Western New Guinea (West Papua and Papua, Indonesia) Riodinidae (Lepidoptera)

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Abstract: An overview of the Riodinidae of western New Guinea is given. In particular, the species described by Toxopeus (1944), which have remained largely unknown due to a lack of illustrations, are considered. Type specimens of all species described by Toxopeus are illustrated for better evaluation and comparison with closely related forms. Lectotypes of the following taxa are designated: *Dicallaneura amabilis casis* Jordan, 1912 and *Praetaxila tyrannus tyrannus* (Grose-Smith & Kirby, 1897).
The following taxa are considered new synonyms: *Dicallaneura ribbei cyanandra* Toxopeus, 1944; *D. ostrina ansuna* Fruhstorfer, 1914; *D. decorata kausambides* Toxopeus, 1944; *D. decorata parina* Fruhstorfer, 1914; *D. amabilis praedilecta* Toxopeus, 1944; *Praetaxila tyrannus polyphemus* Toxopeus, 1944 and *Praetaxila heterisa auspex* Toxopeus, 1944. *Praetaxila heterisa* (Jordan, 1912) is raised to species rank.
In general, the high intra-species variability in *Dicallaneura* and *Praetaxila* is striking (which makes it very difficult to distinguish different subspecies) as well as an apparent trend to be mimetic. In *P. eromena eromena* Jordan, 1912 this becomes very obvious, as females appear in two very distinctive, previously unknown forms.
Rangkuman: Diberikan tinjauan umum tentang Riodinidae New Guinea bagian barat. Secara khusus, spesies yang dideskripsikan oleh Toxopeus (1944), yang sebagian besar masih belum diketahui karena kurangnya ilustrasi. Spesimen tipe dari semua spesies yang dideskripsikan oleh Toxopeus diilustrasikan untuk evaluasi dan perbandingan yang lebih baik dengan bentuk-bentuk yang berkerabat dekat. Lectotype dari spesies berikut ditetapkan: *Dicallaneura amabilis casis* Jordan, 1912, *Praetaxila tyrannus tyrannus* (Grose-Smith & Kirby, 1897). Taksa berikut dianggap sinonim baru: *Dicallaneura ribbei cyanandra* Toxopeus, 1944; *D. ostrina ansuna* Fruhstorfer, 1914; *D. decorata kausambides* Toxopeus, 1944; *D.decorata parina* Fruhstorfer, 1914; *D. amabilis praedilecta* Toxopeus, 1944; *Praetaxila tyrannus polyphemus* Toxopeus, 1944; *Praetaxila heterisa auspex* Toxopeus, 1944. *Praetaxila heterisa* (Jordan, 1912) dinaikkan ke peringkat spesies. Secara umum, variabilitas intra-spesies yang tinggi pada *Dicallaneura* dan *Praetaxila* sangat mencolok (yang membuatnya sangat sulit untuk membedakan subspesies yang berbeda) serta kecenderungan yang jelas dalam meniru. Pada *P. eromena eromena* Jordan, 1912 ini menjadi sangat jelas, karena betina tampak dalam dua bentuk yang sangat berbeda dan sebelumnya tidak diketahui.

Keywords: *Dicallaneura*, *Praetaxila*, New Guinea, PNG, Toxopeus, Archbold Expedition.

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Introduction

The idea for this work arose after a visit to the collection of Naturalis Biodiversity Center in Leiden, during which it was discovered that most holotype specimens for the work of Toxopeus (1944) are deposited there, but that these have never been depicted. At that time, it was not intended to give a broader review but merely a check-list of the species described by Toxopeus. But more and more uncertainties surfaced during the course of the work, which made it necessary to view and discuss further material, since numerous taxa are only very poorly known and some of them were never before illustrated. The main purpose of this paper is therefore to to give illutrations of new material which may aid identification. However, aside of the types, there are very few specimens in museum collections and this work would not have been possible without the help of numerous colleagues but especially Akira Yagishita and Kiyoshi Okubo.

Only two riodinid genera are occurring in New Guinea: *Dicallaneura* Butler, 1867 und *Praetaxila* Fruhstorfer, 1914. Discussions of synonyma include almost only taxa occurring in West Papua and Papua.

In his review of the Archbold collection of Riodinidae, Toxopeus' work of 1944 covered 12 species (8 *Dicallaneura* and 4 "*Sospita*"), collected during the Third Archbold Expedition (1938-1939) on the way from Humboldt Bay to Peak Wilhelmina (Mount Trikora, Jayawijaya Mountains). Likewise, 14 taxa were described as new by him. Toxopeus generally selected and labelled holotypes, and additional specimens of the type series were accordingly labelled as "allotypes" or paratypes, so no lectotype designations were necessary. A synonymic list is given at the end of this work. For a list of localities see Toxopeus (1940).

Abbreviations used

CARR – Coll. A. Rawlins, Rainham, Kent, United Kingdom
CAYI – Coll. A. Yagishita, Ibaraki, Japan
CKON – Coll. K. Okubo, Nishinomiya City, Hyogo, Japan
CSSK – Coll. S. Schröder, Köln, Germany
KSP – Koleksi Serangga Papua, Universitas Cenderawasih, Waena, Indonesia
MZB – Museum Zoologicum Bogoriense, Bogor, Indonesia
NHMUK – The Natural History Museum, London, United Kingdom
RMNH – Naturalis Biodiversity Center, Leiden, The Netherlands
SMT – Staatliches Museum für Tierkunde, Dresden, Germany
MFN – Museum für Naturkunde, Berlin, Germany
HT – Holotype
PT – Paratype
LT – Lectotype
TL – Type locality

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Systematic part

Dicallaneura Butler, 1867

Type species: *D. pulchra,* designated by Scudder, 1875

In his overview of the "Nemeobiinae", Stichel (1928) listed already 14 species with 27 subspecies for *Dicallaneura*, which are described in detail and which - following Seitz (1914) - represented the most current documentation for a long time. Bridges (1988) listed 18 species and 28 subspecies and Parsons (1998) gives a total number of 15 species. According to the funet.fi website, maintained by Markku Savela, *Dicallaneura* currently includes 16 species and 25 subspecies.
The genus ranges from Aru across mainland New Guinea (including some offshore islands like Waigeo and the "Schouten Islands") but does not reach Australia.

Dicallaneura ekeikei Bethune-Baker, 1904

Dicalleneura [sic !] *ekeikei* Bethune-Baker, 1904: 370 (HT ♂, "Ekeikei, B.C. New Guinea", NHMUK)
Dicalleneura [sic !] *ekeikei*. – D´Abrera, 1971: 388 (illustration of the HT ♂, and one female)
Dicallaneura ekeikei. – Parsons, 1998: 332, pl. 41, figs 1017-1020 (HT ♂)

Notes: *D. ekeikei* is easily recognized because of the "longitudinal stripes below" which were already mentioned by Bethune-Baker as unique character within the genus. It is a very rare species, previously known only from the holotype and one additional paratype female, both deposited in the NHMUK. The female is superficially reminding of *Dicallaneura leucomelas* Rothschild & Jordan, 1905, which differs in having the characteristic underside pattern of the other species belonging to *Dicallaneura*.
Nominate ssp. *ekeikei* does not occur in Western New Guinea, but is exclusively known from the Owen Stanley Range in SE Papua New Guinea, NE of Port Moresby. The type locality is said to be midway between Epa and Tapini (Parsons, 1998: 332).

Dicallaneura ekeikei longifascia Joicey & Talbot, 1922 (Figs 1-4)

Dicallaneura longifascia Joicey & Talbot, 1922: 331 (HT ♀, "Nomnagihé", NHMUK)

Notes: The description of *D. longifascia* was based on a single female specimen. Joicey & Talbot compared *longifascia* with *ekeikei* and mention that both species agree in having white areas on both wings and a long white stripe on the hindwing. The description of the female type specimen does not reveal any significant differences to *ekeikei*, neither were they discussed elsewhere. Parsons (1989: 332) considers *longifasciata* to be a subspecies of *ekeikei*, which makes sense, considering the wide geographical distance between both type localities. The *longifascia* holotype was described from Nomnagihé, which is situated 25 km southeast of Wangaar in West Papua and according to Toxopeus (1944), this is south of Geelvink Bay, probably somewhere in the Kobowre (Weyland) Mountains.

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A male illustrated herein from Yahukimo/West Papua (Figs 1-2; CKON) shows no relevant differences in comparison to the male holotype of nominate *ekeikei* (Parsons, 1998: pl. 41, figs 1017-18). Other similar specimens are known from Kaimana and Timika (CAYI).
The white upperside-hindwing, postmedian spot (space 3) in the females may be lacking. Females of the nominate race show a marginal yellowish line, ranging from tornus almost to the apex of the hindwing, which is restricted to spaces 3 and 4 in specimens from Papua/West Papua. As was already suggested by Stichel (1928: 117), *longifascia* is most likely a synonym of *ekeikei* but for the present, the classification of Parsons is adopted here.

Dicallaneura ribbei Röber, 1886

Notes: Various characters of the underside wing pattern were used to define *Dicallaneura ribbei*. Röber (1886) especially referred to a prominent yellow square on the forewing underside, adding the following sentence in locked fonts in his description: “the part of the median vein between the 1st and 2nd branch and the latter stand out very well against the dark brown background by their light brown dusting and form a shifted square open to the outside; in the apex there is a white-yellow zigzag band”. On the other hand, Stichel (1928: 104) regarded the narrow brown submarginal band, which is flanked by yellow on both sides, as distinctive character of the hindwing underside. The various approaches already show that *ribbei* is a highly variable species.

Males are easily recognized by their uniform blackish-blue wing upperside and - based on their underside pattern - females of *ribbei*, *kirschi*, *pulchra* und *decorata*, which are superficially very similar, are also relatively easy to separate from each other. *D. ribbei* as well as *pulchra* have a continuous, smooth margined, subterminal hindwing band, distinguishing it from similar *kirschi*, where this band is split into a series of zigzagged streaks. In *D. pulchra*, the area below the cubitus of the forewing underside is coloured yellow, but mainly brown in *ribbei*. There is no subterminal band on the hindwing underside of *decorata*, which may be recognized by the elongated whitish stripes in spaces 1b to 3.

D. ribbei is displaying a remarkably high phenotypic plasticity, which is also reflected in the numerous “subspecies” being described.
There appear to be numerous local populations on the NG mainland, whose systematic positions do not appear to be fully understood. It is possible that these are actually synonyms of a single, highly variable subspecies (Parsons, 1998) or independent, allopatric taxa. This would mean that *ribbei* breaks up into many individual subspecies or populations, which may not be completely separated from each other, but occurr in apparent genetic isolation. Only a complete revision, which includes records from the entire range of distribution, can lead to a clearer picture of this species.
Stichel (1928: 108) had already mentioned that *ribbei* is divided into 5, only very weakly separated subspecies and Parsons (1989: 330) subsequently synonymized most species from mainland New Guinea with *ribbei arfakensis* Fruhstorfer, 1898: *diantha* Grose-Smith 1901, *milnei* Fruhstorfer 1904, *birana* Fruhstorfer 1914, *hageni* Toxopeus 1944, and tentatively, *ovada* Fruhstorfer 1914. Parsons (1998: 330) also concludes that only one race of *ribbei* occurs in PNG, which is *ribbei arfakensis*.

The taxon *irregularis* Ribbe, 1926, mistakenly listed as subspecies of *Dicallaneura ribbei* by Bridges (1988: II. 31), is a synonym of *Rapala ribbei* (Röber, 1886) from Sulawesi (Takanami, 1989: 54).

Dicallaneura ribbei ribbei Röber, 1886 (Figs 7-10)

Dicallaneura ribbei Röber, 1886: 49, pl. 5 fig. 15-16 (HT ♂, "Aru Inseln, Ureiuning", NHMUK)

Notes: Parsons (1998) mentioned that the male holotype is deposited in the NHMUK, bearing the following locality data: "Aru Inseln Ureiuning, C. Ribbe 1884". The collection of the SMT (Dresden) includes a further pair with corresponding data, which, according to a note added by J. Tennent, may represent syntypes.
Occurrence of the nominate subspecies is restricted to the Aru Islands.

Dicallaneura ribbei arfakensis Fruhstorfer, 1898 (Figs 5-6, 11-18)

Dicallaneura arfakensis Fruhstorfer, 1898: 195 (Type ?, "Montes Arfak, Nova Guinea", Dep.?)
Dicallaneura diantha Grose-Smith, 1901: 7, pl. 2 fig. 1-3 (HT ♂, "Milne Bay, British New Guinea, NHMUK)
Dicallaneura milnei Fruhstorfer, 1904: 147 (HT ♂, "Milne Bay, British-Neu-Guinea", NHMUK)
Dicallaneura ribbei birana Fruhstorfer in Seitz, 1914: 786 (HT ♀, "Etna Bay, SW Neth. New Guinea", NHMUK)
? *Dicallaneura ribbei ovada* Fruhstorfer in Seitz, 1914: 787 (HT ♂, "Eilanden River", NHMUK)
Dicallaneura ribbei cyanandra Toxopeus, 1944: 170 (HT ♀ "Bernhard Camp, Idenburg", RMNH) **syn. nov.**
Dicallaneura ribbei hageni Toxopeus, 1944: 171 (HT ♂, "Astrolabe Bay, 'German' New Guinea", NHMUK)

Notes: In describing *arfakensis*, Fruhstorfer (1898: 195) already recognized the close relationship with *ribbei* from the Aru Islands, even though it was only known to him from Röber`s description. He gave a lengthy description, but did not discuss any morphological differences of the wing underside pattern in detail.
However, Fruhstorfer points out the different ultramarine blue upperside forewing colour of *arfakensis*, which, in contrast, should be black in *ribbei* s.str. According to Fruhstorfer (in Seitz 1914: 786): "the male shows a somewhat darker brown overall colouration of the underside than *arfakensis*".
It has to be clarified whether the black margin of the forewing is somewhat more extensive in *arfakensis* females than observed in *ribbei* specimens from Aru. However, it remains questionable whether this is an important character at all.
The nominate subspecies differs in its much stronger and sharper defined, more contrasting underside pattern and the wider hindwing submarginal band. The median veins on the underside of the hindwing are clearly light yellow in *ribbei ribbei*, while only slight differences in the hindwing ground tone can be seen in *arfakensis*.
However, it is a highly variable subspecies and Parsons (1998: pl. 40 figs 998-1003) has depicted specimens that are strongly reminiscent of the specimens from Aru in terms of the underside pattern.
According to Fruhstorfer (in Seitz, 1914), *arfakensis* is found along the entire northern coast of New Guinea, including Waigeo. The holotype male was collected in the Arfak Mountains south of Manokwari, but the females placed with the type were supposedly collected at Astrolabe Bay (Madang Province). The name "Vraz" is given as the collector of the type

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specimen, but it remains unclear who this is or where the type is deposited. Toxopeus (1944) assumes as type locality: “certainly not at high altitudes, most probably behind Manokwari on the outspurs of the hills”.
Toxopeus (1944) also explained that the illustrations (at least of the ♀) in Seitz are most likely based on specimens from the surroundings of Astrolabe-Bay and separated these specimens (which were, according to Toxopeus, received by Fruhstorfer at a later time, probably in 1904) from *arfakensis* as ***Dicallaneura ribbei hageni* Toxopeus, 1944,** which is currently regarded as further synonym of *ribbei arfakensis*.
D. r. hageni was separated from *r. arfakensis* mainly because of the presence of a mid-costal spot on the hindwing underside as is present in *cyanandra* Toxopeus, 1944 while *arfakensis* has a “mid-costal tooth” only.

The description of ***Dicallaneura ribbei birana* Fruhstorfer,** 1914 is based on a single female specimen from Etna Bay in southwest Papua. Fruhstorfer`s short diagnosis comprised only two lines, comparing it with a female of nominate *ribbei* from Aru Is. It was said to differ from this subspecies by its extended black discal area of the forewing and narrower yellow bands of the hindwing underside. Toxopeus (1944) has pointed out that his *birana* “specimens showing all spots and bands enlarged compared to the figures of other subspecies”. In addition, in the female “the brown colour of the forewing upperside protrudes into the yellow veins 3 and 4 and (with a sharp tooth) in the interspace below vein 2.” However, these characters are not regarded as sufficient enough to support separation of a subspecies (Parsons, 1998: 330).

***Dicallaneura ribbei ovada* Fruhstorfer, 1914** from the “Eilanden River” (now known as Pulau River in south Papua) was said to be the subspecies being most distant from nominate *ribbei*, described as larger than *ribbei*, the underside being deeper brown and the stripes and bands which are light yellow in *ribbei* are ochreous in *ovada*; the spots of the forewing smaller (Stichel, 1928). As the holotype is the only known specimen, Parsons (1998) regarded *ovada* as possible synonym of *arfakensis*. A male from Timika (Figs 17-18) does not show any significant differences to specimens from the northern coast, except for the better developed and stronger yellowish coloured median wing veins 2-4, closely resembling *ribbei* from Aru and it may be better included in this race.

***D. ribbei cyanandra* Toxopeus, 1944 syn. nov.**
The type series consists of 5 females, collected at “Bernhard Camp, Idenburg” in the Jayawijaya (Central) Mountains, and according to Toxopeus, the holotype and three paratypes are said to be in “Museum Buitenzorg” (Figs 11-12, ♀ PT), and a further paratype in the “National Museum, New York”. However, one specimen labelled as holotype is deposited on the collection of RMNH/Leiden (Figs 5-6). Toxopeus had characterized the Idenburg population in his description as follows: “This subspecies is noticeable for its dark mid-costal marking in the shape of the Greek character π and the plain disc of the hindwing underside. The yellow bands are conspicuous because of their dark edges”.
However, comparable forms have also become known from ssp. *arfakenis* (e.g. from Sorong and Waigeo), so a subspecific separation is unnecessary.

Dicallaneura decorata Hewitson, 1862

Notes: Stichel (1928: 111) had already observed that this species splits up into „teilweise nur schwach getrennte, in sich nicht beständige Unterarten“, and many “races” are difficult to separate from each other. Although the species is, according to Toxopeus (1944: 162), subject to a “susceptibility to local influences”, he recognized in his work no less than eleven subspecies that were assigned to four sections within *decorata*:

a) *ostrina*-section: with dark males and a light coloured hindwing underside,
b) *decorata*-section: (including *sfagia*) with red banded males and very dark undersides as in nominate *decorata*,
c) *tantra*-section: with a reddish band and light underside in the males and with very light undersides in the females, including rather large forms,
d) *parina*-section: like *tantra*, but including smaller forms.

