

# An annotated catalogue of the Procridinae of the World (Lepidoptera: Zygaenidae)

Konstantin A. Efetov & Gerhard M. Tarmann

## Abstract

Almost 90 years have passed after the last publication of a catalogue of the family Zygaenidae of the world (Bryk, 1936). At that time there was no correct understanding of the taxonomic, genetic and ecological framework of the subfamily Procridinae. Many species of this subfamily were included into the Chalcosiinae and Zygaeninae. A new contemporary annotated catalogue consisting of five tribes, 94 genera and 570 species of Procridinae is provided. This is the first ever published complete worldwide catalogue of the subfamily. All together, 1111 taxa (including synonyms) are discussed. Three new tribes (*Thyrassiini*, tribus nov., *Pollanisini* tribus nov. and *Cleleini* tribus nov.), two new genera (*Afromalambria* gen. nov. and *Pseudohedina* gen. nov.) as well as four new subgenera (*Longiterna* subgen. nov., *Afroterna* subgen. nov., *Obscuriterna* subgen. nov., and *Eurasiterna* subgen. nov.) are described. 36 comb. nov., 14 stat. nov. and 3 syn. nov. are established.

**Keywords:** Lepidoptera, Zygaenidae, Procridinae, Thyrassiini, Pollanisini, Artonini, Cleleini, Procridini, systematic catalogue, taxonomy, distribution, larval host-plants, World.

## Catálogo anotado de los Procridinae del mundo (Lepidoptera: Zygaenidae)

## Resumen

Han pasado casi 90 años desde la última publicación de un catálogo de la familia Zygaenidae del mundo (Bryk, 1936). En aquella época no existía una comprensión correcta del marco taxonómico, genético y ecológico de la subfamilia Procridinae. Muchas especies de esta subfamilia se incluyeron en los Chalcosiinae y Zygaeninae. Se proporciona un nuevo catálogo contemporáneo anotado que consta de cinco tribus, 94 géneros y 570 especies de Procridinae. Se trata del primer catálogo mundial completo publicado de la subfamilia. En total, se analizan 1111 taxones (incluidos los sinónimos). Se describen tres nuevas tribus (*Thyrassiini*, tribus nov., *Pollanisini* tribus nov. y *Cleleini* tribus nov.), dos nuevos géneros (*Afromalambria* gen. nov. y *Pseudohedina* gen. nov.) y cuatro nuevos subgéneros (*Longiterna* subgen. nov., *Afroterna* subgen. nov., *Obscuriterna* subgen. nov. y *Eurasiterna* subgen. nov.). Se establecen 36 comb. nov., 14 stat. nov. y 3 syn. nov.

**Palabras clave:** Lepidoptera, Zygaenidae, Procridinae, Thyrassiini, Pollanisini, Artonini, Cleleini, Procridini, catálogo sistemático, taxonomía, distribución, plantas nutricias de larvas, Mundo.

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## Introduction

The family Zygaenidae is an important model group for ecological, environmental, zoogeographic, biochemical, karyological, genetic, morphological and taxonomic investigations in Lepidoptera (see e.g. Can et al. 2018, 2019; Can Cengiz et al. 2018; Drouet & Tarmann, 1989; Drouet et al. 2021; Gernaat et al. 2022; Huang & Efetov, 2021; Efetov, 1996e, 2012b, 2016, 2018, 2019; Efetov et al. 2004, 2010a, 2010b, 2010c, 2010d, 2011, 2012a, 2012b, 2013, 2014a, 2014b, 2014c, 2014d, 2015a, 2015b, 2016a, 2016b, 2016c, 2016d, 2017, 2018, 2019a, 2019b, 2019c, 2019d, 2020, 2021, 2022, 2023a, 2023b; Efetov & Gorbunov, 2016; Efetov & Knyazev, 2014; Efetov & Kucherenko, 2020, 2021; Efetov & Savchuk, 2009, 2013; Efetov & Tarmann, 2012, 2014b, 2017a, 2020a, 2020b, 2022a, 2022b; Knyazev et al. 2015a, 2015b; Landoldt et al. 1991; Marianelli et al. 2020; Markl et al. 2022; Mutanen et al. 2016; Nahirnić-Beshkova et al. 2021; Nazari & Efetov, 2023; Nazari et al. 2019; Parshkova & Efetov, 2014; Razov et al. 2017; Subchev et al. 2016, 2012, 2013; Tarmann, 1975, 1979, 1984a, 1984b, 1992a, 1992b, 1995, 1998, 2004, 2016, 2019a, 2019b, 2019c; Tarmann & Efetov, 2021; Tarmann et al. 2019; Vrenozi et al. 2019; Zahiri et al. 2021). Its systematics is well established. According to the contemporary classification the family Zygaenidae consists of five subfamilies: Inouelinae Efetov & Tarmann, 2017; Zygaeninae Latreille, 1809; Callizygaeninae Alberti, 1954; Chalcosiinae Walker, 1865, and Procridinae Boisduval, 1828 (Efetov, 1999c, 2001d, 2004d; Efetov & Tarmann, 2014a, 2017a; Tarmann, 1994; Mirić et al. 2023).

The Procridinae is the only subfamily that has a worldwide distribution and which occurs also in America and Australia. Many species have been described during the last years (see e.g. Efetov, 1998a, 1998b, 2010, 2012a; Efetov & Tarmann, 2013a, 2013b, 2014a, 2014b, 2016a, 2016b, 2017a, 2017b; Keil, 1998, 1999, 2016b, 2020; Mollet, 2008, 2015, 2016a, 2016b, 2016c, 2016d, 2017, 2018, 2020a, 2020b; Mollet & Tarmann, 2007, 2010, 2023; Owada, 2021; Owada et al. 2021, 2022a, 2022b; Owada & Inada, 2005; Shih & Owada, 2022; Sondhi et al. 2023; Tarmann & Cock, 2019; Tarmann & Drouet, 2015). However, newer checklists of taxa exist only for the Palaearctic and Australian regions (Tarmann, 2004; Efetov & Tarmann, 2012).

As the last catalogue of the Procridinae of the world was published 88 years ago (Bryk, 1936) it is urgently time for an update. Although there are several papers in preparation where more species will be described, we think this catalogue should be published now. We have postponed this work already for many years, always in the hope of making it more complete by waiting for the next publication series about Procridinae. Further new species must be summarized as an addition at a later time.

## Historical background

Illustrations of Zygaenidae can be found on the paintings of the Dutch Masters of 17th century

where they join Papilioidea and other moths on and around flower bouquets (Efetov & Tarmann, 2008a). The first Zygaenidae were described in the 10th edition of Carolus Linnaeus' *Systema Naturae* in the year 1758, viz. *Sphinx filipendulae* Linnaeus, 1758, and *Sphinx statices* Linnaeus, 1758. Soon there followed numerous descriptions by other authors such as Eugen Johann Christoph Esper, Michael Denis & Ignaz Schiffermüller, Jacob Hübner, Ferdinand Ochsenheimer and others. However, a first comprehensive summary of the so far known names was not available before the publication of Jean-Baptiste Alphonse DéChauffour de Boisduval's work *Monographie des Zygaenides* (1828). A significant step forward in our knowledge about Zygaenidae followed slightly later in the 19th century with authors like Gottlieb August Wilhelm Herrich-Schäffer (1843-1855, 1843-1856, [1853]-[1858], [1856]-1861), Christian Friedrich Freyer (1833-1836), Francis Walker (1854, 1856), Otto Staudinger (1862, 1871, 1878-1879, 1887a, 1887b), George Francis Hampson (1893), Charles Oberthür (1880, 1893, 1894, 1916), John-Henry Leech (1889a, 1889b, 1898), Charles Swinhoe (1890, 1891, 1892, 1894, 1903), Edward Meyrick (1886-1888), Herbert Druce (1881-1900, 1889, 1896, 1899, 1806, 1910) and others. These authors did not only deal with the Palaearctic species but were working in a world-wide context. An impressive overview of all known species of Zygaenidae of the world with short descriptions of the species and, if known, also of their distribution and biology, with colour illustrations of all mentioned species can be found in Adalbert Seitz's books *Die Gross-Schmetterlinge der Erde*. In these series of books the Zygaenidae were treated by Karl Jordan (1907a, 1907c-1908, 1913) and Max Gaede (1926).

A list of all known taxa in the world with synonyms, citations of original descriptions and geographical notes on the distribution was published by Embrik Strand in *Lepidopterorum Catalogus* in volumes 33 (by Helmut Burgeff, 1926, all Zygaeninae) and 71 (by Felix Bryk, 1936, all other Zygaenidae groups). The fascination about the variability of Zygaenidae and their geographical differences especially of the Palaearctic species of *Zygaena* Fabricius, 1775, resulted in a huge number of descriptions of subspecies, forms and aberrations. Helmut Burgeff, Franz Daniel, Francis Dujardin, Otto Holik, Manfred Koch, Hans Rauch, Hugo and Günther Reiss, Ubaldo Rocci, Ruggero Verity, Karl-Heinz Wiegel, etc. described hundreds of taxa.

Only Burchard Alberti (1954, 1958-1959) saw the family Zygaenidae as a whole and in a global context. He summarised their characters, especially those of their genitalia and tried the first phylogenetic analysis. Interesting new ideas came from Ernst Rudolf Reichl (1964) who implemented for the first time biometry and biostatistics into the discussion about populations, subspecies and species. He also created the first electronic database for Zygaenidae. The phylogenetic approach of Alberti, based on the studies of more and new characters, was further developed by Clas Naumann (morphology, ultrastructures, biochemistry, and biogeography) and many of his students, e.g. Oliver Niehuis (molecular biology), Axel Hille (biology, biochemistry, biometry), Harald Fänger (morphology, ultrastructure), also by Konstantin Efetov & Gerhard Tarmann (morphology, biology, behaviour, biochemistry, molecular biology, genetics) and recently by Mirela Mirić and Jadranka Rota (genetics).

We also have to mention Walter Gerald Tremewan (genetics, bionomics, bibliography, systematics, taxonomy, and phylogeny), Axel Hofmann (biology, biogeography, systematics, taxonomy, and phylogeny), Hiroshi Inoue (morphology, systematics, and taxonomy), Bernard Mollet and Thomas Keil (morphology, biology, systematics) and Shen-Horn Yen (morphology, systematics, molecular biology, and phylogeny) as other important contributors to the knowledge of the family.

By all these works more lepidopterologists were stimulated to study Zygaenidae. Many of them compiled large collections. Here we have to mention the rich special collections of Zygaenidae of Eyjolf Aistleitner (Palaearctic region, especially Iberian Peninsula), Francis Dujardin (Palaearctic region), Ulf Eitschberger (Palaearctic region), Helmut und Ruth Holzinger (Palaearctic region), Predrag Jakšić (Balkans), Thomas Keil (especially Palaearctic region), Hans Rauch (Alps, Italy, Balkans), and

especially the huge collection of Thomas Witt (mainly Palaearctic and Oriental region). In some countries collectors have formed very active working groups that contributed significantly especially to the knowledge of the Zygaenidae fauna of their country, e.g. in France the GIRAZ with members like Louis Faillie, Jean-Marie Desse, Eric Drouet, Marc Nicolle, Bruno Lambert and others.

A number of impressive monographies in the form of books have been published on Zygaenidae during the last years (e.g. Efetov, 2001f, 2004a, 2005a; Efetov & Tarmann, 1999a, 2008b, 2012; Guenin, 2023; Keil, 2014; Hofmann & Tremewan, 2017, 2020a, 2020b; Naumann, Tarmann & Tremewan, 1999; Tarmann, 2004) and more will follow.

Extended material was compiled during various collecting expeditions by persons who deposited their material in private collections and in museums. Here we have to mention especially the collectors of the British, Dutch, German, Austrian and Russian Empires that worked between the end of the 19th century up to the Second World War. Extraordinary persons like Lord Walter Rothschild and the Grand Duke Nikolay Mikhaylovich Romanov, and later Adalbert Seitz, invested lots of money in compiling material and in the publication of richly illustrated book series. For those private people but also for larger national museums a number of collectors travelled around the world and brought material of Zygaenidae from almost all countries where they are distributed. Moreover, members of the navy of the British Empire and employees of powerful commercial companies (e.g. the Dutch East Indian Company) were sent to foreign countries and many of them were collectors of insects. As examples for some of these almost “professional collectors” we mention Hugo Theodor Christoph (Central Asia), J. Z. Kannegieter (South-East Asia) and as an example of well-known people who were based far away from their home countries Rudolph van Eecke (South-East Asia), Hermann Höne (China), Edi Diehl (Indonesia), Georg Brückner (Guatemala) and J. F. Zikán (Brazil).

In Europe Leo Sheljuzhko (Eastern Europe, Caucasus, Central Asia), Guy Barrague (North Africa), Josef J. de Freina (Western Palaearctic and Africa), Wolfgang Eckweiler (especially western Asia), Ernst Görgner (western Asia), and Jiří Klir (Asia) collected valuable material also of Zygaenidae that is now mainly deposited in other collections.

In Asia especially the Japanese scientists and collectors like Hiroshi Inoue, Mamoru Owada, Yasunori Kishida, Kiyoshi Horie and Toshitsugo Endo established large collections that contain important material of Zygaenidae. Others such as Masanao Nakamura, Kayoko Nishihara und Chiharu Koshio contributed significantly to our knowledge of morphology and biology.

In spite of all these efforts we still have large gaps in the knowledge of Zygaenidae for many parts of the world, where newer comprehensive summaries are missing and the identification of species is therefore difficult. Many undescribed species are already known and waiting to be described. A very substantial contribution to the knowledge of the Asian and Australian Zygaenidae fauna, mainly based on his own field observations and rearing experiments, has recently been carried out by Bernard Mollet (e.g. Mollet, 1995, 2003a, 2003b, 2003c, 2019a; Mollet & Tarmann, 2023).

Revisions on generic level are permanently published but the progress is slow. Revisions on Zygaenidae dealing with whole continents have only been published for parts of the Palaearctic (Naumann et al. 1999; Efetov, 2001d, 2005a, 2005b; Efetov & Tarmann, 1995b, 1999a; Keil, 2014), America (Tarmann, 1984b) and Australia (Tarmann, 2004; Mollet & Tarmann, 2023) during the last 50 years.

The authors of this catalogue have already summarised their total knowledge on Zygaenidae and undertook an attempt to provide a hypothetical ground plan of the family in 2017 (Efetov & Tarmann, 2017a).

### **The concept of Alberti (genera, subgenera, species groups)**

Scientific work with Zygaenidae has been often controversial. While in one case a character can

be extremely useful for classification, the same character can be completely irrelevant in another case. This problem is not new. Already scientists like Karl Jordan (e.g. Jordan, 1907a, 1907c) and Martin Hering (e.g. Hering 1922, 1926), who summarised parts of the World's Zygaenidae in several books and papers, stepped into some of the tricky traps that have been laid by an unpredictable evolutionary history especially in the subfamily Procridinae (Tarmann, 1984b, 2004).

Alberti (1954) published the first comprehensive revision of the Zygaenidae of the world. It was based on extended studies, especially on the genitalia morphology of males and females. He recognised seven subfamilies for Zygaenidae: Zygaeninae, Phaudinae (now family Phaudidae within Zygaenoidea), Chalcosiinae, Anomoeotinae (now family Anomoeotidae within Zygaenoidea), Himantopterinae (now family Himantopteridae within Zygaenoidea), Charideinae (moved to Thyrididae by Minet, 1991) and Procridinae.

Especially for his treatment of the Procridinae Alberti (1954) used genera and also subgenera and within these subgenera species groups. In the same way, he also treated the subfamily Zygaeninae.

This concept has been widely accepted, especially in Procridinae. However, the discovery of new characters and more knowledge on their variability has made it necessary to describe a new subfamily, viz. Inouelinae (Efetov & Tarmann, 2017a), new genera and to divide some genera into more subgenera.

There is a common consensus that species can be grouped together with closely related species to form so-called species groups. However, there is no consensus if it makes sense to give a group of species or a group of species groups a taxonomic status in the form of the description of a subgenus. The fact that many of these described subgenera have suddenly appeared as genera in various publications and have confused users of scientific names like taxonomists, applied entomologists, biogeographers etc. led to a widely distributed rejection of subgeneric names. Opinions about the pros and cons of subgeneric names have been strongly held between entomologists and it is mainly dependent on the education and the tradition of an entomological society in which direction these feelings go (see e.g. Hofmann & Tremewan, 2009).

The authors of this catalogue have studied the family Zygaenidae for almost half a century. Nevertheless, they could not avoid following Alberti's concept throughout all their works as it was in most cases clearly the best solution for taxonomic and systematic work in Zygaenidae and especially in the Procridinae, which are treated in this catalogue. This concept enables good grouping of monophyletic units, the subgeneric names are based on types with a designated type species and there is a responsible authorship for each of them. Moreover, in many cases clear monophyletic species groups are found within the subgenera which enables further good subgrouping. Examples are genera like *Artona* Walker, 1854, *Illiberis* Walker, 1854, *Zygaenoprocris* Hampson, 1900, *Adscita* Retzius, 1783, or *Jordanita* Agenjo, 1940, each with a number of well differentiated subgenera (Figures 1-2).

### A new concept to use tribes in Procridinae

Since 1994 the subfamily Procridinae has been divided into two tribes: Artonini Tarmann, 1994 and Procridini Boisduval, 1828 (Tarmann, 1994; Efetov & Tarmann, 2012, 2017a). This concept was based on a large number of significant morphological, biological and other characters. All these relevant characters were listed, compared and discussed in detail in Efetov & Tarmann (2017a). However, some characters that have earlier been thought to belong to Artonini only have later also been found in Procridini. The concept that Artonini are monophyletic and Procridini paraphyletic has not been confirmed as valid in recent years. The final confirmation that the concept used so far was wrong is based on the newest DNA results using 32 nuclear and mitochondrial genes (Mirić et al. 2023). Taking into account these new results and combining them with the so-far known earlier results on morphology and biology we see that the subfamily Procridinae consists of five monophyletic traits.

Consequently, we divide here the Procridinae into Thyrassiini **tribus nov.**, Pollanisini **tribus nov.**, Artonini Tarmann, 1994, Cleleini **tribus nov.**, and Procridini Boisduval, 1828.

### The concept for species and subspecies in this catalogue

Since the times of Linnaeus it has been an unsolvable problem to find a common agreement between authors of what is a species and, of course, also what is a subspecies. Populations with common characters have been grouped together and named but the moment when species level is reached has never been completely clear. There are many zoological species concepts. Wilkins (2006) mentions in a short summary at least 26 existing species concepts. It is not the aim of this catalogue to contribute to this discussion but we have to agree to a pragmatic solution for the list of taxa given below. The subfamily Procridinae of Zygaenidae that is treated in this catalogue shows especially rich character variability and character combinations. We are confronted with the situation that sometimes characters are very constant in one group but are completely variable in another. Moreover, many species interbreed without problems and produce hybrid populations that are also fertile in further generations. Therefore, it has often been difficult to decide whether a taxon has to be treated as a species or included in a known taxon as a subspecies. According to Alberti's concept (Alberti, 1954) (see above) most taxa that show unique genitalic characters have to be treated as species in Procridinae. However, there are species groups that do not show significant differences in genitalia but are, without doubt, different species (e.g. *Pollanisus* in Australia, *Harrisina* in America). Even characters like DNA distances cannot solve this problem (e.g. *Jordanita* in the Palaearctic and *Pollanisus* in Australia). Moreover, even if small genitalic differences are present the existence of broad hybrid belts show that it is sometimes better to treat geographically separated population groups as subspecies and not as valid species even if they also have small genetic differences.

Based on the current knowledge about the variability of characters in Procridinae the authors strongly support the opinion that for the subfamily Procridinae subspecies only make sense and can be accepted if they represent a group of populations that have important constant characters that separate them clearly from the nominotypical populations without exceptions. As examples we mention *Adscita (Adscita) statices statices* and *A. (A.) statices drenowskii* (constant genitalic differences in male, no genitalic differences in female, small genetic differences in the COI gene within the populations but clustering into two well-separated groups, similar biology, vicariant distribution, broad hybrid belt where the two subspecies meet), *Adscita (Adscita) italicica italicica* and *A. (A.) italicica storaiæ* (no constant genitalic differences in male, small but also not constant genitalic differences in female, clear genetic distance in the COI gene, clearly isolated geographic range, no geographical meeting points and therefore no hybrids known in nature), *A. (A.) geryon geryon* and *A. (A.) geryon orientalis* (no constant genitalic differences but large genetic distances in the COI gene, vicariant distributional ranges, no proof of hybrids in nature so far) and *A. (A.) obscura obscura* and *A. (A.) obscura maxima* (no differences in genitalia, constant differences only in habitus and clearly isolated geographic ranges, small genetic differences in the COI gene).

Many species and subspecies described earlier do not fit into this concept. They often were based on insufficient characters and have shown to be synonyms. Especially subspecies were often based only on habitus characters like the different size and colour of the specimens and on an isolated geographic occurrence. The lack of a profound knowledge of the overall variability of these characters in Procridinae has led to this situation. The authors have therefore already synonymized most of the so-far described subspecies in Procridinae (Efetov & Tarmann, 1995b, 2012; Efetov, 2001d). However, recently a number of new taxa have been described where other criteria have been used by the authors as accepted by us for this catalogue (e.g. Keil, 2016b, 2020; Zolotuhin, 2020). All these taxa are here included, discussed in detail and mainly placed according to our above mentioned concept.

## Catalogue

C - comments that follow immediately after the checklist

Family **Zygaenidae** Latreille, 1809, 189, 211 (as Zygaenides)

[Type genus: *Zygaena* Fabricius, 1775, 550]

Subfamily **Procridinae** Boisduval, 1828, 38 (as Procridae)

[Type genus: *Procris* [Fabricius in Illiger], 1807, 289] (see Taeger & Gaedike, 2001, 87)

Tribe **Thyrassiini** Efetov & Tarmann, **tribus nov. (C01)**

[Type-genus: *Thyrassia* Butler, 1876, 355]

Larval host-plants: Vitaceae.

Distribution: Southern and southeastern Asia, Australia.

Genus ***Thyrassia*** Butler, 1876, 355

[Type species: *Syntomis subcordata* Walker, 1854, 132, by original designation]

*Monoschalis* Hampson, 1893 ("1892"), 238

[Type species: *Monoschalis virescens* Hampson, 1893 ("1892"), 238, by original designation]

*Atucia* Watson, 1980, 20

[Type species: *Acutia bidens* Kaye, 1919, 89, by original designation], a junior homonym of *Acutia* Ragonot, 1891, 539 - Insecta: Lepidoptera, Pyralidae. The objective replacement is *Atucia* Watson, 1980, 20

Larval host-plants: Vitaceae.

***T. subcordata*** (Walker, 1854, 132) (*Syntomis*)

Distribution: North India (ssp. *subcordata*), South India, Sri Lanka (ssp. *aurodisca*).

***T. subcordata subcordata*** (Walker, 1854, 132) (*Syntomis*)

*subcaudata* [sic] Swinhoe, 1892, 55, misspelling

***T. subcordata aurodisca*** Hampson, 1891, 44

***T. virescens*** (Hampson, 1893, 238) (*Monoschalis*)

Distribution: Sri Lanka.

***T. penangae*** (Moore, 1859, 198) (*Syntomis*)

Distribution: southern China, Myanmar (Burma), Malaysia, Singapore, Indonesia (Sumatra) (ssp. *penangae*), Java, Bali (ssp. *rafflesi*).

***T. penangae penangae*** (Moore, 1859, 198) (*Syntomis*)

*diversa* (Walker, 1864, 31) (*Hydrusa*) (synonymised by Bryk, 1936, 271)

*penanga* [sic] (Hampson, 1896, 466) (*Syntomis*), misspelling

***T. penangae rafflesii*** (Moore, 1859, 198) (*Syntomis*)

***T. bidens*** (Kaye, 1919, 89) (*Acutia*)

Distribution: Malaysia (Borneo), Indonesia (Borneo).

**T. philippina** Jordan, 1908, 51

*penangae* (sensu Semper, 1898, 433) (nec Moore, 1859, 198) (see Bryk, 1936, 271)

Distribution: Philippines (Luzon).

**T. aprepes** Swinhoe, 1905, 144

Distribution: Indonesia (Sumba. Kai Islands).

**T. inconcinna** Swinhoe, 1892, 55 (Figure 3)

*mimetica* (Turner, 1902, 200) (*Monoschalis*)

Distribution: Australia (Queensland, Lizard Island).

Tribe **Pollanisini** Efetov & Tarmann, **tribus nov. (C02)**

[Type-genus: *Pollanisus* Walker, 1854, 114]

Larval host-plants: Dilleniaceae, Myrtaceae, Vitaceae, Arecaceae.

Distribution: Australia, Fiji, South Africa.

Genus **Pollanisus** Walker, 1854, 114 (C03)

[Type species: *Procris viridipulverulenta* Guérin-Méneville, 1839, pl. 11, by subsequent designation by Kirby, 1892, 87]

Larval host-plants: Dilleniaceae (two species on Urticaceae and one on Fabaceae).

**P. acharon** (Fabricius, 1775, 556) (*Zygaena*)

*eumetopus* Turner, 1926, 443

*eungellae* Tarmann, 2004, 95

Distribution: Australia (Queensland).

**Pollanisus sp. 7** (discussed and figured in Tarmann, 2004, 103; Mollet & Tarmann, 2023, 9, 11)

Distribution: Australia (Northern Territory).

**P. Yugambeh** Mollet & Tarmann, 2023, 30

Distribution: Australia (Queensland, New South Wales).

**P. angustifrons** Tarmann, 2004, 100

*Pollanisus* sp. 4 (discussed and figured in Tarmann, 2004, 102)

*Pollanisus* sp. 5 (discussed and figured in Tarmann, 2004, 102)

Distribution: Australia (Queensland).

**P. jumbun** Mollet & Tarmann, 2023, 13

Distribution: Australia (Queensland).

**P. horakae** Mollet & Tarmann, 2023, 33

Distribution: Australia (Queensland).

**P. trimacula** (Walker, 1854, 110) (*Procris*)

Distribution: Australia (Queensland, New South Wales).

**P. worimi** Mollet & Tarmann, 2023, 36

Distribution: Australia (New South Wales).

**P. kalliesi** Mollet & Tarmann, 2023, 37

Distribution: Australia (New South Wales).

**P. subdolosa** (Walker, 1865, 32) (*Procris*)

Distribution: Australia (Queensland, New South Wales (subsp. *clara*), Victoria (subsp. *subdolosa*)).

**P. subdolosa subdolosa** (Walker, 1865, 32) (*Procris*)

**P. subdolosa clara** Tarmann, 2004, 89

**P. edwardsi** Tarmann, 2004, 86

Distribution: Australia (Queensland, New South Wales).

**Pollanisus sp. 2** (discussed and figured in Tarmann, 2004, 102; Mollet & Tarmann, 2023, 20)

Distribution: Australia (New South Wales).

**P. commoni** Tarmann, 2004, 98 (Figure 15)

Distribution: Australia (Queensland).

**Pollanisus sp. 8** (discussed and figured in Tarmann, 2004, 104; Mollet & Tarmann, 2023, 22)

Distribution: Australia (Queensland).

**P. contrastus** Tarmann, 2004, 91

Distribution: Australia (Queensland, New South Wales).

**Pollanisus sp. 3** (discussed and figured in Tarmann, 2004, 102; Mollet & Tarmann, 2023, 26)

Distribution: Australia (Queensland).

**Pollanisus sp. 6** (discussed and figured in Tarmann, 2004, 103; Mollet & Tarmann, 2023, 26)

Distribution: Australia (Queensland).

**P. incertus** Tarmann, 2004, 99

Distribution: Australia (Queensland).

**P. jirrbal** Mollet & Tarmann, 2023, 45

Distribution: Australia (Queensland).

*P. viridipulverulenta* (Guérin-Méneville, 1839, pl. 11) (*Procris*) (Figure 21)  
*adelaidae* Turner, 1926, 444

Distribution: Australia (Queensland, New South Wales, Victoria, South Australia, Tasmania).

*P. cupreus* Walker, 1854, 115

Distribution: Australia (Western Australia).

*P. nielseni* Tarmann, 2004, 75 (Figure 22)

Distribution: Australia (Western Australia).

*P. empyrea* (Meyrick, 1888, 927) (*Procris*) (**C04**)

Distribution: Australia (Western Australia).

*P. amethystina* (Meyrick, 1888, 927) (*Procris*) (**C04**)

Distribution: Australia (Western Australia).

*P. apicalis* (Walker, 1854, 111) (*Procris*)

*sequens* Walker, 1854, 115

*novaehollandiae* (Wallengren, 1860, 39) (*Procris*)

Distribution: Australia (Queensland, New South Wales, Victoria, South Australia, Tasmania).

*P. nocturna* Mollet & Tarmann, 2023, 50

Distribution: Australia (Queensland, New South Wales).

*P. modestus* Tarmann, 2004, 76

Distribution: Australia (New South Wales).

*P. lithopastus* Turner, 1926b, 443

Distribution: Australia (New South Wales, Victoria, Tasmania).

*P. mariotti* Kallies & Mollet, 2011

Distribution: Australia (Victoria).

*Pollanisus* sp. 1 (discussed and figured in Tarmann, 2004, 79; Mollet & Tarmann, 2023, 18)

Distribution: Australia (Australian Capital Territory).

*P. cyanota* (Meyrick, 1886, 793) (*Procris*)

Distribution: Australia (Queensland, New South Wales, Victoria).

*P. hyacinthus* Kallies & Mollet, 2018

Distribution: Australia (Kangaroo Island).

**P. isolatus** Tarmann, 2004, 105

Distribution: Australia (Victoria).

**P. calliceros** Turner, 1926a, 117

Distribution: Australia (southern New South Wales, Victoria, Tasmania (subsp. *calliceros*); central east and north of New South Wales (subsp. *azurea*).

**P. calliceros calliceros** Turner, 1926a, 117

**P. calliceros azurea** Tarmann, 2004, 107

Genus **Saliuncella** Jordan, 1907b, 124 (**C29**)

[Type species: *Saliuncella marshalli* Jordan, 1907b, 124, by monotypy]

Larval host-plants: Vitaceae.

**S. marshalli** Jordan, 1907b, 124 (Figure 45)

Distribution: South Africa (Natal, Swasiland).

Genus **Onceropyga** Turner, 1906, 137

[Type species: *Onceropyga anelia* Turner, 1906, 137, by monotypy]

Larval host-plants: Vitaceae.

**O. anelia** Turner, 1906, 137 (Figure 4)

Distribution: Australia (Queensland, New South Wales).

**O. pulchra** Tarmann, 2004, 135

Distribution: Australia (Queensland, New South Wales).

Genus **Hestiochora** Meyrick, 1886, 788

[Type species: *Procris tricolor* Walker, 1854, 111, by subsequent designation by Turner, 1926b, 441]

Larval host-plants: Myrtaceae (in one species also Proteaceae).

**H. erythrota** Meyrick, 1886, 789 (Figure 23)

Distribution: Australia (Queensland, New South Wales).

**H. tricolor** (Walker, 1854, 111) (*Procris*) (Figure 5)

Distribution: Australia (Victoria, Tasmania).

**H. continentalis** Tarmann, 2004, 145

Distribution: Australia (Western Australia, Queensland, New South Wales, Victoria, South Australia).

**H. furcata** Tarmann, 2004, 148

Distribution: Australia (Queensland, New South Wales, Victoria, South Australia).

***H. queenslandensis*** Tarmann, 2004, 149

Distribution: Australia (Queensland, New South Wales).

***H. xanthocoma*** Meyrick, 1886, 788

Distribution: Australia (Northern Territory, Queensland).

***H. occidentalis*** Tarmann, 2004, 151

Distribution: Australia (Western Australia).

***H. intermixta*** Tarmann, 2004, 152

Distribution: Australia (Queensland, New South Wales, South Australia).

Genus ***Turneriprocris*** Bryk, 1936, 304

[Type species: *Procris dolens* Walker, 1854, 112, by original designation]

*Neoprocris* Turner, 1926b, 445 (a junior homonym of *Neoprocris* Jordan, 1915, 300 - Lepidoptera, Zygaenidae)

The objective replacement name is *Turneriprocris* Bryk, 1936, 304

[Type species: *Neoprocris saltuaria* Jordan, 1915, 300, by original designation]

Larval host-plants: Myrtaceae.

***T. dolens*** (Walker, 1854, 112) (*Procris*)

Distribution: Australia (Queensland, New South Wales, Victoria, South Australia, Tasmania).

Genus ***Myrtartona*** Tarmann, 2004, 169

[Type species: *Procris rufiventris* Walker, 1854, 110, by original designation]

Larval host-plants: Myrtaceae

***M. coronias*** (Meyrick, 1886, 792) (*Procris*)

Distribution: Australia (Queensland, New South Wales, Victoria, South Australia, Tasmania).

