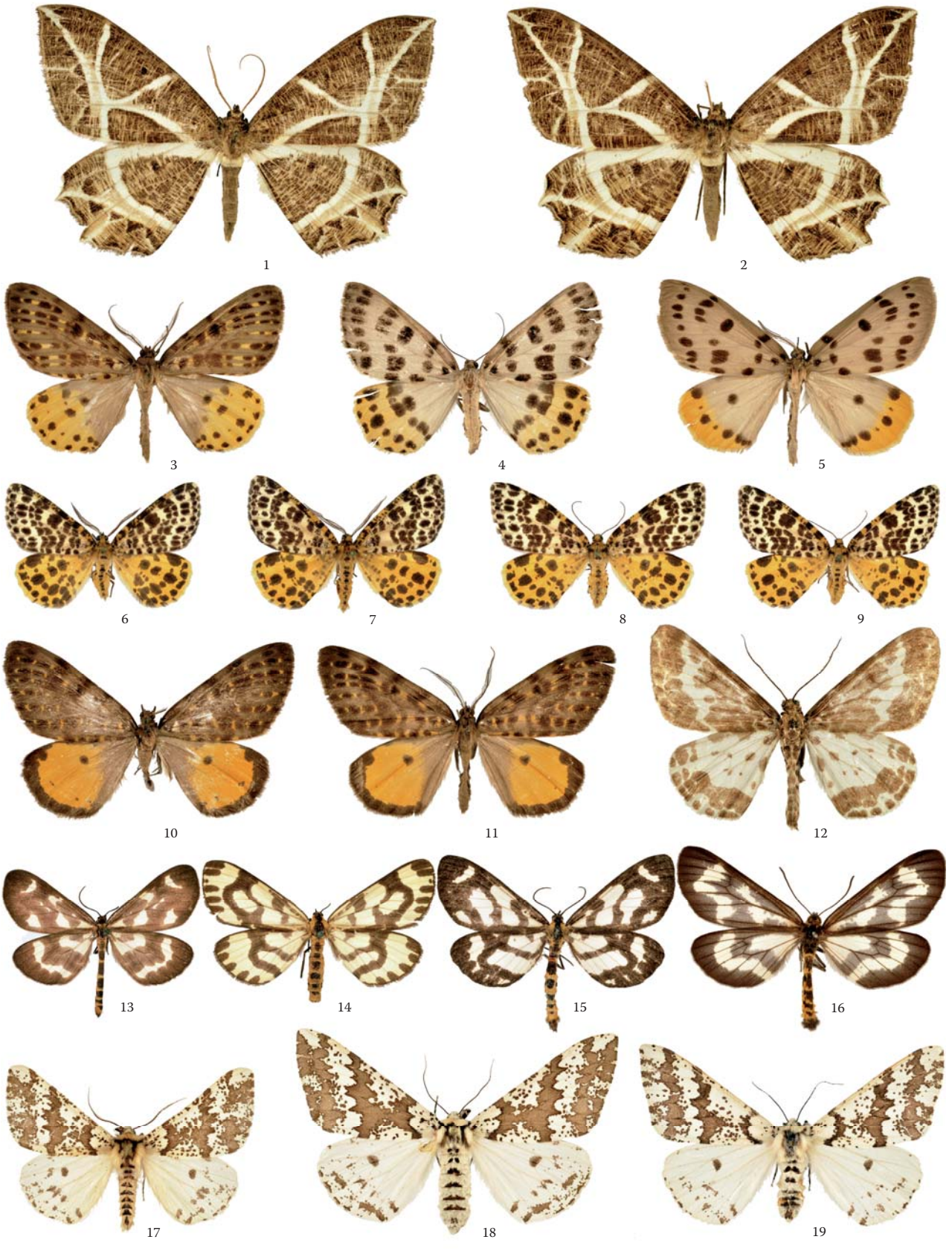

Plate 85: 1–2. *Erebomorpha fulguraria intervolans*; 3. *Arichanna sinica*; 4. *Arichanna jaguararia gaschkevitchii*; 5. *Arichanna tientsuena*; 6–9. *Arichanna melanaria*; 10–11. *Arichanna perimelaina*; 12. *Pogonopygia pavida*; 13. *Cystidia couaggaria*; 14. *Cystidia eurypile*; 15. *Cystidia eurymede*; 16. *Cystidia stratonice*; 17–19. *Abraxesis melaleucaria*.

