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# The Taxonomy of the genus *Lymantria* HÜBNER, [1819] (Lepidoptera: Lymantriidae)

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## Abstract

A review of the genus *Lymantria* HÜBNER, [1819] and its species results in the genus being divided into 12 subgenera, 9 of these introduced and described here as new. A total of 167 species of *Lymantria* are now known. All species except of three species incertae sedis are illustrated in colour and presented with male genitalia. Distribution maps are given for the Asian species. The present paper includes 22 cases of new synonymy, 17 changes in the status, and 31 new combinations. 42 species and 23 subspecies are described as new to science. One each neotype and lectotype are designated.

## Zusammenfassung

Die Gattung *Lymantria* HÜBNER, [1819] mit ihren Arten wird dargestellt. Die Gattung wird in 12 Subgenera aufgeteilt. Davon werden 9 hier erstmalig beschrieben und eingeführt. Derzeit sind 167 *Lymantria*-Arten bekannt. Alle Arten mit Ausnahme von 3 species incertae sedis werden in Farbe abgebildet und mit ihren männlichen Genitalien (in einigen Fällen auch die weiblichen Genitalapparate) illustriert. Punktkarten zeigen die Verbreitung der asiatischen Arten der Gattung. In der vorliegenden Arbeit werden 22 Fälle neuer Synonymien, 17 neue Stati sowie 31 neue Kombinationen mitgeteilt. 42 Arten und 23 Unterarten werden als neu für die Wissenschaft beschrieben. 1 Neotypus und 1 Lectotypus werden designiert.


**Key words:** Asia, check list, lectotype designation, Lepidoptera, Lymantriidae, *Lymantria*, new combination, neotype designation, new species, new subspecies, new subgenus, *Polymona*, synonymies, taxonomy.

## Contents

## Introduction

Among taxonomists and agriculturalists the family Lymantriidae has a rather bad reputation:

- there are too many species in a few genera (e.g. *Lymantria* HÜBNER, [1819], *Euproctis* HÜBNER, [1819], *Arctornis* GERMAR, 1810);
- the imagines and caterpillars are often insufficiently illustrated;
- some species have a large infra-specific and geographical variation;
- some species have a wide distribution;
- strongly developed sexual dimorphism makes the association of males and females of the same species somewhat difficult;
- the larger females of most of the species are rather rare in collections and are often unknown, or known from single specimens;
- many species have highly polyphagous caterpillars;
- many species are a serious threat to man in agricultural and forest regions;
- some species cause public health problems or cause sensitive persons to have troublesome skin reaction by urtication.

The systematics and taxonomy of Lymantriidae are relatively unknown as compared to other Noctuoid families, e.g. the Notodontidae. Authors that have worked on the systematics and taxonomy of the Lymantriidae, particularly *Lymantria* include BRYK, COLLENETTE, FERGUSON, HOLLOWAY, KISHIDA, MAES, MATSUMURA, SCHINTLMEISTER, STRAND and SWINHOE. The present classification of the Lymantriidae is not based on a thorough phylogenetic analysis. There is the tendency to place known species into a few very large and often paraphyletic genera.

The genus *Lymantria* has been a common depository for many species. The latest available catalogue of the Lymantriidae placed 140 species in *Lymantria* (BRYK 1934). In the present concept of the genus 40 species (about 29%) were removed from *Lymantria*. The taxonomy of *Lymantria* is relatively unknown. Of the 101 nominal species taxa of *Lymantria* listed in the catalogue of BRYK (1934), only 69 (68%) are valid species as presented here. On the other hand, this study listed 167 species of *Lymantria*; approximately 240% of the species known by BRYK (1934).

The purpose of the present paper is to revise the taxonomy of the Australasian species of *Lymantria* as a first step to better understand the systematics, phylogeny and zoogeography of the group. Subgenera are used to separate closely related species into defined groups, making identification easier.

In the course of researching this paper it was necessary to examine the African species, particularly the Madagascan fauna. My knowledge of the African *Lymantria* is limited so no considerable taxonomic changes were made. The Lymantriidae of Madagascar were revised fortunately by GRIVEAUD (1977), giving the basis in which to evaluate the taxonomy of *Lymantria* presented here. Outside of Madagascar only a few species of *Lymantria* are known. Most of the described African taxa placed by BRYK (1934) into *Lymantria* do not belong there. During the course of this study, about 8-10 species from Asia were not described as they were only represented by one or a few worn specimens or specimens with dubious data.

The Lymantriidae are most diverse in the Old World tropics, with a few species in temperate areas such as North America and Europe and with a few genera in South America. The genus *Lymantria*

is particularly diverse in southern China, Indochina and the Himalayas. HOLLOWAY (1999) defined the family Lymantriidae and the tribe Lymantriini, including notes on their bionomy. FERGUSON (1978) placed the genus *Lymantria* into the tribe Lymantriini; the subfamily Lymantriinae containing the genus *Lymantria* was introduced by STRAND (1915).

## Abbreviations

BMNH – The Natural History Museum, London
CAS – Institute of Zoology of the Chinese Academy of Sciences, Beijing
DEI – Deutsches Entomologisches Institut, Eberswalde
FNS – Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt/M.
HEO – Hope Entomological collections, Oxford University Museum of Natural History
HUS – Entomological Institute, Hokkaido University, Sapporo
MNHN – Museum national d'Histoire naturelle, Paris
MTD – Museum für Tierkunde, Dresden
NMS – Naturhistoriska Museet, Stockholm
NHMW – Naturhistorisches Museum, Wien
MWM – Museum Witt, München
NNM – Nationaal Natuurhistorisch Museum, Leiden
NSMT – National Science Museum, Tokyo
RMCA – Royal Museum of Central Africa, Tervuren
SMNS – Staatliches Museum für Naturkunde Rosenstein, Stuttgart
ZFMK – Museum Alexander Koenig, Bonn
ZMHU – Zoologisches Museum der Humboldt-Universität zu Berlin
ZSM – Zoologische Staatssammlung, München
UZM –Universitetes Zoologiske Museum, København

GU – genitalia dissection
HT – Holotype
PT – Paratype
LT – Lectotype
PLT – Paralectotype
ST – Syntype

## Material and methods

The material studied here mainly originates from the collections at MWM, Munich, BMNH, London, RMCA, Tervuren, ZFMK, Bonn, ZSM, Munich, coll. A. HAUENSTEIN, Schönenberg and from my own. Paratypes of the taxa described here as new are deposited in these mentioned collections. The total number of examined specimens of *Lymantria* was n > 45.000. Fortunately I was able to locate, check and photograph all primary types of *Lymantria* except 21 on species-level.

Figures of the genitalia were taken with a Nikon LS 1000 scanner (SCHINTLMEISTER 2002) respectively with a Nikon microscope Eclipse E600, connected with a digital camera Sony EXC-950P.

The genitalia dissections (GU) referring to material from MWM, Munich are marked with a "W" before the slide-number. The genitalia slides from my own collection are marked with two groups of numbers (e.g. GU 57-12).

The forewing length was measured from the base to the apex of the right forewing. The dots in the distribution maps are based mostly on (> 95%) the original specimens I revised myself. An asterisk marks the type locality of the species and the subspecies (type localities of synonyms were not marked separately).

The localities are cited in the systematic account referring to the original spelling of the label on the specimen.

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Miss Gabriela Tennhard (Dresden) and Paul Schaefer corrected the English grammar and spelling.

## Definition of the genus *Lymantria*

The definition of the genus is given by HOLLOWAY (1999): "The forewing facies is one of repetitive, dark, lunulate or zig-zag fasciation on a paler ground. The cell has interior and exterior V-shaped marks broken by the veins, and, basal to these, a dot, streak or ring in the orbicular stigma position just distal to the antemedial. There is often a strong row of dark marginal flecks or triangles in the spaces on both wings, and the hindwing margin (in males at least) is more frequently angled ..... There is no areole in the forewing .....

..... the feature that most clearly defines this large and varied genus is the extensile nature of the female ovipositor that, with the eighth segment structures, is as long or longer than the ductus and bursa combined. The extended zone is mainly within the membrane between the ovipositor lobes and the eighth segment ..... The male abdomen has tymbals."

In addition to this definition the following characteristics seem to be consistent for *Lymantria*: In most species the body and the wings (often only the fringes) are of a prominent pinkish colour; in a few cases the pinkish colour is replaced by a warm yellow.