***M. leucopleura*** (Meyrick, 1886, 792) (*Procris*)

Distribution: Australia (Queensland, New South Wales).

***M. rufiventris*** (Walker, 1854, 110) (*Procris*) (Figure 24)

Distribution: Australia (Western Australia, South Australia, western Victoria).

***M. mariannae*** Tarmann, 2004, 176

Distribution: Australia (Queensland).

Genus ***Levuana*** Bethune-Baker, 1906, 343 (C05)

[Type species: *Levuana iridescentis* Bethune-Baker, 1906, 344, by original designation]

Larval host-plants: Arecaceae (former pest on *Cocos nucifera*).

**L. iridesces** Bethune-Baker, 1906, 344

Distribution: Fiji Islands (Viti Levu, Ovalau, Cagalai).

**Tribe Artonini** Tarmann, 1994, 120 (**C06**)

[Type-genus: *Artona* Walker, 1854, 439]

Larval host-plants: Poaceae, Zingiberaceae, Pittosporaceae, Lauraceae, Musaceae, Arecaceae.  
Distribution: Australia, eastern, southern and southeastern Asia, tropical Africa.

**Genus Artona** Walker, 1854, 439 (**C07**)

[Type-species: *Artona discivitta* Walker, 1854, 440, by monotypy]

Larval host-plants: Poaceae (mainly bamboo) (subgenera *Artona*, *Zeuxippa*, *Balataea*, *Fuscartona*).

**Subgenus Artona** Walker, 1854, 439 (**C07**)

[Type-species: *Artona discivitta* Walker, 1854, 440, by monotypy]

Larval host-plants: Poaceae (bamboo).

**A. (A.) discivitta** Walker, 1854, 440 (**C08**) (Figure 25)

Distribution: southern India.

**Subgenus Zeuxippa** Herrich-Schäffer, 1855, 87, **stat. nov.** (**C07**)

[Type-species: *Sphinx pulchra* Drury, 1773, 52, by monotypy]

Larval host-plants: Poaceae (bamboo).

**A. (Z.) phaeoxantha** Hampson, 1920a, 274 (**C09**)

Distribution: southern India (Madras).

**A. (Z.) zebraica** Butler, 1876, 356 (**C09**)

Distribution: northern India, Myanmar (Burma), Thailand, Malaysia.

**A. (Z.) fulvida** Butler, 1876, 356 (**C09**)

*diffusa* Oberthür, 1894, 30 (*Artona fulvida* var. *diffusa*)

Distribution: northern India, Myanmar (Burma), Thailand, Malaysia.

**A. (Z.) flavigiliata** Hampson, 1920a, 273 (**C09**)

Distribution: northern India (Sikkim).

**A. (Z.) confusa** Butler, 1876, 357 (**C09**)

Distribution: northern India.

**A. (Z.) digitata** Hampson, 1920a, 273 (**C09**)

Distribution: Myanmar (Burma) (Tenasserim).

**A. (Z.) *khasiana* Jordan, 1908, 43 (C09)**

Distribution: NE India (Assam).

**A. (Z.) *sikkimensis* Elwes, 1890, 379 (C09)**

Distribution: north India (Sikkim).

**A. (Z.) *nigrescens* Butler, 1876, 356, stat. nov. (C10)**

Distribution: northern India.

**A. (Z.) *guttata* (Snellen, 1892, 32) (*Syntomis*), stat. rev. (C10)**

Distribution: Indonesia (Sumatra).

**A. (Z.) *neglecta* Hering, 1925, 175, stat. rev. (C10)**

Distribution: Myanmar (Burma).

**A. (Z.) *walkeri* (Moore, 1859), 199 ("? *Syntomis*") (C11) (Figure 26)**

Distribution: Indonesia (Java) (ssp. *walkeri*), Indonesia (Bali) (ssp. *baliensis*).

**A. (Z.) *walkeri walkeri* (Moore, 1859), 199 ("? *Syntomis*")**

**A. (Z.) *walkeri baliensis* Jordan, 1908, 43**

**A. (Z.) *hainana* Butler, 1876, 357**

*walkeri* (sensu auct.) (nec Moore, 1859, 199)

*fulvida* (sensu auct.) (nec Butler, 1876, 356)

Distribution: China (Hainan).

**A. (Z.) *flavipuncta* Hampson, 1900, 225**

Distribution: northeastern India (Assam).

**A. (Z.) *hypomelas* Jordan, 1908, 43**

Distribution: northern India (NW India, Sikkim).

**A. (Z.) *superba* Alphéraky, 1897, 124**

Distribution: western China.

**A. (Z.) *pulchra* (Drury, 1773, pl. 29, fig. 3) (*Sphinx*)**

Distribution: western China.

**A. (Z.) *cuneonotata* Leech, 1898, 328**

Distribution: western China.

**A. (Z.) lucasseni** (Snellen, 1903), 234 (*Brachartona*)

Distribution: Indonesia (Java).

**A. (Z.) pluristrigata** Hampson, 1907, 328 (**C12**)

Distribution: Indonesia (Borneo, Pulo Laut).

**A. (Z.) refulgens** (Hampson, 1893, 232) (*Chrysartona*)

[systematic position of this taxon needs verification]

Distribution: Myanmar (Burma).

Subgenus **Balataea** Walker, 1865, 110, **stat. rev.** (**C07**)

[Type-species: *Balataea aegerioides* Walker, 1865, 111, by monotypy]

*Rhaphidognatha* Felder & Felder, 1862, 31, a junior homonym of *Rhaphidognatha* Murray, 1857, 316 - Insecta: Coleoptera. There is no objective replacement name but the type species of *Rhaphidognatha* Felder & Felder, 1862, is considered to be conspecific with *Balataea aegerioides* Walker, 1865, the type species of *Balataea* Walker, 1865. The latter is therefore available for use as a subjective replacement name.

[Type-species: *Rhaphidognatha sesiaeformis* Felder & Felder, 1862, 32, by monotypy]

*Bintha* Walker, 1865, 127

[Type-species: *Bintha gracilis* Walker, 1865, 127, by monotypy]

Larval host-plants: Poaceae.

**A. (B.) octomaculata** (Bremer, 1861, 476) (*Euchromia*), **stat. rev.** (Figure 27)

*sesiaeformis* (Felder & Felder, 1862, 32) (*Rhaphidognatha*)

*aegerioides* Walker, 1865, 111 (*Balataea*)

Distribution: Russia (Far East (Amur Region, Khabarovsk Territory, Pimorye Territory)), eastern China, Korea, Japan.

**A. (B.) gracilis** (Walker, 1865, 127) (*Bintha*), **stat. rev.**

Distribution: Russia (Far East (Sakhalin, southern Kuril Islands)), eastern China, Korea, Japan.

**A. (B.) taiwana** Wileman, 1911, 174 (*Artona* "(?") (see Owada & Inada, 2005, 5), **stat. nov.**

Distribution: China (Taiwan).

**A. (B.) kimurai** (Owada & Inada, 2005, 2) (*Balataea*), **stat. nov.**

Distribution: Japan (Okinawa).

**A. (B.) angusta** Alberti, 1954, 269, **stat. rev.**

Distribution: eastern China.

**A. (B.) intermedia** Alberti, 1954, 270, **stat. rev.**

Distribution: eastern China.

**A. (B.) elegantior** Alberti, 1954, 270, **stat. rev.**

Distribution: eastern China.

Subgenus **Pseudosesidia** Alberti, 1954, 271, **stat. rev. (C07)**

[Type-species: *Balataea (Pseudosesidia) aegeriaeformis* Alberti, 1954, 271, by original designation and monotypy]

Larval host-plants: unknown.

**A. (P.) aegeriaeformis** (Alberti, 1954, 271) (*Balataea*), **stat. rev.**

Distribution: southeastern China.

Subgenus **Fuscartona** Efetov & Tarmann, 2012, 13, 38 (**C07**)

[Type-species: *Artona martini* Efetov, 1997a, 170, by original designation]

Larval host-plants: Poaceae (bamboo).

**A. (F.) martini** Efetov, 1997a, 170 (Figures 6, 16)

*funeralis* (sensu Alberti, 1954, 267 (*Balataea*) et sensu auct.) (nec Butler, 1879, 351) (see Efetov, 1997a, 166)

Distribution: eastern and southeastern China (including Taiwan), Vietnam, Japan, introduced also to Ogasawara Islands (Japanese Micronesia), New Zealand and even in Europe, viz. Italy (Marianelli et al. 2020).

**A. (F.) funeralis** (Butler, 1879a, 351) (*Procris*), **stat. rev.**

*tokyonella* (sensu Alberti 1954, 267 (*Balataea*)) (nec Matsumura, 1927, 76) (see Efetov, 1997a, 166)

Distribution: Russia (Far East (Sakhalin, southern Kuril Islands)), eastern and southeastern China, Japan.

**A. (F.) uniformis** (Alberti, 1954, 268) (*Balataea*), **stat. rev.**

Distribution: China (Shanxi).

**A. (F.) parilis** Efetov, 1997a, 175, **stat. rev.**

Distribution: China (Jiangxi).

Genus **Procotes** Butler, 1896, 355

[Type-species: *Euchromia diminuta* Walker, 1854, 230, by original designation and monotypy]

Larval host-plants: unknown.

**P. diminuta** (Walker, 1854, 230) (*Euchromia*)

Distribution: Sri Lanka.

Genus **Striartona** Efetov & Tarmann, 2012, 14, 39

[Type-species: *Bintha clathrata* Poujade, 1886a, 117, by original designation and monotypy]

Larval host-plants: unknown.

**S. clathrata** (Poujade, 1886a, 117) (*Bintha*)

Distribution: China (Sichuan, Shaanxi).

**S. nanling** Owada & Wang, 2021, 123 (C13)

Distribution: southern China.

Genus **Allobremeria** Alberti, 1954, 277

[Type-species: *Allobremeria plurilineata* Alberti, 1954, 277, by original designation and monotypy]

Larval host-plants: Poaceae (Xue & Han, 2003).

**All. plurilineata** Alberti, 1954, 277

Distribution: southeastern China.

**All. maoershan** Owada & Wang, 2021, 122

Distribution: southern China.

Genus **Amuria** Staudinger, 1887b, 172

[Type-species: *Amuria cyclops* Staudinger, 1887b, 172, by monotypy]

*Brachartona* Hampson, 1891, 44

[Type-species: *Artona quadrimaculata* Moore, 1879a, 390, by original designation]

Larval host-plants: Zingiberaceae (known for *A. (Am.) chorista* and *A. (Am.) trisignata*), Pittosporaceae (known for *A. (Am.) trisignata*), and Lauraceae (known for *A. (Am.) trisignata*), Musaceae (known for two undescribed species from India and New Guinea).

**Am. cyclops** Staudinger, 1887b, 172

Distribution: Russia (Far East (Khabarovsk Territory, Primorye Territory), China, Korea.

**Am. microstigma** (Jordan, 1908, 44) (*Artona*) (C14)

Distribution: northeastern India (Assam).

**Am. flavigula** (Hampson, 1896, 477) (*Chrysartona*) (C14)

Distribution: northeastern India (Assam).

**Am. celebensis** (Jordan, 1908, 45) (*Artona*) (C14)

Distribution: Indonesia (Sulawesi).

**Am. annulipes** (Jordan, 1908, 47) (*Homophylotis*) (C14)

Distribution: Indonesia (Natuna island group, Riau island province: Pulo Laut).

**Am. sciara** (Jordan, 1908, 47) (*Homophylotis*) (C14)

Distribution: Indonesia (Amboina).

***Am. xanthosoma* (Jordan, 1908, 47) (*Homophylotis*) (C14)**

Distribution: Sula Islands (Sula Mangoli).

***Am. chorista* (Jordan, 1908, 44) (*Artona*) (C14)**

Distribution: northeastern India.

***Am. lugubris* (Jordan, 1908, 44) (*Artona*) (C14)**

Distribution: northeastern India.

***Am. postvitta* (Moore, 1879b, 13) (*Artona*) (C14)**

Distribution: northeastern India (Sikkim).

***Am. quadrimaculata* (Moore, 1879a, 390) (*Brachartona*), **comb. nov. (C14)****

Distribution: northern India, Myanmar (Burma).

***Am. trisignata* (Snellen, 1903, 235) (*Brachartona*), **comb. nov. (C14)** (Figure 28)  
*quadrisignata* (Snellen, 1903, 234) (*Brachartona*), **comb. nov., syn. nov. (C15)****

Distribution: Indonesia (Sumatra, Java).

***Am. sythoffii* (Snellen, 1903, 236) (*Brachartona*), **comb. nov. (C14)****

Distribution: Indonesia (Java).

***Am. melaleuca* (Jordan, 1908, 46) (*Homophylotis*), **comb. nov. (C17)****

Distribution: New Guinea (both subspecies).

***Am. melaleuca melaleuca* (Jordan, 1908, 46) (*Homophylotis*)**

***Am. melaleuca postica* (Jordan, 1908, 46) (*Homophylotis melaleuca* ssp.)**

***Am. assimilis* (Jordan, 1908, 47) (*Homophylotis*), **comb. nov. (C16)****

Distribution: Malaysia (Malakka).

***Am. aenea* (Jordan, 1925, 231) (*Homophylotis*), **comb. nov. (C18)****

Distribution: Papua New Guinea (Feni Island (Ambitle island) east of New Ireland (Latangai island)).

***Am. chalcosoma* (Jordan, 1926, 366) (*Artona*), **comb. nov. (C19)****

Distribution: Indonesia (Kai Ketjil).

***Am. albicilia* (Hampson, 1900, 222) (*Artona*), **comb. nov. (C20)****

Distribution: northeastern India (Naga Hills).

***Am. nigra* (Hampson, 1893, 237) (*Tasema*), comb. nov. (C20)**

Distribution: Myanmar (Burma).

***Am. purpurata* (Jordan, 1908, 47) (*Homophylotis*), comb. nov. (C20)**

Distribution: Papua New Guinea.

***Am. neglecta* (Tarmann, 2004, 203) (*Pseudoamuria*), comb. nov. (C20)**

Distribution: Australia (Queensland).

Genus ***Palmartona*** Tarmann, 2004, 207 (C16)

[Type species: *Brachartona catoxantha* Hampson, 1893 ("1892"), 233, by original designation]

Larval host-plants: Arecaceae (pest on *Cocos nucifera*) L.

***Palm. catoxantha* (Hampson, 1893, 233) (*Brachartona*)**

Distribution: Myanmar (Tenasserim), Malaysia, Singapore, Indonesia (Sumatra, Nias, Java, Bangka, Kalimantan, Sulawesi), Philippines (Palawan), Papua New Guinea, Australia (Queensland).

Genus ***Australartona*** Tarmann, 2004, 185

[Type species: *Australartona mirabilis* Tarmann, 2004, 186, by original designation and monotypy]

Larval host-plants: Poaceae.

***Austr. mirabilis* Tarmann, 2004, 186**

Distribution: Australia (Queensland, New South Wales).

Genus ***Homophylotis*** Turner, 1904, 243

[Type species: *Homophylotis thyridota* Turner, 1904, 243, by monotypy]

*Homoplyotis* [sic] Alberti, 1954, 408, misspelling

Larval host-plants: unknown.

***H. thyridota* Turner, 1904, 243**

Distribution: Australia (Queensland).

***H. pseudothyridota* Tarmann, 2004, 194**

Distribution: Australia (Queensland).

***H. artonoides* Tarmann, 2004, 195**

Distribution: Australia (Queensland).

***H. doloides* (Pagenstecher, 1900, 25) (*Procris*)**

Distribution: Papua New Guinea (Bismarck Archipelago).

Genus *Pseudoamuria* Tarmann, 2004, 201

[Type species: *Pseudoamuria uptoni* Tarmann, 2004, 202, by original designation]

Larval host-plants: unknown.

*Pseud. uptoni* Tarmann, 2004, 202

Distribution: Australia (Queensland).

Genus *Arachotia* Moore, 1879b, 14

[Type-species: *Arachotia flaviplaga* Moore, 1879b, 14, by monotypy]

Larval host-plants: unknown.

*Arach. flaviplaga* Moore, 1879b, 14

Distribution: northern and northeastern India (West Bengal to Assam).

*Arach. piaoac* Owada & Pham, 2022, 203

Distribution: Vietnam.

*Arach. euglenia* Jordan, 1908, 50

Distribution: northeastern India (Assam).

*Arach. tamdao* Owada & Pham, 2021, 40

Distribution: Vietnam (Vinh Phuc, Tam Dao).

*Arach. sapa* Owada & Pham, 2021, 43

Distribution: Vietnam (Lao Cai, Sa Pa).

*Arach. nanling* Owada & Wang, 2021, 43

Distribution: China (Guangdong, Shaoguan, Nanling).

*Arach. dadongshan* Owada & Wang, 2021, 43

Distribution: China (Guangdong, Lianzhou, Dadongshan).

*Arach. hohuanshanensis* Shih & Owada, 2022, 136

Distribution: China (Taiwan).

*Arach. vespoides* Moore, 1879a, 390

Distribution: northern India.

*Arach. quadricolor* (Semper, 1898, 426) (*Lophosoma aenea* Jordan, 1908, 50)

Distribution: Philippines.

***Arach. xeniaetamara*** Bryk, 1936, 304

*hyalina* Hering, 1925, 175 (nec Leech, 1889b, 123)

Distribution: Philippines (Luzon).

Genus ***Chalconyctes*** Jordan, 1907b, 123 (**C29**)

[Type species: *Chalconyctes vetulina* Jordan, 1907b, 124, by monotypy]

Larval host-plants: Arecaceae (*Cocos nucifera* L. (coconut), *Elaeis guineensis* Jacq. (oil palm), palms).

***C. vetulina*** Jordan, 1907b, 124

*velutina* [sic] Jordan, 1907b, pl. 2k, misspelling

Distribution: Eastern and Central Africa (Uganda).

***C. chloauges*** (Holland, 1893, 374) (*Adscita*)

Distribution, Africa (Cameroon, Gaboon, Congo)

***C. catori*** (Jordan, 1907b, 125) (*Homophylotis*)

Distribution: Africa (Sierra Leone, Ivory Coast, Togo, Gabon).

***C. anhyalea*** Hampson, 1920a, 276

Distribution: Africa (Gabon).

***C. albipalpis*** Hampson, 1920a, 275

Distribution: Africa (Ivory Coast).

***C. chalybeia*** Rebel, 1914, 290

Distribution: Central Africa.

Genus ***Neobalataea*** Alberti, 1954, 306 (**C29**)

[Type species: *Neobalataea nigriventris* Alberti, 1954, 307, by original designation]

Larval host-plants: unknown.

***N. nigriventris*** Alberti, 1954, 307

Distribution: Africa (Tanzania).

***N. leptis*** (Jordan, 1907b, 125) (*Homophylotis*)

Distribution: Africa (Angola).

Tribe ***Cleleini*** Efetov & Tarmann, **tribus nov. (C21)**

[Type-genus: *Clelea* Walker, 1854, 465]

Larval host-plants: Vitaceae, Hydrangeaceae, Fagaceae, Rosaceae, Poaceae.

Distribution: eastern, southern and southeastern Asia, tropical Africa.

Genus ***Clelea*** Walker, 1854, 465

[Type-species: *Clelea sapphirina* Walker, 1854, 465, by monotypy]

Larval host-plants: Vitaceae.

***C. sapphirina*** Walker, 1854, 465

Distribution: southern China, Myanmar (Burma), India [comment: due to a lot of misidentifications in literature the real distribution of *Clelea sapphirina* is not known.]

***C. discriminis*** Swinhoe, 1891, 474

Distribution: northeastern India (Assam).

***C. simplex*** Jordan, 1908, 45

Distribution: northeastern India (Assam).

***C. nigroviridis*** Elwes, 1890, 380 (Figure 32)

Distribution: northeastern India, Myanmar (Burma).

***C. cyanescens*** Alberti, 1954, 289

Distribution: southern China (Hunan, Guandong) (subsp. *cyanescens*); eastern China (subsp. *monotona*) (Jiangsu, Zhejiang).

***C. cyanescens cyanescens*** Alberti, 1954, 289

***C. cyanescens monotona*** Alberti, 1954, 289

***C. formosana*** Strand, 1915, 119 (as *nigroviridis* v. *formosana*) (**C22**)

Distribution: China (Taiwan), Japan (Sakishima).

***C. formosana formosana*** Strand, 1915, 119

***C. formosana simplicior*** Bryk, 1926, 255, stat. nov.

***C. formosana kanoi*** Owada, 2021, 205, stat. nov.

***C. melli*** Hering, 1925a, 174

Distribution: China (Guangdong).

***C. esakii*** Inoue, 1958, 238 (Figure 7)

Distribution: Japan.

***C. yuennana*** Alberti, 1954, 290 (as *yünnana*)

Distribution: China (Yunnan).

***C. chala*** (Moore, 1859, 311) (*Procris*)

Distribution: Indonesia (Java, Borneo?).

***C. refulgens*** Hampson, 1905, 193

Distribution: northeastern India (Assam), Myanmar (Burma).

***C. metacyanea*** Hampson, 1896, 467

Distribution: northeastern India (Assam).

***C. plumbeola*** Hampson, 1893, 240

Distribution: northeastern India (Assam), Bhutan, Myanmar (Burma).

***C. albofascia*** (Leech, 1898, 340) (*Arbudas*)

*albifascia* [sic] Bryk, 1936, 247, misspelling

Distribution: China (Sichuan).

Genus ***Thibetana*** Efetov & Tarmann, 1995b, 74

[Type-species: *Artona sieversi* Alphéraky, 1892, 5, by original designation]

Larval host-plants: unknown.

***Th. sieversi*** (Alphéraky, 1892, 5) (*Artona*)

*dejeani* (Oberthür, 1894, 29) (*Artona*)

*gephyra* (Hering, 1936, 1) (*Artona*)

Distribution: China (Qinghai, Sichuan).

***Th. delavayi*** (Oberthür, 1894, 29) (*Artona*)

Distribution: China (Yunnan).

***Th. witti*** Efetov, 1997c, 509

Distribution: China (eastern Tibet).

***Th. zebra*** (Elwes, 1890, 379) (*Artona*) (**C23**)

Distribution: northern India (Sikkim).

***Th. postalba*** (Elwes, 1890, 379) (*Artona*) (**C23**)

Distribution: northern India (Sikkim).

***Th. keili*** Efetov & Tarmann, 2017b (**C23**)

Distribution: China (eastern Tibet).

Genus ***Bremeria*** Alphéraky, 1892, 7

[Type-species: *Bremeria manza* Alphéraky, 1892, 7, by monotypy]

*Subclelea* Alberti, 1954, 292 (*Clelea* subg.)

[Type-species: *Clelea* (*Subclelea*) *parabella* Alberti, 1954, 293, by original designation]

Larval host-plants: unknown.

**B. manza** Alphéraky, 1892, 7

Distribution: northeastern China.

**B. parabella** (Alberti, 1954, 293) (*Clelea*)

Distribution: eastern China (Zhejiang).

**B. aurulenta** (Poujade, 1886a, 116) (*Bintha*)

Distribution: China (Sichuan) (subsp. *aurulenta*); China (Zhejiang) (subsp. *bella*).

**B. aurulenta aurulenta** (Poujade, 1886a, 116) (*Bintha*)

**B. aurulenta bella** (Alberti, 1954, 292) (*Clelea*)

**B. albomacula** (Leech, 1898, 329) (*Artona*)

Distribution: China (Sichuan).

**B. sinica** Alphéraky, 1897, 122

Distribution: China (Sichuan).

**B. cyanicornis** (Poujade, 1886a, 116) (*Bintha*) (see Efetov, 2000a, 23)

Distribution: China (Sichuan).

Genus **Cerodendra** Tremewan, 1973, 122

[Type-species: *Dendrocera quadripunctata* Hampson, 1893 ("1892"), 231, by original designation (for *Dendrocera* Hampson, 1893 ("1892"))]

*Dendrocera* Hampson, 1893 ("1892"), 231, a junior homonym of *Dendrocera* Lamarck, 1817, 422 - Insecta: Coleoptera. The objective replacement name is *Cerodendra* Tremewan, 1973

Larval host-plants: unknown.

**C. bipuncta** (Hampson, 1895, 283) (*Clelea*)

*bipunctata* Jordan, 1908, (explicatio tabulae)

Distribution: south India (Nilgiris).

**C. quadripunctata** (Hampson, 1893, 231) (*Dendrocera*)

Distribution: Sri Lanka.

Genus **Hagianga** Mollet, 2020a, 106

[Type-species: *Hagianga tieni* Mollet, 2020a, 107, by original designation and monotypy]

Larval host-plants: unknown.

**H. tieni** Mollet, 2020a, 107

Distribution: northern Vietnam.

Genus ***Chrysartona*** Swinhoe, 1892, 57 (see Efetov, 1996; Efetov & Tarmann, 2008b, 2008c)  
[Type-species: *Procris stipata* Walker, 1854, 114, by original designation and monotypy]

Larval host-plants: Vitaceae (known for one species that has been misidentified as *Ch. stipata* Walker, 1854, from Taiwan) (see Yen & Fan, 1995; Efetov, 2006).

Subgenus ***Chrysartona*** Swinhoe, 1892, 57

[Type-species: *Procris stipata* Walker, 1854, 114, by original designation and monotypy]

***Ch. (Ch.) stipata*** (Walker, 1854, 114) (*Procris*)

Distribution: northern and northeastern India, Myanmar (Burma). All records from other regions (e.g. China, Indonesia) refer to other species.

***Ch. (Ch.) efetovi*** Parshkova, 2007, 143

Distribution: northeastern India (Assam).

***Ch. (Ch.) hausmanni*** Efetov, 2006, 27

Distribution: Indonesia (Java, Borneo). (C24)

***Ch. (Ch.) murzini*** Mollet, 2016a, 59 (C25)

Distribution: Thailand.

***Ch. (Ch.) stueningi*** Efetov, 2006, 29

*stipata* partim (sensu Alberti, 1954, 294 (*Clelea*)) (nec Walker, 1854, 114)

Distribution: eastern China.

***Ch. (Ch.) tremewani*** Efetov, 2006, 31

Distribution: northeastern India.

***Ch. (Ch.) sinevi*** Efetov, 2006, 33

*stipata* partim (sensu Alberti, 1954, 294, pl. 28, figs 9a-9c (*Clelea*)) (nec Walker, 1854, 114)

Distribution: China, Myanmar (Burma).

***Ch. (Ch.) sylvianae*** Mollet, 2016a, 62

Distribution: Myanmar (Burma).

***Ch. (Ch.) dangvani*** Mollet, 2018, 80 (Figure 31)

Distribution: southern Vietnam.

Subgenus ***Chrystremewana*** Efetov, 2006, 36

[Type-species: *Chrysartona birmana* Efetov, 2006, 37, by original designation]

***Ch. (Chrystrem.) birmana*** Efetov, 2006, 37

Distribution: northeastern India (Assam), Myanmar (Burma), Laos.

***Ch. (Chrystrem.) honeyi*** Efetov, 2006, 39

Distribution: northeastern India (Assam).

Subgenus ***Chrystarmanna*** Efetov, 2006, 41

[Type-species: *Chrysartona sikkima* Efetov, 2006, 42, by original designation]

***Ch. (Chrystarm.) sikkima*** Efetov, 2006, 42

*stipata* (sensu Wang, 1995, 23 (*Clelea*)) (nec Walker, 1854, 114)

Distribution: northeastern India (Sikkim).

***Ch. (Chrystarm.) meyi*** Efetov, 2006, 44

*stipata* partim (sensu Alberti, 1954, 294 (*Clelea*)) (nec Walker, 1854, 114)

Distribution: Indonesia (Java).

***Ch. (Chrystarm.) margarita*** Efetov, 2006, 47

Distribution: northeastern India (Assam).

***Ch. (Chrystarm.) mineti*** Efetov & Tarmann, 2013b, 198

Distribution: northern Vietnam.

***Ch. (Chrystarm.) antenor*** Mollet, 2018, 79 (C26)

Distribution: southern Vietnam.

***Ch. (Chrystarm.) pravata*** (Moore, 1859, 199) (*Syntomis*)

Distribution: Indonesia (Sumatra, Java, southeastern Borneo), Malaysia (northern Borneo), Philippines (Luzon).

***Ch. (Chrystarm.) variata*** (Swinhoe, 1892, 58) (*Phacusa*)

Distribution: Indonesia (New Guinea, Irian Jaya) (subsp. *variata*); Indonesia (island Mefor NW. of New Guinea) (subsp. *fumosa*); Indonesia (Sumba, islands Kepulauan Kai, New Guinea (Irian Jaya)), Papua New Guinea (subsp. *separata*); Indonesia (island Ambon) (subsp. *amboinensis*); Indonesia (island Bacan) (subsp. *guttigera*).

***Ch. (Chrystarm.) variata variata*** (Swinhoe, 1892, 58) (*Phacusa*)

***Ch. (Chrystarm.) variata fumosa*** (Jordan, 1908, 46) (*Clelea*)

***Ch. (Chrystarm.) variata separata*** (Jordan, 1908, 46) (*Clelea*)

***Ch. (Chrystarm.) variata amboinensis*** (Jordan, 1908, 46) (*Clelea*)

***Ch. (Chrystarm.) variata guttigera*** (Jordan, 1908, 46) (*Clelea*)

***Ch. (Chrystarm.) explorata* (Hering, 1925a, 175) (*Clelea*)**

Distribution: Papua New Guinea.

Genus ***Araeocera*** Hampson, 1893 (“1892”), 244

[Type-species: *Araeocera cyanescens* Hampson, 1893 (“1892”), 244, by original designation]

Larval host-plants: Poaceae (bamboo) (known for *A. compta* according to a rearing note by R. W. Paine on paratype label).

***A. compta*** Jordan, 1908, 48

Distribution: Indonesia (South Flores).

***A. cyanescens*** Hampson, 1893, 244

Distribution: Myanmar (Burma).

***A. posthyalina*** Hampson, 1893, 244

Distribution: India (Sikkim).

***A. prasina*** Jordan, 1931, 277

Distribution: Indonesia (Java).

Genus ***Platyzygaena*** Swinhoe, 1892, 57

[Type-species: *Soritia moelleri* Elwes, 1890, 385, by original designation and monotypy]

Larval host-plants: unknown.

***P. moelleri*** (Elwes, 1890, 385) (*Soritia*)

Distribution: northeastern India (Sikkim, Assam).

***P. melaleuca*** (Jordan, 1907a, 17) (*Clelea*) (comb.: Efetov & Tarmann, 2012, 17)

Distribution: China (Sichuan).

Genus ***Piarosoma*** Hampson, 1893 (“1892”), 243 (C27)

[Type species: *Piarosoma albicinctum* Hampson, 1893 (“1892”), 243, fig. 160, by original designation and monotypy]

***Hysteroscene*** Hering, 1925, 177

[Type-species: *Hysteroscene extravagans* Hering, 1925a, 177, by original designation]

***Hysteroscena*** [sic] Horie & Wang, 2011, 44, pl. 3, fig. 2, misspelling)

Larval host-plants: Hydrangeaceae (*Hydrangea macrophylla* (Thunb.) Ser.) (known for *P. fushan* Owada & Shih, 2022) (Owada et al. 2022b).

***P. arunachalensis*** Sondhi, Efetov, Tarmann & Kunte, 2023, 140.

Distribution: northeastern India.

***P. albicinctum*** Hampson, 1893, 243

Distribution: Myanmar (Burma).

**P. hyalina** (Leech, 1889, 123) (*Arachotia*)

*univittata* Strand, 1915, 122 (*Piarosoma hyalina* ab.) (unavailable)

Distribution: southeastern and southern China.

**P. thibetana** (Oberthür, 1894, 31) (*Phacusa*)

*hyalina* partim (sensu Leech 1898, 336 (*Piarosoma*)) (nec Leech, 1889, 123)

*thibetana* (sensu Jordan, 1907, 17, pl. 3-i (*Piarosoma hyalina* f. *thibetana*))

*thibetana* partim (sensu Bryk, 1936, 269 (*Piarosoma hyalina* subsp. *thibetana*))

*hyalina* partim (sensu Alberti, 1954, 223 (*Hysteroscene hyalina*)) (nec Leech, 1889, 123)

Distribution: western China.