Parsons (1998) recognizes the following three subspecies in Papua New Guinea:
decorata ostrina Grose-Smith, 1894 (HT ♂, “Humboldt Bay”, NHMUK)
decorata conos Fruhstorfer, 1904 (HT ♂, “Deutsch-Neu-Guinea“, NHMUK)
decorata parina Fruhstorfer, 1914 (HT ♂, “Lower Aroa River, Brit. N. Guinea”, NHMUK)
= *sigala* Fruhstorfer, 1914 (HT ♂, “Milne Bay”, NHMUK)
= *sfagia* Fruhstorfer, 1914 (HT ♂, “Eilanden River“, NHMUK)
= *sariba* Fruhstorfer, 1914 (HT ♂, “Sariba Island”, Milne Bay, NHMUK)

Parsons is discussing the regional occurrences of the subspecies in Papua New Guinea from west to east in the following order: *ostrina* (northwest: Sepik) – *conos* (Central: Morobe, Madang) – *parina* (south and southeast: Central/Milne Bay). He illustrates *ostrina* and *conos* (female underside only) but in his plate captions for the southwestern (Western Province) and southeastern (Central Province) population, which should belong to *decorata parina*, the name *decorata decorata* is given, even though occurrence of the nominate subspecies is restricted to Aru. Maybe this is caused by the Aru and the southern New Guinea *decorata* populations greatly resembling each other (Toxopeus, 1944: 162).

Furthermore, five additional subspecies names are currently in usage, all of them assigned to taxa occurring only in Western New Guinea, and thus omitted by Parsons (1998):

decorata adulatrix Fruhstorfer, 1904 (TL Waigeo)
decorata sangha Fruhstorfer, 1914 (TL Misool)
decorata tantra Fruhstorfer, 1914 (TL Dorey)
decorata ansuna Fruhstorfer, 1914 (TL Yapen)
decorata kausambides Toxopeus, 1944 (TL Araucaria River, Jayawijaya [Central] Mountains)

If ssp. *ostrina* from “Humboldt Bay” is added to this list, then there are currently six *decorata* subspecies occurring in West Papua and Papua.

Males usually have a red or orange coloured band across the forewing and orange-brown hindwings, but in ssp. *ostrina* the upperside is dark blackish-brown with only some orange-red at the hindwing costa. The male phenotype of ssp. *conos* is intermediate between

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ostrina and *parina*. The basal half of the forewing is coloured dark reddish brown, without a red band and hindwings are slightly reddish brown, turning into yellow at the costa (Fig. 36; Seitz, 1914: 788, pl. 139). Females of all subspecies are very similar on their wing upperside, which is yellow to orange, except for the outer, apical half of the forewing which is blackish with a dark violet-blue tinge in side-view. The underside pattern is highly variable regarding the development of the bluish-white stripes, the ground colour and the intensity of blue spots.
After comparing the populations occurring in New Guinea and on the surrounding islands, only four subspecies of *decorata* are recognized in this work:

1) ssp. *decorata* (Aru),
2) ssp. *sangha* (southeastern PNG, NG south of the Central Cordillera, including Misool),
3) ssp. *tantra* (NW mainland West Papua and Papua), and
4) ssp. *ostrina* (NG north of the Central Cordillera).

Dicallaneura decorata decorata Hewitson, 1862 (Figs 19-22)

Dicallaneura decorata decorata Hewitson, 1862: 74, pl. 38 figs 11-13 (HT ♂, "Aru", NHMUK)

Notes: According to Toxopeus (1944: 158), ssp. *decorata* "is extremely near to *sfagia* FRUHST. from S. W. Neth. New Guinea and differs in the male sex in having a lighter and broader forewing band. The females of both subspecies hardly show any difference at all.", so it is not surprising that Parsons synonymized *sfagia* with mainland *decorata parina*, which is likewise very close to nominate *decorata*, occurring only on Aru but not on mainland New Guinea.

Dicallaneura decorata ostrina Grose-Smith, 1894 (Figs 23-34)

Dicallaneura ostrina Grose-Smith, 1894: 543 (HT ♂, "Humboldt Bay, Dutch New Guinea", NHMUK)
Dicallaneura ostrina. – Grose Smith & Kirby, 1897: 1, pl. 1 figs 1-2.
D. ostrina ansuna Fruhstorfer, 1914: 788. **syn. nov.**
D. ostrina. – Stichel, 1928: 109.
D. decorata ostrina. – Toxopeus, 1944: 159.
D. decorata kausambides Toxopeus, 1944: 160. **syn. nov.**
Dicallaneura decorata ostrina. – Parsons, 1998: 329, pl. 40 figs 984, 986/987.

Notes: Occasionally, *ostrina* was considered an independent species (Stichel, 1928: 109, D'Abrera, 1971: 388) and in addition to the nominate subspecies, for example, the taxon *ansuna* Fruhstorfer, 1914 was regarded as subspecies of *ostrina*. This is due to the very dark wing upperside colour of supposed *ansuna* males compared to the other *decorata* subspecies, which was caused by an incorrect assignment in Seitz (cf. the discussion of *decorata ansuna* below).
Following Fruhstorfer (1904), it was Toxopeus, who regarded *ostrina* again as a subspecies of *decorata*, which can be confirmed as there is no sympatry between *ostrina* und normal red-banded *decorata* males (Parsons, 1998: 330).
On the upperside, males are dark pinkish brown, suffused with purple. In fresh specimens, there may still be some red scales, and Toxopeus (1944) mentions traces of a red band being present in some.

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Males of *ostrina* are easily recognized because of their reddish-brown patch at the apex of the hindwing, which may be very prominent (Parsons, 1998: 40, fig. 984) or reduced to a reddish orange dusting along the hindwing costa, as is the case in the male from the Cyclops Mountains (Fig. 23).

Females belong to the distinctive yellow form, which is very similar in all subspecies and hardly differs from the nominate subspecies from Aru or ssp. *sfagia* (cf. Stichel, 1928: 109). The yellow is slightly less orange, the undersides have an identical pattern, but the white spots are slightly stronger than in nominate *decorata*. A female of "Hollandia/Humboldt Bay", which was designated as "neallotype" by Toxopeus (1944: 160) [Grose-Smith only had one male available for his description in 1894] is deposited in RMNH Leiden (Fig. 25).

D. decorata kausambides **Toxopeus, 1944 syn. nov.** (Araucaria River, Jayawijaya [Central] Mountains, north of Kobakma?) is known from two males only, which are labelled "Araucaria Camp, 800m". The camp was located at the Araucaria Creek, a tributary of the Sahoeweri River (Archbold et al., 1942: 239).
Both specimens (labelled as holo- and paratype) are in the collection of the RMNH Leiden (Figs 27-28). With their predominantly brown wing uppersides they are closely resembling *ostrina* and the slightly different colour at the apex of the hindwing upperside or the larger discal (halfmoon shaped) white spot are not sufficient enough to recognize *kausambides* as a subspecies. Accordingly, *kausambides* is here regarded as a synonym of *decorata ostrina*.
Females from the Central Mountains remain unknown.

The taxon "***kausambides*** **ab.** ***intermedia*** **Toxopeus, 1944**" doubtlessly falls within the variation of *kausambides*. It differs only in having a slightly more yellowish hindwing costa and the orange bar on the forewing is slightly more developed on the forewing (Fig. 29). However, *intermedia* is an infrasubspecific and therefore unavailable name [Art. 45.6 ICZN].

Dicallaneura decorata ansuna **Fruhstorfer, 1914 syn. nov.**: Fruhstorfer (in Seitz, 1914: 788, pl. 140, d, e) adds images of the underside of a female and the upper side of a male to the description of *ansuna*. The female undoubtedly belongs to a *decorata* form, but the male pictured shows a compact, light blue band on the forewings, which clearly distinguishes it from the males of all other *decorata* subspecies, which never show such a blue band. Toxopeus (1944) has already pointed out this incorrect assignment ("a miscreation of Fruhstorfer") and that the male from Yapen Island belongs to *D. pulchra* [placed with *princessa* by Stichel, 1928: 109].
Based on the illustration in Seitz, this single male is subsequently selected as the type of the new subspecies *D. pulchra ansa* Toxopeus, 1944, since the name *ansuna* was already used for the form of *deocrata* flying on Yapen.
No males of *decorata ansa* from Yapen were available for the revision of Toxopeus (1944: 163), but due to its geographical proximity to New Guinea, he already suspected a similarity to ssp. *tantra* or ssp. *ostrina*. Males from Yapen confirms the latter and likewise this also corresponds to Fruhstorfer's original intention. The male illustrated herein (Figs 31-32) does not differ from *ostrina* specimens known from mainland northern New Guinea.
The only female from Yapen (Figs 33-34) that is available to me is characterized by the reduced yellow of the forewings, especially in spaces 1a and 1b, while in all other subspecies the yellow in space 1b is reaching almost to the tornus. As it is more than doubtful whether

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this is a reliable character for subspecific separation, *ansuna* is therefore considered a synonym of *ostrina*.
Since Seitz's illustrations of "*ansuna*" belong to two different species and he did not consider the work of Toxopeus, it is not surprising that D'Abrera (1977: 388) compares *ansuna* with both *pulchra* and *ostrina*, and ultimately even regards it to be an independent species. Consequently, *D. ostrina ansuna* has so far been characterized exclusively by the image of the underside of a female in Seitz. The whereabouts of the female type specimen are not known (Seitz mentions Tring), but it may also be found in in Berlin or London.

The subspecies *ostrina* was described from “Humboldt Bay” (= Yos-Sudarso-Bay), but also flies in the northern provinces of Papua New Guinea (Sepik). It is not known how far south or west the distribution of comparable populations extends, but a distribution along the northern coast of Papua is assumed and includes the island of Yapen.

Dicallaneura decorata sangha Fruhstorfer, 1914 (Figs 35, 37-52)

Dicallaneura decorata sangha Fruhstorfer, 1914: 787 [HT ♂, “Mysol”, Tring = NHMUK]
D. decorata parina Fruhstorfer, 1914: 788 [HT ♂, “Lower Aroa River, Brit. N. Guinea”, NHMUK] **syn. nov.**
D. decorata sfagia Fruhstorfer, 1914: 788 [HT ♂, “Eilanden River“, NHMUK]
= *sigala* Fruhstorfer, 1914 (HT ♂, “Milne Bay”, NHMUK)
= *sariba* Fruhstorfer, 1914 (HT ♂, “Sariba Island”, Milne Bay, NHMUK)

Notes: Parsons (1998) regarded all southern PNG populations of *D. decorata* as belonging ssp. *parina*, also including the occurrences from southern Papua, which were originally described as ssp. *sfagia*.
Since ssp. *sangha* from Misool does not differ much from the records known from southern New Guinea, which are characterized by a strong orange-red diagonal band on the forewing, it is also included here. The hindwings are colored reddish-brown, the costa being clearly brightened yellow and the colouring towards the inner margin becoming only slightly darker.
The name ssp. *sangha* has page priority and accordingly, ssp. *parina* has to be regarded as synonym of ssp. *sangha*.
In contrast, the populations in northern Papua and especially West Papua (= ssp. *tantra*) are generally darker in colour, the diagonal band on the forewings is narrower and the reddish-brown of the hindwings strongly darkens from the apex to the inner margin.

***Dicallaneura decorata parina* Fruhstorfer, 1914 syn. nov.**: The type material of ssp. *parina* was collected at the Aroa River, north of Port Moresby (Central Province of PNG) and according to Parsons (1998: 329), *parina* is “widespread throughout much of the southern and south-eastern mainland”. Parsons includes ssp. *sfagia* in *parina*, which also occurs in southern Papua, south of the Central Cordillera in the Asmat Lowland. Type locality of *sfagia* is the Pulau (Eilanden) River south of Agats (SE of Timika) and the race occurring at Timika / Mimika and other well-known localities in southern Papua are generally included in the range of *parina* (Gotts & Pangemanan, 2010). [Timika is located approximately 300 km northwest of Pulau River]
The two males from Kiunga/Western Province and Bisiatabu/Central Province, depicted by Parsons (1998: pl. 40 figs 980-983) differ only in the intensity of the white stripes on the hindwing underside, in the extent, as can also be observed between specimens from Timika and Pulau River (Figs 49-52). According to Parsons, ***D. decorata sigala*,** originally described

from Milne Bay, has also to be included in ssp. *parina*. This includes the populations of Yule Island (Figs 41-42), north of Port Moresby.

D. decorata conos **Fruhstorfer, 1904**: the material from the Madang and Morobe Province of PNG (TL: Bongu, south of Madang), is intermediate between *parina* and *ostrina*. According to Fruhstorfer, the forewings are basally dark reddish-brown without the band present in *parina* (Fig. 36; cf. Seitz, 1914: 788, pl. 139b). Interestingly, similar, also heavily darkened phenotypes can also be found, for example, in Nabire, i.e. in a region that is far away from Madang Province/PNG. This specimen from Nabire (Figs 63-64) is illustrated here, as it is much darker and has the forewing band much less produced than specimens from Sorong and FakFak. It is only provisionally included in *D. decorata* aff. *conos*.

Dicallaneura decorata tantra Fruhstorfer, 1914 (Figs. 55-62)

Dicallaneura decorata tantra Fruhstorfer, 1914: 788 [HT ♂, "Dorey", ? NHMUK]

Notes: This subspecies was briefly described (but never illustrated), based on material from the eastern coast of the Doberai Peninsula, possibly from the surroundings of Dorey Bay south of Manokwari or the Arfak Mountains and hence, it was called the "Vogelkop subspecies" by Toxopeus.
Toxopeus (1944) mentions the very narrow orange forewing band in the males, which is also not as bright as in ssp. *sangha*. The hindwing is "vivid rusty-brown" but with a "clear yellow costal-apical area", which was also observed by Stichel, and by which *tantra* mainly differs from *parina*. This trend can be observed in specimens from Mioswaar Island as well as in specimens from the other side of the Doberai Peninsula at Sorong. It remains doubtful if additional specimens from FakFak (Kapaur), mentioned by Fruhstorfer, also belong to ssp. *tantra* or to a different taxon, as they already approach the phenotype of ssp. *adulatrix* known from Waigeo (Stichel, 1928: 112).

Dicallaneura decorata adulatrix Fruhstorfer, 1904 (Figs 53-54, 67-68)

Dicallaneura decorata adulatrix Fruhstorfer, 1904: 145. [HT ♂, "Waigiu", ? NHMUK]

Notes: Fruhstorfer notes that *adulatrix* cloesly resembles the nominate subspecies, but in his description compares the male of *adulatrix* with *ostrina*: in contrast to *ostrina* males, the forewings of *adulatrix* are basally reddish-brown and the hindwings are completely reddish-brown, while in *ostrina* only the apical part is lined with reddish-brown. Female specimens have more prominent, longer white stripes underneath.
The only available female (Fig. 53-54) from Waigeo does not differ much from those of ssp. *tantra*, but a male from Waigeo (Figs 67-68) is approaching the dark phenotype of ssp. *conos*.

Dicallaneura pulchra (Guérin-Méneville, 1830)

Argynnis pulchra Guérin-Méneville (in Duperrey), 1830: pl. 16, fig. 2-3. [Type ♀, "port Dory", Dep.?]
Emesis leosida Boisduval, 1832: 65. [not illustrated]

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Emesis leosida. BOISD. – Guérin-Méneville (in Duperrey), 1838: 275, 318.
Taxila pulchra. – Hewitson, 1862: 73, pl. 38, f. 8-10.

Notes: The description of *D. pulchra* is based on a female specimen from Dorey (= Manokwari), which was figured by Guérin-Méneville in 1830. As the text part of plate 16 was published much later than the plates, there was no written description of the species until 1838 (Cowan, 1970; Cretella, 2010). Boisduval (1832) gave a text description of the same species (without any illustration, but referring to Guérin-Méneville) now under the name *E. leosida* in 1832, but this name has to be regarded as a synonym, even though the illustration of *pulchra* was lacking any written description (ICZN Art. 12.2.7.) and Guérin-Méneville had accepted Boisduval`s alleged authorship. The whereabouts of the holotype are still unknown, but it is certainly not a male specimen as has been stated by Parsons (1998). Hewitson (1862) did not list Dorey as locality as was stated in Guerin-Meneville: [“Cette charmante espèce a été trouvée au port Dory, à la Nouvelle-Guinée.”], but subsequently gave Waigeo as its only habitat.
Staudinger (1888: 239, pl. 87 ♂; deposited in MFN Berlin) also gave Waigeo as the only locality: “Die Gattung enthält nur 2 Arten, von denen die abgebildete **ausschliesslich** auf Waigeu (woher ich sie auch von Dr. Platen erhielt), ..gefunden wurde.“ This was copied by Toxopeus, who mentions “topotypic material” of Platen.
Toxopeus (1944: 165) regarded *leosida* Boisduval, 1832 as valid subspecies from Manokwari and not as a synonym of *pulchra*. Toxopeus (1944) states: “The name *leosida* Boisd. was based on a specimen from New Guinea, as I can confirm after having carefully compared the details of Boisduval's description with a Manokwari specimen in my collection. It is therefore not an absolute synonym of *pulchra*, as Stichel maintained, but a separate subspecies. Stichel's habitat „Dorey" for *D. pulchra pulchra* must be cancelled”.
Therefore, it was assumed that the type locality of the original of Boisduval must be Dorey or Manokwari, while *pulchra* is described as a subspecies of Waigeo, but without further justification.
Thus, Toxopeus deliberately changes the type locality of *pulchra* Guérin-Méneville, which has been proven to be Dorey, and now establishes Waigeo as the type locality instead. Subsequent researchers did not question this designation and, finally Waigeo was erroneously accepted as type locality of *pulchra* (Toxopeus, 1944; Seitz, 1914: 787; Parsons, 1998). The location of the type specimen remains unknown (Lachlan & Müller, 2013).
Outside of from New Guinea, *pulchra* is also recorded from the Aru Islands (pers. comm. Yagishita, 2024, Fig. 84).
D. pulchra is distinguished by a whitish blue, oblique bar across the forewing in the males, which does not underly a significant variation (Lachlan & Müller, 2013). Females are closely resembling *ribbei*, but the area below the cell of the forewing underside is coloured yellow in *pulchra* and not dark brown.

There are currently six subspecies known from western New Guinea:

ssp. *pulchra* Guérin-Méneville, 1830 (TL “port Dory” = Manokwari)
ssp. *princessa* Grose-Smith & Kirby, 1897 (TL “Biak”)
ssp. *vasatha* Fruhstorfer, 1914 (TL “Kapaur” = FakFak)
ssp. *sigrya* Fruhstorfer, 1914 (TL “Mysol”)
ssp. *udiyana* Fruhstorfer, 1914 (TL “Humboldt Bay”)
ssp. *ansa* Toxopeus, 1944 (TL “Jobi Isl.”)

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Parsons (1998: 331) referred to the NHMUK arrangement, which is suggesting that *udiyana*, *vasatha* and *sigrya* are synonyms of *pulchra*. The whereabouts of the types of the subspecies mentioned above are unknown.

Dicallaneura pulchra pulchra (Guérin-Méneville, 1830) (Figs 73-83)

Argynnis pulchra Guérin-Méneville (in Duperrey), 1830: pl. 16, fig. 2-3. [HT ♀, "port Dory", Dep.?]
ssp. *vasatha* Fruhstorfer, 1914 (TL "Kapaur" = FakFak)
ssp. *udiyana* Fruhstorfer, 1914 (TL "Humboldt Bay")
ssp. *sigrya* Fruhstorfer, 1914 (TL "Mysol")
? ssp. *ansa* Toxopeus, 1944 (TL "Jobi Isl.")