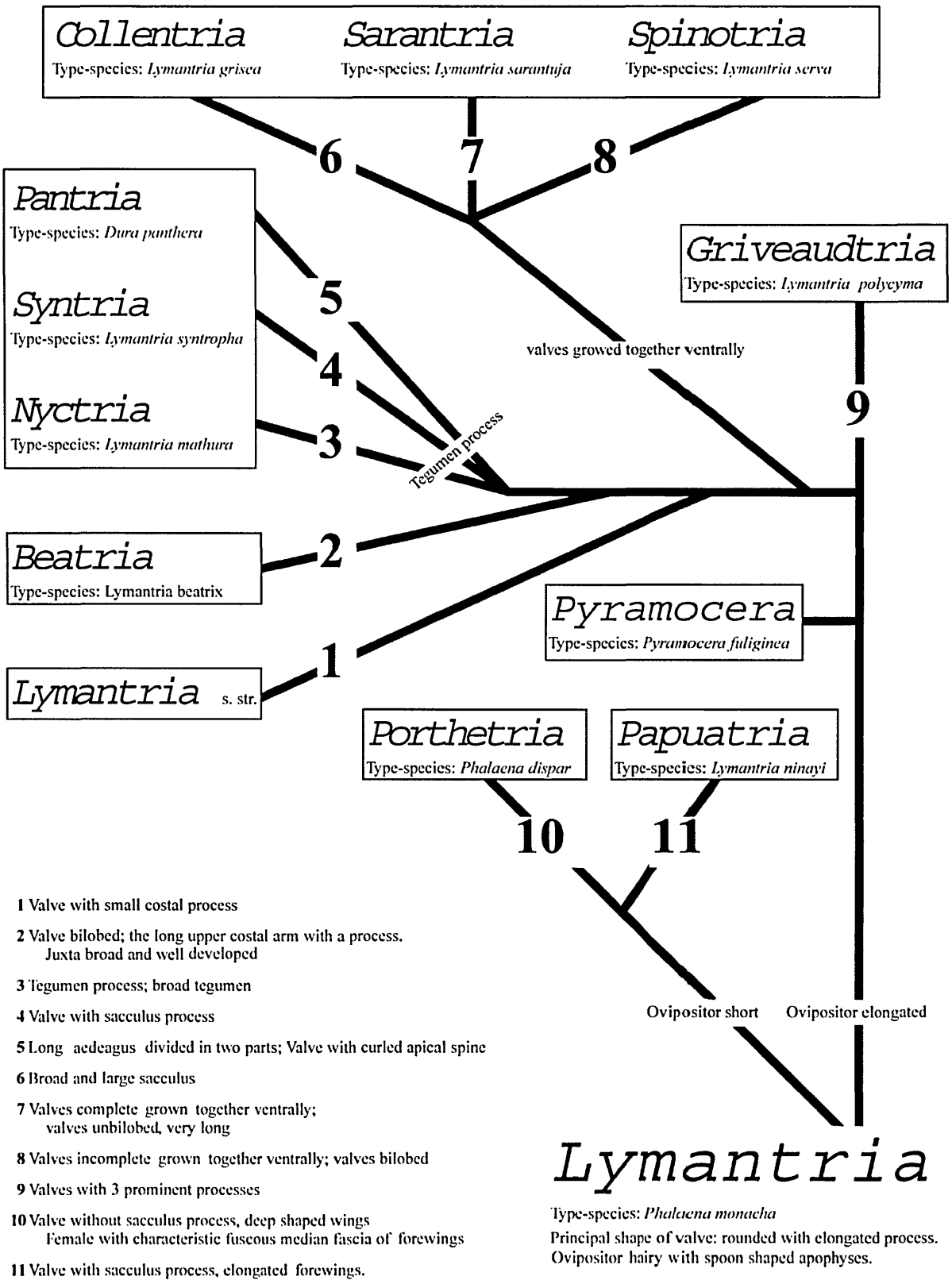
I have found characteristics in the female genitalia, where the very long ovipositor bears many short hairs, which could be probably a synapomorphy for *Lymantria*. There are two pairs of extended apophyses, which are not pointed (as in most other known noctuoids) but end in a broad spoon-like ellipsoid shape ("spoon-apophyses"). This character is found in the subgenera *Porthetria* and *Papuatria,* although the ovipositor is not extended.

The basic construction of the male genitalia is characterized by a triangular and long uncus without a gnathos, which is often clearly separated from the tegumen. The valves are undivided with the costal apex acutely produced. In further groups of *Lymantria*, e.g. *Spinotria* the valves become divided.

## Classification within the genus

Within the genus *Lymantria* several groups can be defined by external and genitalic characters. It should be noted that the dividing into subgenera of *Lymantria* is determined by pragmatic reasons rather than reflecting on "important" taxonomic differences. Generally the genus *Lymantria* forms a rather homogenous group, in which subgenera like *Papuatria* or *Collentria* could be representing distinct genera.

The genus *Lymantria* in its present generic concept can be divided into two groups according to the morphology of the female genitalia. The subgenera *Porthetria* and *Papuatria* have a relatively short ovipositor. The females cover the egg-masses with setae from their abdomen, as far as known. The other group beginning with subgenus *Lymantria* possess very long ovipositors. Their eggs are not covered with setae and are not placed as exposed egg-masses but, usually lay secluded eggs under bark scales or in cracks.




**1** Valve with small costal process

**2** Valve bilobed; the long upper costal arm with a process. Juxta broad and well developed

**3** Tegumen process; broad tegumen

**4** Valve with sacculus process

**5** Long aedeagus divided in two parts; Valve with curled apical spine

**6** Broad and large sacculus

**7** Valves complete grown together ventrally; valves unbilobed, very long

**8** Valves incomplete grown together ventrally; valves bilobed

**9** Valves with 3 prominent processes

**10** Valve without sacculus process, deep shaped wings Female with characteristic fuscous median fascia of forewings

**11** Valve with sacculus process, elongated forewings.

**Fig. 1:** Relationship within the genus *Lymantria*.

## Subgenus *Porthetria* HÜBNER, [1819]

(Fig. 2)

**Type-species:** *Phalaena dispar* LINNAEUS, 1758 by subsequent designation by KIRBY (1892).

**Synonyms:**
*Sericaria* BERTHOLD, 1827. Type-species: *Phalaena dispar* LINNAEUS, 1758.
*Enome* WALKER, 1855. Type-species: *Enome ampla* WALKER, 1855.
*Pegella* WALKER, 1866. Type-species: *Pegella curvifera* WALKER, 1866.
*Barhona* MOORE, 1879. Type-species: *Barhona carneola* [= *Phalaena Bombyx brotea* STOLL, 1781].

### Diagnosis

The ground colour of the wings is white, however in some species they are brown. The brown colouration seems to be secondary, as many species possess white and brown forms, e.g. *L. antennata* WALKER, 1855, *L. xylina* SWINHOE, 1903, *L. pagenstecheri* sp.n. or *L. buruensis celebesa* COLLENETTE, 1947. The blackish pattern in general resembles the males of the *monacha*-group. Usually the basal band of the forewings is marked by black dots, which are not seen so prominently in the *monacha*-group. The V-shaped discal spot is distinctive. The sexually dimorphic females are often pinkish coloured on the wings. The forewing pattern of the females is characterized by blackish basal fascia and two prominent median bands, which form a conjunction at the dorsum of the forewings. The discal spot and a discal streak on the forewings are well developed and prominent.