**P. guangdong** Owada & Wang, 2022, 214

*thibetana* (sensu Hering, 1925b, 82, fig. 3 (male genitalia) (*Hysteroscene thibetana*)) (nec Oberthür, 1894, 31)

*thibetana* partim (sensu Bryk, 1936, 269 (*Piarosoma hyalina* subsp. *thibetana*)) (nec Oberthür, 1894, 31)

*thibetana* (sensu Alberti, 1954, 223, pl. 17, fig. 1 (*Hysteroscene hyalina*)) (nec Leech, 1889, 123))

*thibetana* (sensu Horie & Wang, 2011, 45, pl. 3, fig. 5 (*Piarosoma thibetana*)) (nec Oberthür, 1894, 31)

*thibettana* (sensu Horie & Wang, 2011, pl. 3, caption of figure 5, misspelling (*Piarosoma thibettana* [sic])) (nec Oberthür, 1894, 31)

Distribution: China (Guangdong).

**P. tamdao** Owada & Wang, 2022, 215

Distribution: Vietnam (Vinh Phuc, Tam Dao).

**P. bachma** Owada & Pham, 2022, 217

Distribution: Vietnam (Thua Thien Hue, Bach Ma).

**P. oquyho** Owada & Pham, 2022, 207

Distribution: Vietnam (Lao Cai, Sa Pa, O Quy Ho).

**P. melli** (Hering, 1925b, 82) (*Hysteroscene*)

Distribution: southern China.

**P. sapa** Owada & Pham, 2022, 210

Distribution: Vietnam (Lao Cai, Sa Pa).

**P. fushan** Owada & Shih, 2022, 220

*hyalina* partim (sensu Matsumura, 1931, 991, fig. (*Piarosoma*)) (nec Leech, 1889, 123)

*univittata* (sensu Inoue, 1987, 299 (*Piarosoma*)) (nec Hering, 1925a, 178)

*hyalina* partim (sensu Tarmann, 1992b, 98 (*Hysteroscene*)) (nec Leech, 1889, 123)

*hyalina* partim (sensu Efetov & Tarmann, 1995, 77 (*Hysteroscene*)) (nec Leech, 1889, 123)

*hyalina* partim (sensu Wang, 1995, 9-10 ((*Hysteroscene*))) (nec Leech, 1889, 123)

*hyalina* partim (sensu Efetov & Tarmann, 2012, 17 (*Hysteroscene*)) (nec Leech, 1889, 123)

Distribution: China (Taiwan: Taipei, Taoyuan, Ilan, Hsinchu).

***P. extravagans*** (Hering, 1925a, 177) (*Hysteroscene*)

*annulatissima* Strand, 1915, 122 (*Piarosoma hyalina* ab.) (unavailable)

*univittata* (Hering, 1925a, 178) (*Hysteroscene* sp.)

Distribution: China (Taiwan).

***P. sizala*** (Swinhoe, 1894, 441) (*Phacusa*) (sensu Bryk, 1936, 269) (**C 28**)

Distribution: northeastern India (Assam).

Genus ***Tasema*** Walker, 1856, 1597

[Type-species: *Tasema bipars* Walker, 1856, 1597, by monotypy]

Larval host-plants: Fagaceae.

***T. bipars*** Walker, 1856, 1597

Distribution: northern and northeastern India.

***T. viridescens*** Alberti, 1954, 282

Distribution: China (Yunnan).

***T. longipennis*** Hampson, 1893, 236

Distribution: Myanmar (Burma)

Genus ***Ephemeroidea*** Hampson, 1893 (“1892”), 242

[Type-species: *Ephemeroidea ariel* Hampson, 1893 (“1892”), 242, by original designation]

Larval host-plants: Poaceae (bamboo) (known for *E. viridescens*).

***E. ariel*** Hampson, 1893, 242

Distribution: northeastern India (Assam), Myanmar (Burma).

***E. cyanea*** Jordan, 1908, 50

Distribution: northeastern India (Assam).

***E. flavocincta*** Hampson, 1893, 242

Distribution: Myanmar (Burma).

***E. virescens*** Snellen, 1903, 222 (Figure 29)

Distribution: Indonesia (Sumatra, Java).

Genus *Lophosoma* Swinhoe, 1892

[Type-species: *Syntomis cuprea* Walker, 1856, 1596, by original designation]

Larval host-plants: unknown.

*L. cuprea* (Walker, 1856, 1596) (*Syntomis*) (Figure 30)

Distribution: northern India, Andaman islands.

*L. quadricolor* (Walker, 1856, 1596) (*Syntomis*)

Distribution: northern India.

Genus *Morionia* Jordan, 1910, 256

[Type-species: *Morionia sciara* Jordan, 1910, 256, by monotypy]

Larval host-plants: unknown.

*M. sciara* Jordan, 1910, 256 (Figure 33)

*sciaria* [sic] Efetov & Tarmann, 1995b, 76, misspelling

Distribution: China (Taiwan).

Genus *Pseudoinope* Efetov & Tarmann, 1999b, 165

[Type-species: *Procris fusca* Leech, 1889a, 595, by original designation and monotypy]

Larval host-plants: Hydrangeaceae.

*P. fusca* (Leech, 1889a, 595) (*Procris*)

*syriaca* (Hampson, 1920a, 275) (*Clelea*) (synonymized by Efetov & Tarmann, 1999b, 167)  
*albicina* (Inoue, 1976a, 159) (*Clelea*) (synonymized by Efetov & Tarmann, 1999b, 167)

Distribution: Japan.

Genus *Inope* Staudinger, 1887b, 170 (see Efetov & Tarmann, 1996)

[Type-species: *Inope heterogyna* Staudinger, 1887b, 170, by monotypy]

*Aglaino* Staudinger, 1887b, 171

[Type-species: *Aglaino maerens* Staudinger, 1887b, 171, by monotypy]

*Pollanista* Strand, 1915, 118

[Type-species: *Pollanista inconspicua* Strand, 1915, 118, by original designation]

Larval host-plants: Rosaceae.

*I. heterogyna* Staudinger, 1887b, 170

*impellucida* Graeser, 1888, 108

Distribution: Russia (Far East), Japan.

*I. maerens* (Staudinger, 1887b, 171) (*Aglaino*)

*microphaea* (Hampson, 1920a, 275) (*Clelea*) (synonymized by Efetov & Tarmann, 1999b, 167)

*tokyonella* (Matsumura, 1927, 76) (*Artona*) (synonymized by Efetov, 1997a, 166)

*sachalinensis* (Matsumura, 1927, 77) (*Artona*) (synonymized by Efetov, 1999a, 235)

*fusca* (sensu Inoue, 1976a, 160 (*Clelea*)) (nec Leech, 1889a, 595) (synonymized by Efetov & Tarmann, 1999b, 167)  
*moerens* [sic] (Jordan, 1907a, pl. 3) (*Artona*), misspelling

Distribution: Russia (Far East), northeastern China, Korea, Japan.

***I. inconspicua* (Strand, 1915, 118) (*Pollanista*)**

Distribution: China (Taiwan).

***I. fuliginosa* (Moore, 1879a, 14) (*Artona*)**

Distribution: northeastern India.

Genus ***Alloprocris*** Hering, 1925b, 84

[Type-species: *Alloprocris draesekei* Hering, 1925b, 84; by original designation]

Larval host-plants: unknown.

***A. adusta* Draeseke, 1926, 44**

Distribution: Western China.

***A. draesekei* Hering, 1925b, 84**

Distribution: Western China.

***A. draesekei draesekei* Hering, 1925b, 84)**

***A. draesekei ellena* Alberti, 1954, 286**

***A. draesekei hoenei* Alberti, 1954, 286 (as *hönei*)**

***A. augustae* Alberti, 1940, 99**

Distribution: Central China.

***A. spielhagenae* Alberti, 1954, 286**

Distribution: Western China.

***Leptozygaena* Jordan, 1907c, 13**

[Type species: *Leptozygaena gracilis* Jordan, 1907c, 13, by monotypy]

Larval host-plants: unknown.

***L. gracilis* Jordan, 1907c, 13**

Distribution: New Guinea.

Genus ***Metanyctes*** Butler, 1876, 425 (C29)

[Type species: *Aclytia contracta* Walker, 1865 ("1864"), 102, by original designation]

Larval host-plants: unknown.

***M. contracta*** (Walker, 1865), 102) (*Aclytia*)

Distribution: Africa (Sierra Leone).

***M. flavibasis*** Hampson, 1920a, 274

Distribution: Eastern Africa (Malawi (Mount Mulanje)).

***M. sachtlebeni*** Alberti, 1954, 304

Distribution: Africa (Ecuadorian Guinea, Gabon).

Genus ***Aethioprocris*** Alberti, 1954, 305 (**C29**)

[Type species: *Aethioprocris togoensis* Alberti, 1954, 306, by original designation and monotypy]

Larval host-plants: unknown.

***A. togoensis*** Alberti, 1954, 306

Distribution: Africa (Togo).

***A. congoensis*** Alberti, 1957, 294

Distribution: Africa (Congo).

Genus ***Sthenoprocris*** Hampson, 1920a, 275 (**C29**)

[Type species: *Sthenoprocris malgassica* Hampson, 1920a, 275, by original designation]

Larval host-plants: unknown.

***S. malgassica*** Hampson, 1920a, 275

Distribution: Madagascar.

***S. meinickei*** Hering, 1928, 280

Distribution: Eastern Africa (Tanzania).

***S. brondeli*** Viette, 1978, 59

Distribution: Eastern Madagascar.

Genus ***Ankasocris*** Viette, 1965, 122 (**C29**)

[Type species: *Ankasocris striatus* Viette, 1965, 123, by original designation and monotypy]

Larval host-plants: unknown.

***A. striatus*** Viette, 1965, 123

Distribution: Madagascar.

Genus ***Ischnusia*** Jordan, 1928, 133 (**C29**)

[Type species: *Syntomis culiculina* Mabille, 1878, 85, by monotypy]

*Pseudonacta* (partim) Kirby, 1892, 107

[Type species: *Syntomis culiculina* Mabille, 1878, 85, by monotypy]

Larval host-plants: unknown.

***I. culiculina* (Mabille, 1878, 85) (*Syntomis*)**

Distribution: Madagascar.

Genus ***Alteramenelikia*** Alberti, 1971, 239 (C29)

[Type species: *Menelikia jordani* Alberti, 1954, 309, by original designation (for *Menelikia* Alberti, 1954)]

*Menelikia* Alberti, 1954, 308

[Type species: *Menelikia jordani* Alberti, 1954, 309, by original designation], a junior homonym of *Menelikia* Arambourg, 1941, 341 (Mammalia)

Larval host-plants: unknown.

***A. jordani* Alberti, 1954, 309**

Distribution: Eastern Africa (Ethiopia).

Genus ***Triacanthia*** Romieux, 1937, 124 (C29)

[Type species: *Triacanthia filictorum* Romieux, 1937, 126, by original designation]

Larval host-plants: unknown.

***T. filictorum* Romieux, 1937, 126**

Distribution: Africa (Congo).

Genus ***Xenoprocris*** Romieux, 1937, 127 (C29)

[Type species: *Xenoprocris jordani* Romieux, 1937, 129, by original designation]

Larval host-plants: unknown.

***X. jordani* Romieux, 1937, 129**

Distribution: Africa (Congo).

Genus ***Madaprocris*** Viette, 1978, 61 (C29)

[Type species: *Madaprocris minetorum* Viette, 1978, 62, by original designation and monotypy]

*Madaprotis* [sic] Viette, 1978, 60, fig.2, misspelling

Larval host-plants: unknown.

***M. minetorum* Viette, 1978, 62**

Distribution: Central Madagascar.

Genus ***Afromalamblia*** Efetov & Tarmann, gen. nov. (C30)

[Type species: *Malamblia flavipalpis* Hampson, 1910, 488, here designated]

Larval host-plants: unknown.

**A. *flavipalpis* (Hampspon, 1910, 488) (*Malamblia*), comb. nov.**

Distribution: Southern Africa (Zimbabwe).

**A. *titoea* (Druce, 1896, 351) (*Brachartona*), comb. nov.**

Distribution: Southern Africa (Transvaal).

**A. *unxia* (Druce, 1896, 351) (*Brachartona*), comb. nov.**

Distribution: Nigeria (Lagos).

Tribe **Procridini** Boisduval, 1828, 38 (as Procridae) (C31)

[Type genus: *Procris* [Fabricius in Illiger], 1807, 289] (see Taeger & Gaedike, 2001, 87)

Larval host-plants: Vitaceae, Rosaceae, Fagaceae, Polygonaceae, Asteraceae, Plumbaginaceae, Cistaceae, Geraniaceae and some others, a few species are polyphagous.

Distribution: Europe, Asia, Africa, America.

Genus **Pseudoilliberis** Efetov & Tarmann, 2012, 19, 42

[Type-species: *Illiberis kuprianovi* Efetov, 1995a, 237, by original designation and monotypy]

Larval host-plants: Fagaceae (*Quercus*).

**Ps. *kuprianovi* (Efetov, 1995a, 237)**

Distribution: Russia (Far East (Amur Region, Khabarovsk Territory, Pimorye Territory)), northern China, Korea.

Genus **Illiberis** Walker, 1854, 280

[Type-species: *Illiberis sinensis* Walker, 1854, 280, by monotypy]

Larval host-plants: Rosaceae, Fagaceae (*Quercus*), Corylaceae (*Corylus*).

Subgenus **Nikilliberis** Efetov & Tarmann, 2012, 19, 43

[Type-species: *Illiberis kardakoffi* Alberti, 1951, 143, by original designation and monotypy]

Larval host-plants: Fagaceae (*Quercus*) (Efetov, 2000b), Corylaceae (*Corylus*) (Efetov, 2005b).

**I. (N.) *kardakoffi* Alberti, 1951, 143**

Distribution: Russia (Far East (Amur Region, Khabarovsk Territory, Pimorye Territory)), northern China.

Subgenus **Primilliberis** Alberti, 1954, 230

[Type-species: *Illiberis laeva* Püngeler, 1914, 53, by original designation]

Larval host-plant: Rosaceae.

**I. (P.) *laeva* Püngeler, 1914, 53**

*glaucosquamata* Strand, 1915, 120

Distribution: China (eastern part and Taiwan).

**I. (P.) *yeni*** Efetov, 1997b, 231 (*Illiberis*)

Distribution: China (Taiwan).

**I. (P.) *rotundata*** Jordan, 1907a, 15 (*Illiberis*)

*fujisana* Matsumura, 1927, 78 (*Illiberis*)

*fumata* Alberti, 1954, 231 (see Efetov, 2005a, 200) (*Illiberis*)

*kaszabi* Alberti, 1970b: 194 (see Efetov, 2005a, 200) (*Illiberis*)

*ononica* Dubatolov, 2002: 109 (see Efetov, 2005a, 200) (*Illiberis*)

*psychina* (sensu Alberti, 1951, 134 (*Illiberis*)) (nec Oberthür, 1880, 28)

*rotundifolia* [sic] Hofmann & Kia-Hofmann, 2011, 66, misspelling (*Illiberis*)

Distribution: Russia (southeastern Siberia (Zabaykalye Territory), Far East (Amur Region)) (Efetov, 2005, 61, 210), Mongolia, China, Korea (Kim, Sohn & Cho, 2004, 237), Japan.

**I. (P.) *pruni*** Dyar, 1905a, 954 (*Illiberis*)

Distribution: Russia (southeastern Siberia (Zabaykalye Territory), Far East (Amur Region, Khabarovsk Territory, Pimorye Territory)), China, Korea (subsp. *pseudopsychina*); Japan (subsp. *pruni*).

**I. (P.) *pruni pruni*** Dyar, 1905a, 954

*aomoriensis* Matsumura, 1927, 77

*japonica* Alberti 1951, 140 (*Illiberis pseudopsychina* subsp.)

*elegans* (sensu Jordan, 1907a, 7 (*Procris*)) (nec Poujade, 1886, 143) (see Alberti, 1954, 232)

*nigra* (sensu auct.) (nec Leech, 1889a, 595 (*Procris*)))

**I. (P.) *pruni pseudopsychina*** Alberti, 1951, 139 (*Illiberis*)

*sinensis* auct. (nec Walker, 1854, 280) (*Illiberis*)

Subgenus ***Illiberis*** Walker, 1854, 280

[Type-species: *Illiberis sinensis* Walker, 1854, 280, by monotypy]

Larval host-plants: Rosaceae (Kim, Sohn & Cho, 2004; Efetov, Klir & Tarmann, 2010a).

**I. (I.) *sinensis*** Walker, 1854, 280

*formosana* (Matsumura, 1927, 76) (*Procris*)

Distribution: China, Korea. Literature data on the presence of *I. sinensis* in the Russian Far East are based on misidentifications of *I. pruni* Dyar, 1905a (see Efetov, 2005a, 200).

**I. (I.) *assimilis*** Jordan, 1907a, 15

Distribution: Russia (Far East (Pimorye Territory)), eastern China, Korea, Japan.

**I. (I.) *hoenei*** Alberti, 1954, 234 (as *hönei*)

Distribution: China (Yunnan).

**I. (I.) *ellenae*** Alberti, 1954, 235

Distribution: China (Yunnan).

**I. (I.) *crispoides*** Mollet, 2020a, 62

Distribution: Vietnam (North Vietnam).

**I. (I.) *crispa*** Mollet, 2016b, 162

Distribution: China (Hainan).

Subgenus ***Euphacusa*** Matsumura, 1927, 79

[Type-species: *Euphacusa taikozana* Matsumura, 1927, 79, by original designation and monotypy]

Larval host-plants: Vitaceae (Kim, Sohn & Cho, 2004).

***silvestris*-group**

**I. (E.) *silvestris*** (Strand, 1915, 121) (*Phacusa*)  
*taikozana* (Matsumura, 1927, 79) (*Euphacusa*)

Distribution: China (Taiwan).

***cybele*-group**

**I. (E.) *phacusana*** Strand, 1915, 120

Distribution: China (Taiwan).

**I. (E.) *dirce*** (Leech, 1889a, 596) (*Northia*)

Distribution: eastern China, Korea.

**I. (E.) *formosensis*** Strand, 1915, 120  
*horishana* Matsumura, 1927, 78

Distribution: China (Taiwan).

**I. (E.) *inermis*** Alberti, 1954, 238

Distribution: China (Hunan).

**I. (E.) *cybele*** (Leech, 1889a, 596) (*Northia*)  
*contraria* Alberti, 1954, 239 (see Efetov, 2005a, 201)

Distribution: Russia (Far East (Pimorye Territory)), China (including Taiwan).

**I. (E.) *paracybele*** Alberti, 1954, 239 (*Illiberis*)

Distribution: China (Taiwan).

Subgenus ***Alterasvenia*** Alberti, 1971a, 239

[Type-species: *Northia ulmivora* Graeser, 1888, 107, by original designation]

*Svenia* Alberti, 1954, 246 (a junior homonym of *Svenia* Brotzen, 1937, 66 - Protozoa. The objective replacement name is *Alterasvenia* Alberti, 1971a, 239)

[Type-species: *Northia ulmivora* Graeser, 1888, 107, by original designation]

Larval host-plants: Ulmaceae.

*ulmivora*-group

**I. (A.) *ulmivora*** (Graeser, 1888, 107) (*Northia*)  
*pekinensis* (Draeseke, 1926, 44) (*Procris*)

Distribution: Russia (Far East (Khabarovsk Territory, Pimorye Territory)), Mongolia, northern China.

**I. (A.) *yuennanensis*** Alberti, 1951, 139 (as *yünnanensis*)

Distribution: central and southern China.

*ochracea*-group

**I. (A.) *ochracea*** Leech, 1898, 335

Distribution: China (including Taiwan).

**I. (A.) *kislovskyi*** Efetov & Tarmann, 2016a, 138

Distribution: northern Myanmar (Burma).

**I. (A.) *habaensis*** Mollet, 2015, 224

Distribution: southwestern China.

**I. (A.) *wuzhiensis*** Mollet, 2015, 227

Distribution: China (Hainan).

*banmauka*-group

**I. (A.) *banmauka*** Efetov & Tarmann, 2014a, 63

Distribution: northern Myanmar (Burma).

**I. (A.) *cernyi*** Efetov & Tarmann, 2013a, 33 (Figure 34)

Distribution: northern Thailand.

Genus ***Pseudohedina*** Efetov & Tarmann, gen. nov. (C32)

[Type species: *Illiberis paradistincta* Alberti, 1954, 246, here designated, type-species also by monotypy]

Larval host-plants: unknown.

***P. paradistincta*** (Alberti, 1954, 246) (*Illiberis (Svenia)*), comb. nov.

Distribution: eastern China (Jiangsu, Zhejiang).

Genus ***Hedina*** Alberti, 1954, 249 (see Efetov & Tarmann, 2012, 22)  
[Type-species: *Northia tenuis* Butler, 1877a, 394, by original designation]

*Thyrina* Poujade, 1886b, 143

[Type-species: *Thyrina elegans* Poujade, 1886b, 143, by monotypy]

Larval host-plants: Vitaceae.

***H. nigra*** (Leech, 1889a, 595) (*Procris*) (Figure 35)

Distribution: China, Japan (Horie, 2012, 23).

***H. psychina*** (Oberthür, 1880, 28) (*Procris*)

*sinensis* partim (Kirby, 1892, 88) (*Illiberis*) (nec Walker, 1854, 280)

*ussuriensis* (Alberti, 1951, 137) (*Illiberis*)

Distribution: Russia (Far East (Pimorye Territory)), northeastern China (Shanxi, Hebei, Beijing) (Xue & Han, 2003, 263), Korea (Kim, et al, 2004, 246), Japan

***H. consimilis*** (Leech, 1898, 334) (*Illiberis*)

*hyalina* partim (Jordan, 1907a, 15) (*Illiberis*) (nec Staudinger, 1887b, 169)

*distinctus* (Kardakoff, 1928, 415) (*Illiberis*)

Distribution: Russia (Far East (Khabarovsk Territory, Pimorye Territory)), northeastern China, Korea (Kim, Sohn & Cho, 2004, 247), Japan.

***H. hyalina*** (Staudinger, 1887b, 169) (*Northia (Ino)*)

*transvena* (Jordan, 1907a, 16) (*Illiberis*)

*coreana* (Matsumura, 1927, 77) (*Illiberis*)

Distribution: Russia (Far East (Khabarovsk Territory, Pimorye Territory)), China, Korea.

***H. sinyaevi*** Mollet, 2016b, 28

Distribution: China (Shaanxi).

***H. tenuis*** (Butler, 1877a, 394) (*Northia*) (Figure 8)

*khastiana* (Moore, 1879b, 12) (*Northia*)

Distribution: Russia (Far East (Khabarovsk Territory, Pimorye Territory)), northeastern India, China, Korea, Japan.

***H. elegans*** (Poujade, 1886b, 143) (*Thyrina*)

Distribution: China (Sichuan, Guizhou, Hunan, Zhejiang). Literature data on the presence of *H. elegans* in the Russian Far East (e.g. Xue & Han, 2003, 262) are based on a misidentification of *Illeiboris pruni* Dyar, 1905a, by Jordan (in Seitz) (1907a, 7) (see Alberti, 1954, 232, 252).

***H. serrata*** (Alberti, 1954, 254) (*Illiberis (Hedina)*)

Distribution: southern China (Yunnan).

***H. albiventris*** (Alberti, 1954, 254) (*Illiberis (Hedina)*)

Distribution: central China (Shaanxi).

***H. louisi*** (Efetov, 2010, 235) (*Illiberis (Hedina)*)

Distribution: China (Shaanxi).

***H. translucida*** (Poujade, 1884, 136) (*Procris*) (Figure 36)

Distribution: China (Sichuan, Hunan, Hubei, Zhejiang).

***H. taiwana*** (Efetov, 1997b, 236) (*Illiberis (Hedina)*)

Distribution: China (Taiwan).

***H. annamita*** Mollet, 2017b, 135

Distribution: Vietnam.

***H. vietnamica*** (Efetov, 1997b, 240) (*Illiberis (Hedina)*)

Distribution: southern China (Yunnan), northern Vietnam (Efetov, 2003, 27).

Genus ***Maculaia*** Mollet, 2019b, 141

[Type-species: *Maculaia danhi* Mollet, 2019b, 142, by original designation and monotypy]

Larval host-plants: unknown.

***M. danhi*** Mollet, 2019b, 142

Distribution: southern Vietnam.

Genus ***Dubernardia*** Alberti, 1954, 257

[Type-species: *Phacusa djreuma* Oberthür, 1893, 21, by original designation and monotypy]

Larval host-plants: unknown.

***D. djreuma*** (Oberthür, 1893, 21) (*Phacusa*) (Figure 37)

Distribution: southern China.

Genus ***Goazrea*** Mollet, 2016c, 33

[Type-species: *Goazrea lao* Mollet, 2016c, 35, by original designation and monotypy]

Larval host-plants: unknown.

***G. lao*** Mollet, 2016c, 34 (Figure 38)

Distribution: northern Thailand, Laos.

Genus ***Gerrya*** Mollet, 2017, 63

[Type-species: *Gerrya radiatus* Mollet, 2017a, 64, by original designation and monotypy]

Larval host-plants: unknown.

**G. radiatus** Mollet, 2017, 64

Distribution: China (Hainan).

Genus **Goe** Hampson, 1893 (“1892”), 242 (as *Goë*) (see Efetov, 1998a, 50)

[Type-species: *Goe diaphana* Hampson, 1893 (“1892”), 242, by original designation and monotypy]

*Kublaia* Alberti, 1954, 255 (*Illiberis* subg.) (see Efetov, 1998a, 60)

[Type-species: *Illiberis heringi* Draeseke, 1926, 45, by original designation and monotypy]

Larval host-plants: unknown.

**G. tarmanni** Efetov, 1998a, 52

Distribution: China (Sichuan).

**G. heringi** (Draeseke, 1926, 45) (*Illiberis*)

Distribution: China (Sichuan).

**G. diaphana** Hampson, 1893, 242 (*Goë*)

Distribution: Myanmar (Burma).

**G. dentata** Efetov, 1998a, 57

*heringi* partim (sensu Alberti, 1954, 256 (*Illiberis* (*Kublaia*))) (nec Draeseke, 1926, 45)

Distribution: China (Shaanxi, Hunan).

Genus **Zama** Herrich-Schäffer, 1855, 87 (see Efetov & Tarmann, 2012, 23)

[Type-species: *Zama cyanecula* Herrich-Schäffer, 1855, 87, by monotypy]

*Northia* Walker, 1854, 141 (a junior homonym of *Northia* Gray, 1847, 140 - Mollusca).

[Type-species: *Glauconopsis nigrigemma* Walker, 1854, 141, by monotypy]

Larval host-plants: Vitaceae.

**Z. shensiensis** (Alberti, 1954, 242) (*Illiberis* (*Zama*))

Distribution: central China (Shaanxi).

**Z. nigrigemma** (Walker, 1854, 141) (*Glauconopsis*)

*cyanecula* Herrich-Schäffer, 1855, 87

Distribution: Myanmar (Burma), Laos, northern Vietnam, China.

**Z. horni** (Strand, 1915, 121) (*Phacusa*)

Distribution: China (Taiwan).

**Z. arisana** (Matsumura, 1927, 79) (*Phacusa*)

Distribution: China (Taiwan).

**Z. endocyanea** (Hampson, 1920a, 273) (*Illiberis*)

Distribution: India (Assam), Bhutan.

**Z. cyanocera** (Hampson, 1893, 241) (*Phacusa*)  
*ignea* (Oberthür, 1894, 29) (*Northia*)

Distribution: Myanmar (Burma).

Genus **Phacusa** Walker, 1854, 150

[Type-species: *Glaukopis tenebrosa* Walker, 1854, 150, by monotypy]

*Notioptera* Butler, 1876, 355

[Type-species: *Syntomis dolosa* Walker, 1856, 1594]

Larval host-plants: Vitaceae, Dilleniaceae (*Dillenia*) (Küppers & Buchsbaum, 2015).

**Ph. tenebrosa** (Walker, 1854, 150) (*Glaukopis*)  
*siamensis* Oberthür, 1894, 31 (*Phacusa* sp.)

Distribution: northeastern India, Thailand.

**Ph. nicobarica** Hampson, 1920a, 272, **stat. rev. (C33)**

Distribution: Nicobare Islands.

**Ph. crawfurdi** (Moore, 1859, 327) (*Syntomis* sp.) (see Holloway, 2011, 16)  
*subtilis* Hering, 1925a, 176

Distribution: Indonesia (Java, Borneo).

**Ph. birmana** (Oberthür, 1894, 30) (*Northia*)

Distribution: Myanmar (Burma), Thailand, Laos.

**Ph. discoidalis** (Swinhoe, 1903, 500) (*Illiberis*)  
*tonkinensis* Alberti, 1954, 259

Distribution: Vietnam.

**Ph. chalcobasis** Hampson, 1920a, 272

Distribution: Indonesia (Sumatra).

**Ph. dolosa** (Walker, 1856, 1594) (*Syntomis*)

Distribution: northeastern India.

**Ph. properta** (Swinhoe, 1890, 400) (*Notioptera*)  
*dohertyi* (Oberthür, 1894, 36) (*Northia* sp.)

Distribution: Myanmar (Burma).

***Ph. janicornae*** Küppers & Buchsbaum, 2016, 148

Distribution: Thailand.

***Ph. manilensis*** Hampson, 1920a, 272

Distribution: Philippines (Luzon).

***Ph. strigosa*** (Walker, 1865, 69) (*Syntomis*)

Distribution: Indonesia (Sulawesi).

Genus ***Pseudophacusa*** Efetov & Tarmann, 2016, 82

[Type-species: *Pseudophacusa multidentata* Efetov & Tarmann, 2016, 82, by original designation and monotypy]

Larval host-plants: unknown.

***P. multidentata*** Efetov & Tarmann, 2016, 82

Distribution: northern Myanmar (Burma).

Genus ***Funeralia*** Alberti, 1954, 264

[Type-species: *Funeralia transiens* Alberti, 1954, 264, by original designation and monotypy]

Larval host-plants: unknown.

***F. transiens*** Alberti, 1954, 264

Distribution: eastern China (Zhejiang).

Genus ***Erythroclelea*** Efetov & Tarmann, 1995b, 70

[Type-species: *Laurion syfanicum* Oberthür, 1894, 25, by original designation and monotypy]

Larval host-plants: unknown.

***E. syfanicum*** (Oberthür, 1894, 25) (*Laurion*)

Distribution: China (Sichuan).

Genus ***Praeprocris*** Alberti, 1954, 315 (*Rhagades* subg.) (see Efetov & Tarmann, 1999a, 17)

[Type-species: *Rhagades (Praeprocris) pseudomaerens* Alberti, 1954, 315, by original designation and monotypy]

Larval host-plants: unknown.

***P. pseudomaerens*** (Alberti, 1954, 315) (*Rhagades*)

Distribution: China (Beijing).

Genus ***Theresimima*** Strand, 1917, 137

[Type-species: *Zygaena ampelophaga* Bayle-Barelle, 1809, 2, by monotypy (of *Theresia* Spuler, 1906)]

*Theresia* Spuler, 1906, 165 (a junior homonym of *Theresia* Robineau-Desvoidy, 1830, 325 - Insecta, Diptera. The objective replacement name is *Theresimima* Strand, 1917) [Type-species: *Zygaena ampelophaga* Bayle-Barelle, 1809, 2, by monotypy]

Larval host-plants: Vitaceae: *Vitis vinifera* L., *Parthenocissus quinquefolia* (L.) Planch. (Embacher & Tarmann, 2002), hybrid *P. inserta* (A. Kerner) Fritsch x *P. quinquefolia* (L.) Planch. (Crimea: Efetov, 1990), *P. tricuspidata* (Siebold & Zucc.) Planch. (Crimea: Efetov, 1998a).

**Th. ampelophaga** (Bayle-Barelle, 1809, 2) (*Zygaena*)  
*ampelophaga* [sic] (Hübner, 1822, figs 153, 154) (*Sphinx*), misspelling (see Efetov et al. 2023a)  
*vitis* (Freyer, 1834, 48) (*Sphinx*)  
*astrapta* (Dannehl, 1933, 147) (*Ino ampelophaga* [sic] “ab (?) rasse (?)”)

Distribution: southern France, Italy (including Sicily), southeastern Austria, Slovenia, Croatia, Bosnia and Herzegovina (?), Serbia, Montenegro, Albania, Macedonia Greece (mainland and islands including Rhodes and Crete), Slovakia, Hungary, Romania (Dobrogea), Bulgaria, southern Ukraine, Moldova, Russia (southern European part including Crimea, Northern Caucasus), Georgia, Turkey, Cyprus, Syria, Lebanon, Israel. The historical occurrence in Algeria may have its origin in introduced specimens as they all come from Alger and surrounding places (no newer records known). No other records known from Africa. The occurrence in Spain is also doubtful and needs confirmation.

Genus **Rhagades** Wallengren, 1863, 110  
[Type-species: *Sphinx pruni* [Denis & Schiffermüller], 1775, 308, by monotypy]

Larval host-plants: Rosaceae. In one species, *Rh. (Rh.) pruni*, larval host-plants can also belong to other families: Fagaceae (e.g. subsp. *chinensis*), Ericaceae, Cistaceae, Rhamnaceae, Salicaceae.