Notes: The separation of the three subspecies established by Fruhstorfer (in Seitz, 1914) appears to be an exaggerated splitting from today's point of view, especially as all species of the genus have proved to be very variable, and the names introduced should therefore be regarded as synonyms of *pulchra*. The populations from West Papua show relatively close similarities and can therefore all be assigned to the nominate subspecies.
In general, the hindwing markings can vary somewhat, such as the presence of the cell end spots or the median veins 2-4 below the cell, which may be outlined with white or yellowish scales to a various degree.
A male from the Arfak Mts. (Fig. 81) has a rather pale ground colour and very bold white underside markings and may represent a local race found at a higher elevation, which differs from the populations known from Manokwari. Specimens from FakFak and Waigeo/Raja Ampat do not differ much from those occurring at Manokwari.

***D. p. udiyana* Fruhstorfer, 1914:** The description of *udiyana* is limited to one line (Fruhstorfer in Seitz, 1914: 787) and refers to differences to the subspecies occurring on Waigeo: „The upper surface of the hindwings is darker than in the specimens from Waigeo, with a smoky-brown tinge." This difference is hardly suitable for a subspecies separation from *pulchra* and the taxon is therefore considered synonymous.
***D. p. vasatha* Fruhstorfer, 1914:** Another taxon that is difficult to characterize, which should be conspicuous in the females in comparison with *pulchra* s.str. due to „smaller white dots of the forewings and, in both sexes, by the obsolete most central one of the three small crescentiform spots traversing the cell. The submarginal silvery-white small stripes are likewise in the decrease." These characters appear more as individual variation, which are also not suitable for separating a subspecies.
***D. p. sigrya* Fruhstorfer, 1914:** According to Fruhstorfer, this taxon is known for relatively small individuals, in which the white band „begins to dissolve posteriorly and is already considerably narrowed." Uppersides are said to be much darker than in nominate *pulchra*, "but without the smoky-brown tinge of the female from Humboldt Bay."
***D. p. ansa* Toxopeus, 1944**
Little is known about this subspecies of Yapen. The description (Fruhstorfer in Seitz, 1914: 788, pl. 140, e) is based solely on an illustration of the upper side of a male. Stichel (1928: 109) assigned *ansa* to *pulchra princessa* on the basis of the illustration. Toxopeus (1944: 167), however, considers it unlikely that this is a form close to ssp. *princessa* found on Biak.

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This argument is followed here and the taxon *ansa* is therefore regarded as a possible synonym of *pulchra*.

Dicallaneura princessa Grose-Smith, 1894 (Figs 85-90)

Dicallaneura princessa Grose-Smith, 1894: 544; [HT ♀, "Biak", NHMUK]
Dicallaneura princessa; Grose-Smith & Kirby, 1897: 2, pl. 1, figs 3-4.
Dicallaneura princessa; Joicey & Noakes, 1915: 196, pl. 26, fig. 6.

Notes: Toxopeus (1944: 169) believes that *princessa* may better be regarded as a separate species, different from *pulchra* and the underside wing pattern makes it easy to distinguish *pulchra* from *princessa* at any time. The central black patch on the underside of the forewing always contains three blue spots and is surrounded by a ring-shaped, postmedian band that extends from the costa to the tornus. In *pulchra* this band is only weakly or not at all developed and the blue spots are strongly offset.
So far, *princessa* has been known almost exclusively from Biak; however, an almost identical specimen is illustrated from Misool (Figs 89-90). However, the large geographical distance between Biak and Misool makes this record appear questionable (incorrect label data?), especially as *princessa* has not yet found on the mainland of the Doberai Peninsula.
Perhaps *princessa* occurs sympatrically on Misool (and Yapen, see above; *D. p. ansa/p. sigrya*) with a subspecies of *pulchra*, which would confirm the species status of *princessa* assumed by Toxopeus (1944: 168).

Dicallaneura kirschi Röber, 1886

Dicallaneura kirschi Röber, 1886: 50, pl. 5, f. 14; [HT ♂, „Aru-Inseln, Ureiuning"; NHMUK)

Notes: According to Röber (1886: 50): „die helle Binde im Discus der Htrfl., welche bei Ribbei ziemlich regelmässige Form besitzt, ist bei Kirschi sehr stark gezackt", meaning that the lightly coloured subterminal hindwing band, which is smooth margined in *ribbei*, is strongly zigzagged in *kirschi*.
Underside pattern of *D. kirschi* resembles that of *D. hyacinthus*, but males of the latter have a blackish blue upperside instead of ochre brown in *kirschi* and a darker underside colour. Occurrence of the nominate subspecies is restricted to Aru.
In New Guinea, three further subspecies have become known: *didica* Fruhstorfer (western West Irian), *fulgurata* Grose Smith (southern New Guinea), and *semirufa* Grose-Smith (Humboldt Bay). The darkest forms are assigned to ssp. *semirufa*, while ssp. *fulgurata* has the lightest forms (which are almost orange colored; Parsons, 1998: pl. 40, fig. 991) and ssp. *didica* occupies an intermediate position between the two forms.

Dicallaneura kirschi semirufa Grose-Smith, 1894 (Figs 91-94)

Dicallaneura semirufa Grose-Smith, 1894: 544. [HT ♂, "Humboldt Bay, Dutch New Guinea", NHMUK]

Notes: Grose-Smith described the two males from "Humboldt Bay" as "dull rufous brown" on their upperside. It is said to be the darkest of all subspecies (D´Abrera, 1971). However, male specimens from the Foja Mountains (Sarmi, Figs 91-94) do not appear as dark as

specimens from Timika (Figs 95-98), which are placed with ssp. *didica*. A long description of a female from "Hollandia" was subsequently given by Toxopeus (1944).

Dicallaneura kirschi didica Fruhstorfer, 1914 (Figs 95-98)

D. kirschi didica Fruhstorfer (in Seitz), 1914: 787, 140 d [HT ♂, „Eilanden River and Oetakwa River", NHMUK]

Notes: Fruhstorfer's description is very short: "♂ with almost white spots and bands of the under surface. ♀ with a dim median crescentiform spot in the cell of the hindwing." Gotts & Pangemanan (2010) place the population occurring at Mimika in ssp. *semirufa*.

Dicallaneura kirschi fulgurata Grose-Smith, 1901

Dicallaneura fulgurata Grose-Smith, 1901: 7, [3] 2 pl. 1, f. 4-5 [HT ♂, "Milne Bay", NHMUK]

Notes: According to Fruhstorfer (1914) the male is "somewhat lighter red-brown" than *didica*. Parsons (1998: 330) especially referred to the phenotypic similarities between males of *D. kirschi fulgurata* and darker females of *D. ribbei* in PNG.
Distribution is apparently restricted to Milne Bay and Central Province in SE PNG (Parsons, 1998: 330), but D´Abrera (1977: 389) listed it from southern Papua.

Dicallaneura hyacinthus Toxopeus, 1944 (Figs 99-104)

Dicallaneura hyacinthus Toxopeus, 1944: 172 [HT ♂, "Araucaria Camp, 800m", RMNH]
Dicallaneura cyanea Toxopeus, 1944: 173 [HT ♂, "Rattan Camp, 1200m", RMNH]

Notes: Although *D. hyacinthus* clearly differs from *kirschi* due to its dark indigo blue upperside, the pattern of the underside is very similar and both species - together with *D. pelidna* - form a phenotypically close group, which all share the zigzagged submarginal line of the hindwing undersides.
In particular, *hyacinthus* and *pelidna* (which was originally described as a subspecies of *kirschi*) show hardly any significant differences, although Parsons (1998: 330), after examining the male genitalia of *pelidna*, continues to list it as a separate taxon.
In contrast, the largely matching male genitalia of *cyanea* (HT illustrated herein; Figs 103-104) have shown that it is merely a slightly darker form of *hyacinthus*, which was therefore synonymized by Parsons (1998: 331). So far, only one female of *hyacinthus* has become known.

Dicallaneura pelidna Jordan, 1937 (Figs 105-106)

Dicallaneura kirschi pelidna Jordan, 1937: 324 (HT ♂, „Momi, coast, Arfak Pen."; NHMUK)

Notes: In this species, characters known from *D. ribbei* (the dark blue upperside), and of *kirschi* (the dark underside) are combined, but the underside pattern was said to be closest to ssp. *fulgurata*. Toxopeus (1944: 172) has likewise pointed out that the blue upperside is

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very unusual for a ssp. of *kirschi* which is generally known for its red-brown ups. As only the type specimen was available to him, he recommended to keep it separate as *D. pelidna*, which was confirmed by Parsons (1998: 330).
The only known species is the holotype, which was collected at Momi (= Wariab), south of Manokwari.

The following species of *Dicallaneura* are regarded as predominantly occurring at higher altitudes. Toxopeus (1944: 175) gives a key for determination, but mentions that: "They constitute a natural group to such a degree that it is a difficult task to combine the sexes of one species if there is a chance of more than one species flying at the same spot, and there exists a still greater difficulty in identifying the subspecies belonging to one species."
The group includes mainly white females which are "apparently being mimetic of *Delias* species" (Parsons, 1998: 97).

Dicallaneura amabilis Rothschild, 1904

Dicallaneura amabilis Rothschild, 1904: 318, pl. 2 fig. 21 (non pl. 2 fig. 22 = ♀ *D. leucomelas* Rothschild & Jordan, 1905), [HT ♂, "Owgarra, north of head of Aroa River"; NHMUK]

Notes: In the original description, a female of *D. leucomelas* was inadvertently assigned to the holotype, which is characterized by extensive white patches on the forewings. The description of the true female was given one year later by Rotschild & Jordan (1905: 464) and the incorrectly assigned female is described there as *D. leucomelas*.
According to Parsons (1998), the distribution of the nominate subspecies is restricted to southeastern PNG (Morobe and Central Province).
The subspecies described of *amabilis* and their variation are still poorly known. In addition to the nominate subspecies known from PNG, two other subspecies have been described from western New Guinea, mostly on the basis of only a few or single specimens, which are difficult to assess: ssp. *mimica* Joicey & Talbot, 1916 and ssp. *casis* Jordan, 1912. The extent of the yellow wing colouration and its shading seem to be very variable in the females and make a clear definition difficult. All forms are undoubtedly very close to each other and possibly all (with the exception of *angustifasciata* and *dilectissima*) fall under *amabilis*.

Dicallaneura amabilis casis Jordan, 1912 (Fig. 113-129)

Dicallaneura amabilis casis Jordan, 1912: 596 [LT ♀, "Mt. Goliath, Snow Mountains", NHMUK]
D. amabilis praedilecta Toxopeus, 1944: 177 [HT ♂, "Mist Camp, Idenburg R.", RMNH] **syn. nov.**

Lectotype designation: The type-series consists of 8 females from "Mt. Goliath, 5-7000 ft., Centr. Dutch N. Guinea, about 139° long., January-February 1911 (A.S. Meek)".
One of these, bearing also a label in Jordan's handwriting: "*Dicallaneura amabilis casis*, Type, 1912, Jord. Nov. Zool. 1911, XVIII", is herewith designated as Lectotype (Figs 117-118).
The remaining PLTs have the same data as the LT, but with different dates: 1 ♀ "Januar 1911", 4 ♀ "Jan.-Feb. 1911, 2 ♀ "Februar 1911".

Notes: *D. a. casis* was separated from the nominate race from "British New Guinea", because of the restricted pale yellow on the forewing. Jordan mentions an olive-ochraceous

basal area of the forewing, extending along the inner margin, so the yellow does not reach the wing margin.
At the time of description, Toxopeus had only one pair of *D. amabilis praedilecta* available (Figs 113-116), which was collected near the Idenburg River (Mist Camp - 1800m, and Top Camp - 2100m, northern slopes of Snow Mountains). The female matches the lectotype of *casis* and *praedilecta* is therefore considered a synonym of *casis*. The small dark spot at the origin of vein 5 on the forewing, Toxopeus` is referring to as separating character is variably developed.
Records from the Snow Mountains also show only insignificant differences to specimens known from the Star Mountains further east, which are also illustrated here (Figs 119-122).
Specimens from PNG, which belong to the nominate subspecies, have a slightly lighter yellowish upper side colouration than *praedilecta*, and the yellow extends to the wing base and the inner margin of the forewing, including space 1 and 1a (Parsons, 1998: pl. 40, fig. 978). The yellow on the hindwings in these forms is more restricted to an area at the costa, so that most of the hindwings appear brownish gray.
However, there are also female specimens known from the Arfak Mountains (Fig. 123), having a very similar extension of the yellow on the forewing and not differing much concerning their underside pattern. They are tentatively included here.
Interestingly, females have also been reported from Ilaga (Fig. 126-127), also located in the Snow Mountains, in which the yellow of the forewings is present along the inner margin. Possibly this population also belong to *casis*, but specimens strongly resemble the nominate subspecies and also ssp. *mimica* Joicey & Talbot, 1916.
Certainly, much more material is needed to confirm the currently accepted subspecies concept.

Dicallaneura amabilis mimica Joicey & Talbot, 1916 (Fig. 130)

Dicallaneura amabilis mimica Joicey & Talbot, 1916: 78, pl. 8 fig. 4 [HT ♀, “Coast District, Geelvink Bay”, NHMUK]

Notes: This taxon is based on a unique female specimen from Geelvink (Cenderawasih) Bay. According to the illustration given by Joicey & Talbot, the orange upperside colour of the females is more extensive than in any other race, reaching almost the tornus of the forewing. Joicey & Talbot compared *mimica* with *angustifascia* Joicey & Noakes, 1916, but describing it as paler brown with the yellow-brown on the forewing more extended. It is strongly reminiscent of the nominate subspecies.

Dicallaneura angustifascia Joicey & Noakes, 1916 (Figs 69-72)

Dicallaneura amabilis angustifascia Joicey & Noakes, 1916: 369, pl. 59, fig. 3 - 4 [Type ♂; “Angi Lakes, Arfak Mountains”, NHMUK]

Notes: Males of this race are characterized by a very narrow upperside band and in having no greyish band on the underside of the hindwings. The hindwing colour was described by Joicey & Noakes as “tinged with chestnut-brown”, which is difficult to recognize in the colour picture included in the original description. In the females, the orange on the forewing

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upperside is restricted to the basal half of the wing, with a sharp indention at vein 1a and 1b. The female type specimen apparently lacks most of its tornal lobes, as the original description shows a “tailed” hindwing.
The taxon is difficult to assign, but as it occurs in sympatry with *amabilis* in the Arfak Mountains, it has to be treated as separate species, which was already discussed by Stichel (1928).

Dicallaneura dilectissima Toxopeus, 1944 (Figs 131-134)

Dicallaneura dilectissima Toxopeus, 1944: 178 [HT ♂, “Moss Forest Camp”, RMNH]

Notes: Already in the original description, *dilectissima* was recognized as a distinct species which, although related to *amabilis*, shows very clear differences. The male has a much broader orange band on the upper side of the forewings and the females stand out due to a very bright, straw-yellow upper side color and thus differ strongly from the *amabilis* females. It is only known from the Jayawijaya (Central) Mountains of Papua and the type locality “Moss Forest Camp” [“Mosboschkamp”] is located north-east of Lake Habbema at the Ibele River. Toxopeus (1944) emphasized the great similarity of the species to *D. fulvofasciata*, in which, however, the tornal lobes are always white and not orange in colour.

Dicallaneura fulvofasciata Joicey & Noakes, 1916 (Figs 135-138)

Dicallaneura fulvofasciata Joicey & Noakes, 1916: 370, pl. 59 fig. 5, pl. 60 fig. 2 [Type ?, “Angi Lakes, Arfak Mountains”, NHMUK]

Notes: In their original description, Joicey & Noakes only tentatively assigned the available females to the new species and pointed out the close relationship to *leucomelas*. However, there are only two species known having white hindwings in the females, which are *fulvofasciata* and *exiguus*. For separation from *exiguus*, see discussion under this species. Males of *fulvofasciata* are also resembling *amabilis*, but tips of the hindwing lobes are always white and not orange as in *amabilis*.
The range of this species is apparently restricted to the Arfak Mountains and illustrated specimens are from Manokwari, Peg. Arfak.

Dicallaneura albosignata Joicey & Talbot, 1916 (Figs 139-142)

Dicallaneura albosignata Joicey & Talbot, 1916: 78, pl. 8 fig 3 [HT ♀, “Wandammen Mountains, NHMUK]

Notes: The species description was based on a single female (Figs 139-140) from the Wandammen Mountains, which is resembling *leucomelas*, but the white forewing discal patch is more restricted in *albosignata*. Occurrence seems to be restricted to the Wandammen Mts. The male is still unknown.

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Dicallaneura exiguus Joicey & Noakes, 1916 (Figs 143-144)

Dicallaneura exiguus Joicey & Noakes, 1916: 371, pl. 60, f. 3-4 [Type ♂, "Angi Lakes, Arfak Mountains", NHMUK].

Notes: Resembling *D. fulvofasciata* Joicey & Noakes, 1916, but the orange on the upperside of the males is more extensive and there is a brownish costal suffusion on the hindwings. Females of both species do not show any differences on the upperside. Underside pattern of *D. exiguus* females is generally lighter than in *fulvofasciata*, with a submarginal white line, zigzag-formed subapically and with a small whitish patch on the hindwing costa. *D. exiguus* is much smaller than *fulvofasciata*. D´Abrera (1977: 389) has illustrated the male holotype.
With the zigzag-pattern of the greyish submarginal band, the underside pattern of *exiguus* reminds of *D. kirschi*. However, in the latter species there is no traversing band on the forewing underside, but generally two variably large white or yellowish spots in the cell and in space 2.

Dicallaneura virgo Joicey & Talbot, 1916 (Fig. 145)

Dicallaneura virgo Joicey & Talbot, 1916: 77, pl. 8 fig. 2 [Syntypes: Coast District, Geelvink Bay and Wandammen Mountains, NHMUK]

Notes: The syntype series includes specimens from two localities (Joicey & Talbot, 1916: 78): "The specimens from the Coast District, Geelvink Bay [1 ♀], were collected in Wandammen Bay", but the remaining syntypes are from the Wandammen Mountains (3000-4000 feet) [7 ♀♀]."
Apparently no lectotype has been designated so far, and it is not known if the type series is consistent or includes more than one taxon. Males are still unknown. Stichel (1928) regards *virgo* as "hardly tenable as a species" and suggests a synonymy with *leucomelas* or *exiguus.*

Dicallaneura leucomelas Rothschild & Jordan, 1905 (Figs 146-148)

Dicallaneura amabilis Rothschild, 1904: 318, pl. 2 fig. 22 [non pl. 2 fig. 21 = *D. amabilis*]
Dicallaneura leucomelas Rothschild & Jordan, 1905: 464 [HT ♂, **"**Angabunga River", NHMUK]
? D. leucomelas discifera Toxopeus, 1944: 176 [HT ♀, "Rattan Camp", RMNH]

Notes: According to Parsons (1998: 332) distribution of nominate *D. leucomelas* is restricted to the Central Cordillera of New Guinea, but he does not list any records outside of PNG, nor does D´Abrera (1977: 390).