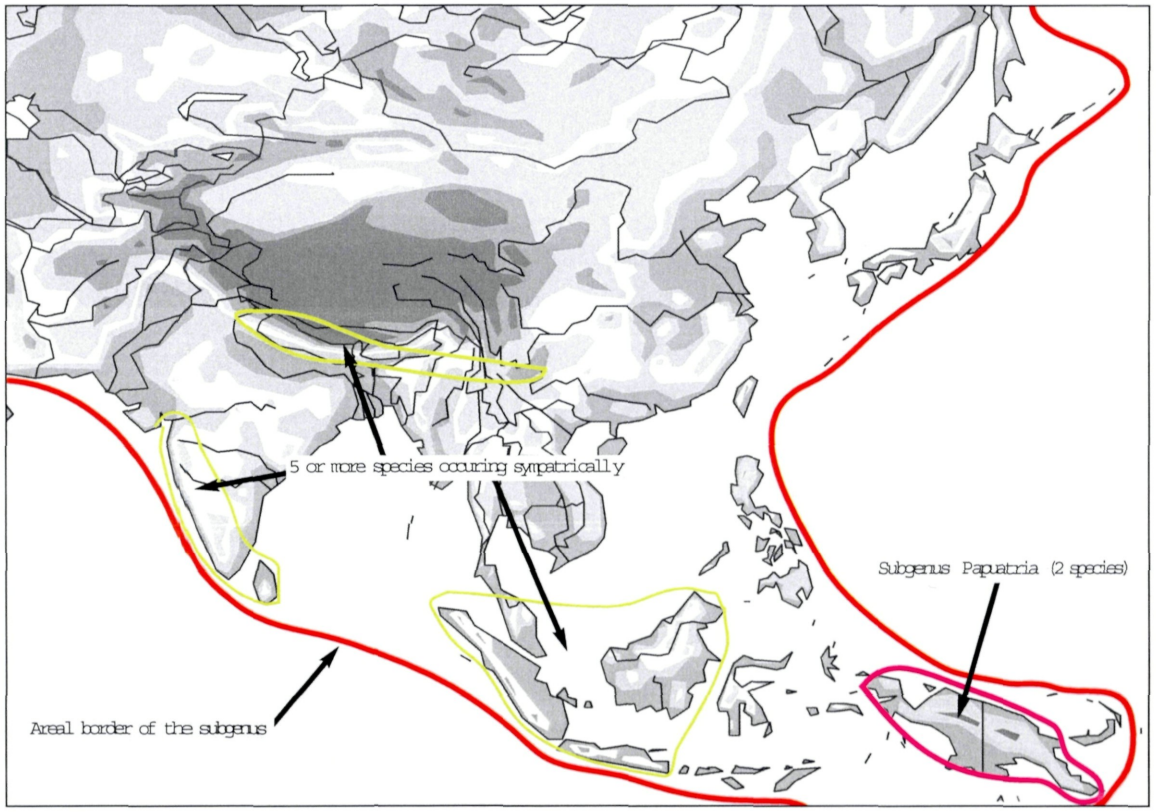



**Fig. 2:** Distribution of the subgenera *Porthetria* and *Papuatria*.

The shape of the wings is rather more quadrangular than triangular. The apex of the forewings is rounded and not elongated. The male genitalia have undivided valves, ampulla absent, the costal apex acutely produced, and the saccular margin rounded to obtusely angled. The female genitalia display a relatively short ovipositor, compared to members of the subgenera *Lymantria* or *Spinotria*.

The subgenus contains 39 species distributed from Europe to Australia (*L. dispar* was introduced by man into North America). The highest diversity of species is found in Oriental Asia.

## Subgenus *Papuatria* subgen.n.

(Fig. 2)

**Type-species:** *Lymantria ninayi* BETHUNE-BAKER, 1910 by present designation.

### Diagnosis

This small, but very unique subgenus includes only two species, endemic to the island of New Guinea. The males are rather small in size with elongate forewings. The V-shaped mark is absent, but a circular blackish discal spot on the forewings is well developed. The venation of the forewings is slightly pinkish coloured. The hindwings show a broad and closed black margin area. The abdomen is black. The sexual dimorphic female is, compared to the size of the males, very large and of a white ground colour with black markings that resemble females of the subgenus *Lymantria.* The male genitalia somewhat resemble *Porthetria,* particularly the thick, short aedeagus and the shape of the valves. They differ by an additional basal process of the valve not seen in any other species of the genus *Lymantria*. The female genitalia have a short ovipositor as in *Porthetria.*

## Subgenus *Lymantria* HÜBNER, [1819]

(Fig. 3)

**Type-species:** *Phalaena monacha* LINNAEUS, 1758 by subsequent designation by MOORE [1883].

**Synonyms:**
*Hypogymna* BILLBERG, 1820. Type-species: *Phalaena monacha* LINNAEUS, 1758.
*Psilura* STEPHENS, 1828. Type-species: *Phalaena monacha* LINNAEUS, 1758.
*Nagunda* MOORE, 1879. Type-species: *Alope semicincta* WALKER, 1855.

### Diagnosis

The members of this group are characterized by a white (in a few cases brown or grey) ground colour of the wings. The forewings are deep-winged and rather of triangular shape and display a rounded apex. The contrasting black pattern follows a characteristic scheme: V- shaped discal spot, five costal spots and an orbicular stigma. All wings have black marginal dots. An example of the basic-pattern for this group is *Lymantria todara* MOORE, 1879.

The male genitalia are relatively small in size and show undivided valves with an ampulla. The aedeagus is smooth and slightly curved without cornuti or spines. The female genitalia of this and the following subgenera are with "spoon-apophyses" and have a long ovipositor with many setae. The differences in the male genitalia between the species are rather small. Important characters for the species diagnosis are the shape of the base of the uncus, the shape of the ampulla and the shape of the long sacculus. The morphology of the ostium bursae of the female genitalia is diagnostic for identification of the species. The subgenus *Lymantria* contains 24 species distributed from Europe to the Moluccas. The highest diversity of species is found in continental Asia (E Himalayas, Yunnan, SE China).

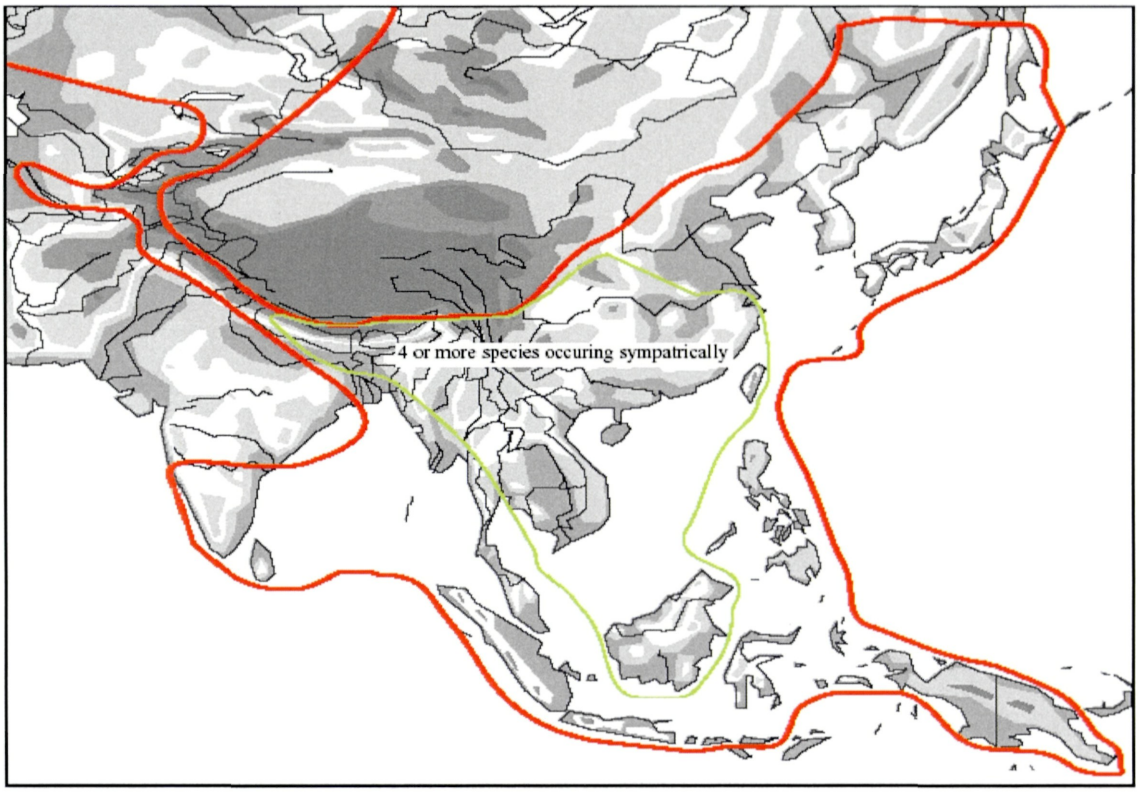



**Fig. 3:** Distribution of the subgenus *Lymantria*.

## Subgenus *Beatria* subgen.n.

(Fig. 4)

**Type-species:** *Phalaena Bombyx beatrix* STOLL, 1791 by present designation.

### Diagnosis

This is a homogenous subgenus, which can be easily identified by the unique shape of the male forewings. The ground colour of all wings is black, however some members have brown to yellowish coloured hindwings. The white to grey pattern is diagnostic for this subgenus. There is a well developed post median fascia, a paler discal area with black discal spot on the forewings. The venation of the hindwings near the anal area is pale coloured. The V-shaped discal spot is absent.

The sexual dimorphic females are of white ground colour with black pattern on the wings. The discal area is white with a prominent black discal spot. The hindwings have a broad black submarginal area. The males and the females do not possess any pinkish colour. The bodies of both sexes are of a black and yellow colour.

The male genitalia have undivided valves with distinct dorsal and ventral arms to the valves. The aedeagus is short, thick and has many cornuti. The prominently developed rectangular juxta is of diagnostic value for identification of the species. The female genitalia are similar to the subgenus *Lymantria*, but the bursa copulatrix (without signum) is relatively small. The subgenus contains 7 species distributed from southern China to Sulawesi.