Subgenus **Naufockia** Alberti, 1954, 317  
[Type-species: *Procris brandti* Alberti, 1938b, 398, by original designation and monotypy]

Larval host-plants: Rosaceae (*Prunus*, *Amygdalus*, *Cotoneaster*).

**Rh. (N.) brandti** (Alberti, 1938b, 398) (*Procris*)

Distribution: Iran (Zagros, southern Kuh-Rud).

Subgenus **Wiegelia** Efetov & Tarmann, 1995b, 66  
[Type-species: *Procris amasina* Herrich-Schäffer, 1851, 42, by original designation]

Larval host-plants: Rosaceae (*Pyrus* (e.g. *Pyrus bourgaeana* Decne.), *Prunus* (e.g. *Prunus ramburii* Boiss., *Prunus spinosa* L., *Prunus cerasifera* Ehrh.) (Vives Moreno & Huertas-Dionisio, 1985; Murria-Beltrán, 2007; Efetov & Tarmann, 2020b), *Amygdalus*, *Cotoneaster*, *Crataegus*, *Malus*).

**Rh. (W.) amasina** (Herrich-Schaffer, 1851, 42) (*Procris*) (Figure 17)

Distribution: Greece (Islands of the Dodekanes and Rhodos), Bulgaria, Turkey, Syria, Lebanon.

**Rh. (W.) predotae** (Naufock, 1930, 107) (*Procris*) (Figure 9)

Distribution: Spain.

**Rh. (W.) tarmanni** Keil, 1999, 73

Distribution: Iran (Zagros).

Subgenus **Rhagades** Wallengren, 1863, 110

[Type-species: *Sphinx pruni* [Denis & Schiffermüller], 1775, 308, by monotypy]

Larval host-plants: Rosaceae (*Crataegus*, *Fragaria*, *Malus*, *Padellus*, *Potentilla*, *Poterium*, *Prunus*, *Pyrus*, *Rosa*, *Rubus*), Ericaceae (*Calluna*, *Erica*), Cistaceae (*Helianthemum*), Fagaceae (*Fagus*, *Quercus*), Rhamnaceae (*Rhamnus*), Salicaceae (*Populus*, *Salix*).

**Rh. (Rh.) pruni** ([Denis & Schiffermüller], 1775, 308) (*Sphinx*) (**C34**) (Figure 10)

Distribution: northeastern Spain, France, Belgium, Luxembourg, Netherlands, Denmark, Germany, Switzerland, Austria, northern Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Greece, Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Finland, Estonia, Latvia, Lithuania, Belarus, Ukraine, Moldova, Russia (northern, central and southern European part including Crimea, Northern Caucasus, Siberia), European Turkey, Georgia, Azerbaijan, Kyrgyzstan, Kazakhstan (subsp. *pruni*); Russia (Far East), China, North Korea (subsp. *chinensis*); Russia (Kuril Islands), Japan (subsp. *esmeralda*).

**Rh. (Rh.) pruni pruni** ([Denis & Schiffermüller], 1775, 308) (*Sphinx*)

*callunae* Spuler, 1906, 166 (*Rhagades pruni* "v. ?")

**Rh. (Rh.) pruni chinensis** (Felder & Felder, 1862, 31) (*Ino* sp.)

*tristis* (Bremer, 1865, 97) (*Procris* sp.)

**Rh. (Rh.) pruni esmeralda** (Butler, 1877a, 394) (*Procris* sp.)

Genus **Zygaenoprocris** Hampson, 1900, 225 (see Efetov, 2001b, 41) (**C35**) (Figure 1)

[Type-species: *Zygaenoprocris chalcochlora* Hampson, 1900, 225, by original designation and monotypy]

Larval host-plants: Polygonaceae (Efetov, 1991b, 1994c; Keil, 2014, 2016b, 2020), Plumbaginaceae (Mollet & Tarmann, 2007; Keil, 2014, 2016b, 2020), Asteraceae (Mollet & Tarmann, 2007; Keil, 2014, 2016b, 2020).

Subgenus **Zygaenoprocris** Hampson, 1900, 225 (**C35**)

[Type-species: *Zygaenoprocris chalcochlora* Hampson, 1900, 225, by original designation and monotypy]

Larval host-plants: Plumbaginaceae (*Acantholimon*) (Mollet & Tarmann, 2007; Keil, 2014, 2016b, 2020), Asteraceae (*Cousinia*) (Mollet & Tarmann, 2007; Keil, 2014, 2016b, 2020).

**Z. (Z.) chalcochlora** Hampson, 1900, 225

Distribution: Afghanistan, Pakistan.

**Z. (Z.) mystrocera** (Püngeler, 1914, 52) (*Ino*) (comb.: Efetov, 2001b) (**C35**)

Distribution: northern central, northern and northeastern Iran (ssp. *mystrocera*), central Iran (Yazd) (ssp. *molleti*), and southern Iran (Kerman) (ssp. *valii*).

**Z. (Z.) mystrocera mystrocera** (Püngeler, 1914), **stat. rev.**

**Z. (Z.) mystrocera molleti** Keil, 2020, 89, **stat. nov.**

**Z. (Z.) mystrocera valii** Keil, 2020, 90, **stat. nov.**

**Z. (Z.) khorassana** (Alberti, 1939a, 3) (*Procris*) (see Efetov & Tarmann, 2012, 26, 46)

Distribution: northeastern Iran, Turkmenistan (Kopetdag).

**Z. (Z.) hofmanni** Mollet & Tarmann, 2007, 71

Distribution: northeastern Iran (Kuh-e Shavar).

**Z. (Z.) efetovi** Mollet & Tarmann, 2007, 69

Distribution: eastern Iran (Kuh-e Mirza Arab).

Subgenus ***Efetovia*** Mollet, 2001, 51

[Type-species: *Procris fredi* Alberti, 1939a, 4, by original designation and monotypy]

Larval host-plants: unknown.

**Z. (E.) fredi** (Alberti, 1939a, 4) (*Procris*) (comb.: Efetov, 2001b)

Distribution: northeastern Iran (Kuh-e Binaloud).

Subgenus ***Longiterna*** Efetov & Tarmann, **subgen. nov. (C36)**

[Type-species: *Procris rjabovi* Alberti, 1938c, 94, here designated]

Larval host-plants: Polygonaceae (*Polygonum*) (Keil, 2014).

**Z. (L.) rjabovi** (Alberti, 1938c, 94) (*Procris*) (comb., Efetov, 2001b)

Distribution: northeastern Iran (Shah-Kuh).

**Z. (L.) eberti** (Alberti, 1968, 249) (*Procris*) (comb.: Efetov, 2001b)

Distribution: Afghanistan (Koh-i-Baba).

Subgenus ***Keilia*** Efetov, 2001b, 47

[Type-species: *Adscita minna* Efetov, 1991b, 155, by original designation]

Larval host-plant: Polygonaceae (*Atraphaxis*) (Efetov, 1991b, 1994c; Efetov & Daricheva, 1992; Keil, 2014, 2016a).

**Z. (K.) minna** (Efetov, 1991b, 155) (*Adscita*) (comb.: Efetov, 2001b)

Distribution: Turkmenistan (Kopetdag), Iran (northern Khorāsān).

**Z. (K.) albertii** (Efetov, 1991b, 57) (*Adscita*) (comb.: Efetov, 2001b)

Distribution: Turkmenistan, Iran (northern Khorāsān-e Razawī).

**Z. (K.) naumannni** (Efetov, 1994a, 53) (*Adscita (Zygaenoprocris)*) (comb.: Efetov, 2001b)

Distribution: northern Afghanistan.

Subgenus ***Molletia*** Efetov, 2001b, 45 (C35)

[Type-species: *Procris taftana* Alberti, 1939a, 4, by original designation]

Larval host-plant: Polygonaceae (*Atraphaxis*, *Polygonum*) (Efetov, 1997d; Mollet, 2000; Keil, 2020).

**Z. (M.) taftana** (Alberti, 1939a, 4) (*Procris*) (comb.: Efetov, 2001b) (Figures 18, 39)

Distribution: Armenia, Iran.

**Z. (M.) persepolis** (Alberti, 1938b, 399) (*Procris*) (comb.: Efetov, 2001b)

Distribution: Iran: southern Zagros Mountains (subsp. *persepolis*); northern and central Zagros Mountains (subsp. *puschmanni*); central Quohrud Mountains (subsp. *schahdadiani*); southern Iran (Kerman) (subsp. *hasarani*).

**Z. (M.) persepolis persepolis** (Alberti, 1938b, 399) (*Procris*)

**Z. (M.) persepolis puschmanni** Keil, 2020, 94, stat. nov.

**Z. (M.) persepolis schahdadiani** Keil, 2020, 94, stat. nov.

**Z. (M.) persepolis hasarani** Keil, 2020, 96, stat. nov.

**Z. (M.) duskei** (Grum-Grshimailo, 1902, 197) (*Ino*) (comb.: Efetov, 2001b)

Distribution: Iran: central parts between Teheran and Esfahan (subsp. *kliri*); central (south of 33°N) and southern parts (subsp. *kermana*); Kuh-e Taftan (subsp. *duskei*); Mekran (subsp. *aerea*).

**Z. (M.) duskei kliri** Keil, 2002, 55 (*Zygaenoprocris* sp.) (see Efetov, 2004a, 113)

**Z. (M.) duskei kermana** (Alberti, 1967, 99) (*Procris* sp.) (see Efetov, 2001d, 154)

**Z. (M.) duskei duskei** (Grum-Grshimailo, 1902, 197) (*Ino*)

*sengana* (Alberti, 1939a, 28) (*Procris* sp.) (see Efetov, 1992b, 147)

**Z. (M.) duskei aerea** (Grum-Grshimailo, 1902, 198) (*Ino duskei* var.) (see Efetov & Tarmann, 1999a, 32, 71)

*mekrana* (Alberti, 1939a, 29) (*Procris* "sp. ?") (see Efetov & Tarmann, 1999a, 32)

Genus **Adscita** Retzius, 1783, 35 (Figure 2)

[Type-species: *Adscita turcosa* Retzius, 1783, 35, by subsequent designation by Kirby, 1892, 84]

*Chrysaor* Hübner, 1806, [1] (included in a work rejected for nomenclatural purposes by the International Commission on Zoological Nomenclature, 1926, Opinion 97, 19)

[Type-species: *Sphinx statices* Linnaeus, 1758, 495, by monotypy]

*Procris* [Fabricius in Illiger], 1807, 289 (see Taeger & Gaedike, 2001, 87)

[Type-species: *Sphinx statices* Linnaeus, 1758: 495, by subsequent designation by Latreille, 1810, 441]

*Atychia* Ochsenheimer, 1808, [9], [10], 11

[Type-species: *Sphinx statices* Linnaeus, 1758, 495, by subsequent designation by Tremewan, 1973, 119]

*Ino* Leach, 1815, 131

[Type-species: *Sphinx statices* Linnaeus, 1758, 495, by monotypy]

*Bradyptesis* Sodoffsky, 1837, 83 (unnecessary objective replacement name for *Atychia* Ochsenheimer, 1808)

Larval host-plants: Polygonaceae, Cistaceae, Geraniaceae. In some Cistaceae-feeding species host-plants can also be Rosaceae and Fabaceae. Some larvae can be leaf-mining but only in early instars.

Subgenus **Procriterna** Efetov & Tarmann, 2004a, 184

[Type-species: *Ino substristis* Staudinger, 1887a, 68, by original designation]

*Procrita* Efetov & Tarmann, 1999a, 31, 63 (a junior homonym of *Procrita* Hendel, 1908, 59 - Insecta, Diptera. The objective replacement name is *Procriterna* Efetov & Tarmann, 2004a, 184)

[Type-species: *Ino subtristis* Staudinger, 1887a, 68, by original designation]

Larval host-plants: Polygonaceae (*Atraphaxis* spp.). Larva not leaf-mining (biology only known for *A. subtristis*).

**A. (P.) subtristis** (Staudinger, 1887a, 68) (*Ino*) (Figure 40)  
*dolosa* (Staudinger, 1887a, 69) (*Ino*) (see Efetov & Tarmann, 1999a, 31)

Distribution: Uzbekistan, Tajikistan, Kyrgyzstan, southern Kazakhstan.

**A. (P.) amaura** (Staudinger, 1887a, 70) (*Ino*)  
*banghaasi* (Alberti, 1938a, 119) (*Procris amaura* subsp.) (see Efetov & Tarmann, 1999a, 31)

Distribution: Uzbekistan, Tajikistan.

**A. (P.) subdolosa** (Staudinger, 1887a, 70) (*Ino dolosa* var.)  
*pamirensis* (Hampson, 1920b, 433) (*Procris*)

Distribution: Uzbekistan, Tajikistan, Kyrgyzstan, southern Kazakhstan, Afghanistan.

**A. (P.) pligori** Efetov, 2012, 99

Distribution: Afghanistan.

Subgenus *Afroterna* Efetov & Tarmann, subgen. nov. (C37)

[Type-species: *Procris mauretanica* Naufock, 1932, 77, here designated]

Larval host-plants: Polygonaceae, Cistaceae. Larva leaf-mining only in early instars.

**A. (Afr.) mauretanica** (Naufock, 1932, 77) (*Procris*), comb. nov.

Distribution: Morocco (Middle Atlas and Rif), northwestern Algeria (subsp. *mauretanica*); Morocco (High Atlas) (subsp. *wiegeli*).

**A. (Afr.) mauretanica mauretanica** (Naufock, 1932, 77) (*Procris*)  
*bohigasi* (Agenjo, 1940, 105) (*Procris mauretanica* var.)  
*meson* Dujardin, 1973, 160

**A. (Afr.) mauretanica wiegeli** (Alberti, 1973a, 12) (*Procris*)  
*atlasica* Dujardin, 1973, 159

Larval host-plants: Polygonaceae (*A. mauretanica wiegeli*), Cistaceae (*A. mauretanica mauretanica*).

Subgenus *Adscita* Retzius, 1783, 35

[Type-species: *Adscita turcosa* Retzius, 1783, 35, by subsequent designation by Kirby, 1892, 84]

*Chrysaor* Hübner, 1806, [1] (see above)  
*Procris* [Fabricius in Illiger], 1807, 289 (see above)  
*Atychia* Ochsenheimer, 1808, [9], [10], 11 (see above)  
*Ino* Leach, 1815, 131 (see above)  
*Bradyptesis* Sodoffsky, 1837, 83 (see above)

Larval host-plants: Polygonaceae (*Rumex* spp.). Larva leaf-mining only in early instars.

**jordani-group** (see Efetov & Tarmann, 2012, 29)

Larval host-plants: Polygonaceae (*Rumex* spp.)

**A. (A.) jordani** (Naufock, 1921, 63) (*Procris*)

Distribution: Portugal, Spain.

**statices-group** (see Efetov & Tarmann, 2012, 29)

Larval host-plants: Polygonaceae (*Rumex* spp.).

**A. (A.) krymensis** Efetov, 1994b, 267

Distribution: Crimea.

**A. (A.) schmidti** (Naufock, 1933b, 61) (*Procris*)  
*ariasae* (Agenjo, 1975, 9) (*Procris schmidti* subsp.)

Distribution: Portugal, Spain.

**A. (A.) alpina** (Alberti, 1937a, 435) (*Procris*)

*oblita* (Rocci, 1937, 146) (*Procris* sp.)

*viridis* Verity, 1946, 148 (*Adscita alpina* "forma")

*caerulea* Verity, 1946, 148 (*Adscita alpina* "forma")

*minuscula* Verity, 1946, 151 (*Adscita alpina alpina* "sottorazza") (see Efetov, 2001c, 128)

*bellissima* Verity, 1946, 151 (*Adscita alpina* "razza")

Distribution: Alps (southeastern France, southern Switzerland, western Austria, northern Italy).

**A. (A.) italicica** (Alberti, 1937a, 438) (*Procris*)

Distribution: central and southern Italy (including Sicily) (subsp. *italicica*); eastern Turkey (subsp. *storaiae*).

**A. (A.) italicica italicica** (Alberti, 1937a, 438) (*Procris*) (Figures 11, 19)

**A. (A.) italicica storaiae** (Tarmann, 1977a, 97) (*Procris*)

**A. (A.) statices** (Linnaeus, 1758, 495) (*Sphinx*) (Figure 41)

Distribution: northeastern Spain, Andorra, Ireland, Scotland, England, Wales, France, Belgium, Luxembourg, Netherlands, Germany, Switzerland, Austria, northern Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Greece, Denmark, Norway, Sweden, Finland, Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Estonia, Latvia, Lithuania, Belarus, Ukraine (without Crimea), Moldova, Russia (European part, Northern Caucasus, Siberia), Georgia, Kyrgyzstan, Kazakhstan, Turkey, northwestern China.

Subsp. *statices*. Absent from most parts of the Iberian Peninsula where it is replaced by *A. (A.) schmidti*; absent from most parts of northern Italy where it is replaced by *A. (A.) alpina*; absent from central and southern Italy where it is replaced by *A. (A.) italicica italicica*; absent from the Crimea where it is possibly replaced by *A. (A.) krymensis*; absent from southern Balkans and western, central and southern Turkey where it is replaced by *A. (A.) statices drenowskii* (see below); absent from eastern Turkey where it is replaced by *A. (A.) italicica storaiae*.

Subsp. *drenowskii*. Southern Balkans to central and southern Turkey.

**A. (A.) statices statices** (Linnaeus, 1758, 495) (*Sphinx*)

*turcosa* Retzius, 1783, 8 (*Adscita* sp.) (unnecessary objective replacement name for *Sphinx statices* Linnaeus, 1758)

- micans* (Freyer, 1833, 27) (*Sphinx* sp.)  
*uralensis* (Grum-Grshimailo, 1893, 385) (*Ino statices* var.)  
*viridis* Tutt, 1899, 390 (*Adscita statices* "ab.")  
*griseonigra* (Hoffmann & Klos, 1923, 44) (*Ino statices* f.)  
*grisea* (Niepelt, 1924, 50) (*Procris statices* f.)  
*extensa* (Alberti, 1937b, 100) (*Procris*)  
*anomala* Verity, 1946, 152 (*Adscita statices* "razza")  
*lutrinensis* (Heuser, 1960, 28) (*Procris* sp.)  
*heuseri* (Reichl, 1964, 100) (*Procris* sp.)  
*albis* (Heuser, 1964, 68) (*Procris* sp.)  
*palatis* (Heuser, 1964, 68) (*Procris* sp.)  
*talis* (Heuser, 1964, 68) (*Procris* sp.)

A. (A.) *statices drenowskii* (Alberti, 1939b, 43) (*Procris* sp.)

Subgenus ***Obscuriterna*** Efetov & Tarmann, **subgen. nov. (C38)**

[Type-species: *Procris obscura* Zeller, 1847a, 15, here designated]

Larval host-plants: Cistaceae, Rosaceae and Fabaceae. Larva leaf-mining only in early instars.

A. (A.) *obscura* (Zeller, 1847a, 15) (*Procris*)

Distribution: Albania, Macedonia, Greece, Romania, Bulgaria, most parts of Turkey, Iraq, Iran (Elburz, Zagros) (subsp. *obscura*); southern Turkey (Mersin, Adana, Hatay), Syria, Lebanon, Israel, Jordan, northeastern Egypt (subsp. *pallida*); Russia (Northern Caucasus (Dagestan)), Georgia, Armenia, Azerbaijan, northeastern Turkey, northwestern Iran (subsp. *maxima*).

A. (A.) *obscura obscura* (Zeller, 1847a, 15) (*Procris*)

- anceps* (Staudinger, 1862, 355) (*Ino* sp.)  
*balcanica* (Staudinger, 1862, 356) (*Ino obscura* "Localform")  
*pallida* (Alberti, 1938a, 122) (*Procris*)

A. (A.) *obscura maxima* (Alberti, 1938a, 122) (*Procris*)

Subgenus ***Eurasiterna*** Efetov & Tarmann, **subgen. nov. (C39)**

[Type-species: *Adscita dujardini* Efetov & Tarmann, 2014b, 182, here designated]

Larval host-plants: Cistaceae, Geraniaceae. Larva leaf-mining only in early instars.

***geryon*-group** (see Efetov & Tarmann, 2012, 30)

Larval host-plants: Cistaceae (*A. geryon* sometimes also on Geraniaceae).

A. (Eur.) *capitalis* (Staudinger, 1879, 317) (*Ino*)

Distribution: Macedonia, Greece, Turkey.

**A. (*Eur.*) *geryon* (Hübner, 1813, pl. 28, figs 130, 131) (*Sphinx*)**

Distribution: Spain, Andorra, England, Wales, France, Belgium, Germany, Switzerland, Austria, Italy (including Sicily), Greece (except north-west), Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, southern Ukraine, Moldova, Russia (southern European part, southern Crimea), northwestern Turkey (subsp. *geryon*); northeastern Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, northwestern Greece (subsp. *orientalis*); high mountains of eastern Switzerland, northern Italy, and central Austria (subsp. *chrysocephala*); central Italy (subsp. *acutafibra*).

**A. (*Eur.*) *geryon geryon* (Hübner, 1813, pl. 28, figs 130, 131) (*Sphinx*)**

*minor* (sensu Jordan, 1907a, 9 (*Procris*)) (nec Eversmann, 1844, 91)

*caerulea* Tutt, 1899, 401 (*Adscita geryon* “ab.”)

*viridis* Tutt, 1899, 401 (*Adscita geryon* “ab.”)

*virescens* (Agenjo, 1937, 311) (*Procris geryon* “forma”)

*aeris* Verity, 1946, 154 (*Adscita geryon* “razza”)

**A. (*Eur.*) *geryon chrysocephala* (Nickerl, 1845, 93) (*Atychia* sp.)**

**A. (*Eur.*) *geryon acutafibra* Verity, 1946, 149 (*Adscita alpina* “forma”) (see Efetov, 2001c, 128)**

**A. (*Eur.*) *geryon orientalis* (Alberti, 1938d, 54) (*Procris*)**

*hyalicolor* Verity, 1946, 150 (*Adscita alpina* “razza”) (see Efetov, 2001c, 128)

*albanica*-group (see Efetov & Tarmann, 2012, 31)

Larval host-plants: Geraniaceae (Efetov, 1992a, 1999b).

**A. (*Eur.*) *dujardini* Efetov & Tarmann, 2014b, 182**

Distribution: southeastern France, Switzerland, Italy, Slovenia.

**A. (*Eur.*) *albanica* (Naufock, 1926, (126)) (*Procris*)**

*jegorowi* (Alberti, 1971, 76) (*Procris*) [nomen nudum]

*accola* Zolotuhin & Nedoshivina, 2020, 144 (*Adscita albanica* ssp.) (see Efetov & Tarmann, 2022)

Distribution: Serbia, Albania, Macedonia, Greece, Bulgaria, Ukraine, Russia (European part, Crimea, Northern Caucasus).

Subgenus *Tarmannita* Efetov, 2000f, 169

[Type-species: *Ino mannii* Lederer, 1853, 103, by original designation]

Larval host-plants: Cistaceae; for *A. mannii* also Rosaceae and Fabaceae, for *A. antoniovivesi* also Rosaceae.

**A. (*T.*) *mannii* (Lederer, 1853, 103) (*Ino*) (Figure 42)**

*heydenreichii* (Lederer, 1853, 103) (*Ino* sp.)

*crassicornis* (Staudinger, 1862, 358) (*Ino heydenreichii* “v.”)

*prasina* (Rothschild, 1917, 345) (*Procris bellieri* subsp.)

*superba* (Rocci, 1937, 145) (*Procris micans* “f. p.”)

*atlantica* (Alberti, 1937b, 98) (*Procris mannii* subsp.)

*denticulata* Verity, 1946, 140 (*Adscita mannii* “forma”)

*caerulea* Verity, 1946, 143 (*Adscita mannii bellieri* “forma”)

*glauca* Verity, 1946, 144 (*Adscita mannii* “razza”)

*gracilis* Verity, 1946, 145 (*Adscita mannii crassicornis* “sottorazza”)

*pseudostatices* Verity, 1946, 146 (*Adscita manii* "razza")  
*heliocasta* Dujardin, 1975, 39  
*micans* (sensu Jordan, 1907a, 9 (*Procris*)) (nec Freyer, 1833, 27)

Distribution: northeastern Spain, France, southwestern Germany, southern Switzerland, southern Austria, Italy (including Sicily), Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Greece, Romania, Bulgaria, northwestern Turkey.

**A. (T.) antoniovivesi** Efetov & Tarmann, 2024, 10

Distribution: Spain.

**A. (T.) bolivari** (Agenjo, 1937, 314) (*Procris*)

Distribution: Portugal, Spain.

Genus **Jordanita** Verity, 1946, 134

[Type-species: *Sphinx chloros* Hübner, 1813, pl. 28, figs 128, 129; by original designation, name made available by designation of type species]

*Jordanita* Agenjo, 1940, 46 (without designation of type species; unavailable under Code, Article 13.3)

Larval host-plants: Asteraceae. Larva leaf-mining, even in last instars.

Subgenus **Roccia** Alberti, 1954, 326

[Type-species: *Ino budensis* Speyer & Speyer, 1858, 466, by original designation]

Larval host-plants: Asteraceae. Larva leaf-mining, even in last instars.

**budensis-group** (see Efetov & Tarmann, 2012, 32)

**J. (R.) budensis** (Speyer & Speyer, 1858, 466) (*Ino*)

Distribution: Spain, France, Austria, Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Greece, Slovakia, Hungary, Romania, Bulgaria, Russia (southern European part, southern Crimea, Northern Caucasus,), Georgia, Armenia, Azerbaijan, Turkey (subsp. *budensis*); Russia (southern Siberia, Far East (Amur Region)), Kazakhstan, Mongolia (subsp. *centralasiae*).

**J. (R.) budensis budensis** (Speyer & Speyer, 1858, 466) (*Ino*)

*cuprea* (Rambur, 1866, 186) (*Procris*)

**J. (R.) budensis centralasiae** (Alberti, 1937c, 87) (*Procris*)

**J. (R.) paupera** (Christoph, 1887, 162) (*Ino*) (**C40**)

*hamifera* (Jordan, 1907a, 8) (*Procris*)

*tamerlana* (Alberti, 1937c, 86) (*Procris hamifera* subsp.)

*minor* (Alberti, 1937c, 87) (*Procris hamifera* "f. (ssp. ?)"') (a junior primary homonym of *Atychia statices* var. *minor* Eversmann, 1844, 91)

*scintillosa* Zolotuhin, 2020, 8 (replacement name for *Procris hamifera minor* Alberti, 1937c) (see Efetov et al. 2022; Efetov & Tarmann, 2022)

*smaragdonna* Zolotuhin, 2020, 9 (see Efetov et al. 2022; Efetov & Tarmann, 2022)

Distribution: Russia (southern European part, Northern Caucasus), Azerbaijan (including Nakhichevan), Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, Turkey, Jordan, northern Iran.

**J. (R.) mollis** (Grum-Grshimailo, 1893, 385) (*Ino budensis* var.) (C41)

Distribution: eastern Russia (southern Siberia and Far East), China, Korea.

**volgensis-group** (see Efetov & Tarmann, 2012, 32)

**J. (R.) volgensis** (Möschler, 1862, 139) (*Ino*) (Figure 12)

Distribution: Ukraine (eastern part), Russia southern (European part, Crimea (Efetov & Savchuk, 2009), Northern Caucasus, southern Siberia), Kazakhstan (subsp. *volgensis*), Georgia, Armenia, Azerbaijan, northwestern Iran (subsp. *muelleri*), Turkey, Syria (subsp. *grandis*).

**J. (R.) volgensis volgensis** (Möschler, 1862, 139) (*Ino*)

**J. (R.) volgensis muelleri** (Alberti, 1973b, 387) (*Procris*)

**J. (R.) volgensis grandis** (Alberti, 1974, 49) (*Procris*)

*monotona* (Alberti, 1937c, 91) (*Procris volgensis* subsp. *hector* f.)

**J. (R.) suspecta** (Staudinger, 1887a, 71) (*Ino cognata* "var. ??")

*globulariae* partim (sensu Jordan, 1907a, 8 (*Procris*)) (nec Hübner, 1793, pl. 67)

Distribution: Uzbekistan, Kyrgyzstan.

**naufocki-group** (see Efetov & Tarmann, 2012, 32)

**J. (R.) tianshanica** (Efetov, 1990, 8) (*Adscita*)

Distribution: Kyrgyzstan.

**J. (R.) naufocki** (Alberti, 1937c, 88) (*Procris*)

Distribution: Kyrgyzstan, Kazakhstan, northwestern China.

**J. (R.) almatiensis** Mollet, 2008, 57

Distribution: southeastern Kazakhstan.

**J. (R.) kurdica** (Tarmann, 1987, 1) (*Adscita*)

Distribution: southeastern Turkey, western and southern Iran.

**hector-group** (see Efetov & Tarmann, 2012, 33)

**J. (R.) hector** (Jordan, 1907a, 8) (*Procris*)

*staudingeri* (Alberti, 1954, 328) (*Procris*)

Distribution: southern Turkey (Mersin, Nigde, Gaziantep, Hatay), Syria, Lebanon, Israel.

Subgenus ***Lucasiterna*** Alberti, 1961, 59

[Type-species: *Procris cirtana* Lucas, 1849, 374, by original designation]

*Lucasia* Alberti, 1954, 319 (a junior homonym of *Lucasia* Robineau-Desvoidy, 1863, 409 - Insecta, Diptera. The objective replacement name is *Lucasiterna* Alberti, 1961, 59)

[Type-species: *Procris cirtana* Lucas, 1849, 374, by original designation]

Larval host-plants: Asteraceae (Mollet, 2003).

**J. (L.) cirtana** (Lucas, 1849, 374) (*Procris*)

*orana* (Austaut, 1880, 284) (*Ino*)

*orana* (Bethune-Baker, 1888, 117) (*Ino*) (a junior primary homonym of *Ino orana* Austaut, 1880)  
*bakeri* (Kirby, 1892, 82) (*Adscita*) (objective replacement name for *Ino orana* Bethune-Baker, 1888)

Distribution: Northern Algeria, Tunisia.

Subgenus ***Tremewania*** Efetov & Tarmann, 1999a, 42

[Type-species: *Atychia notata* Zeller, 1847b, 294, by original designation]

Larval host-plants: Asteraceae. Larva leaf-mining, even in last instars.

**J. (T.) notata** (Zeller, 1847b, 294) (*Atychia*)

*soror* (Rambur, 1866, 187) (*Procris*)

*chlorotica* (Agenjo, 1937, 291) (*Procris globulariae* var.)

*cyanotica* (Agenjo, 1937, 291) (*Procris globulariae* var.)

*superior* (Rocci, 1937, 130) (*Rhagades notata* "f. p.")

*globulariae* partim (sensu Jordan, 1907a, 8 (*Procris*)) (nec Hübner, 1793, pl. 67)

*globulariae* (sensu Agenjo, 1937, 291 (*Procris*)) (nec Hübner, 1793, pl. 67)

*globulariae* (sensu Verity, 1946, 130 (*Procris*)) (nec Hübner, 1793, pl. 67)

Distribution: Portugal, Spain, France, Germany, Switzerland, Austria, Italy (including Sicily), Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Greece (including Crete), Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Ukraine, Russia (soouthern European part, Crimea, Northern Caucasus), Georgia, Armenia, Azerbaijan, Turkey, Iran.

**J. (T.) splendens** (Staudinger, 1887a, 68) (*Ino*) (Figure 43)

*incerta* (Staudinger, 1887a, 72) (*Ino*)

*heringi* (Alberti, 1937c, 78) (*Procris splendens* subsp.)

*globulariae suspecta* (sensu Jordan, 1907a, 8 (*Procris*)) (nec Staudinger, 1887a, 71)

*acroptilon* (Stshetkin & Stshetkin, 1993, 139) (*Procris*) [nomen nudum: unavailable under Code, Article 13.1]

Distribution: Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan.

**J. (T.) ambigua** (Staudinger, 1887a, 71) (*Ino*)

Distribution: Turkmenistan, southern Uzbekistan, western Tajikistan (subsp. *ambigua*); eastern Uzbekistan, Kyrgyzstan (subsp. *asiatica*); Iran (subsp. *schakuhensis*); Afghanistan, southeastern Tadzhikistan (Pamirs) (subsp. *omotoi*).