Toxopeus (1944) described the subspecies *D. leucomelas discifera* from a single female collected at "Rattan Camp" close to the Araucaria River in the Jayawijaya [Central] Mountains [but not from the Wandammen Mtns. as stated in Parsons, 1998: 331]. The differences to the nominate subspecies are very small: the white discal patch on the forewing is slightly more rounded, lacking the incision at vein 4 (Fig. 146). Parsons (1998: 331) suggested that *discifera* may be a synonym of *D. virgo* Joicey & Talbot, 1916; however, the white forewing patch is much smaller in *virgo*, not as rounded in *discifera*. *D. a. discifera* is here regarded as a questionable synonym of *D. leucomelas*. *D. albosignata* differs in

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having a smaller discal white patch on the forewing and is generally much closer to *virgo* than to *leucomelas*. The species is also known from the Cyclops Mtns. (coll. v. Groenendael; RMNH).

Praetaxila Fruhstorfer, 1914

= *Sospita* Hewitson, 1860 sensu Stichel 1928 [junior homonym of *Sospita* Mulsant, 1864] (see Parsons, 1998 and also Huang, Inayoshi & Espeland, 2024)
= *Holodesmus* Waterhouse & Lyell, 1914 [*Holodesmus* Waterhouse & Lyell is a junior objective synonym of *Praetaxila*, being published two days later than *Praetaxila* Fruhstorfer (Hemming, 1967: 221)].

Type species: *Sospita segecia* Hewitson, 1861, desig. by Fruhstorfer, 1914.

Notes: Stichel (1928) had already listed 10 species with 26 subspecies for this genus and these numbers have not changed significantly since then. According to Bridges (1988) and the funet.fi website, *Praetaxila* contains 10 species with 25 subspecies.

Praetaxila segecia (Hewitson, 1861)

Sospita segecia Hewitson, 1861: 76, pl. 39, f. 4-6; [Type ?, „New Guinea“, NHMUK]

Notes: There are doubts regarding the type locality of *segecia*, as Hewitson (1861) did not provide any precise information, but only gave “New Guinea” as its “habitat”. Subsequent authors have interpreted this differently, which has led to further uncertainty. For example, according to Staudinger (1888: 239), the species was found “only on Aru and Mysol”. Fruhstorfer (in Seitz, 1914) later mentions „Dorey or Aru“, but Toxopeus added that Fruhstorfer`s diagnosis is that pertaining to Aru specimens, while still regarding Hewitson`s type as being collected on the Papuan mainland of the Doberai Peninsula (“Dorey, Amberbaken, Sorong”).
Accordingly, he places specimens from the “Vogelkop Pen.” in nominate ssp. *segecia* and suggests that a new name must be created for the race from Aru (Toxopeus, 1944: 181).
He included the other mainland Papua records in ssp. *cariya* Fruhstorfer, 1914, which is followed by Parsons (1998: 334), who does not discuss the Aru taxon, but synonymizes the Yule Island ssp. *yaniya* Fruhstorfer, 1914 with *cariya* [Type locality: Snow Mountains].

Praetaxila segecia segecia Hewitson, 1861 (Figs 149-154)

Sospita segecia Hewitson, 1861: 76, pl. 39, f. 4-6.
? Praetaxila segecia cariya Fruhstorfer (in Seitz), 1914: 794.
Praetaxila segecia yaniya Fruhstorfer (in Seitz), 1914: 794.

Notes: The mainland race *P. s. cariya* (with type locality Upper Setekwa River, Snow Mountains) was separated from the nominate race mainly because of the lacking apical spots in the males and the more extensive white forewing band in the females. However, the white apical spots in the males from Aru, as mentioned by Toxopeus, are variable in the Papuan specimens where they may be completely absent, but well developed in other specimens. In the mainland specimen figured by Parsons (1998: pl. 42 fig. 1051) two white

apical spots are present. The white forewing band is also quite variable (the cell-end spot possibly slightly narrower in the Aru race) and there are no reliable and stable characters to separate different races.
Specimens from Aru, the Doberai Peninsula or other mainland Papua localities show hardly any differences that would justify subspecific differentiation and, accordingly, the name *Praetaxila segecia cariya* Fruhstorfer, 1914 is here questionable treated as a synonym of *segecia*.
Surprisingly, and contrary to the expectation of Fruhstorfer 1914, *segecia* has not yet been recorded from north of the Central Cordillera in Papua, but the species is represented in northern Australia (Queensland), with ssp. *punctaria* Fruhstorfer, 1904.
A unique, very unusual female specimen (Figs 153-154) from Wejaw, Kumbe River (close to Merauke in southern Papua), with a very narrow white forewing band, differs significantly from all other specimens seen so far and does not correspond to *punctaria* either (Braby, 2000: pl. 63).

Praetaxila wallacei (Hewitson, 1862)

Sospita wallacei Hewitson, 1862: 77, pl. [40], f. 7-8 [HT ♂, “Mysol”, NHMUK]

Notes: The closely related species *P. huntei* (Sharpe, 1903) differs in the males by a much larger white hindwing patch. The females, on the other hand, appear difficult to distinguish from each other. The white band of the forewings in *huntei* is somewhat more complete und the white patch on the hindwing seems to be more extensive than in *wallacei*.
The species seems to be restricted to western New Guinea, where it is distributed with three subspecies and was not mentioned in Parsons (1998) for PNG.
The *wallacei* subspecies all appear very similar and differ in the males in principle only by the extent of the white patch on the upper side of the hindwing, which is smallest in *wallacei*, followed by *arkafensis* Joicey & Talbot, 1917 and reaches its greatest extent in *theodosia* Fruhstorfer, 1906. It remains to be seen whether this feature is actually suitable for separating the subspecies until sufficient material from all taxa is available.

Praetaxila wallacei wallacei Hewitson, 1862 (Fig. 163)

Praetaxila wallacei wallacei Hewitson, 1862: 77, pl. [40], f. 7-8 [HT ♂, “Mysol”, NHMUK]

Notes: Apparently described from only a single male from Misool. The males are characterized by a marginal white patch on the hindwing upperside comprising hindwing spaces 2 and 3. The three greatly enlarged apical spots on the forewings, which are possibly somewhat overdrawn in Hewitson, are conspicuous. D’Abrera (1977: 390) mentions that the anal white spot (in space 1b) is “either totally absent or reduced to a thin stripe”, which is consistent with Hewitson's illustration (Fig. 163). *Praetaxila wallacei arfakensis* differs from this by the existence of an additional marginal white spot in space 1b on the hind wings, which makes the patch generally appear more extensive.

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Praetaxila wallacei arfakensis Joicey & Talbot, 1917 (Figs 155-158)

Praetaxila wallacei arfakensis Joicey & Talbot, 1917: 219 [HT ♂; Angi Lakes, Arfak Mountains" NHMUK]

Notes: Joicey & Talbot (1917: 219): "Near the form theodosia, Fruh., from Dorey, but differs from this chiefly in the shorter white patch on the hind wing." The extension of the white patch corresponds to that of *wallacei*, but includes space 1b and almost reaches vein 1b (= "submedian").
Described on the basis of only a single male.
The Arfak Mountains are located only a few kilometers south of Manokwari (Dorey Bay). It is therefore questionable whether *arfakensis* is not the same form as *theodosia*? Specimens from FakFak also do not differ very much from the race of the Arfak Mountains, but some males have the marginal white lunules of the hindwing much more strongly developed.

Praetaxila wallacei theodosia (Fruhstorfer, 1906)

Abisara wallacei theodosia Fruhstorfer, 1906: 205, [Type ?, "Dorey", NHMUK]

Notes: Fruhstorfer (1906) placed particular emphasis on the broader white patch on the hind wings and also pointed out the phenotypic proximity to *huntei*: „*Theodosia* differieren von wallacei durch schmälere weiße Subapicalflecken der Vorderflügel und einen längeren weißen Analfleck der Hinterflügel, der bis M1 hinaufreicht [= space 5], während er bei wallacei Hew., (Type von Mysole) schon bei M 2 [= space 4] aufhört."
Thus ssp. *theodosia* shows the largest extension of the white patch of the hind wings of all subspecies.

Praetaxila huntei (Sharpe, 1903) (Figs 159-162)

Abisara huntei Sharpe, 1903: 310 [Type ?, British New Guinea, NHMUK]
Abisara postalba Rothschild & Jordan, 1907: 192
? *P. postalba wandammanensis* Joicey & Talbot, 1916: 77, pl. 5 fig. 6.
? *S. postalba artaxerxes* Toxopeus, 1944: 190. [Figs. 206-207]

Notes: In the original description, from which it is not clear of how many specimens this was based on (presumably a single male), only "British New Guinea" is given as the type locality. D'Abrera (1970) mentioned "Biagi" [near Kokoda], which is probably due to the more narrowly defined type locality of the taxon *postalba* Rothschild & Jordan, 1916, which he lists as a (questionable) synonym.
Parsons (1998: 333) confirmed the synonymy of *postalba* and consequently placed two further forms as subspecies of *huntei* that were originally included in *postalba*: *wandammanensis* Joicey & Talbot, 1916, and *artaxerxes* Toxopeus, 1944, both of which, however, are inadequately known.
Description of *P. postalba wandammanensis* is based on two females, collected at the Wandammen Mountains, but according to Parsons (1998: 332) only the holotype is available. Toxopeus (1944: 190) did not have the original and well illustrated description of Joicey & Talbot available, but nevertheless described *artaxerxes* (from the Central Mountains, Figs 206-207) as new subspecies, because there should be a high probability that

forms from the Wandammen and from the Central Mountains will be different in most cases. Interestingly, he subsequently compares the type specimen extensively with *satraps* but not with *postalba*.
Stichel (1928: Fig. 87) depicts a specimen of the "*forma wandammanensis*" from "Kota Baroe" (= Jayapura) and the Wandammen Mountains, which he places with *satraps* Grose-Smith 1894. The origin of the specimen shown remains unclear; it is probably actually a specimen of *satraps* s.str.
Ultimately, the affiliation of *artaxerxes* and *wandammanensis* as subspecies of *huntei* seems unlikely, but can only be clarified based on further material.

Distinguishing the females of *wallacei*, *huntei* and *satraps* is extremely difficult. All taxa show almost identical phenotypes and the few usable characteristics for differentiation are variable. The differences mentioned by Parsons (1998: 334) go back to Seitz, who at the time compared the characteristics of *postalba* (then still listed as a separate species) and *satraps*.
Toxopeus (1944: 188) describes in some detail the variability of the wing pattern in females of *satraps* and was not able to find characters defining different subspecies.
A reliable separation does not appear to be possible, and accordingly the assignment of various specimens (either as a subspecies or synonym) to *huntei* or *satraps* based solely on available females must be viewed as extremely critical. This problem also affects *P. wallacei*, at least as far as western New Guinea is concerned, where all three species occur in sympatry. The assignments previously made in the literature are therefore adopted here. The traditional morphological taxonomy used in entomology reaches its limits here and it would be highly unprofessional to make further interpretations or even to draw taxonomic conclusions without including molecular data.
A final clarification of the females' affiliations can only be achieved using DNA analyses, but this lies far beyond the scope of this review.

Females may be tentatively separated by the following characters:

***huntei*:** ups – fw less rounded, with only 3 subapical white spots, white median band broad, hw white extending far into the wing,
uns – fw with well developed orange tornal line, Fruhstorfer (in Seitz, 1914: 794) mentions a "short brown oblique streak in the white area before the abdominal margin" in the text regarding its synonym *postalba*.

***satraps*:** ups - fw well rounded, ups with (3-) usually 4 subapical white spots, white median band narrow; hw commonly with more than two subapical spots.
uns – fw orange tornal line reduced or missing, hw: white area rather restricted

***wallacei*:** ups – fw with 3 subapical spots, hw white extending not as far into the wing as in huntei,
hw without additional subapical spots

Praetaxila statira (Hewitson, 1862)

Sospita statira Hewitson, 1862: 78, pl. 40, figs 9-12 (HT ♂, „Mysol", NHMUK)

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Notes: A very distinctive species, which is known to occur throughout mainland New Guinea and some offshore islands. Males of the various subspecies do not differ very much from each other but several subspecies were described – mainly based on characters of the females - and four races are currently known from western New Guinea. The male underside pattern is remarkably stable in its characters and does not change much throughout the whole range, except for the marginal red, which is slightly variable.
A further subspecies was described from Astrolabe Bay (Madang Province, PNG) as *statira vedalla* Fruhstorfer, 1914 [width of forewing band of the females and underside colouration intermediate between *dyhana* and *gudula*], which is a very rare taxon and therefore insufficiently known. The *vedalla*-specimen illustrated by Parsons (1998: pl. 43, fig. 1067) does not differ much from the Waigeo race illustrated herein (Figs 168-169).
The undescribed race mentioned by Parsons (1998: pl. 43 fig. 1063-66) from the Western Province of PNG closely resembles *statira dhyana* from Timika, which has already been mentioned by Gotts & Pangemanan (2010: 269). A single female from Sarmi, at the northernmost coast of Papua (Figs 176-177) determined as cf. *statira naram*, already approaches the phenotype of *dhyana*.

Praetaxila statira statira (Hewitson, 1862) (Figs 164-167)

Sospita statira Hewitson, 1862: 78, pl. 40, figs 9-12 (HT ♂, „Mysol", NHMUK)

Notes: Females of nominate *statira* as well as ssp. *gudula* from Waigeo have a rather similar underside pattern. Ground colour is relatively dark with the veins prominently coloured in rusty brown. This differs strongly from the mainland subspecies which have an orange ground colour with smaller black spots, which may be partly missing in some populations.
The upperside forewing band was described as yellow-orange by Hewitson, but the available female from Misool (Figs 166-167) has a yellowish forewing band.

Praetaxila statira gudula (Fruhstorfer, 1904) (Figs 168-169)

Abisara statira gudula Fruhstorfer, 1904: 145 (Type ♀, "Insula Weigiu", NHMUK)

Notes: Fruhstorfer had only females of this race available for his description, which differs slightly from *statira* s.str. in having a comparably narrow orange forewing band.

Praetaxila statira naram Fruhstorfer, 1914 (Figs 170-173)

P. statira naram Fruhstorfer, 1914 (in Seitz): 795 [Type ♂, „Kapaur", NHMUK]

Notes: Females of ssp. *naram* are distinguished especially by the complete series of white subapical spots on the forewing underside. The large black spots on the underside of the hindwing are also distinctive. The orange forewing band is much narrower than in ssp. *dhyana*.

Praetaxila statira dhyana Fruhstorfer, 1914 (Figs 174-175, 178)

P. statira dhyana Fruhstorfer (in Seitz), 1914: 795, pl. 140 f [HT ♂, "Upper Setekwa River", NHMUK]
Praetaxila statira dhyana. – Gotts & Pangemanan, 2010: 269.

Notes: This is the *statira*-race known to occur south of the Central Cordillera It was described from the southern slopes of the Snow Mountains at the upper Setekwa River (1000m altitude), which is now part of the Lorentz Reserve, not far from present day Timika. Most likely the locality "Timika" which was used by collectors during the last decades refers to places within this area.
According to Fruhstorfer (in Seitz, 1914), the underside of the males is more prominently striped with white and the marginal red-yellow of the hindwing is stronger than in any other known subspecies. However, the available males do not differ much from males of the nominate form flying on Misool or those from Sorong. Females have the broadest forewing band of all subspecies and the marginal white spots on the forewing underside are replaced by an orange marginal line, almost reaching to the apex. In general terms, *dhyana* is intermediate between the island races and ssp. *naram*.

Praetaxila tyrannus (Grose-Smith & Kirby, 1897)

Abisara tyrannus Grose-Smith & Kirby, 1897; 3, pl. 1, fig. 7-9; [LT ♂, "Waigiou", MFN, Berlin]

Notes: *P. tyrannus* is an easily recognizable, very conspicious but rare species that has only been known from a few specimens. Parsons mentions that *tyrannus* is documented in PNG by only a single male from East Sepik Province (Sikau River). In addition to the nominate subspecies, two other races of *P. tyrannus* have been described: 1) *segestes* Rothschild, 1904 and 2) ssp. *polyphemus* Toxopeus, 1944.
Grose-Smith & Kirby (1897) particularly noted the great resemblance of the females to species of the nymphalid genus *Neptis* Fabricius, 1897. Parsons (1998: 96) has extensively discussed relevant matters of relevant mimicry complexes, including the genus *Tellervo* Kirby, 1894 which may function as aposematic model for *Praetaxila*.

Praetaxila tyrannus tyrannus (Grose-Smith & Kirby, 1897) (Figs 179-182)

Abisara tyrannus Grose-Smith & Kirby, 1897: 3 pl. 1, fig. 7-9; [LT ♂, "Waigiou", MFN, Berlin]

Notes: The type material for *tyrannus* comes from the Staudinger collection (material of von Platen), although it was not clear from the first description on how many specimens the description was actually based on; however, at least one male and one female are involved. There are two specimens in the collection of the MFN Berlin, which correspond precisely to the illustrations in Grose-Smith & Kirby and, which are therefore to be regarded as syntypes. The male is here designated as lectotype; the corresponding female is designated as paralectotype.

Lectotype designation: ♂ with the following labels: Waigeo, 1894. Platen, Origin. Trannus S + K. Type ♂.

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Paralectotype (the remaining ♀ ST): 1 ♀ with the following labels: “Waig. Plat., Tyrannus S+K. Type ♀, Origin.”

The male illustrated by D'Abrera (1977: 392) corresponds very well with the lectotype of *tyrannus*. Characteristic are the orange streaks colouring veins 1a to 2 on the upperside hind wing margin and the creamy-yellowish hindwing cell, the yellow also reaching into spaces 2 and 4. The yellowish markings are generally much more extensive than in ssp. *segestes*. On the upperside of the holoytpe, a small white subapical spot is indicated in space 5. Females of the Waigeo race have two large spots on the forewing upperside and three smaller subapical spots.

Praetaxila tyrannus segestes (Rothschild, 1904) (Figs 183-191)

Abisara segestes Rothschild, 1904; 455; (Type ♂, “Dutch New Guinea, probably east of Geelvink Bay”, NHMUK]
S. tyrannus polyphemus Toxopeus, 1944: 183 [HT ♂, “Cycloop Mts., W of Hollandia”, RMNH] **syn. nov.**

Notes: Described from a single male, having “an ochraceous band of about 3 mm. width from R1 to beyond M2” on the forewing upperside. Hindwing is “unicolorous, with white marginal spots between the veins”, and apparently, without the marginal orange veins known from *tyrannus tyrannus*. The presence of a small white subapical forewing-spot in space 5 is variable and can not be used as reliable subspecific character. On the underside hindwing, the cell is usually filled with yellow and this may extend further into the basal area of space 4 as is also the case in the holotype of nominate *tyrannus* from Waigeo.
On the basis of specimens from Wanggar River, Kwatigore and Nomnagihé, Joicey & Talbot (1922: 334) subsequently described the female of *tyrannus segestes*. They mentioned: “fore wing with cellspot reduced to a dot or obsolete”, and this is the main difference to nominate *tyrannus* from Waigeo. Parsons (1998: pl. 41, fig. 130-31) has illustrated a female from the Nomnagihé, without the postdiscal spot. But there are other specimens (e.g. from Nabire, southern Cenderawasih Bay) which have a large postdiscal spot. A female from Sarmi (Figs 189-190; about 300 km west of Jayapura) does not show the postdiscal spot and a single female from Sorong has a well developed postdiscal spot, but surprisingly lacks the large white postmedian patch on the forewing upperside.
Rothschild was not sure about the exact type locality as he mentioned “Dutch New Guinea”, although he added that it was most likely collected east of the Cenderawasih Bay.