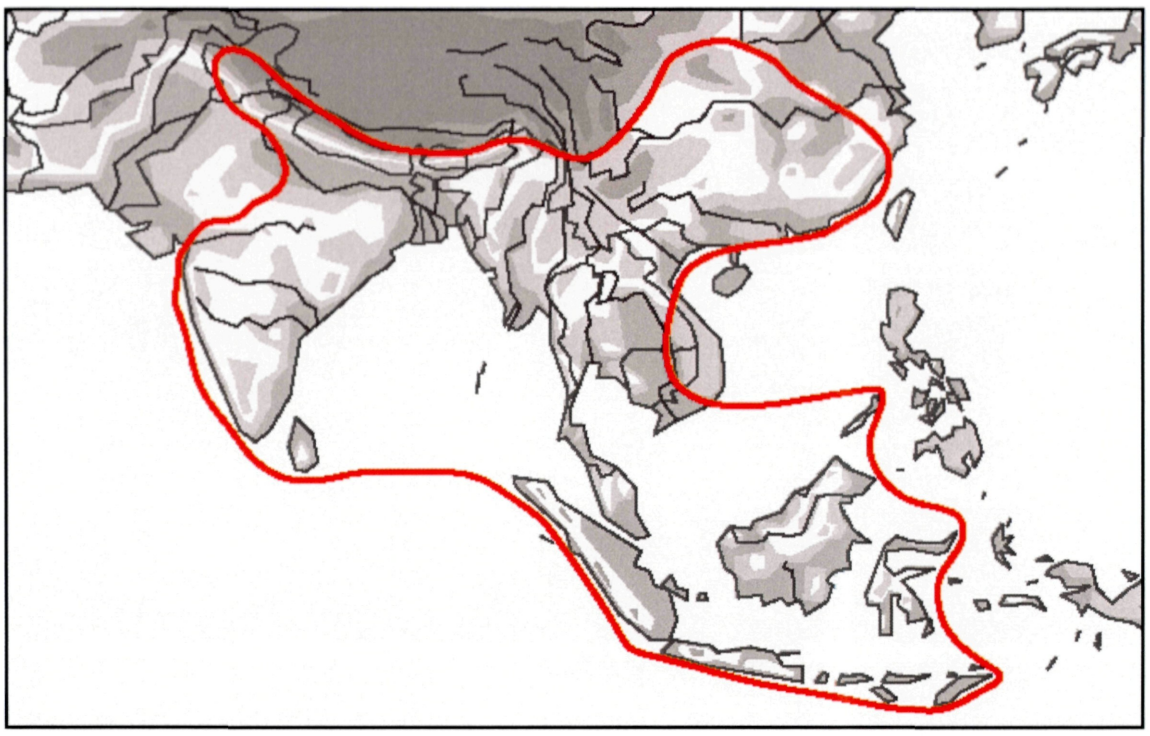


**Fig. 4:** Distribution of the subgenus *Beatria.*

## Subgenus *Nyctria* subgen.n.

(Fig. 5)

**Type-species:** *Lymantria mathura* MOORE, 1865 by present designation.

### Diagnosis

The ground colour of the forewings is a greenish-grey to yellow with an olive-brown pattern. The V-shaped discal spot is weakly developed or absent. The hindwings are of a yellow or pink colour. In many cases there are melanic individuals but some species (e.g. *L. capnodes* COLLENETTE, 1932) are present only as blackish specimens. The sexual dimorphism is strongly developed; the females (as far as known) have pink coloured hindwings. The male genitalia have a lateral additional digitate process arising from the tegumen. The valves are small and deeply divided. The aedeagus is rather short and thick. The females are known only in three species; they resemble females of the subgenus *Lymantria*.

Actually 11 species (mainly distributed in Oriental Asia) are placed in this subgenus. The grouping is somewhat provisional, particularly because *L. naessigi* sp.n. differs greatly from the type species, *L. mathura.* This and the following two subgenera (*Syntria* subgen.n., *Pantria* subgen.n.) form a group, where the species are probably more closely related to each other than to any other members of the genus *Lymantria.*

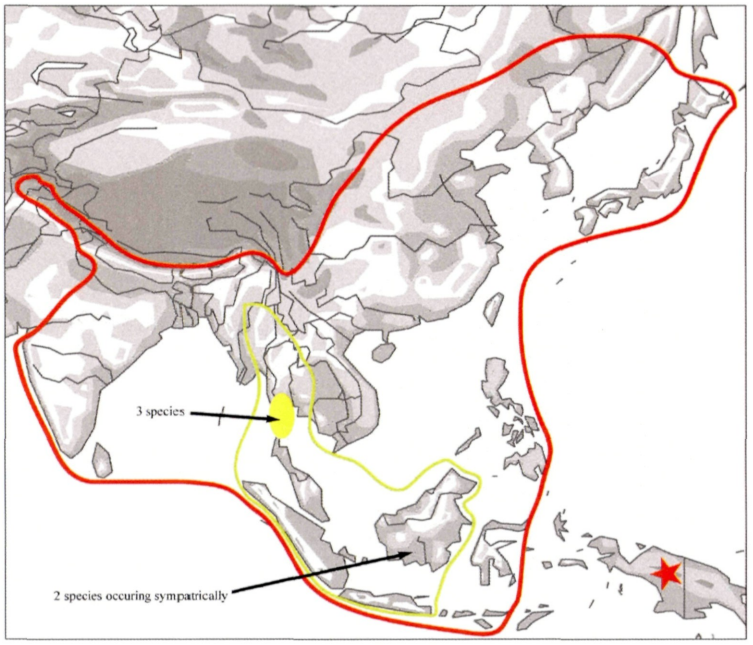



**Fig. 5:** Distribution of the subgenus *Nyctria*.

## Subgenus *Syntria* subgen.n.

**Type-species:** *Lymantria flavoneura* JOICEY & TALBOT, 1925 by present designation.

### Diagnosis

This subgenus is closely related to the previously mentioned *Nyctria*. The males of *Syntria* species match the members of *Nyctria* well. However there is nearly no developed sexual dimorphism (of the three known species only the female of *L. toxopeusi* COLLENETTE, 1955 is known). The male genitalia differ from *Nyctria* by the shape of the tegumen, the long uncus and the undivided valves. The aedeagus is short and thick as in *Nyctria* and the tegumen process near the uncus is also present. There are three species known of, which are all endemic to the island of New Guinea.

## Subgenus *Pantria* subgen.n.

**Type-species:** *Dura panthera* VAN EECKE, 1928 by present designation.

### Diagnosis

The ground colour of the somewhat elongated forewings is yellow with a brown pattern. The pattern is distributed on the entire area of the forewings. The discal spot is somewhat more fuscous than the other pattern; the V-shaped discal spot is weakly developed or absent. The hindwings are yellow without a discal spot. The sexual dimorphism is minimal. The female of *panthera* is a replica of the male, where the female of *L. ekeikei* BETHUNE-BAKER, 1904 has pink hindwings and abdomen. The male

genitalia have a pair of tegumen processes or socii ventral to the uncus, and a long and narrow saccus. The aedeagus is long and slender. The valves are unique with a curled apical spine to the valve. This subgenus contains only three species, two of them are endemic to the island of New Guinea.

## Subgenus *Collentria* subgen.n.

(Fig. 6)

**Type-species:** *Lymantria grisea* MOORE, 1879 by present designation.

### Diagnosis

The forewings are of a violet-brown ground colour with a rounded apex. The pattern is brown, where the V-shaped markings are weakly developed. The discal spot and a spot in the tornal area are prominently visible. The species show a prominent pinkish colour on the abdomen or – often as part of the individual variation of the females – on the hindwings. The male genitalia are characterized by a very strong and broadly developed sacculus as a part of the tegumen. The shape of the divided valves is diagnostic. *L. cryptochloea* COLLENETTE, 1932 shows exceptionally long valve processes, somewhat resembling *Spinotria* subgen.n. The aedeagus has no distinct characters.

The subgenus contains 7 species, distributed mainly allopatric from Taiwan to the Himalayas and through the Oriental Islands down to Mindanao.