**J. (T.) ambigua ambigua** (Staudinger, 1887a, 71) (*Ino*)

**J. (T.) ambigua asiatica** (Staudinger, 1887a, 73) (*Ino budensis* var.)

**J. (T.) ambigua schakuhensis** (Alberti, 1954, 328) (*Procris*)

**J. (T.) ambigua omotoi** (Alberti, 1965, 1) (*Procris* sp.)

Subgenus ***Gregorita*** Povolný & Šmelhaus, 1951, 159

[Type-species: *Procris hispanica* Alberti, 1937b, 87, by original designation]

Larval host-plants: Asteraceae. Larva leaf-mining, even in last instars.

**hispanica-group** (see Efetov & Tarmann, 2012, 34)

**J. (G.) hispanica** (Alberti, 1937b, 87) (*Procris*)

*danieli* (Alberti, 1937b, 89) (*Procris hispanica* subsp.)

*soror* (sensu Agenjo, 1937, 295 (*Procris*)) (nec Rambur, 1866, 187)

*soror* (sensu Povolný & Šmelhaus, 1951, 187 (*Procris*)) (nec Rambur, 1866, 187)

Distribution: Portugal, Spain, southern France.

**algirica-group** (see Efetov & Tarmann, 2012, 34)

**J. (G.) algirica** (Rothschild, 1917, 345) (*Procris orana* subsp.)

*reisseri* (Naufock, 1932, 75) (*Procris*)

*azrouica* (Barragué, 1986, 324) (*Adscita algirica* subsp.)

*taon* (Barragué, 1986, 324) (*Adscita algirica* subsp.)

*stena* (Barragué, 1986, 325) (*Adscita algirica* subsp.)

*intermedia* (Barragué, 1986, 325) (*Adscita algirica* subsp.)

Distribution: Morocco, northern Algeria, Tunisia, Sicily (?).

**J. (G.) minutissima** (Oberthür, 1916, 240) (*Procris tenuicornis* “morphe”)

Distribution: northern Algeria.

**J. (G.) carolae** (Dujardin, 1973, 157) (*Adscita rungsi* subsp.)

Distribution: Morocco (southern High Atlas).

**J. (G.) rungsi** (Dujardin, 1973, 155) (*Adscita*)

Distribution: Morocco (Middle Atlas).

**cognata-group** (see Efetov & Tarmann, 2012, 35)

**J. (G.) cognata** (Herrich-Schäffer, 1847, pl. 13, figs 94, 95) (*Procris*) (Figure 44)

*cognata* (Lucas, 1849, 373) (*Procris*) (a junior primary homonym)

*gigantea* (Naufock, 1933a, 96) (*Procris*)

Distribution: northern Algeria, Tunisia.

**J. (G.) benderi** (Tarmann, 1985a, 17) (*Adscita*)

*koriflana* (Rungs, 1980, 140) (*Adscita cognata* subsp.) [nomen nudum: unavailable under Code, Article 13.1]

Distribution: Morocco (Middle Atlas, High Atlas).

**J. (G.) maroccana** (Naufock, 1937, 30) (*Procris*)

Distribution: Morocco (Middle Atlas, High Atlas).

Subgenus ***Jordanita*** Verity, 1946, 134

[Type-species: *Sphinx chloros* Hübner, 1813, pl. 28, figs 128, 129; by original designation]

Larval host-plants: Asteraceae. Larva leaf-mining, even in last instars.

***graeca*-group** (see Efetov & Tarmann, 2012, 35)

***J. (J.) syriaca*** (Alberti, 1937c, 94) (*Procris*)

Distribution: southern Turkey (?), Syria, Lebanon, Israel, Jordan.

***J. (J.) graeca*** (Jordan, 1907a, 9) (*Procris*)

Distribution: eastern Austria, Croatia, Bosnia and Herzegovina (?), Serbia, Montenegro, Albania, Macedonia, Greece, Slovakia, Hungary, Romania, Bulgaria, Ukraine, Moldova, Russia (European part, Crimea, Northern Caucasus), Georgia, Azerbaijan, Turkey, Cyprus, northern Iraq (subsp. *graeca*); Armenia, Iran (subsp. *persica*).

***J. (J.) graeca graeca*** (Jordan, 1907a, 9) (*Procris*)

*sultana* (Alberti, 1937c, 96) (*Procris*) (see Efetov, 2001d, 156)

***J. (J.) graeca persica*** (Alberti, 1938a, 125) (*Procris* "ssp. ?")

***chloros*-group** (see Efetov & Tarmann, 2012, 35)

***J. (J.) chloros*** (Hübner, 1813, pl. 28, figs 128, 129) (*Sphinx*)

Distribution: southern France, Germany, eastern Switzerland, eastern Austria, northern Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Ukraine, Russia (European part, Crimea, Northern Caucasus, southern Siberia), Georgia, eastern Kazakhstan, Turkey, northern Syria, northern Iraq (subsp. *chloros*); southern Macedonia, southwestern Bulgaria, Greece (subsp. *hades*).

***J. (J.) chloros chloros*** (Hübner, 1813, pl. 28, figs 128, 129) (*Sphinx*)

*sepium* (Boisduval, 1834, 81) (*Procris* sp.)

*minor* (Eversmann, 1844, 91) (*Atychia statices* var.) (see Efetov & Tarmann, 1999a, 25)

*haegeri* (Alberti, 1973b, 386) (*Procris chloros* subsp.)

***J. (J.) chloros hades*** (Alberti, 1970a, 82) (*Procris*)

***J. (J.) chloronota*** (Staudinger, 1871, 100) (*Ino chloros* var.)

*minima* (Alberti, 1937c, 93) (*Procris chloronota* f.)

Distribution: Southern Turkey (Mersin, Adana).

***globulariae*-group** (see Efetov & Tarmann, 2012, 36)

***J. (J.) tenuicornis*** (Zeller, 1847b, 293) (*Atychia*)

Distribution: central Italy (subsp. *tenuicornis*); southern Italy (including Sicily) (subsp. *turatii*).

***J. (J.) tenuicornis tenuicornis*** (Zeller, 1847b, 293) (*Atychia*)

*bellieri* (Rambur, 1866, 184) (*Procris* sp.)

***J. (J.) tenuicornis turatii*** (Bartel, 1906, 178) (*Ino* sp.)

*translucens* Verity, 1946, 136 (*Jordanita tenuicornis* "razza")

- J. (J.) globulariae** (Hübner, 1793, pl. 67) (*Sphinx*)  
caerulea (Tutt, 1899, 408) (*Rhagades globulariae* var.)  
viridis (Tutt, 1899, 408) (*Rhagades globulariae* "ab.")  
azurea (Vorbrodt, 1914, 248) (*Procris globulariae* "Form") (see Efetov & Tarmann, 1999a, 26)  
acanthophora (Agenjo, 1937, 302) (*Procris*)  
bosniaca (Alberti, 1937b, 99) (*Procris globulariae* subsp.)  
stricta (Verity, 1946, 134) (*Procris cognata* "forma")  
aureoviridis (Verity, 1946, 134) (*Procris cognata* "forma")  
caerulea (Verity, 1946, 134) (*Procris cognata* "forma")  
urbis (Verity, 1946, 134) (*Procris cognata* "razza")  
*cognata* (sensu Jordan, 1907a, 8 (*Procris*)) (nec Herrich-Schäffer, 1847, pl. 13)  
*cognata* (sensu Agenjo, 1940, 48 (*Procris*)) (nec Herrich-Schäffer, 1847, pl. 13)  
*cognata* (sensu Verity, 1946, 132 (*Procris*)) (nec Herrich-Schäffer, 1847, pl. 13)

Distribution: central and northern Spain, Andorra, southern England, France, Belgium, Luxembourg, central and southern Germany, Switzerland, Austria, northern and central Italy, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Greece, Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Belarus, Ukraine, Russia (European part, Crimea, Northern Caucasus), northwestern Turkey.

**J. (J.) fazekasi** Efetov, 1998c, 183

Distribution: southern Hungary.

**J. (J.) vartianae** (Malicky, 1961, 216) (*Procris*)

Distribution: southeastern Spain.

Subgenus **Praviela** Alberti, 1954, 329

[Type-species: *Procris anatolica* Naufock, 1929, 94, by original designation]

Larval host-plants: Asteraceae. Larva leaf-mining, even in last instars.

**J. (P.) anatolica** (Naufock, 1929, 94) (*Procris*) (**C42**)

Distribution: Greece (Dodekanes), Turkey, Cyprus, Syria, Lebanon, Israel, Jordan, Iraq, Iran (Zagros and Elburs), Armenia, Azerbaijan (Nakhichevan) (subsp. *anatolica*); northeastern Libya, northern Egypt (subsp. *kruegeri*)

**J. (P.) anatolica anatolica** (Naufock, 1929, 94) (*Procris*)

*levantina* (Jordan, 1931, 277) (*Procris* sp.)

*pfeifferi* (Naufock, 1935, 7) (*Procris* sp.)

**J. (P.) anatolica kruegeri** (Turati, 1930, 50) (*Ino* sp.)

**J. (P.) rietzschii** Keil, 2016b, 201 (**C42**)

Distribution: Iran (Kuh-e-Gebal Bares).

**J. (P.) christinae** Keil, 1998, 113 (**C42**)

Distribution: Iran (central Zagros).

Subgenus ***Solaniterna*** Efetov, 2004a, 33, 119

[Type-species: *Ino subsolana* Staudinger, 1862, 352, by original designation]

Larval host-plants: Asteraceae. Larva leaf-mining until hibernation, in last instars boring in stems of the host plant (only known for *J. subsolana*).

***J. (S.) subsolana*** (Staudinger, 1862, 352) (*Ino cognata* “var. ?”)

*cognata* (Rambur, 1858, pl. 3, fig. 1) (*Procris*) (a junior primary homonym of *Procris cognata* Herrich-Schäffer, 1847, pl. 13, figs 94, 95)  
*incognita* (Staudinger, 1862, 359) (*Ino cognata* “fragliche Varietät”) [nomen nudum]  
*ramburi* (Praviel, 1938, 113) (*Procris subsolana* subsp.)  
*schuetzei* (Alberti, 1940, 313) (*Procris subsolana* subsp.)  
*modesta* (Verity, 1946, 129) (*Procris subsolana* “razza”)  
*venusta* (Verity, 1946, 129) (*Procris subsolana* “razza”)  
*globulariae* partim (sensu Jordan, 1907a, 8 (*Procris*)) (nec Hübner, 1793, pl. 67)

Distribution: Morocco (Rif), Portugal, Spain, France, Belgium, Germany, Switzerland, Austria, Italy (including Sicily), Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Macedonia, Greece, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Ukraine, Moldova, Russia (European part, Crimea, Northern Caucasus, southern Siberia), Georgia, Armenia, Azerbaijan, Kazakhstan, Turkey, northern Iran.

***J. (S.) solana*** (Staudinger, 1887a, 72) (*Ino subsolana* “var. ?”)

*gouldschaensis* (Alberti, 1937a 81) (*Procris solana* subsp.) (see Efetov & Tarmann, 1999a, 25)

Distribution: Uzbekistan, Kyrgyzstan, southern Kazakhstan.

Subgenus ***Rjabovia*** Efetov & Tarmann, 1995b, 70

[Type-species: *Procris horni* Alberti, 1937c, 93, by original designation and monotypy]

Larval host-plants: Asteraceae. Larva leaf-mining, even in last instars.

***J. (R.) horni*** (Alberti, 1937c, 93) (*Procris*)

*armena* (Alberti, 1970a, 79) (*Procris*) [nomen nudum]

Distribution: Armenia, Azerbaijan, Turkey, Iran.

Genus ***Saliunca*** Walker, 1865 (“1864”), 108 (C29)

[Type species: *Tipulodes thoracica* Walker, 1865 (“1864”), 108, by original designation]

Larval host-plants: unknown.

***S. styx*** (Fabricius, 1775, 556) (*Zygaena*)

Distribution: Africa (Gulf of Guinea: Sierra Leone, Togo, Cameroon, Ecuatorial Guinea).

***S. styx styx*** (Fabricius, 1775, 556) (*Zygaena*)

*thoracica* (Walker, 1865, 108) (*Tipulodes*)

*latipennis* Strand, 1913, 57

***S. styx ealaensis*** Alberti, 1957, 299

***S. pallida*** Alberti, 1957, 299

Distribution: Central Africa (Congo).

*S. ventralis* Jordan, 1907b, 123

*analoga* Alberti, 1957, 300 (*Saliunca ventralis* "mod."), unavailable (infrasubspecific)

Distribution: Eastern Africa (Uganda).

*S. rufidorsis* (Plötz, 1880, 80) ("Antichloris ?")

Distribution: western central Africa (Cameroon).

*S. cyanea* Hampson, 1920a, 276

Distribution: Eastern Africa (Uganda).

*S. vidua* Rebel, 1914, 290

Distribution: Central Africa (Congo).

*S. aurifrons* Walker, 1864, 109

Distribution: western and Central Africa (subsp. *aurifrons*) and Eastern Africa (subsp. *ugandana*).

*S. aurifrons aurifrons* Walker, 1864, 109

*aitcha* (Vuillot, 1892, CXL) (as *aitcha*) (*Naclia*)

*S. aurifrons ugandana* Jordan, 1909, 258

*S. flavifrons* (Plötz, 1880, 80) ("Antichloris ?")

Distribution: western Central Africa (Cameroon, Ecuatorial Guinea).

*S. flavifrontis* Bryk, 1936, 279

*flavifrons* Bethune-Baker, 1927: 333 (nec Plötz, 1880, 80)

Distribution: western Central Africa (Cameroon).

*S. fulviceps* Hampson, 1920a, 276

*fulvicepes* [sic] Bryk, 1936, 279, misspelling

Distribution: Eastern Africa.

*S. cyanothorax* Hampson, 1920a, 277

Distribution: Eastern Africa (Uganda).

*S. solora* (Plötz, 1880, 80) ("Antichloris ?") (Figure 47)

Distribution: western Central Africa (Cameroon, Ecuatorial Guinea).

*S. sapphirina* Hampson, 1920a, 2

*saphirina* [sic] Gaede, 1926, 31, misspelling

Distribution: Eastern Africa (Uganda).

**S. meruana** Aurivillius, 1910, 48

Distribution: Central and Eastern Africa (Congo, Ethiopia, Kenya, Uganda, Tanzania) (subsp. *meruana*), western Central Africa (Ecuadorian Guinea) (subsp. *tessmanni*).

**S. meruana meruana** Aurivillius, 1910, 48

**S. meruana tessmanni** Alberti, 1957, 302

**S. anhyalina** Alberti, 1957, 302

Distribution: Eastern Africa (Ethiopia).

**S. chalconota** Hampson, 1920a, 277

Distribution: Eastern Africa (Uganda).

**S. homochroa** (Holland, 1897, 409) ("Charidea ?") (Figure 46)

Distribution: Eastern Africa (Ethiopia, Kenya, Mozambique, Somalia, Uganda, Zimbabwe).

**S. metacyanea** Hampson, 1920a, 277

Distribution: Eastern Africa.

**S. aenescens** Hampson, 1920a, 277

Distribution: Eastern Africa (Uganda, Kenya).

**S. mimetica** Jordan, 1907, 123

*nkolentangensis* Strand, 1912, 57

Distribution: Africa (Nigeria to Congo).

**S. kamiliila** Bethune-Baker, 1911, 575

Distribution: Eastern Africa.

**S. egeria** Bethune-Baker, 1913, 67

Distribution: Eastern Africa (Uganda).

**S. ignicincta** Andreini, 1912, 141

Distribution: Eastern Africa (Eritrea).

**S. rubriventris** Holland, 1919, 324

Distribution: Central Africa (Congo).

**S. orphina** Hering, 1931, 114

Distribution: Eastern Africa (Zaire).

Genus *Syringura* Holland, 1893, 394 (**C29**)

[Type species: *Syringura uranopetes* Holland, 1893, 394, by original designation]

Larval host-plants: unknown.

*S. pulchra* (Butler, 1876, 358) (*Tascia*) (Figure 48)

Distribution: Central and Eastern Africa.

*S. triplex* (Plötz, 1880, 79) (*Tascia*)

*triplex* [sic] (Kirby, 1892, 169), misspelling (*Tascia*)

*uranopetes* Holland, 1893, 394

*triguttata* (Aurivillius, 1925, 1347) (*Saliunca*)

Distribution: Africa (Togo, Sierra Leone, Cameroon).

Genus *Tascia* Walker, 1856, 1600 (**C29**)

[Type species: *Tascia chrysotelus* Walker, 1856, 1600, by monotypy]

*Parasyntomis* Distant, 1897, 15

[Type species: *Parasyntomis aethiops* Distant, 1897, 15, by monotypy]

*Tassia* [sic] Druce, 1910, 392, misspelling

Larval host-plants: unknown.

*T. amata* Druce, 1910, 402

Distribution: Eastern Africa (Ethiopia).

*T. finalis* (Walker, 1854, 245) (*Euchromia*) (Figure 49)

*chrysotelus* Walker, 1856, 1600

*virescens* Butler, 1876, 357

*aethiops* (Distant, 1897) (*Parasyntomis*)

Distribution: South Africa (Transvaal, Natal).

*T. instructa* (Walker, 1854, 254) (*Anycles (Euchromia)*)

*erythrogaster* (Mabille, 1892, CXXXIX) ("*Naclia* ?")

*erythropyga* Gaede, 1926, 33

Distribution: Africa (Sierra Leone).

*T. rhabdophora* Vari, 2002, xi, pl. 1 (Figure 13)

Distribution: Africa (Zimbabwe).

Genus *Astyaloneura* Gaede, 1914, 53 (**C29**)

[Type species: *Astyaloneura trefurthi* Gaede, 1914, 53, by monotypy]

Larval host-plants: unknown.

*A. trefurthi* Gaede, 1914, 53

*cyanopis* (Hampson, 1920a, 278) (*Saliunca*)

Distribution: Southern Africa (Zimbabwe).

**A. meridionalis** (Hampson, 1920a, 278) (*Saliunca*) (Figure 50)

Distribution: eastern Central and Eastern Africa (from Kenia, Uganda, Tanzania, southwards to northern South Africa) (subsp. *meridionalis*), western Central Africa (Congo) (subsp. *centralis*).

- A. meridionalis meridionalis** (Hampson, 1920a, 278) (*Saliunca*)  
**A. meridionalis centralis** Alberti, 1957, 306

**A. incerta** Alberti, 1957, 306

Distribution: Central Africa (Congo).

**A. difformis** (Jordan, 1907b, 122) (*Saliunca*)

Distribution: Central and Eastern Africa (Congo, Uganda, Tanzania).

**A. cupreotincta** (Hampson, 1920a, 279) (*Saliunca*)

Distribution: Eastern Africa.

**A. esmeralda** (Hampson, 1920a, 279) (*Saliunca*)

Distribution: Africa (from Nigeria to Uganda).

**A. glennia** (Jordan, 1907, 123) (*Saliunca*)

Distribution: Southern Africa (Zimbabwe).

**A. biplagata** (Bethune-Baker, 1911, 575) (*Saliunca*)  
*biplagiata* [sic] Gaede, 1926, 33, misspelling

Distribution: Southern Africa (Zimbabwe).

**A. assimilis** (Jordan, 1907b, 122) (*Saliunca*)

Distribution: Southern Africa (Zimbabwe).

**A. nitens** (Jordan, 1907b, 122) (*Saliunca*)

Distribution: Eastern Africa (Uganda).

**A. ostia** (Druce, 1896, 350) (*Saliunca*)  
*osteia* [sic] Gaede, 1926, 36, misspelling

Distribution: Eastern Africa.

**A. chlorotica** (Hampson, 1920a, 280) (*Saliunca*)

Distribution: Central Africa (Congo).

**A. monotona** Hering, 1931, 115

Distribution: Central Africa (Congo).

**A. gaedei** Alberti, 1957, 310

Distribution: Central Africa (Congo (W. Ruwenzori)).

**A. bicolora** Röber, 1929, 327

Distribution: Eastern Africa (Ethiopia).

Genus **Acoloithus** Clemens, 1861, 539

[Type species: *Acoloithus falsarius* Clemens, 1861, 539, by monotypy]

Larval host-plants: Vitaceae (*Vitis* spp.) (known for *A. falsarius*, *A. novaricus*, *A. rectarius*).

**A. falsarius** Clemens, 1861, 539

*sanborni* (Packard, 1864, 32) (*Harrisina*)

Distribution: eastern USA.

**A. novaricus** Barnes & McDunnough, 1913, 295

Distribution: eastern USA.

**A. rectarius** Dyar, 1898, 44 (Figure 51)

Distribution: western USA.

**A. ruficollis** (Druce, 1884, 37) (*Urodus*)

Distribution: Guatemala.

**A. dyraspes** (Druce, 1896, 330) (*Urodus*)

Distribution: Mexico.

**A. rubrojugulatus** (Alberti, 1954, 340) (*Gonioprocris*)

Distribution: eastern USA.

**A. totusniger** Alberti, 1954, 339

Distribution: Mexico.

**A. opacus** Jordan, 1913, 25

Distribution: Colombia.

Genus **Gaedea** Hering, 1924, 272

[Type species: *Gaedea separata* Hering, 1924, 273, by original designation and monotypy]

Larval host-plants: unknown.

**G. separata** Hering, 1924, 273

Distribution: Bolivia.

Genus **Neoilliberis** Tarmann, 1984b, 55

[Type species: *Pyromorpha fusca* H. Edwards, 1885, 43, by original designation]

Larval host-plants: Fabaceae (*Acacia* spp.) (known for *N. fusca*).

**N. martenii** (French, 1884, 13) (*Triprocris*)

*barnea* (Druce, 1896, 329) (*Procris*)

Distribution: southwestern USA, northern Mexico.

**N. tarahumara** Tarmann, 1984b, 58

Distribution: northern Mexico.

**N. fusca** (H. Edwards, 1885, 43) (*Pyromorpha*) (Figure 52)

*landia* (Druce, 1896, 329) (*Procris*)

Distribution: southwestern USA, northern Mexico.

**N. mas** (Dyar, 1918a, 137) (*Gingla*)

Distribution: northern Mexico.

**N. raconica** (Dyar, 1913, 316) (*Gingla*) Mexico

*purpusi* (Hering, 1924, 270) (*Malthaca*)

Distribution: northern Mexico.

**N. thyesta** (Druce, 1884, 37) (*Procris*)

Distribution: Guatemala, Costa Rica.

**N. puebla** Tarmann, 1984b, 59

Distribution: central Mexico.

**N. kendalli** Tarmann, 1984b, 60

Distribution: southern USA.

**N. arizonica** Tarmann, 1984b, 64

Distribution: southern USA.

**N. ignorata** (Hering, 1925, 157) (*Malthaca*)

Distribution: southern Mexico, Guatemala.

Genus *Neofelderia* Tarmann, 1984b, 65

[Type species: *Acreagris correbioides* Felder, 1874, pl. 83, by monotypy]

*Felderia* Kirby, 1892, 163 (a junior homonym of *Felderia* Walsingham 1887, 165 - Insecta, Lepidoptera. Tineidae. The objective replacement name is *Neofelderia* Tarmann, 1984b, 65)

*Acreagris* Felder, 1874, 83 (a junior homonym of *Acreagris* Koch & Berendt, 1854, 123 - Insecta, Collembola. The objective replacement name is *Felderia* Kirby, 1892, 163)

[Type species: *Acreagris correbioides* Felder, 1874, pl. 83, by monotypy]

Larval host-plants: Fabaceae.

*N. rata* (H. Edwards, 1882, 124) (*Lycomorpha*) (Figure 53)

*xanthogramma* (Hering, 1924, 268) (*Malthaca*)

Distribution: southern USA, Mexico.

*N. correbioides* (Felder, 1874, [83]) (*Acreagris*)

*aurora* (Dyar, 1918b, 366) (*Pyromorpha*)

Distribution: Mexico.

*N. mexicana* (Druce, 1884, 41) (*Lycomorpha*)

*venadiocola* (Dyar, 1920, 198) (*Triprocris*)

Distribution: Mexico.

*N. eromena* (Hering, 1924, 267) (*Malthaca*)

*analoga* (Hering, 1924, 268) (*Malthaca*)

Distribution: Mexico.

*N. hoerwertneri* Tarmann, 1984b, 67

Distribution: Guatemala.

Genus *Neoalbertia* Tarmann, 1984b, 68

[Type species: *Lycomorpha constans* H. Edwards, 1881, 81]

Larval host-plants: unknown.

*N. constans* (H. Edwards, 1881, 81) (*Lycomorpha*) (Figure 54)

*sancta* (Neumogen & Dyar, 1894, 64) (*Triprocris constans* "forma")

Distribution: Southern USA.

*N. brunnea* (Alberti, 1954, 388) (*Malthaca*)

Distribution: Mexico.

*N. variabilis* Tarmann, 1984b, 70

Distribution: Mexico.

***N. guatemalteca*** Tarmann, 1984b, 72

Distribution: Guatemala.

***N. anacreon*** (Druce, 1884, 41) (*Procris*)

Distribution: Costa Rica.

Genus ***Procrisimilis*** Tarmann, 1984b, 73

[Type species: *Procrisimilis columbiana* Tarmann, 1984b, 74, by original designation and monotypy]

Larval host-plants: unknown.

***P. columbiana*** Tarmann, 1984b, 74

Distribution: Colombia.

Genus ***Neoprocris*** Jordan, 1915, 300

[Type species: *Neoprocris saltuaria* Jordan, 1915, 300, by original designation]

*Neoprocis* [sic] Bryk, 1936, 302, 308, misspelling

Larval host-plants: Rosaceae (known for *N. aversa*, *N. floridana* and *N. prunivora*).

***N. aversa*** (H. Edwards, 1884a, 13) (*Triprocris*) (Figure 55)

*huachuca* (Dyar, 1905b, 186) (*Parasa chloris* var.)

Distribution: southwestern USA.

***N. floridana*** Tarmann, 1984b, 77

Distribution: southeastern USA (Florida).

***N. prunivora*** Tarmann, 1984b, 80

Distribution: southern USA (Texas).

***N. basalis*** (H. Edwards, 1887, 91) (*Triprocris*)

Distribution: Mexico.

***N. flora*** (Schaus, 1911, 183) (*Propyria*)

Distribution: Costa Rica.

***N. isochroa*** (Jordan, 1913, 25) (*Acoloithus*)

*pusilla* (sensu Druce, 1884, 37 (*Procris*)) (nec Walker, 1854, 112)

Distribution: Panama.

***N. thyana*** (Druce, 1884, 37) (*Procris*)

Distribution: Guatemala.

*N. seva* (Hering, 1938, 432) (*Seryda*)

Distribution: Guatemala.

*N. satanas* (Hering, 1938, 432) (*Acoloithus*)

Distribution: Guatemala.

*N. mirabilis* Tarmann, 1984b, 82

Distribution: Costa Rica.

*N. trismegistos* (Hering, 1926, 112) (*Acoloithus*)

Distribution: Brazil.

*N. viridis* (Druce, 1906, 86) (*Procrimima*)  
*saltuaria* Jordan, 1915, 300

Distribution: Brazil, Bolivia, Paraguay, Argentina.

*N. gigantea* (Hering, 1924, 272) (*Acoloithus*)

Distribution: Bolivia.

*N. metallica* (Schaus, 1892, 284) (*Ardonea*)

Distribution: Peru.

*N. mimetica* (Hering, 1928, 280) (*Tetraclonia*)

Distribution: Bolivia.

Genus *Hoerwertneria* Tarmann, 1984b, 84

[Type species: *Malthaca rubriventris* Hering, 1938, 406, by original designation and monotypy]

Larval host-plants: unknown.

*H. rubriventris* (Hering, 1938, 406) (*Malthaca*)

Distribution: Guatemala.

Genus *Pseudoprocris* Druce, 1884, 38

[Type species: *Pseudoprocris gracilis* Druce, 1884, 38, by subsequent designation by Kirby, 1892, 86]

Larval host-plants: Rosaceae (probably, see Tarmann 1984, 88).

*P. dolosa* Druce, 1884, 38

Distribution: Guatemala.

*P. gracilis* Druce, 1884, 38 (Figure 56)

*morelia* (Dyar, 1912a, 99) (*Adscita*)

Distribution: southern Mexico, Guatemala.

Genus ***Malamblia*** Jordan, 1907b, 124 (see Tarmann, 1985b, 341)

[Type species: *Malamblia durbanica* Jordan, 1907b, 125, by monotypy]

*Chilioprocris* Jordan, 1913, 24

[Type species: *Procris melas* Guérin-Méneville, 1839, 2, by original designation and monotypy]

Larval host-plants: Rosaceae (probably, see Tarmann 1984, 92).

***M. melas*** (Guérin-Méneville, 1839, 2) (*Procris*) (Figure 57)

*durbanica* Jordan, 1907b, 125

Distribution: Chile.

Genus ***Pyromorpha*** Herrich-Schäffer, 1854, pl. 43

[Type species: *Pyromorpha dimidiata* Herrich-Schäffer, 1854, pl. 43, by monotypy]

*Malthaca* Clemens, 1861, 540

[Type species: *Malthaca perlucidula* Clemens, 1860, 541, by monotypy]

*Coementa* Druce, 1885, 123

[Type species: *Coementa timon* Druce, 1885, 123, by subsequent designation by Kirby, 1892, 287]

Larval host-plants: Fagaceae (*Quercus*).

Subgenus ***Gingla*** Walker, 1864, 128

[Type species: *Gingla radialis* Walker, 1864, 128, by monotypy]

Larval host-plants: unknown.

***P. (G.) radialis*** (Walker, 1864, 128) (*Gingla*)

Distribution: Mexico (subsp. *radialis*); Guatemala (subsp. *drucei*); Guatemala (subsp. *crypta*).

***P. (G.) radialis radialis*** (Walker, 1864, 128) (*Gingla*)

***P. (G.) radialis drucei*** (Jordan, 1913, 22) (*Malthaca*)

***P. (G.) radialis crypta*** (Hering, 1924, 270) (*Malthaca*)

***P. (G.) synecha*** (Hering, 1924, 271) (*Malthaca*)

Distribution: Costa Rica, Panama, Colombia, Peru.

***P. (G.) contermina*** (H. Edwards, 1884a, 13) (*Lycomorpha*)

*aequalis* (Druce, 1885, 123) (*Gingla*)

Distribution: Mexico.

***P. (G.) perezi*** Tarmann, 1984b, 97

Distribution: Mexico.

***P. (G.) josialis*** (Druce, 1885, 123) (*Gingla*)

Distribution: Guatemala.

**P. (G.) timon** (Druce, 1885, 123) (*Coementa*)

Distribution: Costa Rica.

**P. (G.) tristeza** Tarmann, 1984b, 99

Distribution: Colombia.

**P. (G.) xanthura** (Jordan, 1913, 23) (*Malthaca*)

Distribution: Ecuador.

**P. (G.) semifulva** (Druce, 1896, 332) (*Lycomorpha*) (**C43**)  
*basirei* (Druce, 1896, 331) (*Lycomorpha*)

Distribution: Mexico.

**P. (G.) morio** (Druce, 1885, 123) (*Coementa*)

Distribution: Guatemala, Costa Rica.

**P. (G.) monochroma** (Hering, 1924, 270) (*Malthaca*)

Distribution: Bolivia.

Subgenus ***Euclimaciopsis*** Tremewan, 1973, 126

[Type species: *Gingla tortricalis* Druce, 1885, 120, by monotypy]

*Euclimacia* Jordan, 1913, 21 (a junior homonym of *Euclimacia* Enderlein, 1910, 342 - Insecta, Neuroptera. The objective replacement name is *Euclimaciopsis* Tremewan, 1973, 126)

[Type species: *Gingla tortricalis* Druce, 1885, 120, by monotypy]

Larval host-plants: unknown.

**P. (E.) tortricalis** (Druce, 1885, 120) (*Gingla*)

Distribution: Costa Rica.

Subgenus ***Pyromorpha*** Herrich-Schäffer, 1854, pl. 43

[Type species: *Pyromorpha dimidiata* Herrich-Schäffer, 1854, pl. 43, by monotypy]

Larval host-plants: Fagaceae (*Quercus*) (known for *P. (P.) dimidiata*, *P. (P.) cinniana*, *P. (P.) dyari*, *P. (P.) brueckneri*).

**P. (P.) dimidiata** Herrich-Schäffer, 1854, pl. 43 (Figure 59)  
*perlucidula* (Clemens, 1861, 541) (*Malthaca*)

Distribution: eastern USA.

**P. (P.) caelebs** Blanchard, 1972, 79

Distribution: southern USA (Texas).

**P. (P.) marginata** (H. Edwards, 1884a, 13) (*Lycomorpha*)

Distribution: Mexico.

**P. (P.) teos** (Schaus, 1889, 88) (*Lycomorpha*)

Distribution: Mexico.

**P. (P.) astora** (Dyar, 1912a, 99) (*Gingla*)

Distribution: Mexico.

**P. (P.) cinniana** Druce, 1884, 40

*tristrigata* (Hering, 1926, 110) (*Tetraclonia*)

Distribution: southern Mexico, Guatemala.