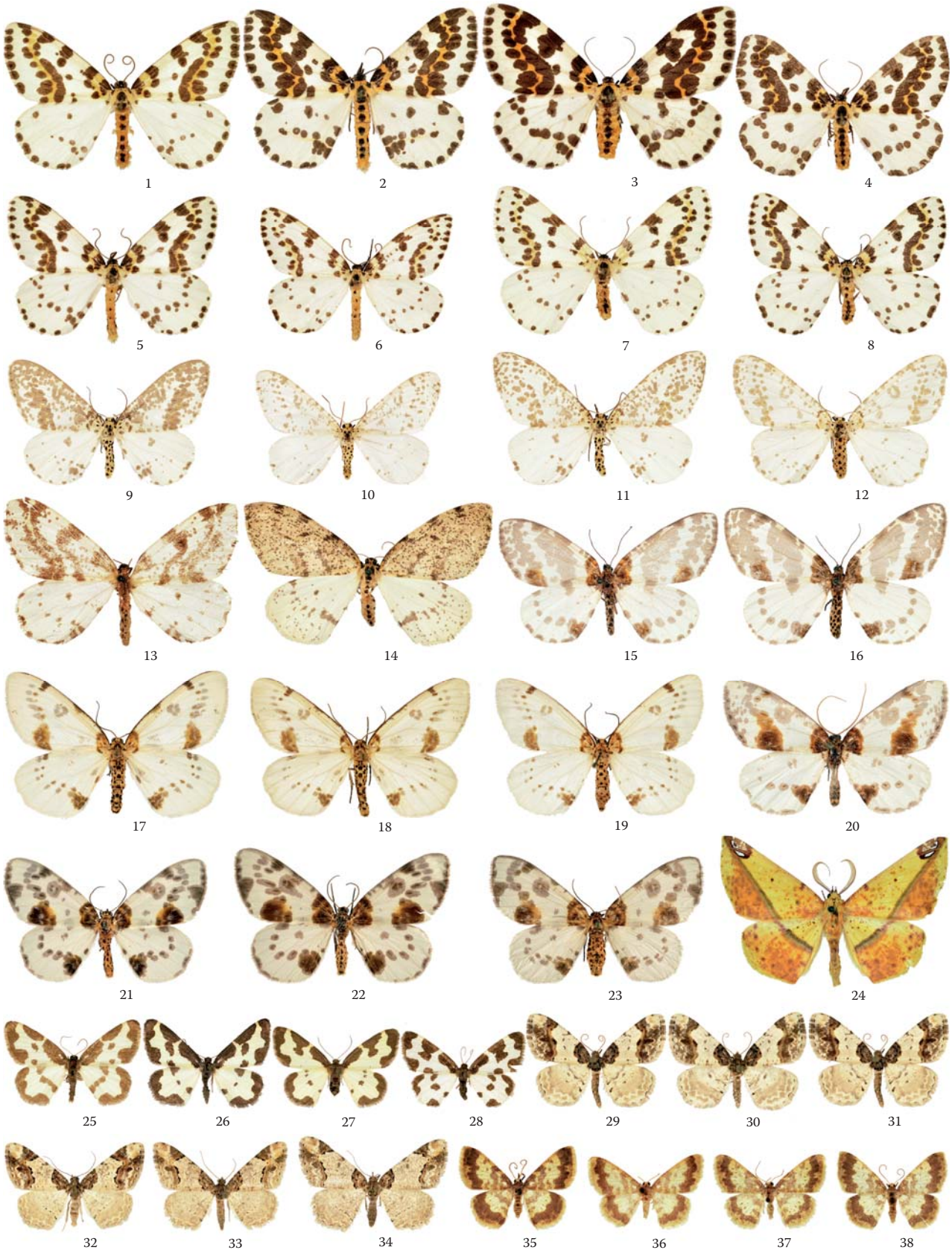

Plate 86: 1–4. *Abraxas grossulariata grossulariata*; 5–8. *Abraxas grossulariata dsungarica*; 9–12. *Abraxas virginalis*; 13. *Abraxas karafutonis*; 14. *Abraxas fuscescens*; 15–16. *Abraxas tenellula*; 17–19. *Abraxas pantaria*; 20. *Abraxas discoparallela*; 21–23. *Abraxas sylvata*; 24. *Mimomiza cruentaria*; 25–28. *Lomaspilis marginata*; 29–31. *Ligdia adustata*; 32–34. *Ligdia coctata*; 35–38. *Peratophyga hyalinata* (38. Holotype of *Zamarada ionephala*).

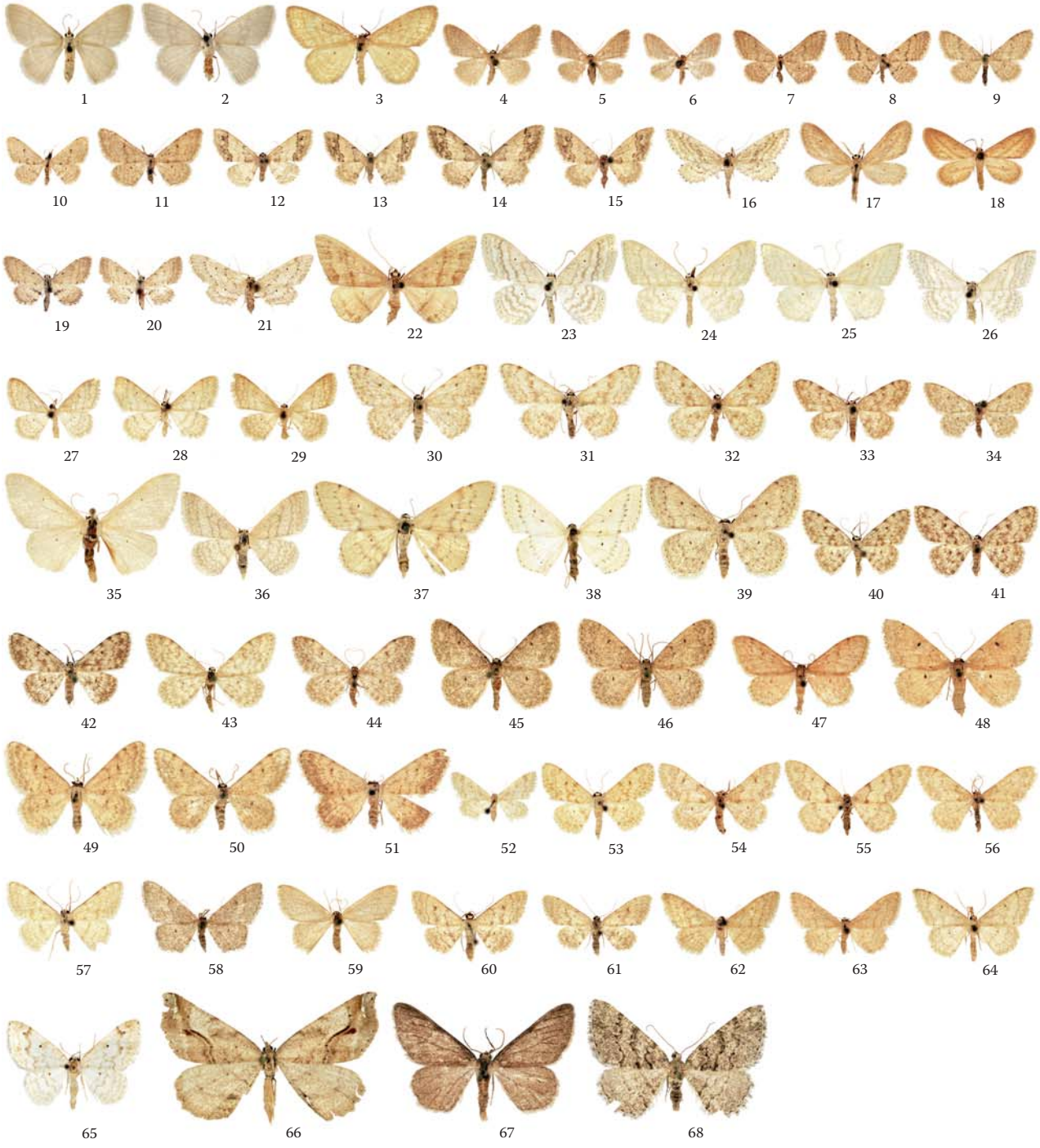

Plate 87: Unidentified Geometridae in the Vartian Collection. Geometrinae: 1–2. Genus indet sp. indet from Afghanistan;
Sterrhinae: 3. *Idaea* sp. indet 1 from Afghanistan; 4–6. *Idaea* sp. indet 2 from Turkey; 7–9. *Idaea* sp. indet 3 from Afghanistan;