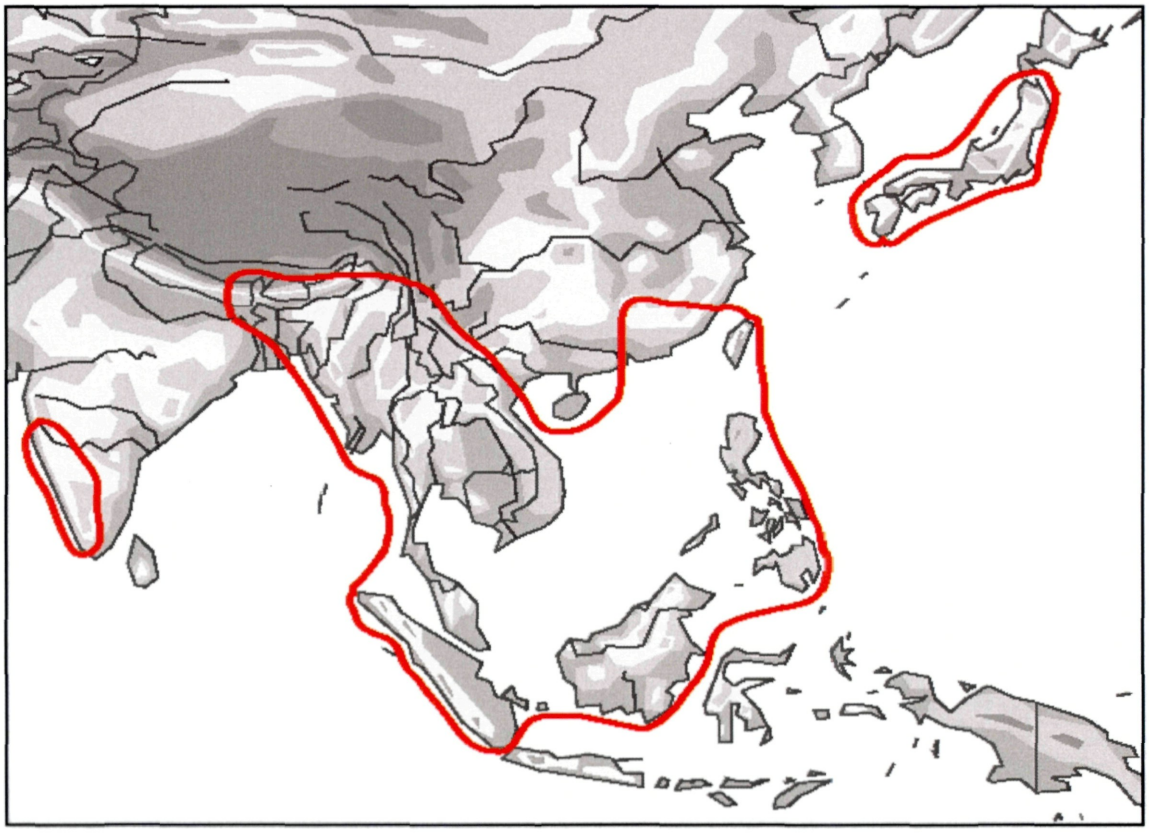


**Fig. 6:** Distribution of the subgenus *Collentria*.

## Subgenus *Spinotria* subgen.n.

(Fig. 7)

**Type-species:** *Bombyx serva* FABRICIUS, 1793 by present designation.

### Diagnosis

The forewings are somewhat elongated, compared to the wing shape of the subgenus *Lymantria*. The ground colour is fuscous brown to black. In a few cases the ground colour of the forewings is white to pale grey. There are often pinkish scales on the fringe and body (sometimes replaced by a warm yellow colour). The forewings pattern is similar to that of *Lymantria*.

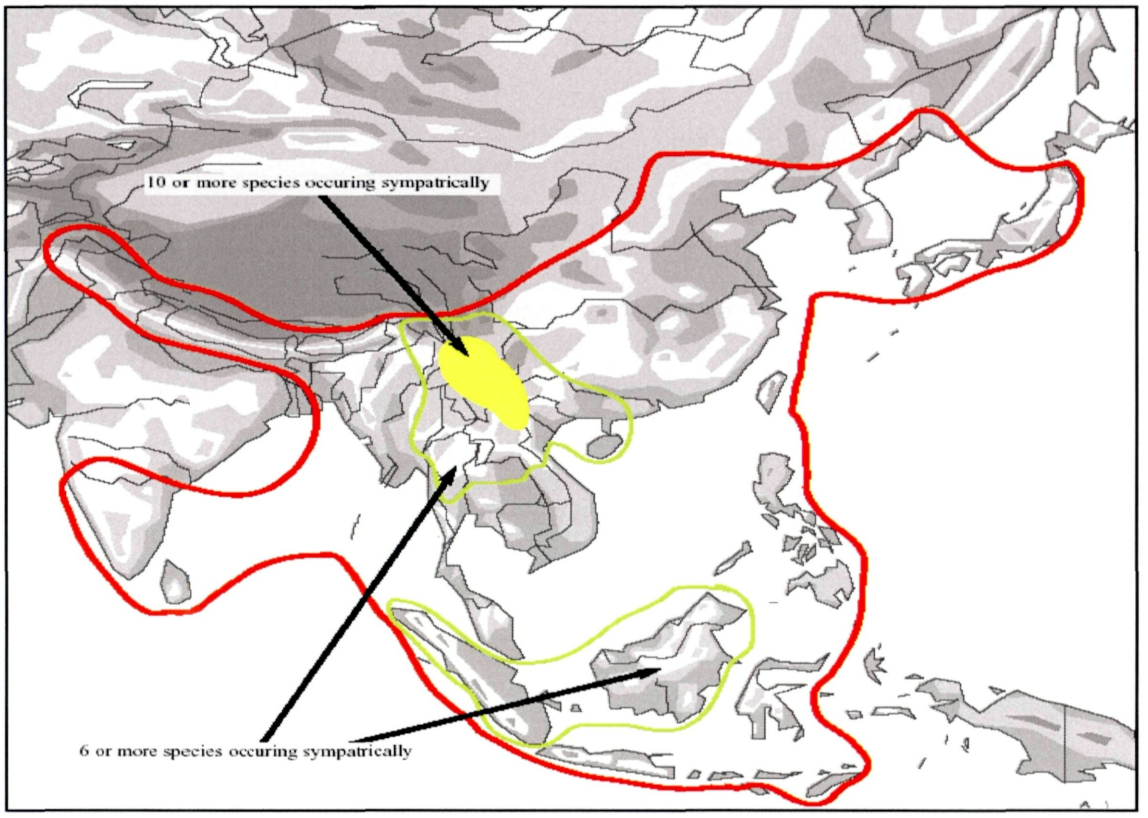



**Fig. 7:** Distribution of the subgenus *Spinotria*.

The male genitalia have valves which are divided distally into two spine-like processes. These processes are specifically distinct by their length (often unequal), shape and thickness. A characteristic feature of *Spinotria* and the two subgenera *Collentria* subgen.n. and *Sarantria* subgen.n. are the valves, which are unifying, in different stages, coalesced. In *Spinotria* the unifying of the valves is at its lowest level, in the species of *Sarantria* subgen.n. the valves are nearly completely grown together. The female genitalia resemble those of *Lymantria*, but the shape of the ostium bursae is triangular or rectangular rather than circular.

The subgenus *Spinotria* is diverse (40 species + 3 species incertae sedis), found mainly in Indochina. The members of this subgenus are distributed from Japan to Pakistan and through the Oriental tropics, not reaching New Guinea or Australia. Due to the external similarity of many species it is to be expected, that the number of known species particularly from the Indonesian Islands, will likely increase.

## Subgenus *Sarantria* subgen.n.

(Fig. 8)

**Type-species:** *Lymantria sarantuja* SCHINTLMEISTER, 1994 by present designation.

### Diagnosis

The ground colour of the forewings is reddish brown with a black pattern. The V-shaped costal spot is weakly developed. The hindwings are a pale brownish. There are no pinkish hairs or scales on the imago.

The subgenus can be best characterized by the structure of the male genitalia. The male genitalia have a valve with only one very long tapered process. In *L. karsholti* sp.n. the valve nearly consists of only one extremely long spine. The uncus looks like a part of the tegumen and is of a triangular, pointed shape. The aedeagus is not straight and has in most cases a hook-like shape at the tip.