**P. (P.) dyari** (Jordan, 1913, 24) (*Tetraclonia*) (Figure 60)

*laterculae* (Dyar, 1900, 32) (*Gingla*) (a junior primary homonym of *Lycomorpha latercula* H. Edwards, 1882, 124)

Distribution: southern USA, Mexico.

**P. (P.) forreri** (Druce, 1884, 37) (*Procris*)

Distribution: Mexico.

**P. (P.) jordani** (Hering, 1924, 226) (*Malthaca*)

Distribution: Mexico.

**P. (P.) latercula** (H. Edwards, 1882, 124) (*Lycomorpha*)

*flavescens* (Hering, 1924, 272) (*Tetraclonia latercula* "forma")

*beovava* (Dyar, 1918b, 366) (*Gingla*)

*erythromelas* (Jordan, 1913, 22) (*Malthaca*)

Distribution: southern USA, Mexico.

**P. (P.) brueckneri** (Hering, 1926, 109) (*Tetraclonia*)

*mimica* (Hering, 1926, 111) (*Seryda*)

Distribution: Guatemala.

**P. (P.) centralis** (Walker, 1854, 288) (*Lycomorpha*)

*notha* (H. Edwards, 1885, 128) (*Lycomorpha*)

Distribution: Mexico.

**P. (P.) ursula** (Hering, 1924, 267) (*Malthaca*)

Distribution: Mexico.

*P. (P.) monotona* (Hering, 1924, 266) (*Malthaca*)

Distribution: Mexico.

*P. (P.) myrla* (Dyar, 1912a, 99) (*Gingla*)

Distribution: Mexico.

*P. (P.) flavibasalis* (Hering, 1938, 431) (*Tetraclonia*)

Distribution: Guatemala.

*P. (P.) brueckneriana* (Hering, 1938, 405) (*Malthaca*)

Distribution: Guatemala.

*P. (P.) costaricensis* Tarmann, 1984b, 102

Distribution: Costa Rica.

*P. (P.) cuchumatana* Tarmann, 1984b, 100

Distribution: Guatemala.

*P. (P.) ripena* (Druce, 1906, 86) (*Ptychoglene*)  
*tetraclonioides* (Hering, 1924, 269) (*Malthaca*)

Distribution: Bolivia, Peru.

Genus *Tetraclonia* Jordan, 1913, 24

[Type species: *Tetraclonia saucia* Jordan, 1913, 24, by original designation]

Larval host-plants: unknown.

*T. nigrivena* Hering, 1928, 280

Distribution: Peru.

*T. zischkai* Tarmann, 1984b, 105

Distribution: Bolivia.

*T. saucia* Jordan, 1913, 24

Distribution: Peru.

Genus *Gonioprocris* Jordan, 1913, 23

[Type species: *Gonioprocris xena* Jordan, 1913, 23, by original designation]

Larval host-plants: Fagaceae (*Quercus*) (probably, see Tarmann 1984, 110).

**G. xena** Jordan, 1913, 23

Distribution: Guatemala.

**G. siruna** Hering, 1938, 406 (Figure 58)

Distribution: Guatemala.

**G. megalops** (Druce, 1884, 38) (*Seryda*)

Distribution: Guatemala.

Genus ***Triprocris*** Grote, 1873, 35

[Type species: *Procris smithsoniana* Clemens, 1861, 540, by original designation and monotypy]

Larval host-plants: Nyctaginaceae (known for *T. smithsoniana*, *T. yampai*, *T. cyanea*).

**T. smithsoniana** (Clemens, 1861, 540) (*Procris*)

Distribution: western USA.

**T. yampai** Barnes, 1905, 215

Distribution: western USA.

**T. cyanea** Barnes & McDunnough, 1910, 162 (Figure 61)

Distribution: western USA.

**T. lustrans** Beutenmüller, 1894, 367

Distribution: western USA.

**T. ruemelii** (Druce, 1884, 40) (*Harrisina*)

Distribution: Mexico.

**T. rosetta** Dyar, 1918b, 366

Distribution: Mexico.

**T. similissima** Tarmann, 1984b, 112

Distribution: Mexico.

**T. auchenochrysa** (Dyar, 1912a, 99) (*Harrisina*)  
*flavithorax* (Hering, 1925, 165) (*Harrisina*)

Distribution: Mexico.

**T. flavipuncta** Tarmann, 1984b, 114

Distribution: Brazil.

Genus **Pampa** Walker, 1854, 238

[Type species: *Euchromia mystica* Walker, 1854, 239. by subsequent designation by Kirby, 1892, 112]

*Nesace* Kirby, 1892, 112 (unnecessary objective replacement name for *Pampa* Walker, 1854, 238)

[Type species: *Euchromia mystica* Walker, 1854, 239, by subsequent designation by Kirby, 1892, 112]

Larval host-plants: Vitaceae.

**P. anisa** (Hering, 1924, 275) (*Harrisina*)

Distribution: Bolivia.

**P. boliviensis** (Hering, 1924, 274) (*Harrisina*)

Distribution: Bolivia.

**P. pseudovenata** Tarmann & Drouet, 2015, 215

Distribution: French Guiana.

**P. approximata** (Hering, 1924, 275) (*Harrisina*)

*prava* (Hering, 1925, 166) (*Harrisina*)

Distribution: Columbia.

**P. teresa** (Druce, 1899, 232) (*Harrisina*)

Distribution: Mexico.

**P. mystica** (Walker, 1854, 239) (*Euchromia*)

Distribution: Honduras.

**P. venata** (Jordan, 1913, 28) (*Harrisina*)

Distribution: Brazil.

**P. peritta** (Hering, 1924, 274) (*Harrisina*)

Distribution: Brazil.

**P. erythrogramma** (Hering, 1924, 273) (*Harrisina*)

Distribution: Uruguay.

**P. virescens** (Hampson, 1907, 328) (*Nesace*)

Distribution: Brazil.

**P. erroris** Tarmann, 1984b, 119

Distribution: Brazil.

**P. rubroventralis** (Hering, 1932, 154) (*Harrisina*)

Distribution: Brazil.

**P. hermieri** Tarmann & Drouet, 2015, 214

Distribution: French Guiana.

**P. splendens** (Jordan, 1913, 29) (*Harrisina*)

Distribution: Peru.

**P. smaragdina** (Hering, 1941, 111) (*Harrisina*)

Distribution: Columbia, French Guiana.

**P. janeira** (Schaus, 1892, 272) (*Harrisina*)

Distribution: Brazil.

**P. lepta** (Jordan, 1913, 28) (*Harrisina*)

Distribution: Columbia.

**P. mephisto** (Jones, 1921, 356) (*Harrisina*)

Distribution: Brazil.

**P. aidae** Tarmann, 1984b, 123

Distribution: Brazil.

**P. eminens** (Schaus, 1892, 272) (*Harrisina*)

Distribution: Brazil.

**P. incredibilis** Tarmann, 1984b, 124

Distribution: Brazil.

**P. esperanzae** Tarmann, 1984b, 127

Distribution: Brazil.

**P. zikani** (Hering, 1932, 154) (*Harrisina*)

Distribution: Brazil.

*P. anamariae* Tarmann, 1984b, 132

Distribution: Brazil.

*P. pseudoeminens* Tarmann, 1984b, 133

Distribution: Paraguay.

*P. proeminens* (Jörgensen, 1932, 49) (*Harrisina*)

Distribution: Brazil.

*P. fulvinota* (Butler, 1876, 361) (*Harrisina*)

Distribution: Brazil.

*P. brevistrigata* (Hering, 1924, 276) (*Harrisina*)

Distribution: Brazil.

*P. seitzii* (Hering, 1932, 155) (*Harrisina*)

Distribution: Brazil.

*P. innocens* (Hering, 1925, 165) (*Harrisina*)

Distribution: Brazil.

*P. ricara* (Jörgensen, 1932, 49) (*Harrisina*)

Distribution: Paraguay.

Genus *Stylura* Burmeister, 1878, 391

[Type species: *Laemocharis forficula* Herrich-Schäffer, 1855, pl. 54, by monotypy]

Larval host-plants: Vitaceae.

*S. forficula* (Herrich-Schäffer, 1855, pl. 54) (*Laemocharis*)

Distribution: Brazil.

*S. brasiliensis* Costa Lima, 1928, 25 (Figure 14)

Distribution: Brazil.

*S. cirama* (Druce, 1896, 330) (*Harrisina*)

Distribution: Guatemala, Costa Rica.

*S. guyanensis* Tarmann & Drouet, 2015, 225

Distribution: French Guiana.

**S. lamonti** Tarmann & Cock, 2019, 155

Distribution: Trinidad.

Genus **Harrisina** Packard, 1864, 31

[Type species: *Aglaope americana* Guérin-Méneville, 1844, 501, by subsequent designation by Dallas, 1865, 499]

*Harrisinula* Hering, 1925, 158

[Type species: *Harrisinula infernalis* Hering, 1925, 153, 158, by original designation]

Larval host-plants: Vitaceae (known for *H. americana*, *H. coracina*, *H. metallica*, *H. guatemalena*).

**H. americana** (Guérin-Méneville, 1844, 501) (*Aglaope*)

*texana* Stretch, 1872, 181

*australis* Stretch, 1885, 102

Distribution: eastern and southern USA.

**H. coracina** (Clemens, 1861, 539) (*Aglaope*)

*nigrina* Graef, 1887, 41

Distribution: southern USA, northern Mexico.

**H. metallica** Stretch, 1885, 102 (Figure 62)

*brillians* Barnes & McDunnough, 1910, 162

*coracina* (sensu Neumoegen & Dyar, 1894, 65) (nec Clemens 1861, 539)

*elongata* Druce, 1896, 330

*tessacans* Dyar, 1912a, 100

Distribution: western USA, northern Mexico.

**H. charax** Druce, 1896, 330

Distribution: Mexico.

**H. draudti** Hering, 1925, 166

Distribution: Mexico.

**H. chalcina** Jordan, 1913, 28

Distribution: Mexico.

**H. mexicana** Schaus, 1889, 87, stat. rev. (C44)

Distribution: Mexico.

**H. guatemalena** (Druce, 1884, 40) (*Aglaope*)

Distribution: Guatemala, Costa Rica.

**H. tergina** Jordan, 1913, 28

Distribution: Colombia.

**H. infernalis** (Hering, 1925, 158) (*Harrisinula*)

Distribution: Brazil.

**H. longicaulis** Hering, 1925, 165

Distribution: Venezuela.

Genus **Harrisinopsis** Jordan, 1913, 26

[Type species: *Harrisinopsis robusta* Jordan, 1913, 26, by original designation and monotypy]

*Monalita* Tremewan, 1973, 134 (see Gernaat et al. 2022, 164)

[Type species: *Lamontia calibana* Kaye, 1923, 997, by monotypy]

*Lamontia* Kaye, 1923, 997 (a junior homonym of *Lamontia* Kirk, 1895, 289 - (Calcarea, Spongidae (now Baeriidae)).

The objective replacement name is *Monalita* Tremewan, 1973, 134)

[Type species: *Lamontia calibana* Kaye, 1923, 997, by monotypy]

Larval host-plants: Chrysobalanaceae (*Hirtella paniculata*) (Gernaat et al. 2022).

**H. robusta** Jordan, 1913, 26 (Figure 20)

*tessmanni* Hering, 1928, 281

Distribution: Peru, Brazil, French Guiana, Surinam.

**H. calibana** (Kaye, 1923, 997) (*Lamontia*)

Distribution: Trinidad.

**H. faurei** (Tarmann & Drouet, 2015, 227) (*Monalita*)

Distribution: French Guiana.

**H. laguerrei** (Tarmann & Drouet, 2015, 228) (*Monalita*)

Distribution: French Guiana.

Genus **Setiodes** Herrich-Schäffer, 1866, 106

[Type species: *Setiodes nana* Herrich-Schäffer, 1866, 106, by monotypy]

*Formiculus* Grote, 1866, 184

[Type species: *Formiculus pygmaeus* Grote, 1866, 185, by monotypy]

Larval host-plants: Vitaceae (*Vitis* spp.).

**S. nana** Herrich-Schäffer, 1866, 106

Distribution: Cuba (subsp. *nana*); Bahamas (subsp. *bahamensis*).

- S. nana nana** Herrich-Schäffer, 1866, 106  
    *pygmaeus* (Grote, 1866, 185) (*Formiculus*)  
**S. nana bahamensis** Dyar, 1899, 100  
    *albimacula* (Hampson, 1904, 180) (*Nesaca*)

Genus **Zikanella** Hering, 1932, 153

[Type species: *Zikanella rubrivitta* Hering, 1932, 153, by original designation and monotypy]

Larval host-plants: unknown.

**Z. rubrivitta** Hering, 1932, 153

Distribution: Brazil.

Genus **Urodopsis** Jordan, 1913, 29

[Type species: *Urodus subcaeruleus* Dognin, 1910, 43, by original designation]

Larval host-plants: unknown.

**U. subcaerulea** (Dognin, 1910, 43) (*Urodus*)

Distribution: Colombia.

**U. dryas** Jordan, 1915, 301

Distribution: Brazil.

**U. pusilla** (Walker, 1854, 112) (*Procris*)

Distribution: Venezuela, Brazil.

**U. melaenella** (Hampson, 1919, 272) (*Pycnoctena*)  
    *hyalina* Hering, 1932, 155

Distribution: Brazil.

Genus **Pycnoctena** Felder, 1874, pl. 83

[Type species: *Pycnoctena angustula* Felder, 1874, pl. 83, by monotypy]

Larval host-plants: unknown.

**P. angustula** Felder, 1874, pl. 83

Distribution: Brazil, French Guiana.

**P. invaria** (Walker, 1854, 240) (*Euchromia*)

Distribution: Brazil.

**P. tristis** Hering, 1932, 153

Distribution: Brazil.

*P. dantasi* (Schaus, 1892, 272) (*Harrisina*)

*uniformis* (Hering, 1932, 153) (*Seryda*)

Distribution: Brazil.

Genus *Seryda* Walker, 1856, 1598

[Type species: *Seryda cincta* Walker, 1856, 1598, by monotypy]

Larval host-plants: unknown.

*S. cincta* Walker, 1856, 1598

Distribution: Brazil.

*S. actinota* Jordan, 1913, 26

Distribution: Colombia.

*S. isa* Jordan, 1913, 26

Distribution: Ecuador.

*S. glaucotis* (Hampson, 1907, 328) (*Caementa*)

Distribution: Guatemala.

*S. gallardi* Tarmann & Drouet, 2015, 231

Distribution: French Guiana.

*S. confusa* Tarmann & Drouet, 2015, 232

Distribution: French Guiana.

*S. kairi* Tarmann & Cock, 2019, 159

Distribution: Trinidad.

### These three species cannot be placed

These three species definitely do not belong into the genera in which they have been placed so far. All are species described from a single specimen and have never been seen since. Type examinations have been done, dissections also. However, it is not possible to describe three new genera based on one single specimen each and without sufficient characters for a diagnosis and differential diagnosis.

*Gingla phonicoruma* Dyar, 1912b, 748 (Mexico)

*Acolothus erythrozona* Dyar, 1912a, 100 (Mexico)

*Procris? chalestra* Druce, 1899, 231 (Costa Rica)

## Comments

**C01** The data of morphology and last DNA results showed that the genus *Thyrassia* forms an isolated monophyletic group within the subfamily Procridinae. We are describing here a new tribe Thyrassiini to reflect this situation.

**Tribe Thyrassiini Efetov & Tarmann, tribus nov.**

[Type-genus: *Thyrassia* Butler, 1876, 355]

Description. Habitus ctenuchid like, forewings triangular, brown, with transparent, white or yellow spots; hindwings extremely short, oval, brown, transparent or yellow with dark brown margin; head rounded, not compressed dorso-ventrally, with large compound eyes and a chaetosema that extends slightly but not completely between the compound eyes and the ocellus; chaetosema extended dorsomedially, the two ends of each side almost touching each other medially. The free space between the base of antenna, ocellus, compound eye and chaetosema and a narrow ring around the compound eye not smoothly scaled (as in all other Procridinae) but covered with a series of tiny hair-like scales (Tarmann 2004, p. 21, fig. 70). Antenna shortly bipectinate proximally, very shortly biserrate distally in both sexes (Tarmann, 2004, p. 22, figs 71-74). Legs short and robust; foretibia with epiphysis, tibial spurs absent. Frenulum a single spine in male and female. Abdomen without lateral evaginations on segments two and seven.

Male genitalia with short, stout, triangular, distally rounded uncus that is completely fused with the large tegumen; valva almost rectangular, without processes, central translucent part slightly fan-shaped; a long finger-like process inserted at the dorsal base of valva; this process forked basally, the short lateral process obviously representing an apodeme for a muscle to move the finger, the latter bent distally and bearing a brush of strong, short, backward-pointing spines. Aedeagus short, stout, strongly sclerotized, everted vesica without cornuti (Tarmann, 2004, p. 217, figs 423-424).

Female genitalia with the papillae anales fused to a short ovipositor; ostium and ductus bursae translucent, without antrum; praebursa absent. The insertion of the ductus seminalis into the bag-like translucent corpus bursae is situated at the very centre of the corpus. This indicates that a possibly earlier present praebursa may be fused with the corpus bursae as otherwise the ductus seminalis must insert at the point where the ducus bursae widens into the corpus (Tarmann, 2004, p. 217, fig. 425). See also Tarmann (2004, pp. 215-216). Larval host-plants: Vitaceae. Distribution. Southern and southeastern Asia, Australia.

**C02** Most of Australian genera form a separate monophyletic branch of Procridinae that cannot be attributed to any hitherto known tribe. Therefore we are providing a description of a new tribe with the aim to accommodate this group.

**Tribe Pollanisini Efetov & Tarmann, tribus nov.**

[Type-genus: *Pollanisus* Walker, 1854, 114]

Description. Habitus variable, head dorsoventrally compressed, chaetosema extended between compound eye and ocellus (like in Artonini); foreleg without epiphysis, hindleg without medial spurs; genitalia male - valva fan-shaped without “Artona-finger”; genitalia female - praebursa absent or if present, translucent, without double row of spines; larval host-plants: Dilleniaceae, Myrtaceae, Vitaceae, Arecaceae. Distribution. Australia, Fiji (1 species), South Africa (1 species).

**C03** The genus *Pollanisus* was revised recently by Mollet & Tarmann (2023). The taxonomy and systematic order given here is following this revision.

**C04** The taxon *Pollanisus amethystina* (Meyrick, 1888) was synonymized with *P. emporea* (Meyrick, 1888) by Tarmann (2004) on the base of genitalia similarity and the fact that both taxa occur in the

same regions of Western Australia and colour variations between more greenish, coppery or bluish shiny scales on the forewing upperside are not a significant character to distinguish species in the genus *Pollanisus*. However, new studies by Mollet (2019) have shown that these two taxa are in fact good species. Mollet reared both species from eggs to imagines, found that they live on different larval host-plants and have different habitats and distribution patterns. Consequently, he correctly reinstated *Pollanisus amethystina* as valid species.

**C05** The phylogenetic position of *Levuana* Bethune-Baker, 1906, was cleared up by Nazari et al. (2019) by obtaining New Generation Sequencing (NGS)-results of historical material of *L. iridescens*, the type-species of *Levuana*. The DNA results and the morphological results were combined and show that this genus is close to the Australian genus *Myrtartona* Tarmann, 2004.

**C06** After the exclusion of Thryassiini, Pollanisini and Cleleini (see below) Artonini form a monophyletic group with important apomorphic character, viz. the presence of a movable process near the apex of sacculus (“*Artona-finger*”). All species with this character are included within Artonini Tarmann, 1994, for which redescription can be found below.

**Tribe Artonini** Tarmann, 1994, 120  
[Type-genus: *Artona* Walker, 1854, 439]

Description. Habitus variable, head dorsoventrally compressed, chaetosema extended between compound eye and ocellus; foreleg with epiphysis, hindleg with single medial spur; genitalia male - valva with “*Artona-finger*”, genitalia female - praebursa present, sclerotized, with double row of pointed spines; larval host-plants: Poaceae, Zingiberaceae, Pittosporaceae, Lauraceae, Musaceae, Arecaceae. Distribution. Australia, eastern, southern and southeastern Asia, tropical Africa.

**C07** The genus *Artona* Walker, 1854, is still not sufficiently revised (see comment “C1” in Efetov & Tarmann 2012, p. 38) and the taxonomic situation at species level has not changed since. *Artona* still needs revising based on the entire type material but also with the inclusion of all the already known new species that have to be described and accommodated. The genus *Artona* is divided here into 5 subgenera: *Artona* Walker, 1854, *Zeuxippa* Herrich-Schäffer, 1855, **stat. nov.**, *Balataea* Walker, 1865, **stat. rev.**, *Pseudosesidia* Alberti, 1954, **stat. rev.**, and *Fuscartona* Efetov & Tarmann, 2012.

**C08** The type-species of the genus *Artona*, viz. *A. discivitta* Walker, 1854, originates from the Nilgiris (Western Ghats, Tamil Nadu, southern India) and is a geographically very isolated species. It shows genitalic characters that are different from all other species that are currently included into the genus *Artona*. All these species share with *Artona discivitta* the characteristic black and yellow habitus, the characteristic sexual dimorphism in pattern and the larval host-plants from the family Poaceae. However, the “brush” at the end of the “*Artona-finger*” in the male genitalia is much stronger developed in all these species (except *A. martini* Efetov, 1997a, and *A. uniformis* (Alberti, 1954)) than in *A. discivitta* where it is almost absent and only represented by a few setae. The “*Artona-finger*” in *A. discivitta* is only weakly developed, shorter and more slender than in all other species. There are also significant differences in the female genitalia (i.e. different form of praebursa in *A. discivitta*). The authors are well aware of this situation but prefer not to separate all other black and yellow species that are currently included into the genus *Artona* from its type-species *A. discivitta*. However, we leave *A. discivitta* as only one species in the subgenus *Artona*. Other species of the genus are included in the subgenera *Zeuxippa*, *Balataea*, *Pseudosesidia* and *Fuscartona*.

**C09** *Artona zebraica* and *A. fulvida* are described in the same paper by Butler (1876, p. 356). These two taxa show very well how problematic the taxonomic situation within the genus *Artona* is. There are several species known with the habitus of *A. zebraica* (i.e. black ground colour with yellow spots on

the forewing and some dark stripes in the hindwing and an abdomen that is narrowly ringed with yellow and black). These species are: *A. digitata*, *A. nigrescens*, *A. phaeoxantha*, *A. khasiana* (male), *A. hypomelas* (male), *A. walkeri* (male), *A. hainana* (male). However, most specimens with the habitus of *A. zebraica* are males whereas all specimens with the habitus of *A. fulvida* are females.

*A. fulvida* has the hindwing yellow with a dark margin and the abdomen always uniformly yellow with the first segment dark and the abdominal end also dark at least laterally. Species with *A. fulvida* habitus are: *A. confusa*, *A. diffusa*, *A. flaviciliata*, *A. hypomelas* (female), *A. khasiana* (female), *A. walkeri* (female), *A. hainana* (female). Species from the subgenera *Artona* and *Zeuxippa* (genus *Artona*) are sexually dimorphic. It is therefore possible that Butler in 1876 described males and females of the same species as two different taxa. However, most species of *Artona* (*Zeuxippa*) show this characteristic sexual dimorphism and this has already been mentioned by Jordan (1907a-1908) (e.g. for *A. khasiana* Jordan, 1908, *A. hypomelas* Jordan, 1908). There are good genitalic differences between the different taxa. However, we often do not know which males belong to which females. Moreover, there are also females with almost “male habitus” known and it seems that the sexual dimorphism is not equally strong in all species. The whole situation is pretty hopeless as long as we are dependent on historical museum material. Rearing experiments from egg would solve this problem. In addition, the comparison of DNA sequences of new material could bring us further. However, species of *Artona* (subgenera *Artona* and *Zeuxippa*) have rarely been collected in the last decades and little new material is available. Moreover, the early stages and the life histories of most species are unknown.

**C10** *Artona nigrescens* Butler, 1876, is distributed in northern India. It has been treated as a subspecies of *A. walkeri* Butler, 1876, by Jordan (1908, p. 43). Bryk (1936, p. 252) followed this opinion. However, *A. (Zeuxippa) walkeri* (Moore, 1859) is endemic to Java and Bali (see comment **C11**). Therefore we have to raise *Artona nigrescens* Butler, 1876, back to species level until more information is available. The new status is: *Artona (Zeuxippa) nigrescens* Butler, 1876, **stat. rev.**

*Artona neglecta* Hering, 1925, is based on one single female (holotype). Hering describes it as “nahestehend *Artona walkeri*” (near to *A. walkeri*) and states that the pattern looks like that of *A. walkeri hainana*. However, we must take in account that *A. (Z.) walkeri* is endemic to Java and Bali (see comment **C11**) and *A. (Z.) hainana* is considered to represent a good species. *A. neglecta* is described from northern India and is almost certainly not conspecific with *A. (Z.) walkeri* or *A. (Z.) hainana*. We therefore treat *A. (Z.) neglecta* in this checklist again as a separate species as long as we cannot prove that it belongs to any other so far described species. The status is now: *Artona (Zeuxippa) neglecta*, **stat. rev.**

*Artona guttata* Snellen, 1892, has also been treated as a subspecies by Jordan (1908, p. 43) (like *A. nigrescens*) but of *A. zebraica* Butler, 1876. It occurs in central Sumatra. The female type deposited in NNML (Leiden, NL) and additional material from the BMNH (London, UK) show that this taxon is different from all *Artona* (*Zeuxippa*) species that are known from India, the SE Asian mainland and from the other Sunda Islands. We therefore treat *Artona guttata* Snellen, 1892, herewith again as a valid species. The status is now: *Artona (Zeuxippa) guttata*, **stat. rev.**

**C11** Moore (1859) described *Syntomis walkeri* after male and female specimens from Java collected by Dr Horsefield. One male specimen in the BMNH has a round pin-label with red ring with the printed inscription “Type”. As far as we know, a lectotype has never been designated. The attached type label must have been put on the pin later, presumably by Karl Jordan who treated the Zygaenidae in the volumes of Seitz (1907a, 1907c, 1908). We therefore designate this specimen herewith as the male **lectotype** and figure it (Figure 26).

Subsequently, *Artona walkeri* was mentioned from various south and southeast Asian countries between the Himalayas, southern China and the Sunda Islands and several taxa have been attached to this species as subspecies (Hampson, 1893; Jordan, 1907; Bryk, 1926; Alberti, 1854). However, as far as examined by us, *Artona (Zeuxippa) walkeri* (Moore, 1859) is restricted to the islands of Java and Bali. All specimens that are mentioned in the literature as *A. walkeri* but not originating from these two

islands have been misidentified. The genitalia of *A. (Z.) walkeri* are very characteristic (especially of the female) and cannot be mixed with other *Artona* species.

**C12** *Artona pluristrigata* is only known from its female holotype. The habitus is different from most other species that are currently included into the genus *Artona*. Its generic position has to be verified and has already been doubted by Holloway (2011, p. 24, tab. 1, fig. 6).

**C13** The recently described three female specimens from China, Guangdong as a new species *S. nanling* Owada & Wang, 2021, have no strong differences in characters from those of the holotype of *Bintha clathrata* Poujade, 1886a, a species known so far only from two female specimens (Huang & Efetov, 2021). It is difficult to judge whether the specimens described as *S. nanling* really belong to a species different from *S. clathrata*. More material is necessary to evaluate the character variability in this genus.]

**C14** A number of species that have so far been treated as *Artona* Walker, 1854, and *Homophylotis* Turner, 1904, belong to the genus *Amuria* Staudinger, 1887, as they are congeneric with its type species *Amuria cyclops* Staudinger, 1887. The larvae of none of them feed on Poaceae, as far as the biology is known. The habitus is dominated by dark (mainly brown, purplish or bluish) colors. Some of these species are almost uniformly dark and if there is a pattern the dark colors contrast with white or light yellow markings. The typical black and yellow wing pattern of *Artona* s. str. (now subgenera *Artona* and *Zeuxippa*) is absent and the body is never ringed with yellow and black like in most *Artona* species. In the male genitalia the apex of the valva bears spiny prolongations (found also in *Balataea* but absent in the subgenera *Artona* and *Zeuxippa*). There are also differences in the female genitalia. In habitus, *Amuria* species are also similar to species of the subgenus *Pseudoamuria* Tarmann, 2004, and species of the genus *Homophylotis* Turner, 1904. At the moment we have to admit that we still have a great deficit in the knowledge of many of the existing species. More careful morphological examinations are necessary to give us an idea on the variability of characters. Fresh material would be important for DNA analyses. The knowledge of the biology may also give us important further information. However, most of the known species are only available in single specimens and many of them are more than 100 years old. See also comment C16.

**C15** *Brachartona quadrisignata* Snellen, 1903 (on p. 234) and *Brachartona trisignata* Snellen, 1903 (on p. 235) are female and male of the same species as can be seen from extended reared material from Java that is deposited in "Naturalis, Natural History Museum, Leiden, Netherlands". The habitus described by Snellen for *B. quadrisignata* is that of the female, that described for *B. trisignata* that of the male. Consequently, we have to accept that these two names are synonyms. However, the name *Brachartona trisignata* Snellen, 1903, is much more often used in literature than *Brachartona quadrisignata* Snellen, 1903, especially in the literature on applied entomology (e.g. Tothill, et al. 1930). We therefore prefer to keep the name *Brachartona trisignata* Snellen, 1903, and synonymise *Brachartona quadrisignata* Snellen, 1903, **syn. nov.**, with *B. trisignata*. This species is currently accommodated in the genus *Amuria* Staudinger, 1887.

**C16** *Pseudoamuria* Tarmann, 2004, was described to accommodate the species *Pseudoamuria uptoni* Tarmann, 2004. There was a second species included in Tarmann (2004), viz. *Pseudoamuria neglecta* Tarmann, 2004. Both have similar habitus as *Homophylotis* Turner, 1904, but they lack the typical genitalia structures of *Homophylotis* (description see below). However, when Tarmann described this genus he had three males and one female of the type species *P. uptoni* Tarmann, 2004, with well-preserved genitalia but only one very bad female genitalia of the holotype of *Pseudoamuria neglecta* Tarmann, 2004. This specimen had been attacked by *Anthrenus* beetles earlier. Since then more material has become known from *P. neglecta* and also a well preserved female. Now we can see that the

female of *P. neglecta* has a well-developed praebursa with a prominent crest with dentations such as we find in *Amuria* Staudinger, 1887.

While examining more material from the Indo-Pacific region with the habitus of *Amuria*, *Pseudoamuria* and *Homophylotis* we found that there are more species involved where the praebursa lacks the characteristic crest with dentations. However, there is also more material available of species with genitalia of the “*Pseudoamuria neglecta* type”. They cannot be mixed with *Homophylotis* as in this genus the female has a very characteristic autapomorphy, i.e. the translucent praebursa and the corpus bursae are fused to a single structure and the ductus seminalis inserts in the middle of this structure (at the place where the fusion has taken place) (see Tarmann, 2004, pp. 197–200, figs 385–401).

We therefore find three genitalia types in the females of *Amuria*, *Pseudoamuria* and *Homophylotis*:

- 1, praebursa well developed, strongly sclerotized, with a prominent crest that bears dentations (*Amuria*-type);
- 2, praebursa well-developed, translucent, without a prominent crest that bears dentations (*Pseudoamuria*; but not *P. neglecta* - with strongly sclerotized praebursa with dentations!);
- 3, praebursa and corpus bursae fused to a single, translucent structure (*Homophylotis*-type).

Only after an examination of all the type material and the additional material that is deposited in museum collections can we decide whether it will be necessary to describe more genera to accommodate all the known species (see comment **C07**). This work could not be completed so far.

Moreover, it seems highly uncertain that all species can be summarized in one genus or subgenus (e.g. *Pseudoamuria*) where the typical praebursa of the *Amuria*-type is not found and which cannot be placed under *Homophylotis* because their genitalia characters do not agree with the characters (see above) of that genus. The reduction of the sclerotized praebursa with the characteristic crest with dentations has most probably taken place several times independently in evolution.

Therefore, for the moment, as a compromise, we accommodate all Indo-Pacific species with the habitus of *Amuria*, *Pseudoamuria* or *Homophylotis* with a well-developed praebursa with a prominent crest that bears dentations into the genus *Amuria* Staudinger, 1887, but also all species that have this habitus and lack the praebursa with the dentate crest. All species that have praebursa and corpus bursae fused to a single structure (as described above) are accommodated under the genus *Homophylotis* Turner, 1904. An exception is *Palmartona* Tarmann, 2004, that has very special antennal and genitalic characters. This taxon is left separately and treated here as a genus.