***S. tyrannus polyphemus* Toxopeus, 1944**: The description of this subspecies was based on a single male from the Cycloop Mts., west of Jayapura. The minor characters defining subspecific status, like the orange, projecting teeth along forewing veins 2-5, fall within individual variation and are insufficient to separate the Cycloops population as new subspecies. Accordingly, *polyphemus* is regarded as a synonym of *segestes* Rothschild, 1904, which was already considered by Parsons (1998). **syn. nov.**
There are no females from Jayapura available for comparison, but the variability of the postdiscal white spot has already been observed in *polyphemus*. *S. tyrannus polyphemus* (females with a small cell spot) was recently reported from the Hunstein Range in the East Sepik Province (Cox & Emmel, 2010).

Praetaxila albiplaga (Röber, 1886) (Figs 192-193)

Abisara albiplaga Röber, 1886: 49, pl. 5 fig. 12 [HT ♀, "Aru-Inseln", NHMUK]

Notes: *P. albiplaga* occurs with three subspecies; the nominate subspecies being represented on Aru, and ssp. *keiana* Rothschild, 1904 on Kei. The mainland New Guinea, ssp. *avera* Rothschild 1904, is known from a few specimens only. Parsons (1998) mentioned the restricted distribution to the Central Province (including the type locality, Upper Aroa River) of PNG, while only single additional records are known from western New Guinea.

Praetaxila albiplaga avera (Rothschild, 1904) (Figs 194-195)

Abisara albiplaga avera Rothschild, 1904: 317, pl. 2, f. 23 [HT ♀, "Upper Aroa River", NHMUK].

Notes: In the Naturalis collection there is a single female of ssp. *avera* from "Doa" (75 km W Port Moresby, Central Province).

Praetaxila satraps (Grose-Smith, 1894)

Abisara satraps Grose-Smith, 1894: 545 [HT ♂, "Humboldt Bay", NHMUK]

Notes: Following Parsons (1998), three subspecies are accepted for New Guinea:
P. s. satraps (Grose-Smith, 1894)
P. s. simbangana (Hagen, 1897) [restricted to PNG]
= *Abisara abbuna* Heller, 1902
= *Praetaxila bahadur* Fruhstorfer, 1914
= *Abisara satraps mambarensis* Rothschild & Jordan, 1907
P. s. cyrus (Toxopeus, 1944)

Praetaxila satraps satraps (Grose-Smith, 1894) (Figs 200-203)

Abisara satraps Grose-Smith, 1894: 545 [HT ♂, "Humboldt Bay", NHMUK]

Notes: Subspecies *simbangana* differs from *satraps* s.str. mainly in having a much broader, yellow marginal hindwing border. D´Abrera (1977) gives as distribution „Geelvink Bay to Humboldt Bay", along the northern coast of Papua. Further records suggest that ssp. *satraps* is distributed throughout northern Papua and West Papua, but occurring at lower elevations (Toxopeus, 1944: 189). Females of all subspecies are extremely similar (Parsons, 1998) and impossible to assign to their males if collected without exact locality data.

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Praetaxila satraps cyrus (Toxopeus, 1944) (Figs 196-199, 204-205)

S. *satraps cyrus* Toxopeus, 1944: 189, [HT ♂, "Lower Mistkamp", RMNH]

Notes: The most prominent character of ssp. *cyrus* is a subterminal, yellow line on the forewing, reaching from the tornus along termen towards the apex. There is some variation this character, but usually there is a trend that a least a weak trace of a yellow subterminal line appears in specimens placed with *cyrus*. In addition, compared to *satraps satraps*, the underside pattern is more band-like and not consisting of rows of individual spots.
The complete type-material from Jayawijaya [Central] Mountains (Lower Mistkamp / Sahoeweri River) and Araucariakamp (Jayawijaya [Central] Mountains) as well as one additional female is deposited in RMNH. Typical representatives of the subspecies are also found at „Sumbole" [KSP] and Ilaga, which is located further to the east in the Sudirman Mountains (Snow Mountains). Remarkably, in the Mamberamo area, both forms (Figs 204-205), with and without the yellow line, are occurring together (Canoe Camp/Prauwenbivak).
Probably, ssp. *cyrus* is a form preferentially inhabiting higher mountain areas, occurring in the western parts of the Central Cordillera (Star Mtns. to Snow Mountains).

Praetaxila eromena (Jordan, 1912)

Abisara eromena Jordan, 1912: 594, [Type ♂, "Upper Setekwa River", NHMUK].

Notes: Aside of *P. eromena* there is only *Praetaxila albiplaga* Röber, 1886, where males are also characterized by a wider extent of orange on the wing upperside. The name *albiplaga* is slightly misleading for a species with orange coloured uppersides, but refers to the brown and white coloured, single female type-specimen that was available to Röber for a description.
P. eromena is a very rare species, known only from a few specimens collected in the Snow Mountains (ssp. *eromena*) and at the Wanggar River, southwest of Nabire (ssp. *poultoni* Joicey & Talbot, 1922).

Praetaxila eromena eromena Jordan, 1912 (Figs 107-112)

Abisara eromena Jordan, 1912: 594, [Type ♂, "Upper Setekwa River", NHMUK].

Notes: Jordan gave a long description of this remarkable species, which was first collected by Meek in the Snow Mountains. The type series consists of two males and one female from the Upper Setekwa River; a male type specimen was illustrated by D´Aberera (1977: 392) and the female by Seitz (1914: pl. 140), clearly showing the "buff yellow" margin of the white hindwing patch, as described by Jordan.
Recent collections of *eromena* from the Central Mountains include the characteristic females with large white patches on both wings and also a second female phenotype, which most likely also belongs to this taxon, but having the white patch on the hindwings replaced by orange. Otherwise there are no differences.
It can not be excluded at this time, that there are two species involved in this complex where the males are impossible to distinguish externally, or - more likely - the females of *eromena*

are exhibiting a female-limited Batesian mimicry, resembling diurnal moths of the unpalatable Agaristidae. Joicey & Talbot (1922) noted that ssp. *poultoni* is flying together with the widely distributed *Immetalia saturata* (Walker, 1865), which is a very similar agaristid (noctuid) moth, occurring in white and bicolor, orange banded forms and the same applies to ssp. *eromena*. Parsons (1998: 96) has discussed the relevant "agaristine noctuid and arctiid complex".
DNA sequences of both female forms are needed to solve this question.

Praetaxila eromena poultoni Joicey & Talbot, 1922

Praetaxila poultoni Joicey & Talbot, 1922: 332 [Type ♂, "Wanggar River", NHMUK]

Notes: Males differ strongly from the nominate subspecies in having the orange of the forewings reduced to a broad discal band. The hindwings of females with larger white patch than in nominate subspecies, reaching to the costa, and a slight yellow tinge in space 1b. D´Abrera (1977: 392) has illustrated a pair. Wanggar River is located southwest of Nabire. The type was collected about 15 from the coast and additional material was included from Nomnagihé, southwest of Wanggar at an altitude of about 600m.

Praetaxila heterisa (Jordan, 1912)

Abisara heterisa Jordan, 1912: 595 [Type ♂, "Mount Goliath", NHMUK]

Notes: After the description of the nominate subspecies by Jordan, Toxopeus (1944) placed two further subspecies in *heterisa*, but these have been overlooked in the literature up to now. The type material is deposited in Leiden (RMNH) and Bogor (MZB). The basis for the descriptions was material from the vicinity of Wissel Lake/Lake Paniai west of the Snow Mountains (ssp. *auspex* Toxopeus, 1944) and from the vicinity of the "Sigi Camps", north of the Jayawijaya Mountains (ssp. *sigiana* Toxopeus, 1944). Both taxa show only slight differences to *heterisa*, but ssp. *sigiana* is accepted as a subspecies mainly because of the clearly broader forewing band of the females. The differences between *sigiana* and *auspex*, on the other hand, are so slight that the latter is considered synonymous with *sigiana*. Especially the square shaped spot in space 3 of the forewing is distinctive for *heterisa* occurring in the northern part of Papua.
Stichel (1928) and later D'Abrera (1977) listed *Praetaxila tessei* Joicey & Noakes, 1916 from the Angi Lakes (Arfak Mountains) as a further subspecies of *heterisa*, which however differs strongly from it, so that *tessei* is here raised to species status.

Praetaxila heterisa heterisa (Jordan, 1912) (Figs 212-215)

Abisara heterisa Jordan, 1912: 595 [Type ♂, "Mount Goliath", NHMUK]

Notes: *P. heterisa* was described form the area of "Mt. Goliath" in the southeastern Jayawijaya Mountains (Central Mountains). However, holotype label data given by Parsons (1998: 335), state a longitude of "about 139°", which agrees with the longitude of Yahukimo, which is a well known area among collectors; so most likely the type locality lies somewhere

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north of Yahukimo in the Jayawijaya [Central] Mountains, which is in no way close to Mt. Goliath.
Jordan (1912) mentions a narrow band of about 1 mm width in the males, and that the female closely resembles the male, but has larger and rounder wings. However, apparently there is a trend in female specimens occurring north of the Central Cordillera to have a much broader forewing band, than in females occurring south of it.

Praetaxila heterisa sigiana (Toxopeus, 1944) (Figs 216-223)

Sospita heterisa sigiana Toxopeus, 1944: 185 [Type ♂, "Sigi Camp", RMNH]
Sospita heterisa auspex Toxopeus, 1944: 186 [Type ♂, "Lake Paniai, Wissel Lakes", RMNH] **syn. nov.**

Notes: Toxopeus characterized ssp. *auspex* as follows: "Near to *S. heterisa sigiana* but the orange fascia on forewing is wider (and in the ♂ sex more interrupted); there is a clear orange subtornal spot; the orange part of the hindwing is more expanded above together with a reduction of the black submarginal spotting; the white submarginal fascia on the forewing below is broader and consists of linear elements (no head-like spots); the white rings on the hindwings are considerably broader and the black vein tip dots are also magnified below."
These characters are here regarded as insufficient to describe a new subspecies.
The characteristics of *sigiana* mentioned by Toxopeus are not very suitable for separating *heterisa*: "Differs in the ♂ sex from *S. heterisa heterisa* in the discal crenulated fascia of the hindwing underside not being whitish, but purplish-grey, and the upper three spots of the white submarginal markings are linear." The males show no significant distinguishing features, but the females are characterized by differently wide and differently complete forewing bands. In contrast to *heterisa* s.str. the much broader band is broken at vein 4 and the square spot in space 3 is shifted outwards.

Praetaxila tessei (Joicey & Noakes, 1916) (Figs 208-211)

Abisara tessei Joicey & Noakes, 1916: 369, pl. 58 fig. 4.

Notes: *P. tessei* is closely related to *P. heterisa* and was previously regarded as valid subspecies of the latter.
Due to the clear phenotypic differences, the taxon is raised here again to the species rank, which was already suggested by D´Abrera (1977: 394).
The type series was collected at the "Angi Lakes, Arfak Mountains, 6000 feet" and the species is only known from the Arfak Mountains in western New Guinea. The pair from Mimika, depicted as *P. tessei* in Gotts & Pangemanan (2010: 268) belongs to *P. heterisa*.

List of Riodinidae species occurring in western New Guinea

Dicallaneura ekeikei longifascia Joicey & Talbot, 1922
Dicallaneura ribbei arfakensis Fruhstorfer, 1898
= *diantha* Grose-Smith, 1901
= *milnei* Fruhstorfer, 1904
= *birana* Fruhstorfer in Seitz, 1914

= *ovada* Fruhstorfer in Seitz, 1914
= *cyanandra* Toxopeus, 1944 **syn. nov.**
= *hageni* Toxopeus, 1944
Dicallaneura decorata ostrina Grose-Smith, 1894
= *ansuna* Fruhstorfer, 1914 **syn. nov.**
= *kausambides* Toxopeus, 1944 **syn. nov.**
Dicallaneura decorata sangha Fruhstorfer, 1914
= *parina* Fruhstorfer, 1914 **syn. nov.**
= *sfagia* Fruhstorfer, 1914
= *sigala* Fruhstorfer, 1914
= *sariba* Fruhstorfer, 1914
Dicallaneura decorata tantra Fruhstorfer, 1914: 788
Dicallaneura decorata adulatrix Fruhstorfer, 1904
Dicallaneura pulchra pulchra (Guérin-Méneville, 1830)
? = *vasatha* Fruhstorfer, 1914
? = *udiyana* Fruhstorfer, 1914
? = *sigrya* Fruhstorfer, 1914
? = *ansa* Toxopeus, 1944
Dicallaneura princessa Grose-Smith, 1894
Dicallaneura kirschi semirufa Grose-Smith, 1894
Dicallaneura kirschi didica Fruhstorfer, 1914
Dicallaneura kirschi fulgurata Grose-Smith, 1901
Dicallaneura hyacinthus Toxopeus, 1944
= *cyanea* Toxopeus, 1944
Dicallaneura pelidna Jordan, 1937
Dicallaneura exiguus Joicey & Noakes, 1916
Dicallaneura amabilis casis Jordan, 1912
= *praedilecta* Toxopeus, 1944: 177 **syn. nov.**
Dicallaneura amabilis mimica Joicey & Talbot, 1916
Dicallaneura angustifascia Joicey & Noakes, 1916
Dicallaneura dilectissima Toxopeus, 1944
Dicallaneura fulvofasciata Joicey & Noakes, 1916
Dicallaneura leucomelas Rothschild & Jordan, 1905
? = *discifera* Toxopeus, 1944
Dicallaneura virgo Joicey & Talbot, 1916
Dicallaneura albosignata Joicey & Talbot, 1916
Praetaxila segecia segecia Hewitson, 1861
? = *cariya* Fruhstorfer (in Seitz), 1914: 794.
Praetaxila segecia yaniya Fruhstorfer (in Seitz), 1914: 794.
Praetaxila wallacei wallacei Hewitson, 1862
Praetaxila wallacei arfakensis Joicey & Talbot, 1917
Praetaxila wallacei theodosia (Fruhstorfer, 1906)
Praetaxila huntei (Sharpe, 1903)
= *postalba* Rothschild & Jordan, 1907
? = *wandammanensis* Joicey & Talbot, 1916
? = *artaxerxes* Toxopeus, 1944: 190.

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P. statira statira Hewitson, 1862
P. statira gudula (Fruhstorfer, 1904)
P. statira dhyana Fruhstorfer, 1914
P. statira naram Fruhstorfer, 1914
Praetaxila tyrannus tyrannus (Grose-Smith & Kirby, 1897)
P. tyrannus segestes (Rothschild, 1904)
= *polyphemus* Toxopeus, 1944 **syn. nov.**
P. satraps satraps (Grose-Smith, 1894)
P. satraps cyrus (Toxopeus, 1944)
P. eromena eromena Jordan, 1912
P. eromena poultoni Joicey & Talbot, 1922
Praetaxila albiplaga avera (Rothschild, 1904)
Praetaxila heterisa heterisa (Jordan, 1912)
Praetaxila heterisa sigiana (Toxopeus, 1944)
= *auspex* Toxopeus, 1944 **syn. nov.**
P. tessei (Joicey & Noakes, 1916)

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Figs 1-4. *Dicallaneura longifascia* Joicey & Talbot, 1922 (scale = 1 cm). **1.** ♂, Yahukimo, CKON; **2.** idem, verso. **3.** ♀, Timika, CAYI; **4.** idem, verso. **Figs 5-6, 11-12.** *Dicallaneura ribbei cyanandra* Toxopeus, 1944. **5.** HT ♀, "Bernhard Camp, Idenburg", RMNH INS. 1279650; **6.** idem, verso. **Figs. 7-10.** *Dicallaneura ribbei ribbei* Röber, 1886. **7.** ♂, Aru, Wokam, CARR; **8.** idem, verso. **9.** ♀, Aru, Wokam, CARR; **10.** idem, verso. **Figs 11-12.** *Dicallaneura ribbei cyanandra* Toxopeus, 1944. **11.** PT ♀, "Bernhard Camp, Idenburg", MZB.LEPI. 100; **12.** idem, verso. **Figs 13-18.** *Dicallaneura ribbei arfakensis* Fruhstorfer, 1898. **13.** ♂, Yahukimo, CSSK; **14.** idem, verso. **15.** ♀, Sorong, CKON; **16.** idem, verso. **17.** ♂, Timika, CAYI; **18.** idem, verso. (scale = 1 cm)

Figs 19-22. *Dicallaneura decorata decorata* Hewitson, 1862. **19.** ♂, Aru Is., Dobo, CSSK; **20.** idem, verso. **21.** ♀, Aru Is., Dobo, CSSK; **22.** idem, verso. **Figs 23-34.** *Dicallaneura decorata ostrina* Grose-Smith, 1894. **23.** ♂, Cyclops Mtns., KSP 10043; **24.** idem, verso. **25.** ♀, "Hollandia", RMNH.INS 1279649; **26.** idem, verso. **27.** ♂, "Araucaria Camp" [HT of *D. decorata kausambides* Toxopeus, 1944], RMNH.INS 981092; **28.** idem, verso. **29.** ♂, "Araucaria Camp" [HT of *D. decorata kausambides* ab. *intermedia* Toxopeus, 1944], RMNH.INS 1279647; **30.** idem, verso. **31.** ♂, Yapen, CAYI; **32.** idem, verso. **33.** ♀, Yapen, KSP 50042; **34.** idem, verso. **Fig. 35.** *Dicallaneura decorata sangha* Fruhstorfer, 1914 [= „*Dicallaneura decorata sfagia* Fruhstorfer, 1914", copied from Seitz, 1914]. **Fig. 36.** *Dicallaneura decorata conos* Fruhstorfer, 1904 [copied from Seitz, 1914]. (scale = 1 cm)

Figs 37- 52. *Dicallaneura decorata sangha* Fruhstorfer, 1914. **37.** ♂, Misool, RMNH.INS 1279644; **38.** idem, verso. **39.** ♀, Misool, RMNH.INS 1279645; **40.** idem, verso. **41.** ♂, „Yule Eiland", RMNH.INS 1279643; **42.** idem, verso. **43.** ♂, Mimika, KSP 10036; **44.** idem, verso. **45.** ♂, „Eilanden Rivier", RMNH.INS 1279642; **46.** idem, verso. **47.** ♀, „Eilanden Rivier", RMNH.INS 391328; **48.** idem, verso. **49.** ♂, Timika, CSSK; **50.** idem, verso. **51.** ♀ Timika, CSSK, **52.** idem, verso. **Figs 53-54.** *Dicallaneura decorata adulatrix* Fruhstorfer, 1904. **53.** ♀, Waigeo, CKON; **54.** idem, verso. (scale = 1 cm)