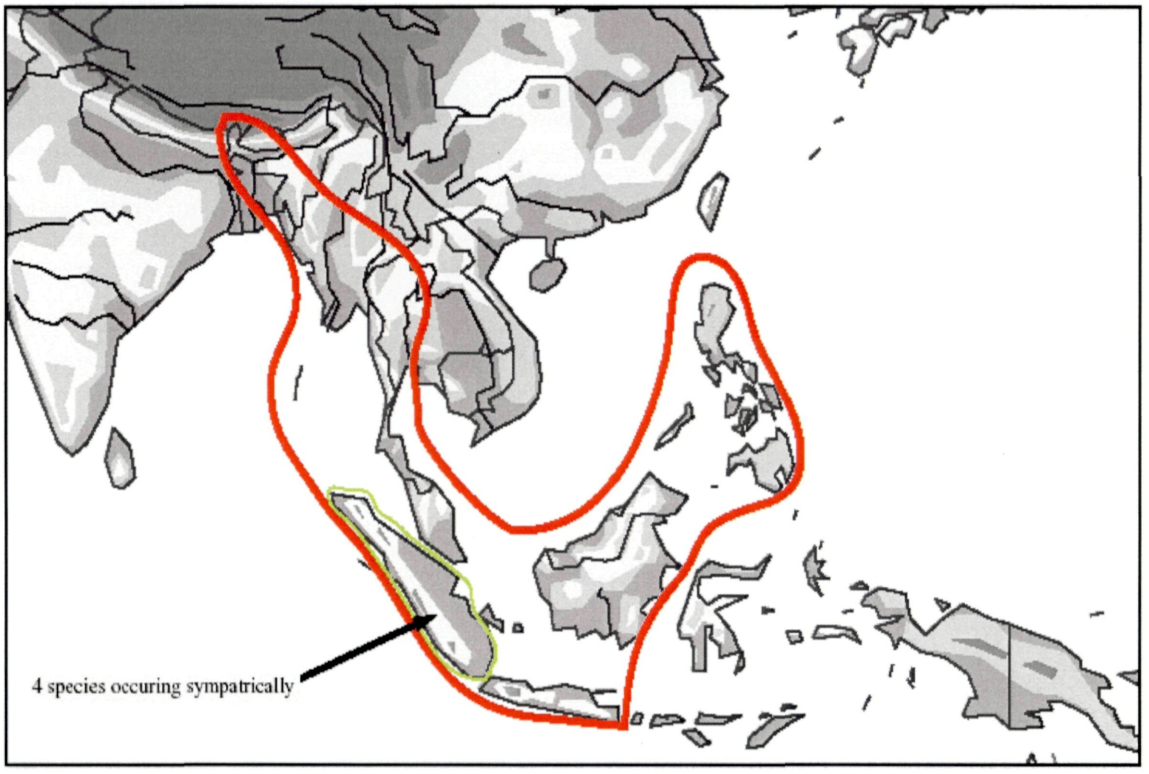



**Fig. 8:** Distribution of the subgenus *Sarantria*.

The females have a long ovipositor with the usual structures (apophyses etc.) as in the subgenus *Spinotria*. The shape of the ostium bursae is ellipsoid and rounded rather than rectangular or triangular. Actually 6 species are known, inhabiting the Oriental region, particularly Sundaland.

## Subgenus *Griveaudtria* subgen.n.

**Type-species:** *Lymantria polycyma* COLLENETTE, 1936 by present designation.

### Diagnosis

The ground colour of the wings is mostly creamy white. The deep shaped forewings resemble *Porthetria*. The pattern is brownish grey with a V-shaped costal spot. There is no further discal spot on the forewings (except in *L. polysticta* COLLENETTE, 1929 , *L. leucerythra* COLLENETTE, 1930, *L. microcyma* COLLENETTE, 1937 and *L. flavicilia* HAMPSON, 1910). There is no pink colour on the wings or abdomen of the imagines, except *L. rosea* BUTLER, 1879, *L. leucerythra, L. joannisi* LE CERF, 1921, and *L. rubroviridis* HERING, 1927. The sexual dimorphism is on a minimal level in the members of *Griveaudtria* sensu stricto (see below).

Two or three processes of the valve distinguish the male genitalia. The tegumen often has processes near the uncus as in *Nyctria*. The aedeagus is straight without specific structures. The female genitalia resemble the females of the subgenus *Lymantria*, though the circular ostium bursae is deeply bilobed, sometimes divided.

GRIVEAUD (1977) placed the Madagascan species placed in *Griveaudtria* in the genus *Lymantica* COLLENETTE, 1936 with type species *Lymantica epelytes* COLLENETTE, 1936 described from a single female from Madagascar. GRIVEAUD illustrated and synonymized *L. epelytes* with *L. rufofusca* MABILLE, 1900 (on page 118, fig. 145 [male holotype of *rufofusca*], fig. 146). The illustration of the female genitalia in GRIVEAUD (fig. 144) makes clear that the type species of *Lymantica* does not belong to the genus *Lymantria,* as the ovipositor is short and without setae and the apophyses are without the spoon-like shape at the tip. Furthermore, the sexual dimorphic imagines do not match the basic pattern of *Lymantria* (no V-shaped mark nor discal spot on the forewings, absolutely different markings, semihyaline wings, where the venation is blackish). The genus *Lymantica* is distributed particularly on mainland Africa.

On the other hand, some of the species in the present check list in *Griveaudtria* are provisionally placed in this subgenus. It seems necessary to undertake further studies, which would probably lead to the introduction of further subgenera for the African species of *Lymantria*. These questionable species are:

*L. polysticta, L. dulcinea* BUTLER, 1882, *L. rosea, L. russula* COLLENETTE, 1933, *L. joannisi, L. leucerythra, L. vacillans* WALKER, 1855, *L. rubroviridis, L. microcyma, L. flavicilia.*

I have listed 21 species in *Griveaudtria,* 16 of which are endemic to Madagascar; the other 5 species are distributed in the equatorial area of Africa. It should be noted that I found no *Lymantria* in southern Africa, however some externally similar species occur there. Sensu stricto (see above) the subgenus *Griveaudtria* is endemic to Madagascar.

## Subgenus *Pyramocera* BUTLER, 1880

**Type-species:** *Pyramocera fuliginea* BUTLER, 1880 [= *Liparis barica* MABILLE, 1879] by original designation.

### Diagnosis

This subgenus contains only one very large species of blackish ground colour and pink coloured abdomen. The V-shaped mark and the discal spot on the forewings are prominently developed. The unusual black pattern in the males displays stripes rather than fasciae. The sexual dimorphic females are larger and show no stripes, only black and white fasciae. The male genitalia resemble *Porthetria* but with an apical curled spine to the valve as in *Pantria*. The female genitalia resemble *Lymantria*, though the bursa copulatrix is relatively small. It seems that *Pyramocera* is most similar to *Porthetria*. There is only one species in *Pyramocera*, which is endemic to Madagascar.

## Checklist

### Lymantriinae STRAND, 1915

#### *Lymantria* HÜBNER, [1819]

(Type-species: *Phalaena monacha* LINNAEUS, 1758)

#### Subgenus *Porthetria* HÜBNER, [1819]

(Type-species: *Phalaena dispar* LINNAEUS, 1758)
(= *Porthetria* HÜBNER, [1819] *Phalaena dispar*)
(= *Sericaria* BERTHOLD, 1827 *Phalaena dispar*)
(= *Enome* WALKER, 1855 *Enome ampla*)
(= *Pegella* WALKER, 1886 *Pegella curvifera*)
(= *Barhona* MOORE, 1879 *Barhona carneola* [= *brotea*])

*dispar dispar* LINNAEUS, 1758 (*Phalaena*)
(= *Ocneria dispar erebus* MIEG, 1886)
(= *Lymantria dispar asiatica* VNUKOWSKIJ, 1926 **syn.n.**)
(= *Lymantria dispar praeterea* KARDAKOFF, 1928 **syn.n.**)
(=*Lymantria dispar hokkaidoensis* GOLDSCHMIDT, 1940)
(=*Lymantria dispar koreibia* BRYK, [1948])
(= *Lymantria dispar kolthoffi* BRYK, [1948] **syn.n.**)
(= *Lymantria dispar andalusica* REINIG, 1938)
(= *Lymantria dispar mediterraneae* GOLDSCHMIDT, 1940)
(= *Lymantria dispar bocharae* GOLDSCHMIDT, 1940 **syn.n.**)
(= *Lymantria dispar chosensis* GOLDSCHMIDT, 1940)
*dispar japonica* (MOTSCHULSKY, [1861] (*Liparis*)
(= *Porthetria umbrosa* BUTLER, 1881)
(=*Porthetria hadina* BUTLER, 1881)
(=*Lymantria dispar obscura* GOLDSCHMIDT, 1940)
(=*Lymantria nesiobia* BRYK, 1942)
*obfuscata* WALKER, 1865
*schaeferi* **sp.n.**
*albescens albescens* HORI & UEMO, 1930 **stat.n.**
*albescens postalba* INOUE, 1956 **stat.n.**
*albescens tsushimensis* INOUE, 1956 **stat.n.**
*xylina xylina* SWINHOE, 1903
(= *Lymantria nigricosta* MATSUMURA, 1921)
(=*Lymantria horishanella* MATSUMURA, 1927)
(= *Lymantria sakaguchii* MATSUMURA, 1927)
*xylina nobunaga* NAGANO, 1912
*apicebrunnea* GAEDE, 1932
*ampla* (WALKER, 1855) (*Enome*)
*aryama* MOORE, 1859
*detersa* WALKER, 1865
*incerta* WALKER, 1855
*costalis* WALKER, 1865 **stat.rev.**
*speideli* **sp.n.**
*antennata* WALKER, 1855
(= *Lymantria turneri* SWINHOE, 1903)
(= *Lymantria undifera* STRAND, 1923)
*pelospila* (TURNER, 1915) (*Enome*)
(= *Lymantria lutescens* AURIVILLIUS, 1920)
(= *Dura prionodesma* TURNER, 1921)