**C17** *Homophylotis melaleuca* Jordan, 1908, is treated as *Pseudoamuria melaleuca* (Jordan, 1908) in Tarmann (2004, p. 294, figs 403, 409) and its male genitalia is figured. However, the specimen taken for the figures has now shown to be an undescribed new species from New Guinea. Its larva lives on banana trees. (A description is postponed as a dissection of the type of *Homophylotis melaleuca* Jordan, 1908, deposited in BMNH (London) is essential for a proper differential diagnosis!).

**C18** *Homophylotis aenea* Jordan, 1925, lacks the characters that are described as typical for *Homophylotis* Turner, 1904, by Tarmann (2004, p. 191) based on the examination of type material. This is (in the male) the very small and translucent valva without ventral processes distally and a stout aedeagus (phallus) without any cornuti or eversible spines but with a characteristic spiny surface on the vesica. *H. aenea* has a female genitalia with a well-developed praebursa that contains a slightly curved spiny crest with long dentations. We therefore transfer *Homophylotis aenea* Jordan, 1925, to the genus *Amuria* Staudinger, 1887. The new combination is: *Amuria aenea* (Jordan, 1925), **comb. nov.**

**C19** *Homophylotis chalcosoma* Jordan, 1926, has also a well-developed praebursa with a row of dentations in the female genitalia. This species is therefore also transferred into the genus *Amuria*

Staudinger, 1887 (see also comment **C18**). The new combination is: *Amuria chalcosoma* (Jordan, 1926), **comb. nov.**

**C20** *Tasema nigra* Hampson, 1893, *Artona albicia* Hampson, 1900, *Homophylotis purpurata* Jordan, 1908, and *Pseudoamuria neglecta* Tarmann, 2004, are, for the moment, transferred to *Amuria* Staudinger, 1887, based on the arguments explained under **C16**. The new combinations are: *Amuria nigra* (Hampson, 1893), **comb. nov.**, *Amuria albicia* (Hampson, 1900), **comb. nov.**, *Amuria purpurata* (Jordan, 1908), **comb. nov.**, *Amuria neglecta* (Tarmann, 2004), **comb. nov.**.

**C21** All the remaining species that were hitherto included into Artonini and cannot be attributed to Thryassiini, Pollanisini and Artonini (sensu stricto, see definition above) form a group that is described here as the tribe Cleleini.

#### Tribe Cleleini Efetov & Tarmann, tribus nov.

[Type-genus: *Clelea* Walker, 1854, 465]

Description. Habitus variable, wings often of “*Procris*-type” sensu Alberti, 1954; foreleg with epiphysis (sometimes secondarily reduced), hindleg with single medial spur (sometimes secondarily reduced); genitalia male - valva without “*Artona*-finger”, genitalia female – praebursa absent or if present without double row of pointed spines; larval host-plants: Vitaceae, Hydrangeaceae, Fabaceae, Rosaceae, Poaceae. Distribution. eastern, southern and southeastern Asia, tropical Africa.

**C22** Owada (2021) published a study on the *Clelea formosana* complex from Taiwan and comes to the conclusion that *C. formosana* consists of the three different species: *C. formosana* Strand, 1915, *C. simplicior* Bryk, 1936, and *C. kanoi* Owada, 2021. In addition to habitus differences Owada found also small genitalic differences between these three taxa. All three taxa have a vicariant distribution. Based on the “concept for species and subspecies in this catalogue” (see introduction), we see these three taxa as good subspecies with geographical vicariant distribution and small genitalic differences and treat them in this catalogue as subspecies of *C. formosana*: *C. formosana formosana* Strand, 1915, *C. formosana simplicior* Bryk, 1936, **stat. nov.** and *C. formosana kanoi* Owada, 2021, **stat. nov.**

**C23** After the description of *Thibetana witti* Efetov, 1997c, it became clear that the two taxa *Artona zebra* Elwes, 1890, and *Artona postalba* Elwes, 1890, do not belong to the genus *Artona* Walker, 1854. They belong to *Thibetana* Efetov & Tarmann, 1995 (Efetov & Tarmann, 2017b).

**C24** We studied a specimen figured by Holloway, 2011, plate 1, fig. 26 as a male of “*Chrysartona pravata*” and found that it is a female of *Ch. hausmanni*.

**C25** *Ch. (Ch.) murzini* Mollet, 2016a, was described on the base of one male holotype. Only female holotype is known from *Ch. (Ch.) efetovi* Parshkova, 2007, distributed in northeastern India. The possible conspecificity of these taxa could be proven on the basis of additional material. Moreover, *Ch. (Ch.) hausmanni* Efetov, 2006, is also known only from females.

**C26** *Ch. (Chrystarm.) mineti* Efetov & Tarmann, 2013b, and *Ch. (Chrystarm.) antenor* Mollet, 2018, are very similar and both originate from Vietnam. Character variability in these two species in habitus as well as in the genitalia cannot be excluded. More material has to be examined to clear this.

**C27** The genus *Piarosoma* was revised by Efetov & Tarmann (unpublished) and Owada et. al. (2022) simultaneously. Owada et al. (2022) finished their studies earlier and have therefore priority. However, we list here additional facts from our typescript to give the reader a more complete picture on this interesting group.

*Hysteroscene* Hering, 1925 is a junior synonym to *Piarosoma* Hampson, 1893 (Owada et al. 2022).

At the time of Hering (1925), Bryk (1936) and Alberti (1954) the family Zygaenidae was separated into seven subfamilies: Himantopterinae Rogenhofer, 1884 (now a separate family within the Zygaenoidea), Phaudinae Kirby, 1892 (now a separate family within the Zygaenoidea); Chalcosiinae Walker, 1865; Charideinae Butler, 1876 (now a separate subfamily within the Thyrididae); Anomoeotinae Hering, 1937 (now a separate family within the Zygaenoidea); Procridinae Boisduval, 1828; and Zygaeninae Latreille. Based on the contemporary classification, after the exclusion of the subfamily Phaudinae Kirby, 1892 (now it is the family Phaudidae) and description of a new subfamily Inouelinae Efetov & Tarmann, 2017a, the family Zygaenidae includes five subfamilies: Inouelinae Efetov & Tarmann, 2017a; Procridinae Boisduval, 1828; Chalcosiinae Walker, 1865; Callizygaeninae Alberti, 1954; and Zygaeninae Latreille, 1809 (Efetov, 1999, 2001b; Efetov et al. 2014b; Efetov & Tarmann, 2017a). The Procridinae are represented by five tribes: Thyrassiini Efetov & Tarmann, tribus nov., Pollanisini Efetov & Tarmann, tribus nov., Artonini Tarmann, 1994, Cleleini Efetov & Tarmann, tribus nov., and Procridini Boisduval, 1828 (Efetov, 1996, 1997a, 1997b, 1998, 2001a, 2006, 2010; Efetov et al. 2004, 2014a, 2014c, 2016; Efetov & Hayashi, 2008; Efetov & Tarmann, 1995, 2013a, 2013b, 2014a, 2014b, 2016a, 2016b, 2017b, this publication, Tarmann, 1994).

*Piarosoma* Hampson, 1893, as well as *Hysteroscene* Hering, 1925, were arranged in Zygaeninae by Bryk (1936). However, Alberti (1954) in his world revision of Zygaenidae, transferred many genera from Zygaeninae and Chalcosiinae to Procridinae Boisduval, 1828, amongst them *Piarosoma* and *Hysteroscene*. In the meantime the subfamily Procridinae of Zygaenidae has been proved to represent a well-separated monophyletic group divided into the five tribes (see above). *Piarosoma* Hampson, 1893 (syn. *Hysteroscene* Hering, 1925) is a Procridinae based on the fact that in the female the spermatheca (= receptaculum seminis) is not divided into a tube-like utriculus and a bulb-like lagena as in most other ditrysian Lepidoptera and all other Zygaenidae subfamilies but developed as one structure, the bursa utricularis (Efetov & Tarmann, 2017a).

*Piarosoma* has a spherical head capsule and a triangular chaetosema that is placed very dorsally and is only slightly extended anteriorly and does not fill the space between the dorsal edge of the compound eye and the ocellus - it therefore should belong to the tribe Procridini. A fan-like valva in the male genitalia is slightly developed and can be seen in some male genitalia preparations but only under special illumination. The protuberances on abdominal segments 2 and 7 are absent. A single third medial spur on hind tibia is developed. Summarising all these characters we include here *Piarosoma* into the tribe Cleleini Efetov & Tarmann, tribus nov.

### Redescription of *Piarosoma*

Body with blackish ground colour with a bluish tinge in fresh specimens; thorax with white or creamy yellow patagia, forming a collar and a white or creamy yellow pattern on abdomen.

Head. Spherical, frons only slightly rounded, not proceeding dorsally; space between compound eye and ocellus without scales anteriorly but covered by a short extension of the triangular chaetosema posteriorly, labial palps short, slightly upcurved, not exceeding frons; antenna bipectinate in both sexes, pointed distally, with the length of the rami tapering towards apex. Proboscis well developed yellow or light brown.

Thorax. Patagia and tegulae well developed, patagia often coloured. Legs long, mid and hindleg almost as long as length of body. Foreleg with tibial epiphysis, hindleg with a pair of apical spurs and a single medial spur.

Wings with transparent areas, forewings one third longer than hindwing. Wing venation on forewing with  $R_2+R_3$  stalked together, all other veins free from cell, medial stem only developed as a groove and not as a full vein, the posterior margin of cell is formed by the basal part of vein  $CuA_1$  which is then running from the posterior edge of the cell in an upcurved way to the wing border, vein

$\text{CuA}_2$  is not fully developed, the basal part is completely reduced and the visible vein starts from a curved cross vein between  $\text{CuA}_1$  and  $\text{CuP}$  that forms an edge where  $\text{CuA}_2$  arises,  $\text{CuP}$  is fully developed and also  $1\text{A}+2\text{A}$ ; hindwing with  $\text{Sc}$  fused with the anterior part of cell for a short distance and free distally, all other veins free from cell, with three medial veins, medial stem only developed as a vein distally,  $\text{CuP}$  and the three anal veins  $1\text{A}$ ,  $2\text{A}$  and  $3\text{A}$  fully developed. Wing pattern very characteristic, with blackish and densely scaled parts and clear, completely scaleless, transparent “windows” that are arranged in groups on the wings and correspond in their margins with the exceptional wing venation of *Piarosoma*.

Abdomen without exceptional structures.

Genitalia male. Uncus strongly sclerotized, base triangular, apex short or long. Valva subquadrate or rounded, with or without process at the distal part of ventral margin (at the distal end of sacculus). Juxta triangularly rounded; transtilla prominent, consisting of a basal plate of different shape and a pair of “horns” dorsally. The translucent central part of the valva with smooth surface basally, but fan-shaped with parallel folds distally (not visible in all dissections). Aedeagus (outer sclerotized part of phallus) broad anteriorly, tapering towards the posterior end, at this distal end a heart-shaped, folded structure is present that is covered with hundreds of little spines. This structure is connected by a translucent band with the juxta. Vesica (translucent eversible part of phallus) with a long band-like structure that bears many small cornuti; if the vesica is not everted this structure appears as a serpentine-like band within the aedeagus, but if everted the vesica is a long, very narrow tube of ca. 4-times the length of the aedeagus and the spines are arranged in a long band with a single small plate of different shape at the distal end.

Genitalia female. Papillae anales small, oval, covered with short setae. Apophyses posteriores with a broad base and a short, very slender distal part that ends round and not pointed distally. 8th sternite and 8th tergite fused to a broad band-like ring. Apophyses anteriores short, developed as translucent, triangular edges. Ostium developed as a narrow sclerotized, oval ring; no sclerotized antrum developed and the translucent, narrow, folded and extremely long ductus bursae starts directly from the ostium ring and ends without forming a praebursa into the translucent, oval corpus bursae that has a large lateral oval appendix. Inner female genitalia with a receptaculum typical for Procridiniae with a long ductus spiralis, a bag-shaped translucent utriculus, without a lagena (as is present in most Lepidoptera) and with a long and narrow accessory gland. The two “horns” of the glandula sebacea are long and tube-like, slightly asymmetrical, one longer and broader, the other shorter and more slender. Petersen’s gland is well visible and developed as a very small translucent organ with two narrow ducts arising from the terminal end of the oviduct and each of them ending into a globular bulb (very difficult to see due to the fragility of this structure).

Differential diagnosis. The genus *Piarosoma* Hampson, 1893, is externally similar to *Phacusa* Walker, 1854. The exceptional wing venation in *Piarosoma* is unique. *Piarosoma* has a medial spur on the hind tibia that is absent in *Phacusa*. In *Phacusa* males the vesica bears between two to four cornuti, and at least two of them are hook-shaped whereas in *Piarosoma* many small cornuti are arranged along a very long band-like vesica seminalis. In the female genitalia *Phacusa* has a prominent praebursa with strongly sclerotized structures developed while in *Piarosoma* a praebursa is absent.

**C28** *Phacusa sizala* Swinhoe, 1894, was removed from *Piarosoma* by Owada et al. (2022). However, as the systematic position of this species is unclear until the type investigation, we provisionally leave it in the genus *Piarosoma*.

**C29** The afrotropical Zygaenidae had to be compiled without major revisional work. Based on the treatments of the group by Gaede (1926), Bryk (1936) and Alberti (1954, 1957), with the inclusion of some smaller contributions, e.g., Viette (1965, 1978), Tarmann (1985b, 2003), Vari, Kroon & Krüger (2002) etc. and after having undertaken only some preliminary own examinations this list has to be

seen as provisional. The following examinations are responsible for basic changes compared with earlier treatments:

1. Examination of the female genitalia proved that the receptaculum seminis consists of the utriculus only and lacks a lagena. However, the tube-like form of the utriculus (at the position where the lagena is situated in non procridine zygaenids and other Lepidoptera) is always slightly or prominently broadened in Procridinae, forming a bag-like structure. This unique structure represents a basic autapomorphy of the Procridinae and is described as “bursa utricularis” (Efetov & Tarmann, 2017a). Gaede (1926) placed the afrotropical Zygaenidae in Zygaeninae, Bryk (1936) in Chalcosiinae and Zygaeninae. Alberti (1954) treated the group as Procridinae but included the genera *Saliunca* Walker, 1864, *Syringura* Holland, 1893, *Tascia* Walker, 1856, and *Astyleneura* Gaede, 1914, within his tribe Callizygaenini (raised to Callizygaeninae by Tarmann, 1994) that has a well-developed lagena in receptaculum seminis like all other Zygaenidae. Our examinations showed that the African Procridinae do not belong to Callizygaeninae but are true Procridinae.
2. The examination of the head capsule, abdomen, legs and genitalia show that the genera *Chalconycles* Jordan, 1907, and *Neobalataea* Alberti, 1954, belong to the tribe Artonini Tarmann, 1994, the genera *Metanycles* Butler, 1876, *Aethioprocrys* Alberti, 1954, *Sthenoprocrys* Hampson, 1920, *Ankasocris* Viette, 1965, *Ischnusia* Jordan, 1928, *Alteramenelikia* Alberti, 1971, *Triacanthia* Romieux, 1937, *Xenoprocrys* Romieux, 1937, *Madaprocris* Viette, 1978, *Afromalambria* gen. nov. belong to the tribe Cleleini Efetov & Tarmann, **tribus nov.**, whereas *Saliunca* Walker, 1864, *Syringura* Holland, 1893, *Tascia* Walker, 1856, and *Astyleneura* Gaede, 1914, are here placed in Procridini Boisduval, 1828.
3. *Saliuncella* Jordan, 1907, with the only known species *S. marshalli* Jordan, 1907, is extraordinary as this species is the only African taxon that is closely related to the Australian *Pollanisus-Onceropyga*-group. The habitus is that of a *Pollanisus* in male and female. The female has an abdominal hairtuft. The genitalia are close to *Onceropyga*. The larval host-plants are Vitaceae like in *Onceropyga*. *S. marshalli* was reared from *Rhoicissus* sp. (Vitaceae) by N. J. Duke in 1994 from Swasiland (South Africa) (reference specimens in BMNH) (Fig. 45). Consequently, this species is here placed into the tribe Pollanisini Efetov & Tarmann, **tribus nov.**

Redescription of *Saliuncella marshalli* Jordan, 1907.

Body densely scaled, with dark greyish green ground colour and shiny blue scales that give the body and legs a strong bluish sheen or only a tinge of blue depending from the angle of the incoming light.

Head. Dorsoventrally compressed (like in *Pollanisus* and *Artona*), space between compound eye and ocellus covered with scales anteriorly, chaetosema triangular, anteriorly extended into the space between compound eye and ocellus but not exceeding this space. Labial palps well developed, curved upwards, slightly exceeding frons; maxillary palps very small; antenna with broad shaft, basal part in male strongly bipectinate, the last 5 segments biserrate, apex bluntly pointed, antenna in female biserrate, covered with shiny bluish scales at shaft (in fresh specimens). 28 antennal segments. Proboscis well developed, yellow. Compound eyes small, frons broader than compound eyes in frontal view. Distance between dorsal margin of compound eye and ocellus approximately as broad as diameter of ocellus.

Genitalia male. The male genitalia of *Saliuncella marshalli* is similar to that of the eastern Australian species of *Onceropyga* (Tarmann, 2004, figs 273-282), although the habitus is very different. Uncus slender, 1/3 shorter than length of valva; tegumen and vinculum very translucent, slender; pulvinus very small, with a very long bundle of hairs that is coming off easily during preparation; valva translucent, strongly fan-shaped, without sclerotization dorsally, with narrow, straight ventral sclerotisation that exceeds the length of the ventral margin of the valva like in *Onceropyga anelia*, but

is almost as slender as that of *O. pulchra*; aedeagus very long and slender, tube-like, with a very narrow, needle-like, slightly twisted cornutus that has almost the length of the aedeagus.

Genitalia female. Ostium narrow, oval; ductus bursae slender, with a double spiral in the middle that is slightly sclerotised, inserting in a very translucent, bag-like corpus bursae; papillae anales weakly sclerotized, with very short setae, apophyses posteriores short and slender; apophyses anteriores also short and slender.

**C30** The genus *Malamblia* Jordan, 1907, with its type-species *M. durbanica* Jordan, 1907, is removed from the African zygaenid list. Its type-species is a synonym to *Procris melas* Guérin-Méneville, 1839, for which Jordan described the genus *Chilioprocris* Jordan, 1913. This species is restricted to Chile (South America). The error had its origin in a misreading of the original label of the type specimen by Jordan (see Tarmann, 1985b). The other species included in *Malamblia* by Hampson (1910), Gaede (1926) and Bryk (1936) cannot be placed into a so far described genus. We therefore describe here the new genus *Afromalamblia* gen. nov. to accommodate these species.

#### *Afromalamblia* Efetov & Tarmann, gen. nov.

Type species: *Malamblia flavipalpis* Hampson, 1910, 488, here designated.

Diagnosis (based on the female holotype and one male of *Malamblia flavipalpis* Hampson, 1910, *Brachartona unxia* Druce, 1896, and *Brachartona titoea* Druce, 1896, and one more undescribed species from Madagascar in the collection of the Natural History Museum, London).

Head dorsoventrally flattened, frons round, protruding dorsally, maxillary palps rudimentary, invisible, labial palps porrect, proboscis yellow, compound eyes small, black, frons 1.5 times broader than compound eye in frontal view, breadth of frons equal in male and female (no sexual dimorphism in this character), ocelli small, distance from compound eye 1.5 times the diameter of ocellus, chaetosema long, oval, strongly protruding forwards (as in *Pseudoamuria*). Foretibia with epiphysis, mid- and hindlegs with one pair of spurs (no third medial spur present!). Frenulum consisting of only one spine in female, retinaculum between base of CuP and posterior margin of cell visible as a small aggregation of specialized long, forward pointing scales.

The genitalia of *Malamblia flavipalpis* was dissected by Vari (No. 617) and one wing was also prepared by Vari on a slide. For more than two years a request to photograph the genitalia and the wing preparation on the slide has been sent to London. However, due to lack of resources this could not be done so far. A description of the genitalia has therefore to be postponed.

Derivatio nominis. The name is a construction compiled from *Malamblia* (now a genus valid for a South American species) and the term “Africa”.

**C31** A redescription of the tribe Procridinae is provided below.

#### Tribe **Procridini** Boisduval, 1828, 38

[Type genus: *Procris* [Fabricius in Illiger], 1807, 289]

Description. Head capsule spherical, not compressed dorsoventrally, chaetosema not extended between compound eye and ocellus; foreleg with or without epiphysis, hindleg without medial spur; genitalia male - valva not fan-shaped, without “*Artona*-finger”; genitalia female - with or without praebursa; larval host-plants: Vitaceae, Rosaceae, Fagaceae, Polygonaceae, Asteraceae, Plumbaginaceae, Cistaceae, Geraniaceae and some others, a few species are polyphagous. Distribution. Europe, Asia, Africa, America.

**C32** The genitalia of *Illiberis (Altersvenia) paradistincta* Alberti, 1954, differs significantly from those of other species of *Altersvenia*, including the type-species of this subgenus, viz. *Northia ulmivora* Graeser, 1888. The aedeagus in the male genitalia resembles that of species of the genus

*Hedina* Alberti, 1954, but the female genitalia of *Illiberis paradistincta* has no huge praebursa with rows of sclerotized spines as in *Hedina*. As this combination of characters is unique, we describe here a new genus *Pseudohedina* gen. nov. to accommodate *Illiberis paradistincta* (type-species of *Pseudohedina* by monotypy).

***Pseudohedina Efetov & Tarmann, gen. nov.***

Type species: *Illiberis paradistincta* Alberti, 1954, 246, by original designation and monotypy.

Diagnosis: Adult with typical *Illiberis*-habitus with transparent wings and well visible veins. In male genitalia valvae without any processes on the ventral margin of sacculus; aedeagus broader distally, with a group of large, pointed, strongly sclerotized cornuti (like in *Hedina*). Female genitalia without strongly dilated praebursa, lacking rows of sclerotized spines. Corpus bursae globular, not asymmetric (as in *Hedina*) and not double lobed (as in *Alterasvenia*).

**C33** Revisional work on *Phacusa* Walker, 1854, by the authors has shown that the genitalia of *Phacusa nicobarica* Hampson, 1920, are different from those of *Ph. tenebrosa* (Walker, 1854) and *Ph. nicobarica* is not a synonym of *Ph. tenebrosa* (synonymised by Efetov & Tarmann (2012)). As a consequence, *Phacusa nicobarica* Hampson, 1920, stat. rev. is here accepted as a good species.

**C34** New material collected in European Turkey (Thrace) by Feza Can with the help of newly synthesised attractant from the series EFETOV-2 shows that *Rhagades pruni* ([Denis & Schiffermüller], 1775) occurs also in Turkey (Can Cengiz et al. 2016).

**C35** In agreement with the concept of this catalogue how to treat species and subspecies (see chapter “The concept for species and subspecies in this catalogue” above) we feel obliged to change the status of some recently described taxa of *Zygaenoprocis* Hampson, 1900. This was not an easy decision as this genus has been extensively investigated in recent years by Keil (2002, 2014, 2016a, 2016b, 2016c, 2020) and most descriptions of new taxa are accompanied by biological and ecological data. Moreover, also first genetic results are available.

However, in comparison with other well-separated taxa that are treated in this catalogue as subspecies (e.g. *Adscita statices statices*, *A. statices drenowskii*, *A. geryon geryon*, *A. geryon orientalis*), some of the new taxa within *Zygaenoprocis* cannot be treated as separate species as they do not differ more from their nearest related taxa than in many other cases where we have accepted subspecific rank. We accept therefore here all taxa described by Keil as valid, but we group some together and treat only those taxa as species that have relevant genitalic differences (even if these differences can be small). Also considering our DNA results from the ZYGMo project in BOLD a clear picture is shown in two species, viz. *Z. (Molletia) persepolis* (Alberti, 1938) with four subspecies and *Z. (M.) duskei* (Grum-Grshimailo, 1902) with also four subspecies. In *Zygaenoprocis* (*Zygaenoprocis*) the situation is more difficult as several taxa have been observed occurring syntopically (e.g. *Z. (Z.) mystrocerata* and *Z. (Z.) efetovi*) (Keil, 2020), in addition, these taxa have stable genitalic differences and have to be treated as species. Moreover, the taxonomic situation regarding *Z. (Z.) khorassana* in relation to *Z. (Z.) mystrocerata* seems not completely clear. We therefore treat the latter for the moment as an independent species and *Z. (Z.) mystrocerata* together with *Z. (Z.) molleti* and *Z. (Z.) valii* as one species with three well separated subspecies.

As was mentioned above, *Z. (M.) duskei* (Grum-Grshimailo, 1902) includes four subspecies. One of these subspecies, viz. *Z. (M.) duskei kliri* Keil, 2002, has been raised to species level by Keil (2023) without any comments. Here we consider this taxon as a subspecies of *Z. (M.) duskei*. Moreover, Keil (2023) mentioned erroneously two more species in the genus *Zygaenoprocis*, viz. *Zygaenoprocis statices* and *Z. obscura*, both correctly belonging to the genus *Adscita*.

**C36** *Zygaenoprocis rjabovi* (Alberti, 1938c) and *Zygaenoprocis eberti* (Alberti, 1968) were placed

in the subgenus *Zygaenoprocris* until now. However, they have good morphological differences from *Zygaenoprocris chalcochlora* Hampson, 1900, the type species of this subgenus. New DNA data (Mirić et al. 2023) confirmed the isolated position of *Z. rjabovi* and *Z. eberti*. It has therefore been necessary to erect a new subgenus of the genus *Zygaenoprocris* to accommodate these two taxa (Figure 1).

### **Subgenus *Longiterna* Efetov & Tarmann, subgen. nov. (Figure 1)**

[Type-species: *Procris rjabovi* Alberti, 1938c, 94, here designated]

*Zygaenoprocris (Longiterna) rjabovi* and *Zygaenoprocris (Longiterna) eberti* have forewings green with strong metallic sheen, long aedeagus with single strongly sclerotized cornutus in male and extremely long ductus bursae in female (Efetov & Tarmann, 1999, figs 109, 167, 168; Efetov et al. 2014a).

Differential diagnosis. All remaining species of the subgenus *Zygaenoprocris* have the ductus bursae and the aedeagus much shorter and a weakly sclerotised cornutus. All species of the other subgenera of the genus *Zygaenoprocris* have strongly different genitalia structures (Efetov & Tarmann, 1999).

Etymology. The word “*Longiterna*” consists of two parts: “*Longi*” shows that these species have very long ductus bursae in female genitalia; the ending “*terna*” has been used already by B. Alberti to create a subgeneric name *Lucasiterna* (later the same principle was used for *Procriterna* Efetov & Tarmann and *Solaniterna* Efetov).

**C37** *Adscita mauretanica* (Naufock, 1932) is the only *Adscita* species in northwestern Africa. Although this species is in habitus, antennal structures and biology a clear *Adscita*, its genitalia are strongly different from all *Adscita* known so far. Moreover, in the COI gene (barcoding tree) this species is far away from all other *Adscita* species. Its nearest neighbour *Adscita bolivari* shows ca. 7% genetic difference. All these characters show the unique position of *A. mauretanica* in *Adscita*. We therefore describe a new subgenus for this isolated species. Moreover, new genetic studies including nuclear genes confirm the position of *A. mauretanica* between *Adscita* and *Jordanita* (Mirić et al. 2023).

### **Subgenus *Afroterna* Efetov & Tarmann, subgen. nov. (Figure 2)**

Type-species: *Procris mauretanica* Naufock, 1932, 77, here designated.

Diagnosis. Males and females are externally very similar to *Adscita statices*, the type species of the genus *Adscita* Retzius, 1783, with shiny green body and forewing upperside and with clubbed antennae. Antenna with pectinations in male, the last segments fused to plates; female without antennal pectinations. Male genitalia. Uncus slender, as long as tegumen. Valva long and slender, ventral margin of sacculus without process, apex of sacculus rounded. Phallus short and broad, ca. 3.5 times longer than broad, vesica with two strongly sclerotized, curved cornuti. Female genitalia. Caudal part of ductus bursae strongly dilated, forming a spherical or ovoid praebursa that has a ventral pocket-like evagination and bears sclerotized dentations (Efetov & Tarmann, 1999, p. 108, fig. 95, p. 123, fig. 157, Efetov, 2001f, p 161, plate 9, fig. 12, p. 209, plate 32, fig. 12).

The morphology of the early instars and their biology is not strongly different from those of other *Adscita* species. The larval host-plants are Polygonaceae and Cistaceae.

Etymology. The word “*Afroterna*” consists of two parts: “*Afro*” shows that this species is only found in Africa (North African distribution); for meaning of “*terna*” see above (comment C36).

**C38** According to morphological, biological and molecular characters the subgenus *Adscita* Retzius, 1783, is a paraphyletic subgenus clearly consisting of three monophyletic units, viz. (*jordani*-group + *statices*-group), (*obscura*-group) and (*geryon*-group + *albanica*-group). In this catalogue we are describing two new subgenera with the aim to have three monophyletic subgenera.

**Subgenus *Obscuriterna* Efetov & Tarmann, subgen. nov. (C38) (Figure 2)**[Type-species: *Procris obscura* Zeller, 1847a, 15, here designated]

*Adscita (Obscuriterna) obscura* has an isolated position in the genus. It has extraordinary genitalia structures and larvae feeding on at least three plant families. The characters of the new subgenus are an extremely long aedeagus (ratio of length to breadth is approximately 20) and also extremely long ductus bursae (ratio of length to breadth more than 60) (Efetov & Tarmann, 1999, figs 94, 156; Efetov, 2001f, plates 9, 33), the larvae feed on Cistaceae, Rosaceae and Fabaceae (and not on Polygonaceae).

Differential diagnosis. All remaining species of the subgenus *Adscita* are oligophagous and have much shorter aedeagus and ductus bursae (Efetov & Tarmann, 1999, figs. 89-93, 95-107, 151-155, 157-165; Efetov, 2001f, plates 3-12, 28-32, 34-36).

Etymology. The word “*Obscuriterna*” consists of two parts: “*Obscuri*” shows that this subgenus is monotypic with one species *A. obscura*. For meaning of “*terna*” see above (comment **C36**).

**C39****Subgenus *Eurasiterna* subgen. nov. (Figure 2)**[Type-species: *Adscita dujardini* Efetov & Tarmann, 2014b, 182, here designated]

Included species. *Adscita (Eurasiterna) capitalis* (Staudinger, 1879), *A. (Eur.) geryon* (Hübner, 1813), *A. (Eur.) dujardini* Efetov & Tarmann, 2014b, and *A. (Eur.) albanica* (Naufock, 1926).

All four species form one branch on a DNA-tree and have a much smaller ratio of length to breadth of aedeagus (less than 15) and also much smaller ratio of length to breadth of ductus bursae (less than 15) than in *A. (O.) obscura*. Larval host-plants belong to Geraniaceae and/or Cistaceae. Species of this subgenus form two groups, viz. *geryon*-group (ductus bursae tubular, without praebursa) and *albanica*-group (ductus bursae strongly delated forming a praebursa) (Efetov & Tarmann, 1999).

Differential diagnosis. All remaining species of the subgenus *Adscita* have another combination of characters. The larvae of the representatives of the subgenus *Adscita* are feeding on Polygonaceae (*Rumex* species). For characters of *Afroterna* and *Obscuriterna* see above.

Etymology. The word “*Eurasiterna*” consists of two parts: “*Eurasii*” shows western Palaearctic distribution of all four included species (Europe and western Asia); for meaning of “*terna*” see above (comment **C36**).

**C40** Different populations of *Jordanita (Roccia) paupera* (Christoph, 1887) (sometimes strongly geographically isolated from one another) can have DNA barcode distances. However, as there are no constant genitalic differences between these populations, we consider them as one species. Recently, Zolotuhin (2020) described two new taxa: *Jordanita (Roccia) scintillosa* Zolotuhin, 2020, and *J. (R.) smaragdonna* Zolotuhin, 2020. These two taxa are considered to be synonyms of *Jordanita (Roccia) paupera* (Christoph, 1887) (Efetov et al. 2022; Efetov & Tarmann, 2022).

**C41** As shown in Efetov et al, (2019) *Ino budensis* var. *mollis* Grum-Grshimailo, 1893, described from China, and so far treated as a synonym of *Jordanita (Roccia) paupera* (Christoph, 1887) (Efetov & Tarmann, 2012), is a good species: *Jordanita (Roccia) mollis* (Grum-Grshimailo, 1893). This opinion is based on the presence of stable differences in the male genitalia and a significant difference in the DNA barcodes. This species is recorded for eastern Russia (Southern Siberia and Far East), China and Korea.