10–11. *Idaea* sp. indet 4 from Pakistan; 12–15. *Idaea* sp. indet 5 from Pakistan; 16. *Idaea* sp. indet 6 from Iran; 17–18. *Idaea* sp. indet 7 from Pakistan;
19–20. *Idaea* sp. indet 8 from Iran; 21. *Idaea* sp. indet 9 from Morocco; 22. *Idaea* sp. indet 10 from Pakistan; 23–26. *Idaea* sp. indet 11 from Pakistan;
27–29. *Idaea* sp. indet 12 from Pakistan; 30–32. *Idaea* sp. indet 13 from Afghanistan and Pakistan; 33–34. *Idaea* sp. indet 14 from Afghanistan;
35. *Idaea* sp. indet 15 from Morocco; 36. *Scopula* sp. indet 1 from Spain; 37. *Scopula* sp. indet 2 from Tadjikistan; 38. *Scopula* sp. indet 3 from Turkey;
39. *Scopula* sp. indet 4 from Turkey; 40–42. *Glossotrophia* sp. indet 1 from Pakistan; 43–44. *Glossotrophia* sp. indet 2 from Morocco;
45–46. *Glossotrophia* sp. indet 3 from Morocco; 47–48. *Glossotrophia* sp. indet 4 from Morocco; 49–51. *Glossotrophia* sp. indet 5 from Iran;
52. *Glossotrophia* sp. indet 6 from Afghanistan; 53. *Glossotrophia* sp. indet 7 from Iran; 54–56. *Glossotrophia* sp. indet 8 from Afghanistan;
57. *Glossotrophia* sp. indet 9 from Iran; 58. *Glossotrophia* sp. indet 10 from Pakistan; 59. *Glossotrophia* sp. indet 11 from Pakistan;
60–61. *Glossotrophia* sp. indet 12 from Afghanistan; 62–63. *Glossotrophia* sp. indet 13 from Afghanistan; 64. *Glossotrophia* sp. indet 14 from Pakistan;
Larentiinae: 65. Genus indet sp. indet from Pakistan;
Ennominae: 66. Genus indet 1 sp. indet from W China; 67. Genus indet 2 sp. indet from Pakistan; 68. Genus indet 3 sp. indet from Iran.