*lunata lunata* (STOLL, 1782) (*Bombyx*)
(= *Pegella ichorina* BUTLER, 1884
(= *Lymantria lunata f. lunatoides* STRAND, 1915)
*lunata ingrami* **ssp.n.**
*lunata diversa* TURNER, 1936
*lunata carteri* **ssp.n.**
*lunata curvifera* (WALKER, 1886)
*sphalera sphalera* COLLENETTE, 1930
(= *Lymantria sphalera talesea* COLLENETTE, 1933 **syn.n.**)
*sphalera tennhardae* **ssp.n.**
*sphalera akemiae* **ssp.n.**
*monoides* COLLENETTE, 1932
*buruensis* COLLENETTE, 1933
*buruensis celebesa* COLLENETTE, 1947 **stat.n.**
*behouneki* **sp.n.**
*novaguineensis* BETHUNE-BAKER, 1904
*rosina* PAGENSTECHER, 1900
*doreyensis* COLLENETTE, 1933
*pagenstecheri* **sp.n.**
*ganara ganara* MOORE, 1859
*ganara xiaolingensis* CHAO, 1985 **stat.n.**
*brotea brotea* (STOLL, 1781)
(= *Lymantria galinara* SWINHOE, 1903 **syn.n.**)
*brotea lepcha* (MOORE, 1879)
(= *Barhona carneola* MOORE, 1879)
*brotea rudloffi* **ssp.n.**
*grigorievi* **sp.n.**
*plumbalis* HAMPSON, 1895
*ascetria* HÜBNER, [1819]
(= *Dasychira antica* WALKER, 1856)
(= *Lymantria pramesta* MOORE, 1859)
*loacana* SEMPER, 1898
*praetermissa* COLLENETTE, 1933
*brunneiplaga* SWINHOE, 1903
*diehli* SCHINTLMEISTER, 1994
*orestera* COLLENETTE, 1932
*bivittata bivittata* (MOORE, 1879) (*Pegella*)
*bivittata marginalis* WALKER, 1862 **stat.n.**
*bivittata roseoides* **ssp.n.**
*rikiosatoi* **sp.n.**
*narindra* MOORE, 1859
(= *Lymantria* (*Liparis*) *hilaris* VOLLENHOVEN, 1863)
*sapaensis* KISHIDA, 1998
*kishidai* **sp.n.**
*paukstadti* **sp.n.**

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*nephrographa* TURNER, 1915
(= *Lymantria mjöbergi* AURIVILLIUS, 1920)

## Subgenus *Papuatria* subgen.n.

(Type-species: *Lymantria ninayi* BETHUNE-BAKER, 1910)

*ninayi* BETHUNE-BAKER, 1910
*kebeae* BETHUNE-BAKER, 1904

## Subgenus *Lymantria* HÜBNER, [1819]

(Type-species: *Phalaena monacha* (LINNAEUS, 1758))
(= *Hypogymna* BILLBERG, 1820 *Phalaena monacha*)
(= *Psilura* STEPHENS, 1828 *Phalaena monacha*)
(= *Nagunda* MOORE, 1879 *Alope semicincta)*

*monacha monacha* (LINNAEUS, 1758) (*Phalaena*)
(= *Noctua heteroclita* MÜLLER, 1764)
(= *Bombyx monacha eremita* HÜBNER, 1804)
(= *Bombyx monacha nigra* FREYER, 1833)
(= *Psilura transiens* MIEG, 1886)
(= *Lymantria monacha chosenibia* BRYK, 1949)
(=*Lymantria monacha matuta* BRYK, 1949)
(=*Lymantria monacha lateralis* BRYK, 1949)
(=*Lymantria monacha idae* BRYK, 1949)
(= *Lymantria monacha neirai* AGENJO, 1959)
(= *Lymantria monacha ceballosi* AGENJO, 1959)
*minomonis minomonis* MATSUMURA, 1933
*minomonis okinawaensis* KISHIDA, 1987
*sugii* KISHIDA, 1986 **stat.n.**
*similis similis* MOORE, 1879
(= *Lymantria cara* BUTLER, 1881)
(= *Lymantria monacha yunnanensis* COLLENETTE, 1933 **syn.n.**)
*similis loeffleri* **ssp.n.**
*similis monachoides* **ssp.n.**
*todara* MOORE, 1879
*concolor concolor* WALKER, 1855
(= *Lymantria concolor superans* WALKER, 1855 **syn.n.**)
(= *Lymantria micans* FELDER & FELDER, 1874)
(= *Lymantria carnecolor* MOORE, 1888)
(= *Lymantria horishana* MATSUMURA 1931 **syn.n.**)
(= *Lymantria concolor lacteipennis* COLLENETTE, 1933 **syn.n.**)
*concolor septentrionalis* **ssp.n.**
*ossea* TOXOPEUS, 1948
*hollowayi* SCHINTLMEISTER, 1994
*jakli* **sp.n.**
*alexandrae* SCHINTLMEISTER, 1994
*ganaroides* STRAND, 1915
*witti* **sp.n.**
*demotes demotes* COLLENETTE, 1947
*demotes galai* **ssp.n.**
*demotes prattorum* **ssp.n.**
*demotes seramensis* **ssp.n.**
*subrosea subrosea* SWINHOE, 1903
(= *Lymantria rosea* HAMPSON, 1892 nec BUTLER, 1879)
*subrosea singapura* SWINHOE, 1906 **stat.n.**
(=*Lymantria similis niasica* STRAND, 1915 **syn.n.**)

*semperi* **sp.n.**
*lygaea* BETHUNE-BAKER, 1908
*sobrina sobrina* MOORE, 1879
*sobrina buchsbaumi* **ssp.n.**
*semicincta* (WALKER, 1855) (*Alope)*
(= *Lymantria rhodina* WALKER, 1865)
*umbrifera* WILEMAN, 1910
(=*Lymantria dissoluta f. takasagonis* MATSUMURA, 1933)
*argyrochroa* COLLENETTE, 1936
*dissoluta* SWINHOE, 1903
*moesta* SWINHOE, 1903
*sinica sinica* MOORE, 1879
(= *Lymantria nebulosa* WILEMAN, 1910 **syn.n.**)
(= *Lymantria formosana* MATSUMURA, 1911)
(=*Lymantria melanopogon* STRAND, 1914 **syn.n.**)
(= *Lymantria baibarana* MATSUMURA, 1931 **syn.n.**)
*sinica albido* **ssp.n.**
*lucescens* (BUTLER, 1881)
(= *Lymantria takamukui* NAGANO, 1917)
(= *Lymantria aomoriensis* MATSUMURA, 1921)

## Subgenus *Beatria* subgen.n.

(Type-species: *Phalaena Bombyx beatrix* STOLL, 1791)

*beatrix* (STOLL, 1791) (*Phalaena Bombyx*)
(= *Lymantria ganaha* SWINHOE, 1903)
*marginata* WALKER, 1855
(= *Lymantria nigra* MOORE, 1888)
(= *Lymantria pulsilla* FELDER & R. FELDER, 1868)
*hauensteini hauensteini* **sp.n.**
*hauensteini ricardae* **ssp.n.**
*fuliginosa* MOORE, 1883
(= *Lymantria postfusca* SWINHOE, 1906 **syn.n.**)
*atemeles* COLLENETTE, 1932
*laelae* **sp.n.**
*chroma* COLLENETTE, 1947

## Subgenus *Nyctria* subgen.n.

(Type-species: *Lymantria mathura* MOORE, 1865)

*mathura mathura* MOORE, 1865
*mathura aurora* BUTLER, 1877
(= *Lymantria aurora fusca* LEECH, 1888)
(= *Lymantria mathura subpallida* OKANO, 1960 **syn.n.**)
*grandis* WALKER, 1855
(= *Lymantria maculosa* WALKER, 1855)
(= *Lymantria metarhoda* WALKER, 1862)
(= *Lymantria viola* SWINHOE, 1889 **syn.n.**)
*minora* (VAN EECKE, 1928)
(= *Lymantria pendleburyi* COLLENETTE, 1932)
(= *Lymantria harimuda* ROEPKE, 1937 **syn.n.**)

*meyi* **sp.n.**
*murzini* **sp.n.**
*hausmanni* **sp.n.**
*maculata* SEMPER, 1896
*capnodes* (COLLENETTE, 1932)
(=*Lymantria capnodes bisextilis* TOXOPEUS, 1948 **syn.n.**)
*erikae* **sp.n.**
*geoffmartini* **sp.n.**
*naessigi* **sp.n.**

### Subgenus *Syntria* subgen.n.

(Type-species: *Lymantria flavoneura* JOICEY & TALBOT, 1925)

*flavoneura* JOICEY & TALBOT, 1925
*syntropha* COLLENETTE, 1955
*toxopeusi* COLLENETTE, 1955

### Subgenus *Pantria* subgen.n.

(Type-species: *Dura panthera* VAN EECKE, 1928)

*panthera* (VAN EECKE, 1928)
*ekeikei* (BETHUNE-BAKER, 1904)
*honeyi* **sp.n.**

### Subgenus *Collentria* subgen.n.

(Type-species: *Lymantria grisea* MOORE, 1879)

*grisea grisea* MOORE, 1879
*grisea servula* COLLENETTE, 1936 **stat.n.**
*grisea kosemponis* STRAND, 1914 **stat.n.**
(= *Lymantria roseola* MATSUMURA, 1931)
*cryptochloea cryptochloea* COLLENETTE, 1932
*cryptochloea kinoshitai* **ssp.n.**
*cryptochloea cernyi* **ssp.n.**
*barlowi* SCHINTLMEISTER, 1994
*caliginosa* COLLENETTE, 1933 **stat.n.**
*fumida* BUTLER, 1877
*fergusoni* **sp.n.**
*kanara* COLLENETTE, 1951