**C42** *Jordanita (Praviela) anatolica* (Naufock, 1929) and *Jordanita (Praviela) christinae* Keil, 1998, are treated as two different species in Keil (2014). In Efetov & Tarmann (2012, p. 36) *J. anatolica christinae* is treated as a subspecies. The authors always had strong doubts that these two taxa are really different species. The reason for these doubts was the well-known variability in the male genitalia of *J. anatolica* (Efetov & Can, 2010) where combinations and forms of cornuti could be found in various

populations with the characters of those described and figured by Keil (1998, p. 113, fig. 1b) for *J. christinae*. Moreover, specimens with the habitus of *J. christinae* (reddish wings and body) could also be found as aberrations within other Iranian populations of *J. anatolica*. In his original description even Keil himself had doubts and described therefore the new taxon only as a subspecies of *J. anatolica* (Keil, 1998). However, Keil was secretly always convinced that the two taxa are different species and continued searching for arguments. He visited Iran and the type locality of *J. christinae* many times. Finally he found both colour forms syntopic in the type locality of *J. christinae* with a significant difference in the time of flight activity. Specimens with the characters of *J. anatolica* (green wings and body) were always earlier on the wing in the year than those with the characters of *J. christinae*. Keil reared both taxa from egg to imago and described their biology (Keil, 2014, pp. 140–147). In addition to the syntopic occurrence he observed oviposition of females of both taxa on different larval host-plants at the same locality. The larvae are also slightly different in coloration. The latter character was also known by the authors for several years but color variation in larvae of Procridinæ are common and also this character did not convince us that both taxa are really good species. Keil (2014, pp. 140–147), in his work on the Zygænidæ of Iran, again summarizes all arguments and publishes figures on the biologies of *J. anatolica* and *J. christinae*.

Based on these data but also on our genetic data from our ZYGMo project in BOLD (the genetic distance between *J. christinae* and *J. anatolica* is larger than between all other *J. anatolica* populations that are so far examined) we now accept the specific status of *J. christinae*. However, specimens with intermediate characters in habitus and genitalia have been found around the type-locality of *J. christinae* in the Zagros mountains. This is a clear sign that both species are very closely related.

*Jordanita (Pravielia) rietzschii* Keil, 2016, can be only a colour form of *J. (P.) anatolica* because these two “taxa” have no genitalic differences.

Further molecular and biological investigations are necessary in the subgenus *Pravielia* Alberti, 1954, and it also would be very important to find newer material of *J. (P.) anatolica kruegeri* (Turati, 1930) from North Africa which we here treat as a subspecies to *J. anatolica* based on its genitalic characters.

**C43** In Tarmann (1984, p. 36) the date behind the author of *Pyromorpha (Gingla) semifulva* (Druce, 1896) is wrongly cited as “Druce, 1884”. This error was discovered by Steve Nanc (New York, USA) in December 2016. It was an error by G. M. Tarmann in 1984 when he mixed *Dycladia semifulva* Druce, 1884 (now *Cosmosoma semifulva* (Druce, 1884), Erebidae, Ctenuchinæ) with *Lycomorpha semifulva* Druce, 1896 (Zygænidæ, Procridinæ). It would not make sense to change now also the synonymy between *Lycomorpha semifulva* Druce, 1896: 332, and *Lycomorpha basirei* Druce, 1896: 331, just because *L. basirei* was described one page earlier in the same paper. According to the principle of the first revising author we leave *Pyromorpha (Gingla) semifulva* (Druce, 1896) as valid species and *L. basirei* Druce, 1896 as its synonym.

**C44** In Tarmann (1984, p 40) *Harrisina mexicana* Schaus, 1889, was synonymized with *Aglaope coracina* Clemens, 1861, due to almost no genitalic differences. More material has now shown that this was wrong and both taxa represent different species. *H. mexicana* is smaller and has longer pectination in the male antenna. The male genitalia are, as in many *Harrisina*, not significantly different. This species was described from one male from Mexico (Veracruz, Paso de San Juan). Females can only be attached to this species if they are reared and if also males from the same rearing are available. This has not been done so far. Sufficient DNA data are not available so far.

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\*Konstantin A. Efetov  
Laboratory of Biotechnology and Department of Biological Chemistry  
V. I. Vernadsky Crimean Federal University  
RU-295051 Simferopol  
CRIMEA / CRIMEA  
E-mail: shysh1981@mail.ru  
<https://orcid.org/0000-0003-1468-7264>

Gerhard M. Tarmann  
Sammelungs- und Forschungszentrum der Tiroler Landesmuseen, Ferdinandeum  
Krajnc-Straße, 1  
A-6060 Hall in Tirol  
AUSTRIA / AUSTRIA  
E-mail: g.tarmann@tiroler-landesmuseen.at  
<https://orcid.org/0000-0002-7360-5698>

\*Autor para la correspondencia / Corresponding author

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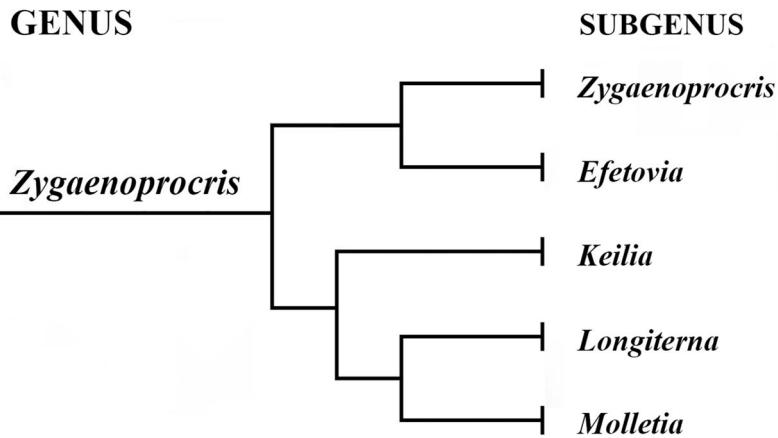
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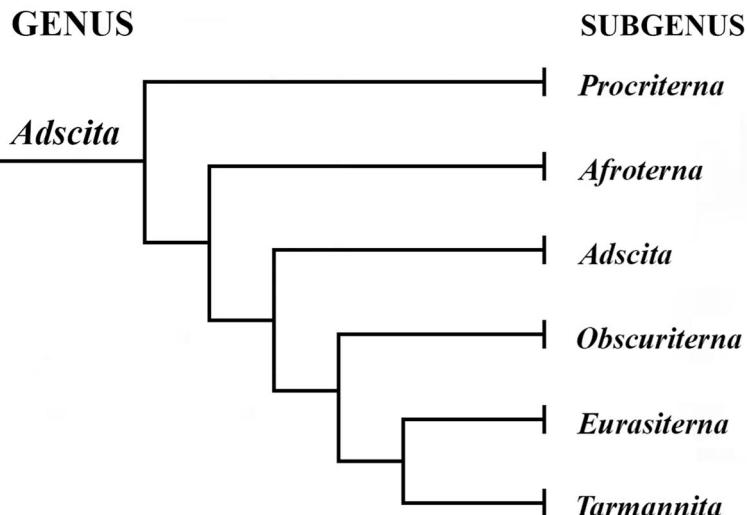
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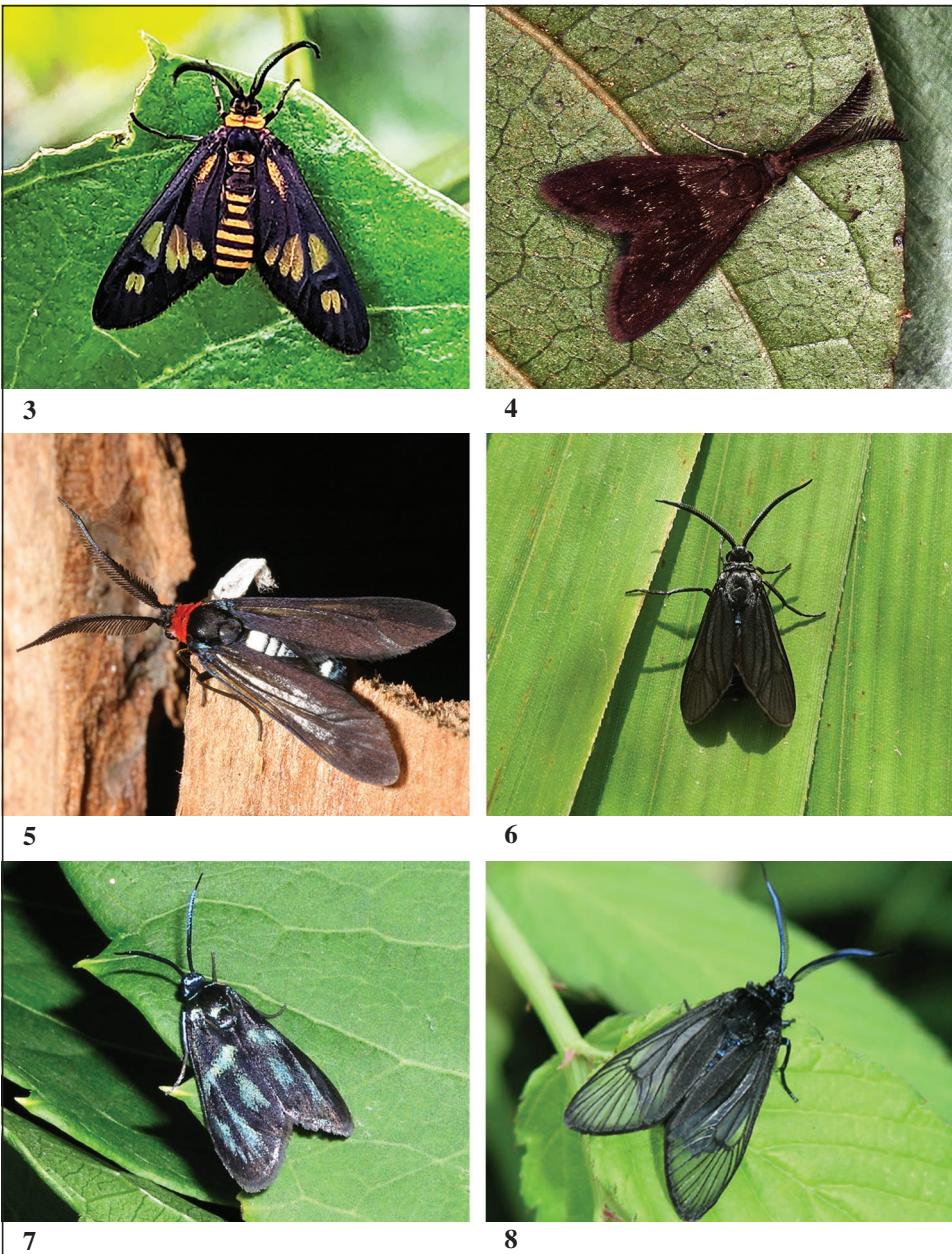


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**Figures 1-2.** 1. A dendrogram showing phylogenetic relationships between subgenera of the genus *Zygaenoprocris*, based on morphology, biology and DNA data. 2. A dendrogram showing phylogenetic relationships between subgenera of the genus *Adscita*, based on morphology, biology and DNA data.



**Figures 3-8.** Examples of live moths of Procriidinae species. **3.** *Thyrsia inconcinna*, male (Australia) (Photo: S. Renneberg). **4.** *Onceropyga anelia*, male (Australia) (Photo: G. M. Tarmann). **5.** *Hestiochora tricolor*, male (Australia) (Photo: A. Zwick). **6.** *Artona martini*, male (Italy) (Photo: K. A. Efetov). **7.** *Clelea esakii*, female (Japan) (Photo: K. A. Efetov). **8.** *Hedina tenuis*, male (Japan) (Photo: anonymous).



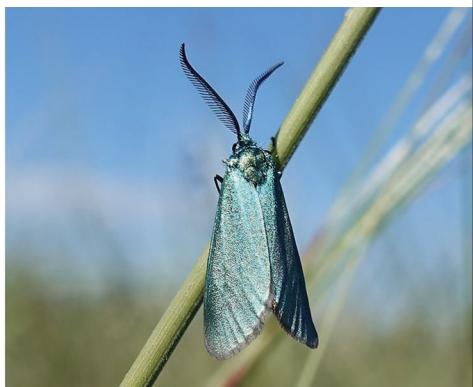
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**Figures 9-14.** Examples of live specimens of Procridinae species. **9.** *Rhagades predotae*, male (Spain) (Photo: K. A. Efetov). **10.** *Rhagades pruni*, male (Crimea) (Photo: K. A. Efetov). **11.** *Adscita italica italica*, male (Italy) (Photo: K. A. Efetov). **12.** *Jordanita volgensis*, male (Crimea) (Photo: K. A. Efetov). **13.** *Tascia rhabdophora*, male (Zimbabwe) (Photo: B. Würsten). **14.** *Stylura brasiliensis*, female (Paraguay) (Photo: U. Drechsel).



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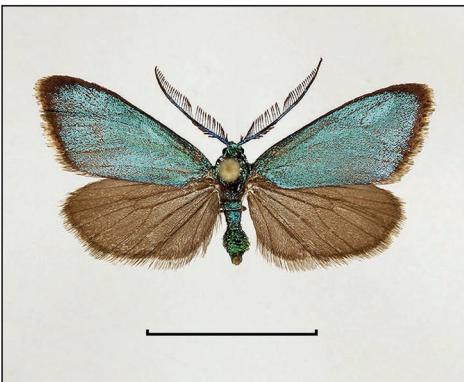


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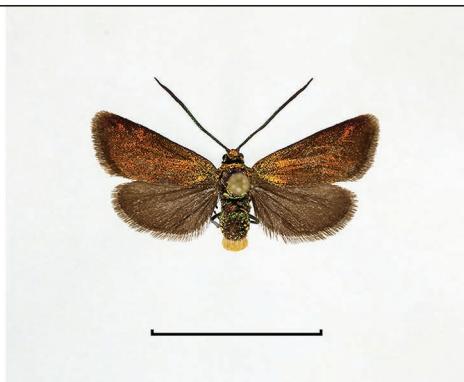


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**Figures 15-20.** Examples of larvae of Procridinae species. **15.** *Pollanisus commoni* (Australia) (Photo: G. M. Tarmann). **16.** *Artona martini* (Italy) (Photo: K. A. Efetov). **17.** *Rhagades amasina* (Turkey) (Photo: K. A. Efetov). **18.** *Zygaenoprocris taftana* (Armenia) (Photo: K. A. Efetov). **19.** *Adscita italicica italicica* (Italy) (Photo: K. A. Efetov). **20.** *Harrisinopsis robusta* (Suriname) (Photo: J. Van Den Heuvel).



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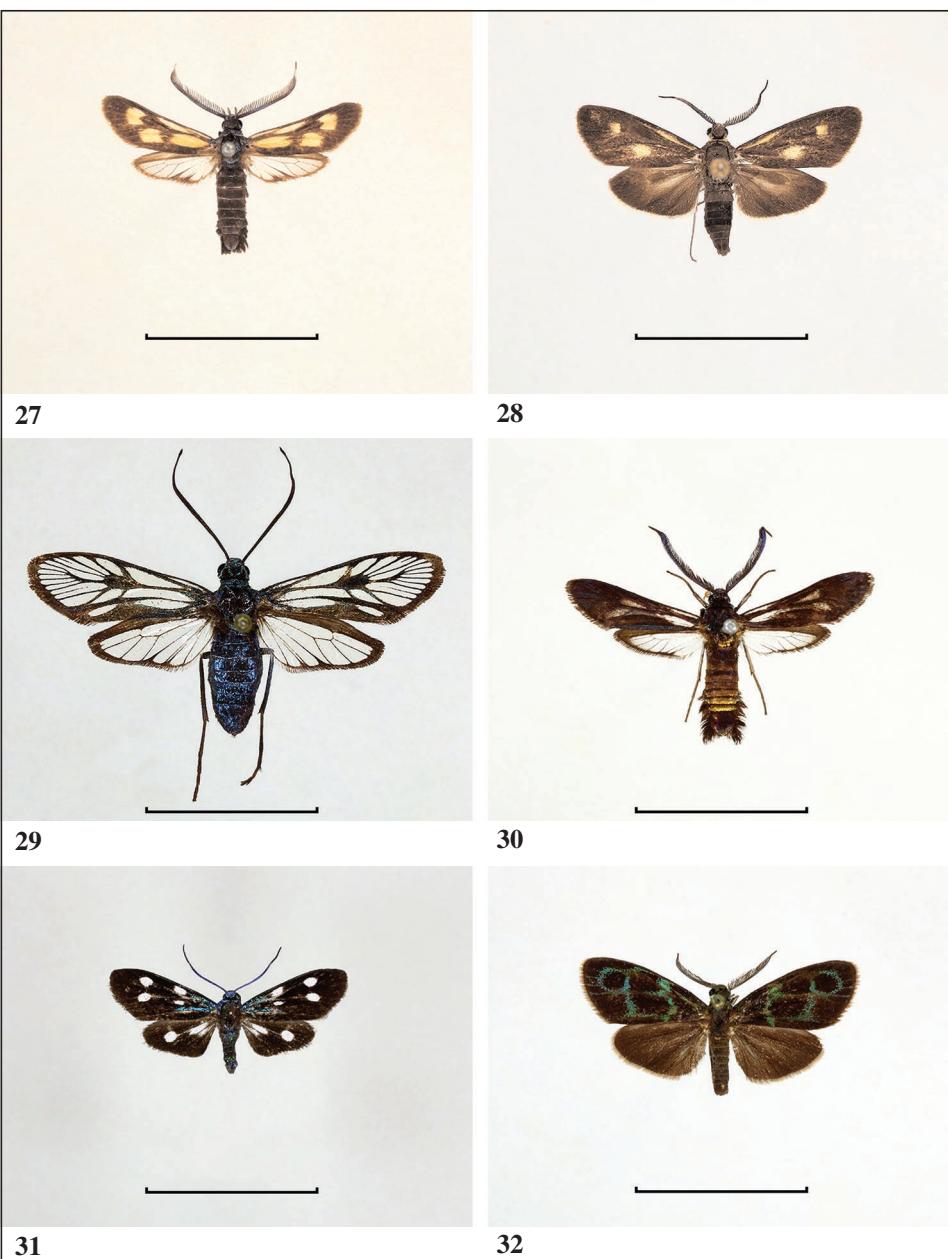


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**Figures 21-26.** Examples of Australian and Oriental Procridinae. 21. *Pollanisus viridipulverulenta*, male (East Australia). 22. *Pollanisus nielseni*, female (West Australia). 23. *Hestiochora erythrota*, male (East Australia). 24. *Myrtartona rufiventris*, female (West Australia). 25. *Artona discivitta*, male (South India). 26. *Artona walkeri*, lectotype male (Indonesia, Java). Scale: 1.0 cm (All photos: G. M. Tarmann).



**Figures 27-32.** Examples of Eastern Palaearctic and Oriental Procridinae. **27.** *Artona octomaculata*, male (Far East of Russia, Amur). **28.** *Amuria trisignata*, male (Indonesia, Java). **29.** *Ephemeroidea virescens*, female (Indonesia, Java). **30.** *Lophosoma cuprea*, male (India, Sikkim). **31.** *Chrysartona dangvani*, female (Vietnam). **32.** *Clelea nigroviridis* (Myanmar). Scale: 1.0 cm (All photos: G. M. Tarmann).



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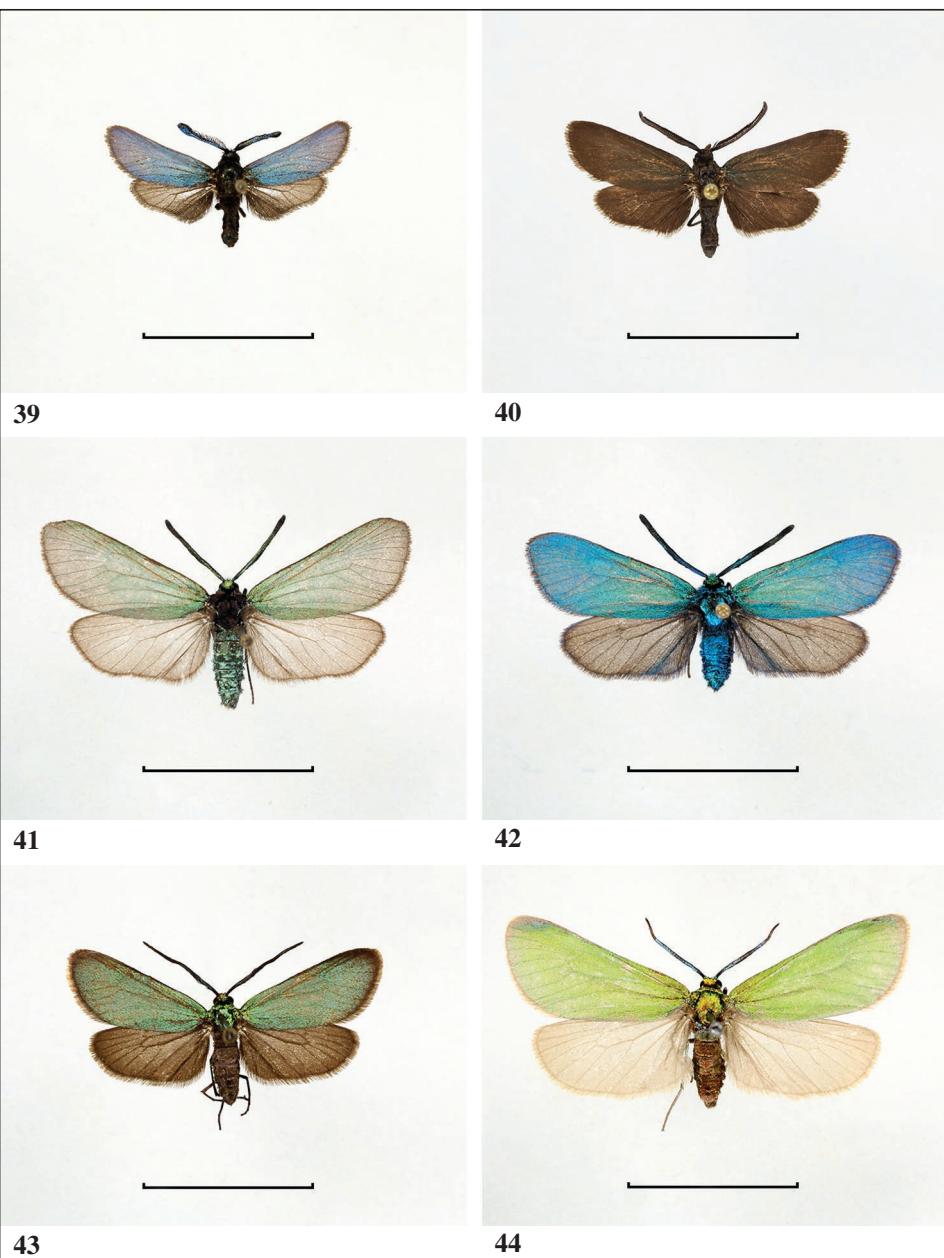


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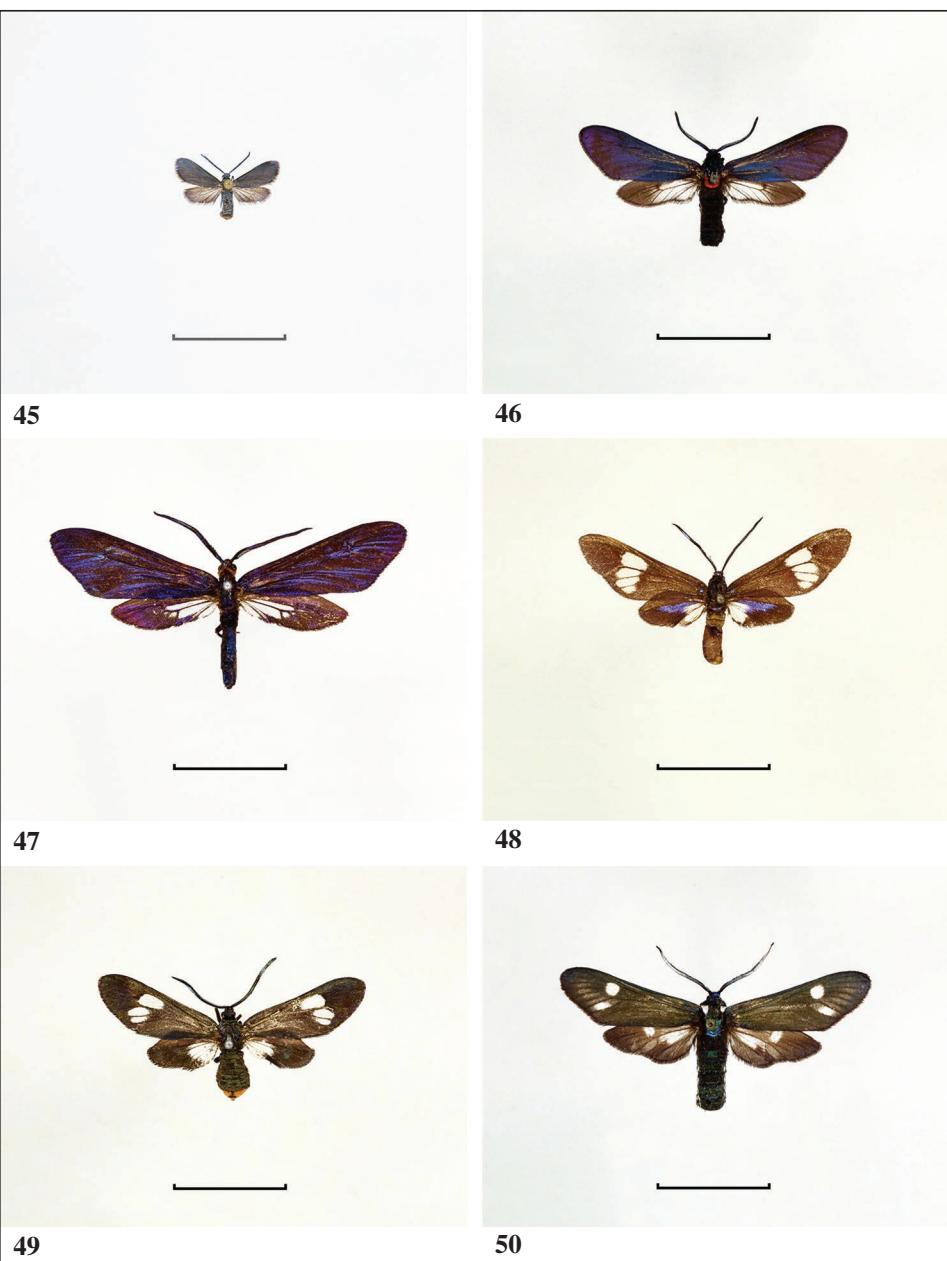


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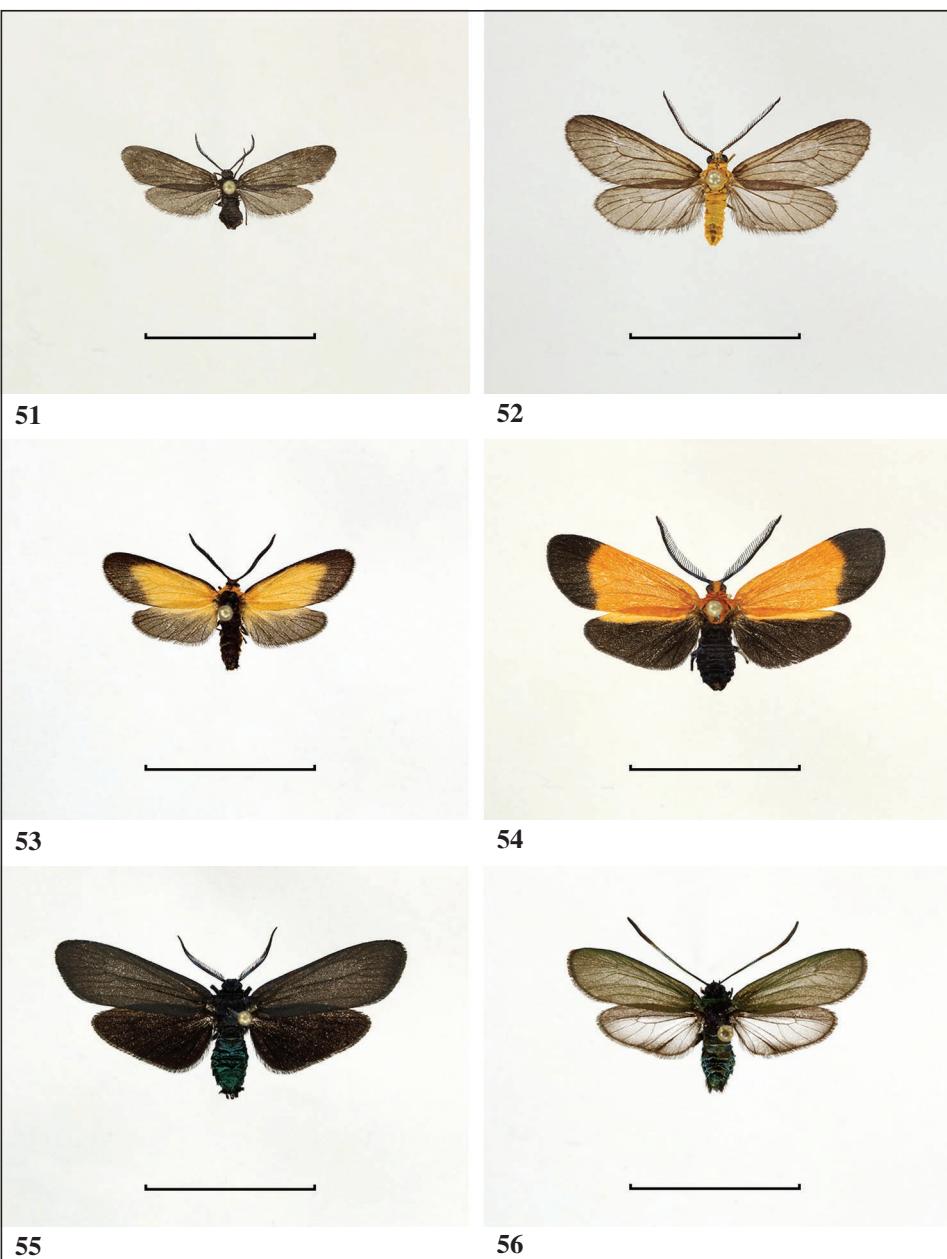
**Figures 33-38.** Examples of Eastern Palaearctic and Oriental Procridinae. **33.** *Morionia sciara*, male (China, Taiwan). **34.** *Illiberis cernyi*, male (Thailand). **35.** *Hedina nigra*, male (Japan). **36.** *Hedina translucida*, male (China). **37.** *Dubernardia djreuma*, male (China). **38.** *Goazrea lao*, male (Thailand). Scale: 1.0 cm (All photos: G. M. Tarmann).



**Figures 39-44.** Examples of Western and Central Palaearctic Procridinae. **39.** *Zygaenoprocris taftana*, male (Armenia). **40.** *Adscita subtristis*, male (Uzbekistan). **41.** *Adscita statices*, male (Austria). **42.** *Adscita manni*, male (Italy). **43.** *Jordanita splendens*, male (Tajikistan). **44.** *Jordanita cognata*, male (Algeria). Scale: 1.0 cm (All photos: G. M. Tarmann).



**Figures 45-50.** Examples of African Procridinae. **45.** *Saliuncella marshalli*, female (Republic of South Africa). **46.** *Saliunca homochroa*, female (Democratic Republic of the Congo). **47.** *Saliunca solora*, female (Republic of Cameroon). **48.** *Syringura pulchra*, female (Central African Republic). **49.** *Tascia finalis*, female (Republic of South Africa). **50.** *Astyloaneura meridionalis*, male (Burundi). Scale: 1.0 cm (All photos: G. M. Tarmann).



**Figures 51-56.** Examples of American Procriidinae. **51.** *Acoloithus rectarius*, male (USA). **52.** *Neoilliberis fusca*, male (USA). **53.** *Neofelderia rata*, male (USA). **54.** *Neoalbetia constans*, male (USA). **55.** *Neoprocris aversa*, male (USA). **56.** *Pseudoprocris gracilis*, male (Guatemala). Scale: 1.0 cm (All photos: G. M. Tarmann).



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**Figures 57-62.** Examples of American Procridinae. **57.** *Malamblia melas*, male (Chile). **58.** *Gonioprocris suruna*, female (Guatemala). **59.** *Pyromorpha dimidiata*, male (USA). **60.** *Pyromorpha dyari*, male (USA). **61.** *Triprocris cyanea*, male (USA). **62.** *Harrisina metallica*, male (USA). Scale: 1.0 cm (All photos: G. M. Tarmann).