Figs 55-62. *Dicallaneura decorata tantra* Fruhstorfer, 1914. **55.** ♂, Sorong, CSSK; **56.** idem, verso. **57.** ♀, Sorong, CSSK; **58.** idem, verso. **59.** ♂, Mioswaar, KSP 62677; **60.** idem, verso. **61.** ♀, Mioswaar, KSP 62678; **62.** idem, verso. **Figs 63-66.** *Dicallaneura decorata* cf. *conos* Fruhstorfer, 1904. **63.** ♂, Nabire, CSSK; **64.** idem, verso. **65.** ♀, Nabire, KSP 10029; **66.** idem, verso. **Figs 67-68.** *Dicallaneura decorata adulatrix* Fruhstorfer, 1904. **67.** ♂, "Waigeu, Platen", MFN; **68.** idem, verso. **Figs 69-72.** *Dicallaneura angustifascia* Joicey & Noakes, 1916. **69.** ♂, Arfak Mtns., CAYI; **70.** idem, verso. **71.** ♂, [copied from Joicey & Noakes, 1916]; **72.** ♀, [copied from Joicey & Noakes, 1916]. (scale = 1 cm)

Figs 73-83. *Dicallaneura pulchra pulchra* Guérin-Méneville, 1830. **73.** ♂, Waigeo, CSSK; **74.** idem, verso. **75.** ♀, Waigeo, CSSK; **76.** idem, verso. **77.** ♀, "Dorey" [copied from Guernin-Méneville, 1830]. **78.** ♂, Manokwari, KSP 50955. **79.** ♂, FakFak, CAYI; **80.** idem, verso. **81.** ♂, Arfak, CKON. **82.** ♂, Yahukimo, CAYI; **83.** idem, verso. **Fig. 84.** *Dicallaneura pulchra* ssp. **84.** ♂, Aru, CAYI. **Figs 85-90.** *Dicallaneura princessa* Grose-Smith, 1894. **85.** ♂, Biak, RMNH.INS 1279702; **86.** idem, verso. **87.** ♀, Biak, RMNH.INS 1279703; **88.** idem, verso. **89.** ♂, Misool, CAYI; **90.** idem, verso. (scale = 1 cm)

Figs 91-94. *Dicallaneura kirschi semirufa* Grose-Smith, 1894. **91.** ♂, Sarmi, Foja Mtns., KSP10047; **92.** idem, verso. **93.** ♀, Sarmi, Foja Mtns., KSP10046; **94.** idem, verso. **Figs 95-98.** *D. kirschi didica* Fruhstorfer, 1914. **95.** ♂, Timika, CSSK; **96.** idem, verso. **97.** ♀, Timika, CAYI; **98.** idem, verso. **Figs 99-104.** *Dicallaneura hyacinthus* Toxopeus, 1944. **99.** HT ♂, „Araucariakamp", RMNH.INS 981095; **100.** idem, verso. **101.** PT ♀, „Araucariakamp", RMNH.INS 981096; **102.** idem, verso. **103.** ♂, "Ratankamp" [HT of *D. cyanea* Toxopeus, 1944], RMNH.INS 981094; **104.** idem, verso. **Figs 105-106.** *Dicallaneura kirschi pelidna* Jordan, 1937. **105.** HT ♂, „Momi, coast, Arfak. Pen.", NHMUK]; **106.** idem, verso. **Figs 107-112.** *Praetaxila eromena eromena* Jordan, 1912. **107.** ♂, Yahukimo, CKON; **108.** idem, verso. **109.** ♀, Yahukimo, CKON; **110.** idem, verso. **111.** ♀, Yahukimo, CKON; **112.** idem, verso. (scale = 1 cm)

Figs 113-127. *Dicallaneura amabilis casis* Jordan, 1912. **113.** ♂, "Mist Camp, Idenburg R." [HT of *D. amabilis praedilecta* Toxopeus, 1944], RMNH.INS 981087; **114.** idem, verso. **115.** ♀, „Top Camp, Idenburg R.", [PT of *D. amabilis praedilecta* Toxopeus, 1944], RMNH.INS 981088; **116.** idem, verso. **117.** ♀, "Mt. Goliath" [LT of *Dicallaneura amabilis casis* Jordan, 1912], NHMUK; **118.** idem, verso. **119.** ♂, "Star Mountains, Abmisibil", RMNH.INS; **120.** idem, verso. **121.** ♀, Star Mountains, Abmisibil, RMNH.INS 1279652; **122.** idem, verso. **123.** ♀, Arfak Mtns., CAYI. **124.** ♂, Ilaga, Snow Mountains, CAYI; **125.** idem, verso. **126.** ♂, Ilaga, Snow Mountains, CAYI; **127.** idem, verso. **128.** ♀, "Mt. Goliath" [PLT of *Dicallaneura amabilis casis* Jordan, 1912], NHMUK; **129.** idem,

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verso. **Fig. 130.** *Dicallaneura amabilis mimica* Joicey & Talbot, 1916. **130.** HT ♀, "Coast District, Geelvink Bay" [copied from Joicey & Talbot, 1916].

Figs 131-134. *Dicallaneura dilectissima* Toxopeus, 1944. **131.** HT ♂, "Moss Forest Camp", RMNH.INS 981090; **132.** idem, verso. **133.** PT ♀, "Moss Forest Camp", RMNH.INS 981091; **134.** idem, verso. **Figs 135-138.** *Dicallaneura fulvofasciata* Joicey & Noakes, 1916. **135.** ♂, Manokwari, KSP10012; **136.** idem, verso. **137.** ♀, Manokwari, KSP10013; **138.** idem, verso. **Figs 139-142.** *Dicallaneura albosignata* Joicey & Talbot, 1916. **139.** HT ♀, "Wandammen Mtns.", NHMUK; **140.** idem, verso. **141.** ♂, Wondiwoi Mtns., Wandammen Penin., CAYI; **142.** idem, verso. **Figs. 143-144.** *Dicallaneura exiguus* Joicey & Noakes, 1916. **143.** Type ♂, "Angi Lakes, Arfak Mountains" [copied from Joicey & Noakes, 1916], NHMUK; **144.** Type ♀, "Angi Lakes, Arfak Mountains" [copied from Joicey & Noakes, 1916], NHMUK. **Fig. 145.** *Dicallaneura virgo* Joicey & Talbot, 1916. Type ♀, [copied from Joicey & Talbot, 1916], NHMUK. **Figs 146-148.** *Dicallaneura leucomelas* Rothschild & Jordan, 1905. **146.** ♀, [copied from Rothschild, 1904, pl. 2 fig. 22]. **147.** ♀, "Rattan Camp" [HT of *D. leucomelas discifera* Toxopeus, 1944], RMNH.INS 981089; **148.** idem, verso. (scale = 1 cm)

Figs 149-154. *Praetaxila segecia segecia* Hewitson, 1861. **149.** ♂, Timika, CSSK; **150.** idem, verso. **151.** ♀, Timika, CSSK; **152.** idem, verso. **153.** ♀, "Wejaw", RMNH.INS 1279657; **154.** idem, verso. **Figs 155-158.** *Praetaxila wallacei arfakensis* Joicey & Talbot, 1917. **155.** ♂, Arfak Mtns., CAYI; **156.** idem, verso. **157.** ♀, Arfak Mtns., CAYI; **158.** idem, verso. **Figs 159-162.** *Praetaxila huntei* (Sharpe, 1903). **159.** ♂, Star Mountains, Sumtamon, KSP10062; **160.** idem, verso. **161.** ♀, Central Mountains, Ilaga, KSP10069; **162.** idem, verso. **Fig. 163.** *Praetaxila wallacei wallacei* Hewitson, 1862. Type ♂, „Mysool" [copied from Hewitson, 1862). (scale = 1 cm)

Figs 164-167. *Praetaxila statira statira* (Hewitson, 1862). **164.** ♂, Misool, CAYI; **165.** idem, verso. **166.** ♀, Misool, CAYI; **167.** idem, verso. **168.** ♀, Waigeo, CAYI; **169.** idem, verso. **Figs 170-173.** *Praetaxila statira naram* Fruhstorfer, 1914. **170.** ♂, Sorong, CAYI; **171.** idem, verso. **172.** ♀, Sorong, CAYI; **173.** idem, verso. **Figs 174-175.** *Praetaxila statira dhyana* Fruhstorfer, 1914. **174.** ♀, Timika, CAYI; **175.** idem, verso. **Figs 176-177.** *Praetaxila* cf. *statira naram* Fruhstorfer, 1914. **176.** ♀, Sarmi, KSP10141; **177.** idem, verso. **Fig.** 178. *Praetaxila statira dhyana* Fruhstorfer, 1914. **178.** ♀, Timika, CKON. (scale = 1 cm)

Figs 179-182. *Praetaxila tyrannus tyrannus* (Grose-Smith & Kirby, 1897). **179.** LT ♂, "Waigeu, 1894, Platen", MFN; **180.** idem, verso. **181.** PLT ♀, "Waig., Plat.", MFN; **182.** idem. verso. **Figs 183-191.** *Praetaxila tyrannus segestes* (Rothschild, 1904). **183.** ♂, Weyland Mountains, Argani, CAYI; **184**. idem, verso. **185.** ♀, Weyland Mountains, Argani, CAYI; **186.** idem, verso. **187.** ♂, "Cycloop Geb." [HT of *S. tyrannus polyphemus* Toxopeus, 1944], RMNH.INS 981086; **188.** idem, verso. **189.** ♀, Sarmi, KSP10060; **190.** idem, verso. **191.** ♂, Weyland Mountains, Argani, CAYI. **Figs 192-195.** *Praetaxila albiplaga albiplaga* (Röber, 1886). **192.** ♂, Wakam Isl. Aru., CAYI; **193.** idem, verso. **Figs 194-195.** *Praetaxila albiplaga avera* (Rothschild, 1904). **194.** ♀, "Doa", RMNH.INS 1279665; **195.** idem, verso. (scale = 1 cm)

Figs 196-199. *Praetaxila satraps cyrus* (Toxopeus, 1944). **196.** HT ♂, "Lower Mistkamp", RMNH.INS 981083; **197.** idem, verso. **198.** PT ♀, "Araucariakamp", RMNH.INS 981084; **199.** idem, verso. **Figs 200-203** *Praetaxila satraps satraps* (Grose-Smith, 1894). **200.** ♂, Jayapura, CAYI; **201.** idem, verso. **202.** ♀, "Cyclopengat", ZMA.INS 5185771; **203.** idem, verso. **Figs 204-205.** *Praetaxila satraps cyrus* (Toxopeus, 1944). **204.** ♂, "Prauwenbivak", RMNH.INS 1471720. **205.** ♂, "Prauwenbivak", RMNH.INS 1279668. **Figs 206-207.** *Sospita postalba artaxerxes* Toxopeus, 1944. **206.** HT ♀, "Araucariakamp", RMNH.INS 1279661; **207.** idem, verso. **Figs 208-209.** *Praetaxila tessei* (Joicey & Noakes, 1916). **208.** ♂, Arfak Mtns., CAYI; **209.** idem, verso. (scale = 1 cm)

Figs 210-211. *Praetaxila tessei* (Joicey & Noakes, 1916). **210.** ♀, Arfak Mtns., CAYI; **211.** idem, verso. **Figs 212-215.** *Praetaxila heterisa heterisa* (Jordan, 1912). **212.** ♂, Sugapa, Jayawijaya (Central) Mountains, CAYI; **213.** idem, verso. **214.** Tembagapura, Jayawijaya (Central) Mountains, CAYI; **215.** idem. verso. **Figs 216-223.** *Praetaxila heterisa sigiana* (Toxopeus, 1944). **216.** ♂, "Lake Paniai, Wissel Lakes" [HT of *Sospita heterisa auspex* Toxopeus, 1944], RMNH.INS 1670790; **217.** idem, verso. **218.** ♀ "Lake Paniai, Wissel Lakes" [PT of *Sospita heterisa auspex* Toxopeus, 1944], RMNH.INS; **219.** idem, verso. **220.** HT ♂, "Sigi Camp", RMNH.INS 1670788; **221.** idem, verso. **222.** PT ♀, "Sigi Camp", RMNH.INS 1279659; **223.** idem, verso. (scale = 1 cm)

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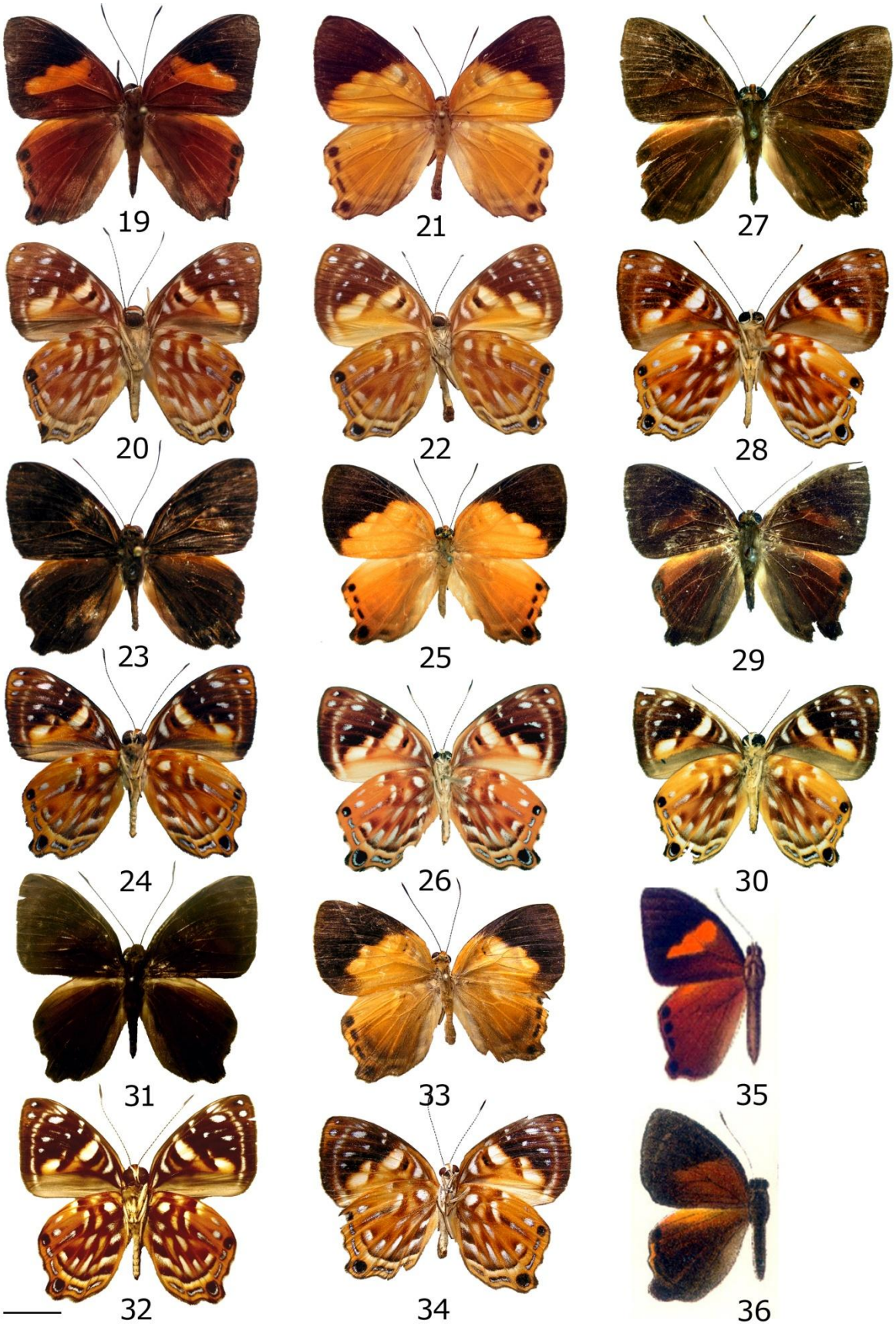

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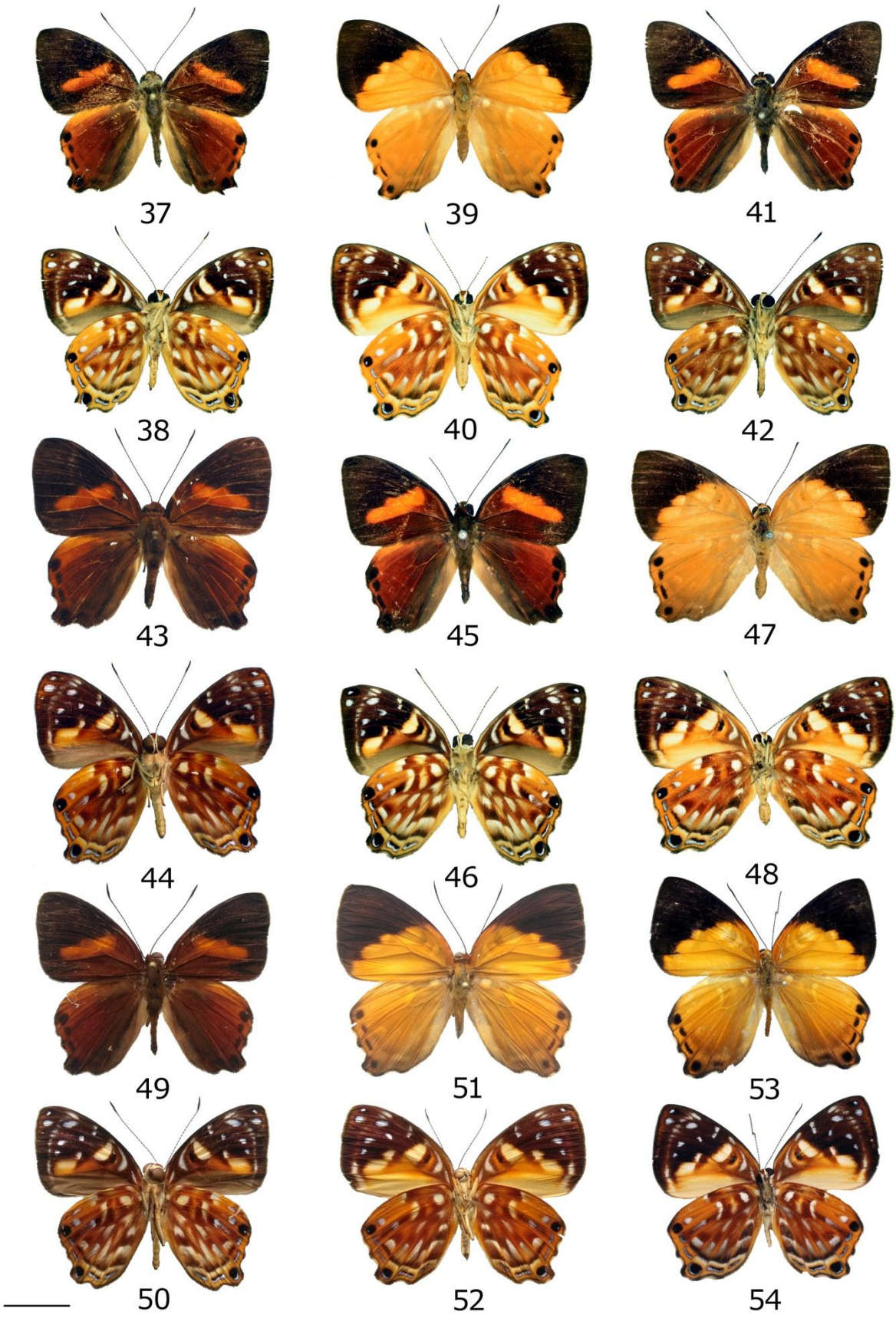

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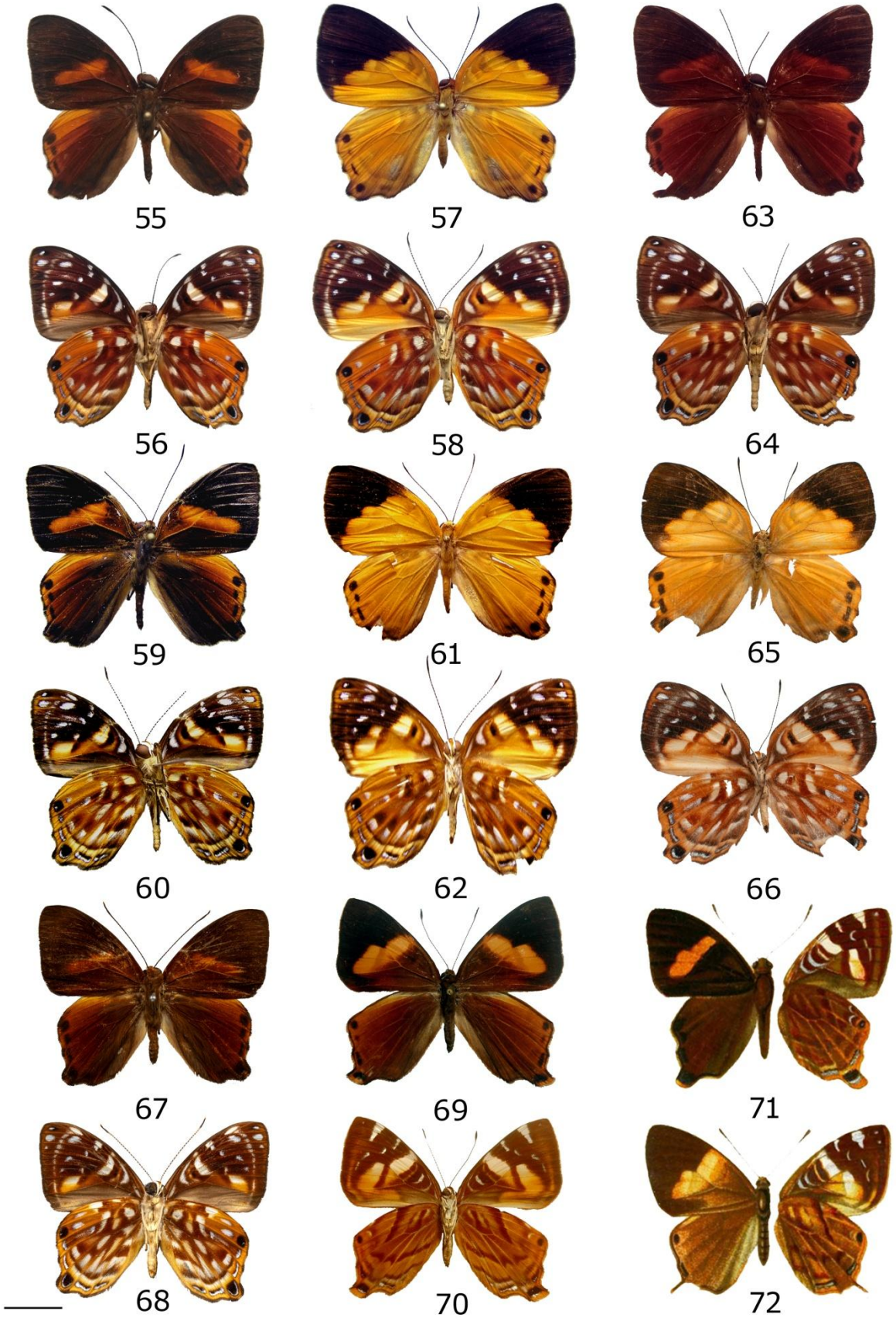

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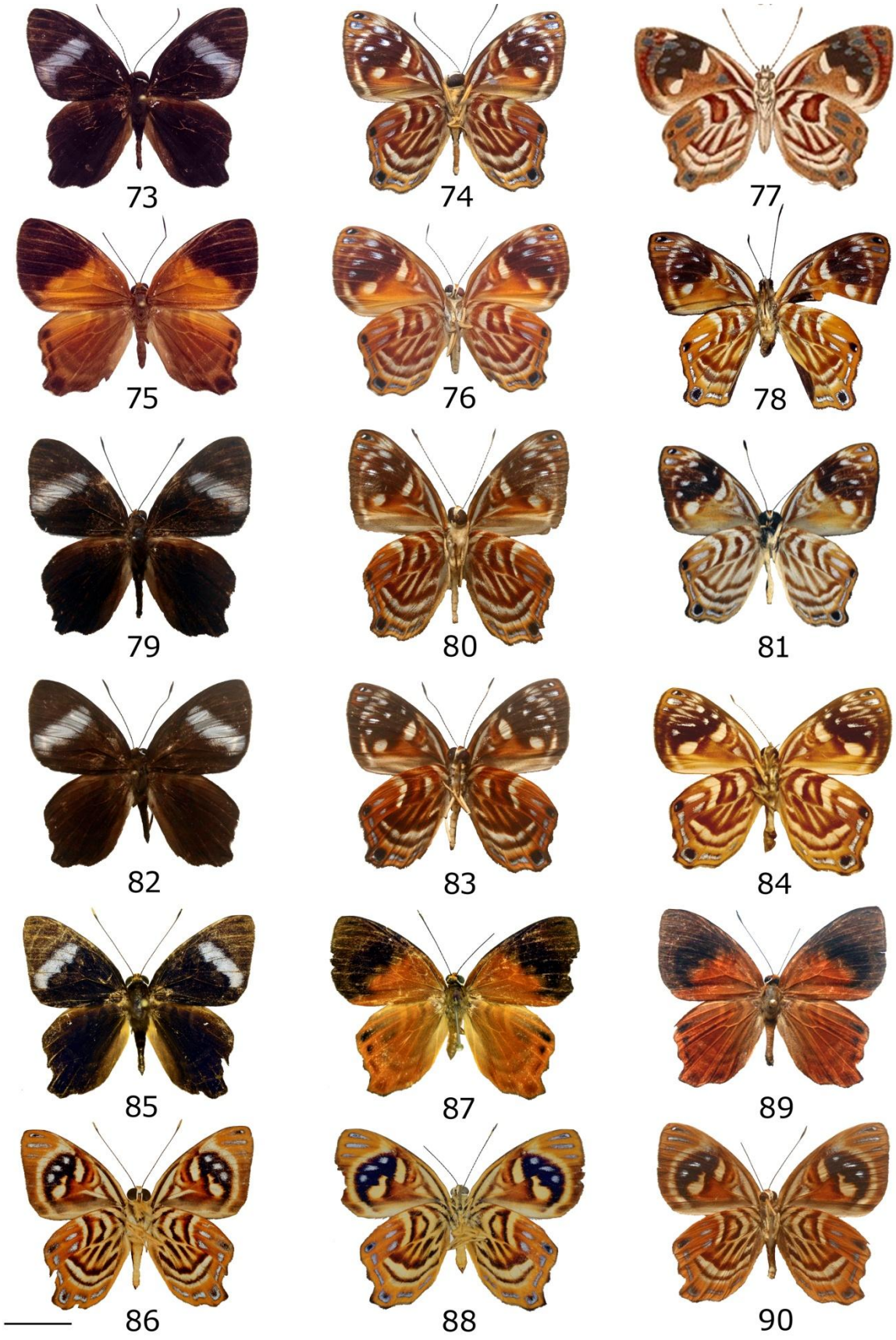

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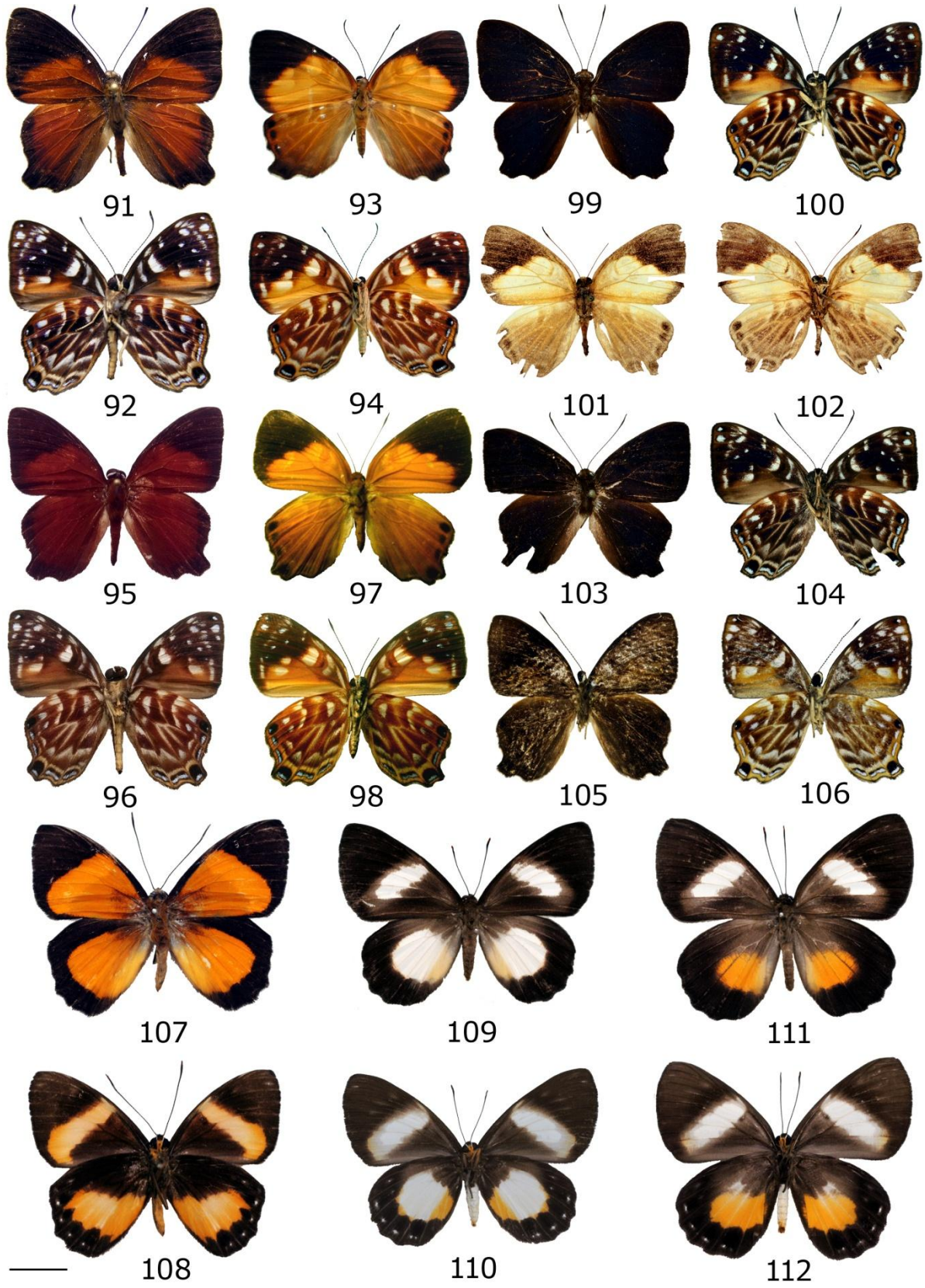

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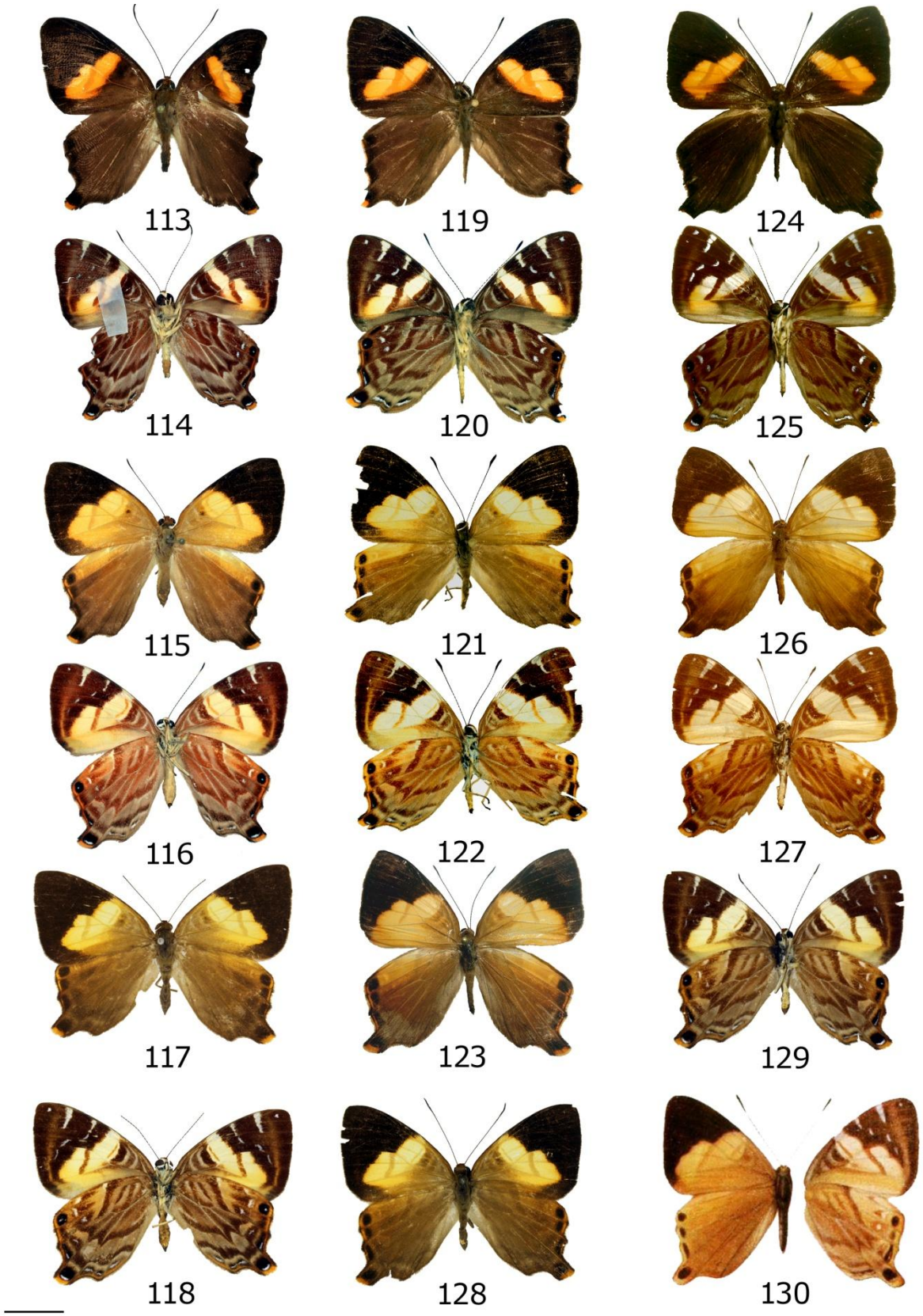

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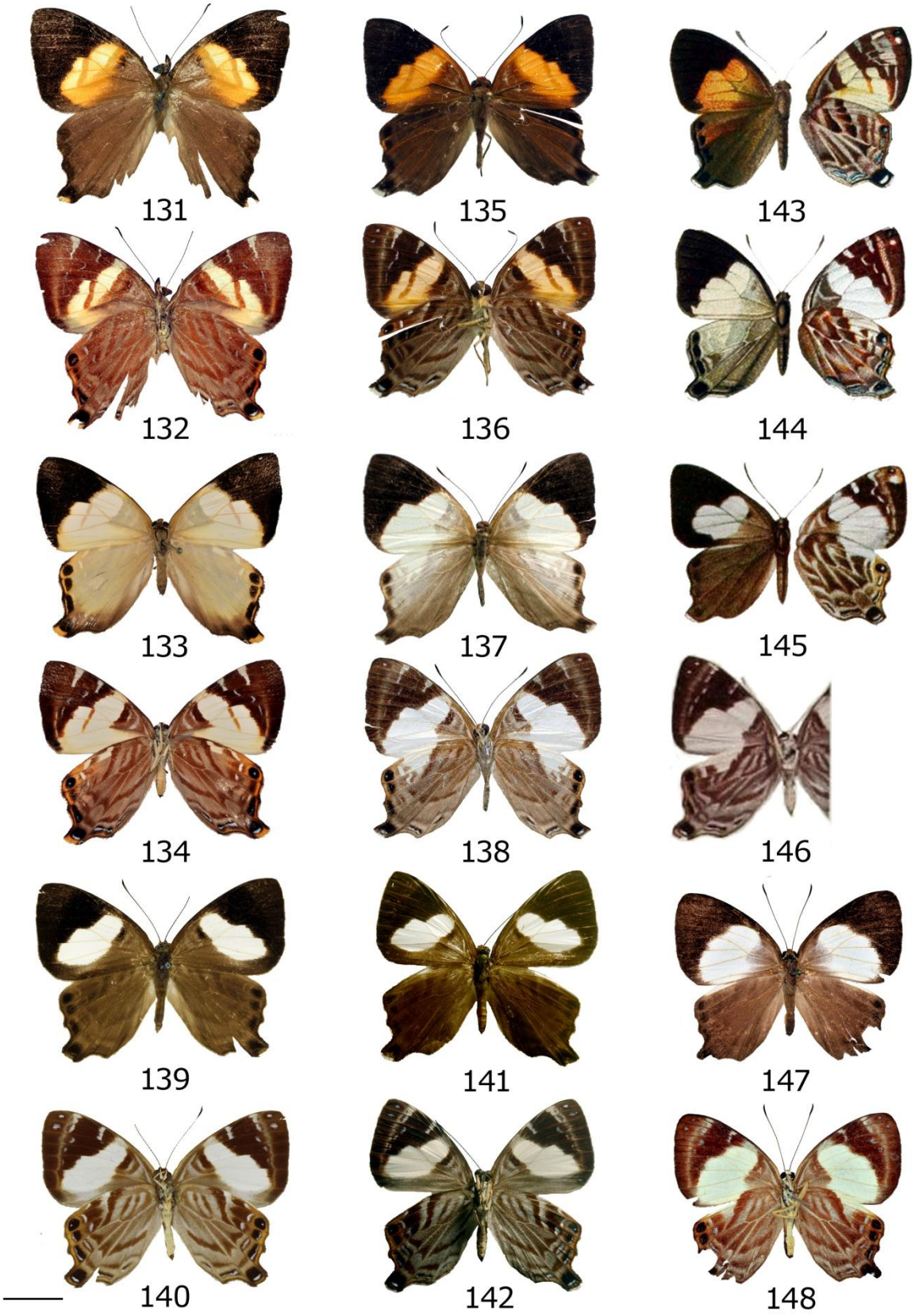

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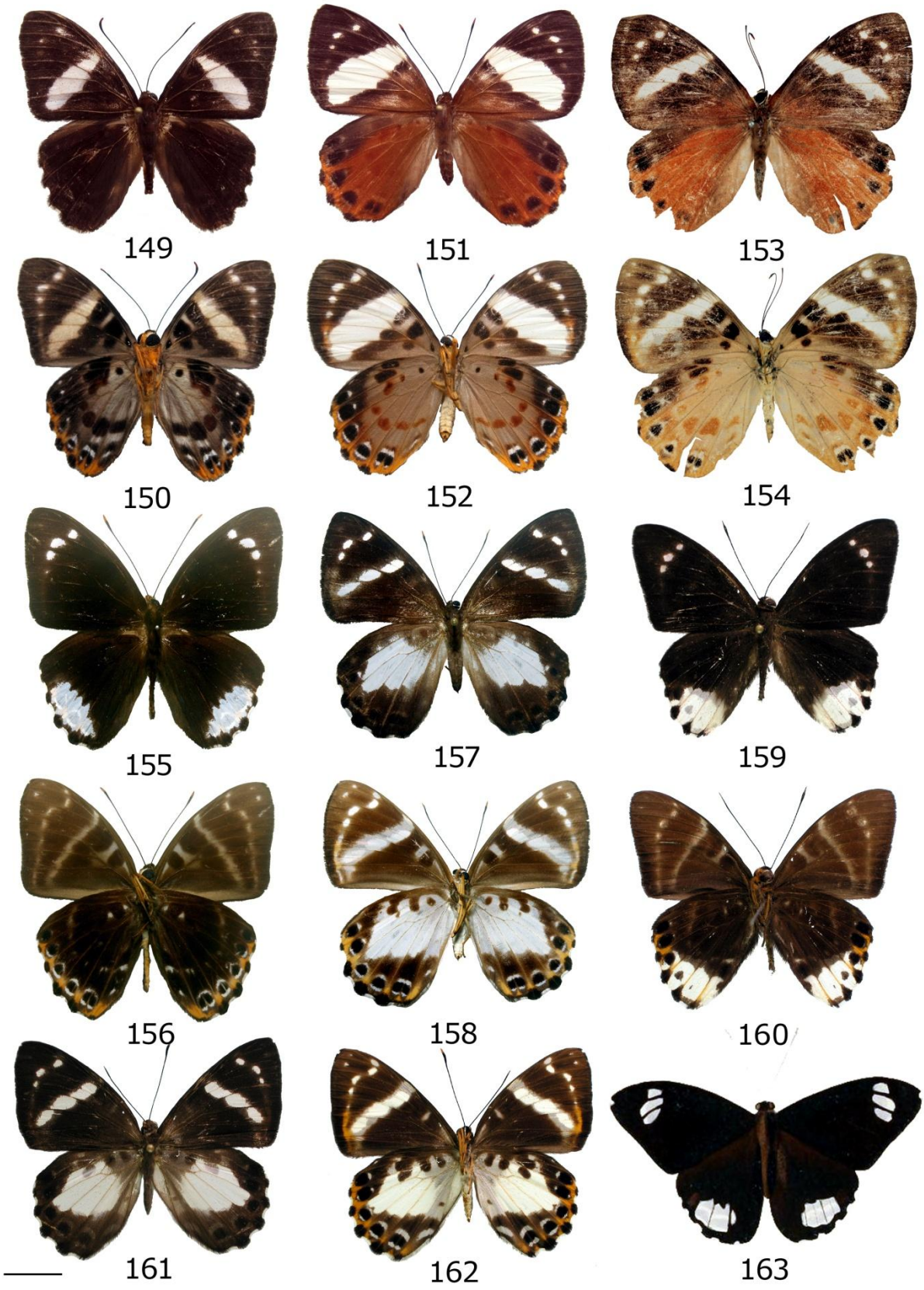

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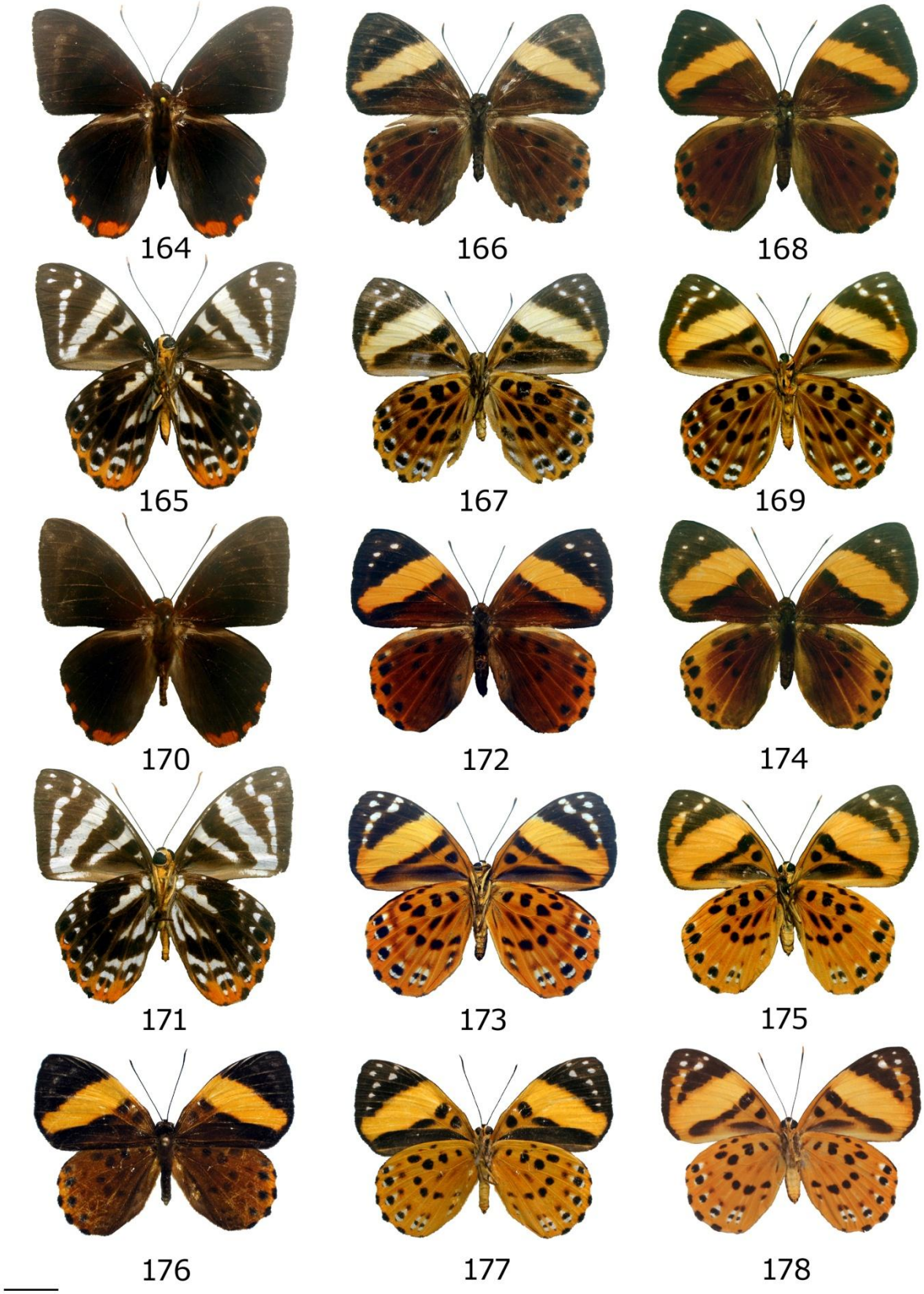

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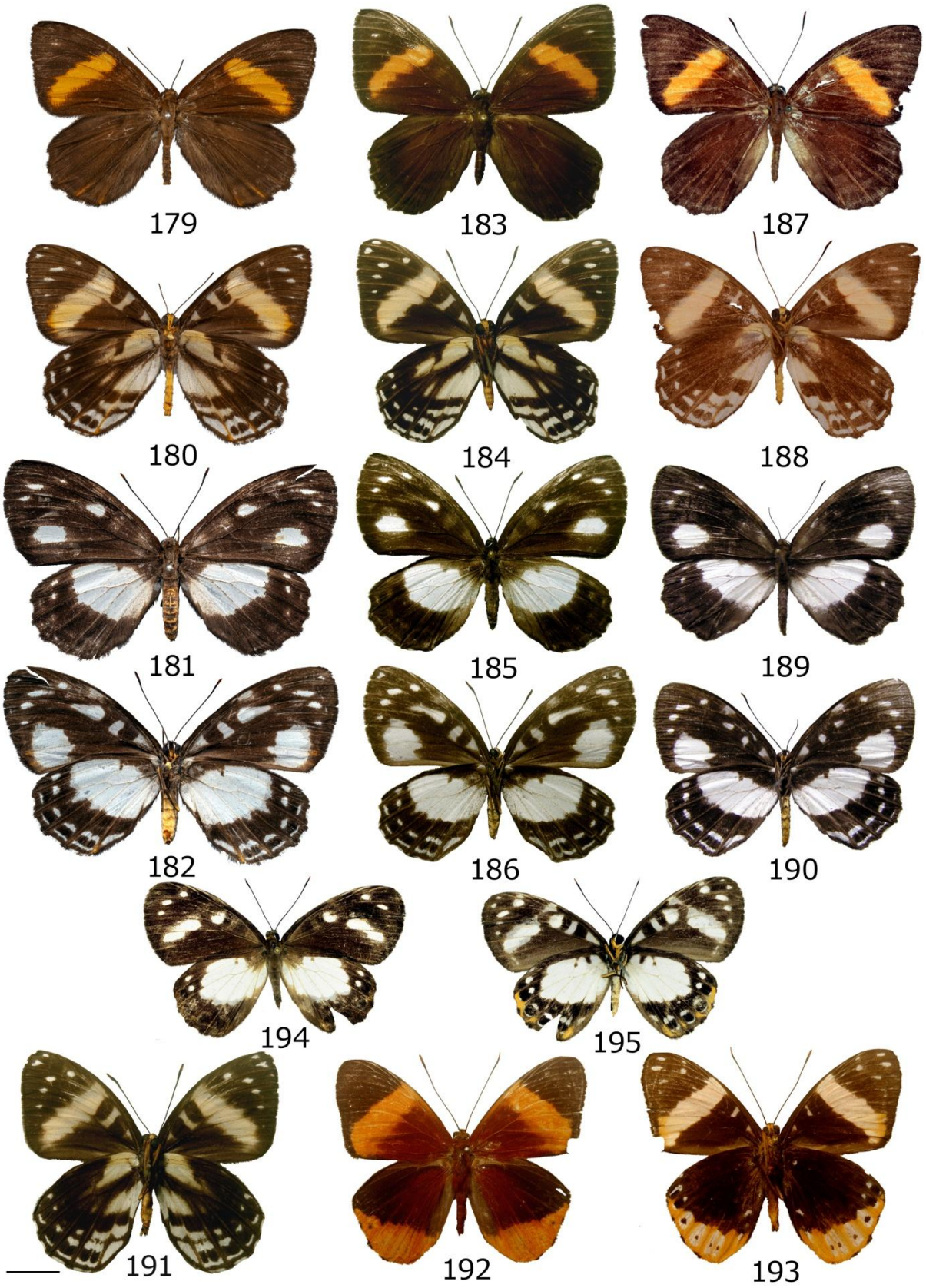

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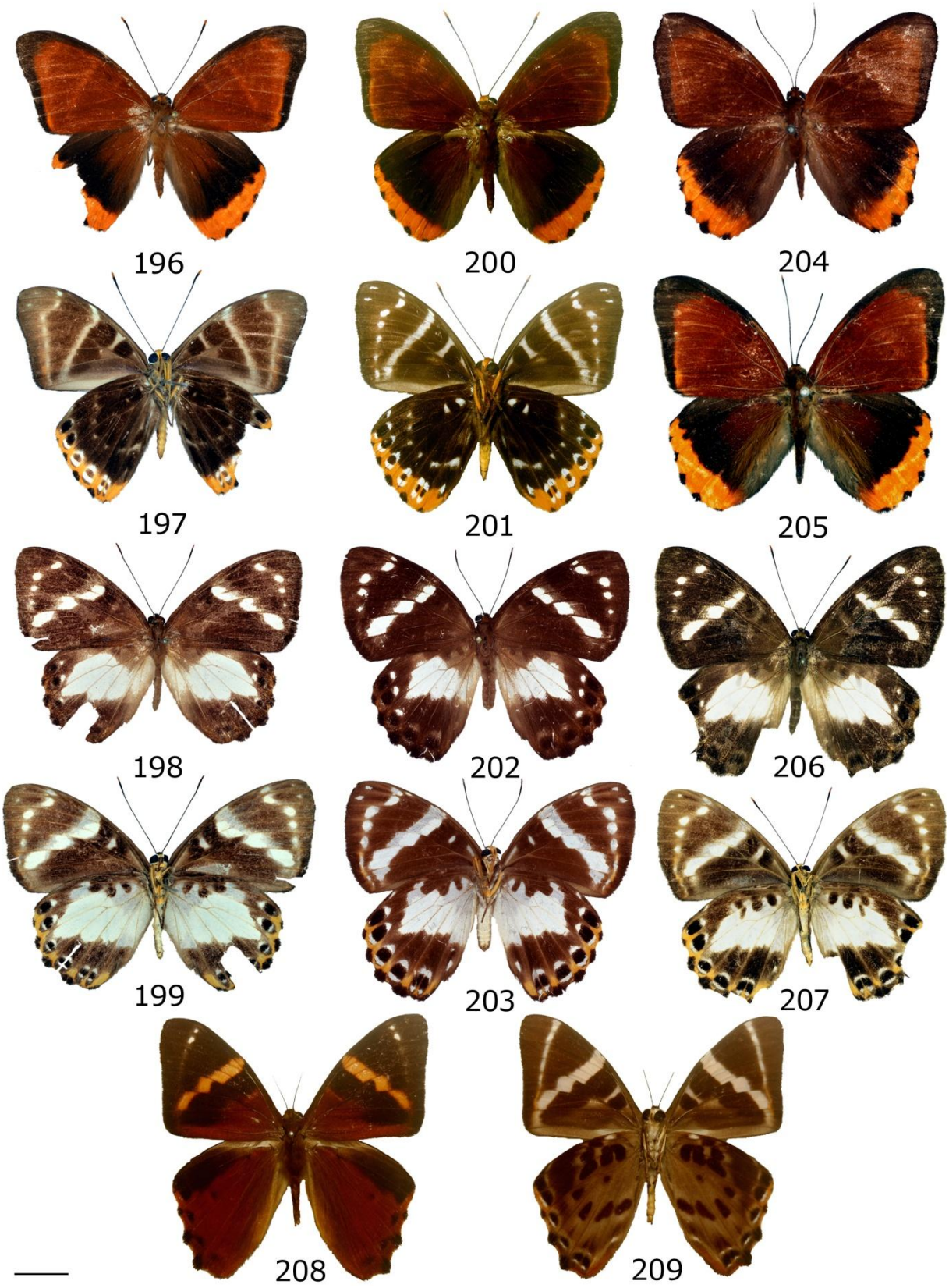

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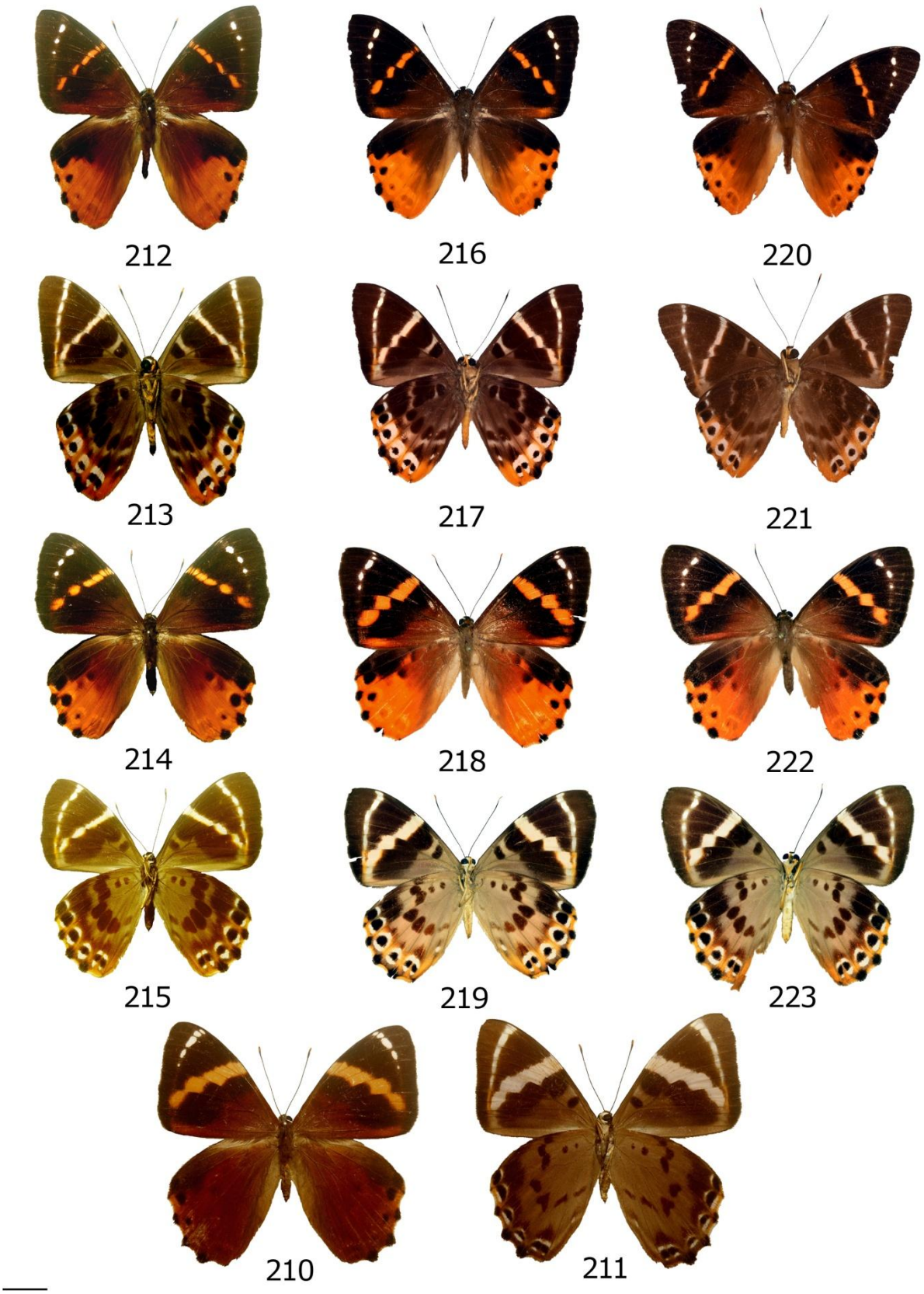

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