### Subgenus *Spinotria* subgen.n.

(Type-species: *Bombyx serva* FABRICIUS, 1793)

*serva* (FABRICIUS, 1793)
*eckweileri* **sp.n.**
*tortivalvula* CHAO, 1984
*gaborronkayi* **sp.n.**
*laszloronkayi* **sp.n.**
*gyulaii* **sp.n.**
*hreblayi* **sp.n.**
*maxfischeri* **sp.n.**

*grauli* **sp.n.**
*rubea* SCHINTLMEISTER, 1989
*obsoleta obsoleta* WALKER, 1855
(= *Lymantria bhascara* MOORE, 1859 **syn.n.**)
*obsoleta eminens* **ssp.n.**
*defreinai* **sp.n.**
*strigatoides* SCHINTLMEISTER, 1994
*haeuseri* **sp.n.**
*minahassa* COLLENETTE,1933
*pagon* HOLLOWAY, 1999
*polioptera* COLLENETTE, 1934
*stueningi* **sp.n.**
*nussi* **sp.n.**
*iris* STRAND, 1911 **stat.n.**
*inordinata inordinata* (WALKER, 1865)
*inordinat javana* **ssp.n.**
*inordinata barisana* COLLENETTE, 1933
*inordinata philippina* **ssp.n.**
*liedgensi* **sp.n.**
*loedli* **sp.n.**
*koeppeli* **sp.n.**
*sexspinae* HOLLOWAY, 1976
*koenigi* **sp.n.**
*rhabdota rhabdota* COLLENETTE, 1949
*rhabdota stephani* **ssp.n.**
*kobesi* SCHINTLMEISTER, 1994
*grisescens grisescens* (STAUDINGER, 1887)
*grisescens goergneri* **ssp.n.**
*grisescens bantaizana* MATSUMURA, 1933 **stat.n.**
*juglandis* CHAO, 1984
*strigata* AURIVILLIUS, 1894
*microstrigata* HOLLOWAY, 1999
*tagalica* (AURIVILLIUS, 1894)
*albolunulata* MOORE, 1879 **stat.rev.**
(= *Lymantria elassa* COLLENETTE, 1938 **syn.n.**)
*punicea* CHAO, 1984
*tricolor* CHAO, 1984
*ihlei* **sp.n.**
*schnitzleri* **sp.n.**
*temburong* HOLLOWAY, 1999
*swetlanae* **sp.n.**
*siniaevi* **sp.n.**

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*vastatrix* TOXOPEUS, 1948
*simplex* PAGENSTECHER, 1886
*vinacea* MOORE, 1879

## Subgenus *Sarantria* subgen.n.

(Type-species: *Lymantria sarantuja* SCHINTLMEISTER, 1994)

*sarantuja* SCHINTLMEISTER, 1994
*faircloughi* HOLLOWAY, 1999
*sublunata sublunata* (ROTHSCHILD, 1920) (*Dasychira*)
*sublunata thomasi* **ssp.n.**
*kinta* COLLENETTE, 1932
*mikkolai* **sp.n.**
*karsholti* **sp.n.**

## Subgenus *Griveaudtria* subgen.n.

(Type-species: *Lymantria polycyma* COLLENETTE, 1936)

*polycyma* COLLENETTE, 1936
*castanea* (KENRICK, 1914) (*Dasychira*)
*oinoa* COLLENETTE, 1956
*lamda* COLLENETTE, 1936
*malgassica* (KENRICK, 1914) (*Dasychira*)
*brunneata* (KENRICK, 1914) (*Dasychira*)
*binotata* (MABILLE, 1880) (*Liparis*)
(= *Liparis atala* SWINHOE, 1923)
*griseostriata* (KENRICK, 1914) **stat.rev.**
*rusticana* HERING, 1927
*dubia* (KENRICK, 1914) (*Dasychira*)
*lineata* (GRIVEAUD, 1977) (*Lymantica*) **comb.n.**
*polysticta* COLLENETTE, 1929
*dulcinea* BUTLER, 1882
(= *Dasychira didymata* KENRICK, 1914)
*rosea* BUTLER, 1879: 239
(= *Dasychira rufotincta* KENRICK, 1914)
*russula* COLLENETTE, 1933
*joannisi* LE CERF, 1921
*leucerythra* COLLENETTE, 1930
*vacillans* WALKER, 1855
*rubroviridis* HERING, 1927
*microcyma* COLLENETTE, 1937
*flavicilia* HAMPSON, 1910

## Subgenus *Pyramocera* BUTLER, 1880

(Type-species: *Pyramocera fuliginea* BUTLER, 1880 = *Liparis barica* MABILLE, 1879)

*barica* (MABILLE, 1879) (*Liparis*)
(= *Pyramocera fuliginea* BUTLER, 1880)
(= *Lymantria fumosa* SAALMÜLLER, 1884)
(= *Lymantria uxor* SAALMÜLLER, 1884)

# The subgenus *Porthetria* HÜBNER, [1819]

## *Lymantria* (*Porthetria*) *dispar dispar* (LINNAEUS, 1758): 12 (*Phalaena*)

(Figs. 9, 14-18, 20, 56, 57, 210, 263)

**Holotype:** not stated, Europe – Linnean Society, London [not examined].

**Synonyms:**
*Ocneria dispar erebus* MIEG, 1886: 237.
Holotype: England, Ils proviennent de Darlington [not examined].
*Lymantria dispar asiatica* VNUKOWSKIJ, 1926: 79 **syn.n.**
Holotype: [Russia], Siberia meridionales, Altaij et Sajan occidentalies, Prov. Semipalatinsk – University of Tomsk [not examined].
*Lymantria dispar praeterea* KARDAKOFF, 1928: 416, pl. 8: 15, 16. **syn.n.**
Holotype: Russia, Ussuri-Gebiet, "Russ. Insel und in Narwa" [not examined].
*Lymantria dispar hokkaidoensis* GOLDSCHMIDT, 1940: 59.
Holotype: Japan, Hokkaido [not examined].
*Lymantria dispar koreibia* BRYK, [1949]: 15.
Holotype: Korea, Motojondo – NMS, Stockholm [not examined].
*Lymantria dispar kolthoffi* BRYK, [1949]: 16, pl. 3: 6 **syn.n.**
Holotype: [China], Kiangsu (=Jiangxu) – NMS, Stockholm [not examined].
*Lymantria dispar andalusica* REINIG, 1938.
Holotype: Spanien, Sierra de Alfacar – ZMHU [not examined].

**Taxonomy:** There are - as individual forms - melanic to yellow-whitish male specimens. The hindwings display all forms from pale whitish, yellowish, brown to blackish, with or without a blackish marginal band. The blackish pattern on the forewings is subject to variation; there are forms with a very reduced pattern. The species varies much in size e.g. from 22-29 mm wing length ♂♂ in Yamanashi, Honshu.

*Lymantria dispar* is also known as a migrant; Middle Asian specimens migrated into Finland (KAISILA 1962). Due to this, I can only recognize the nominotypical subspecies on the Continent. However, there seems to be a tendency to larger wingspans in the East. In The Far Eastern islands the subspecification seems to be different from the mainland and also the individual variability is minimal.

**Genitalia** (Figs. 210, 263): The valves with a long and thick acutely produced and rounded apex. The saccular margin is approximately 90° angled.

## *Lymantria* (*Porthetria*) *dispar japonica* (MOTSCHULSKY, [1861]): 31 (*Liparis*)

(Figs. 9, 19, 28)

**Holotype:** Japan [not examined].

**Synonyms:**
*Porthetria umbrosa* BUTLER, 1881: 10.
Syntypes: Japan, Tokei, Yokohama, Hakodate – BMNH, London [examined].
*Porthetria hadina* BUTLER, 1881: 11.
Holotype: Honshu, Yokohama – BMNH, London [examined].
*Lymantria dispar obscura* GOLDSCHMIDT, 1940: 60 [not examined].
Holotype: Japan, Honshu.
*Lymantria nesiobia* BRYK, 1942: 25.
Holotype: Japan, Kuril Isl. – NMS, Stockholm [not examined].

**Taxonomy:** The populations from Japan are generally larger compared with mainland specimens. The females have a brownish ground colour, the males vary from fuscous brown to nearly black. This characteristic is due to the individual variability of mainland-*dispar* and specimens from Hokkaido. The syntypes of *umbrosa* (♂, ♀) rather resemble smaller European specimens than the other Japanese populations. INOUE (1956) argued that the type locality of *umbrosa* is "probably an error".

**Further remarks:** *L. dispar japonica* and *L. albescens postalba* occur sympatrically and synchron in Tsushima Isl., which indicates that both taxa are not conspecific.

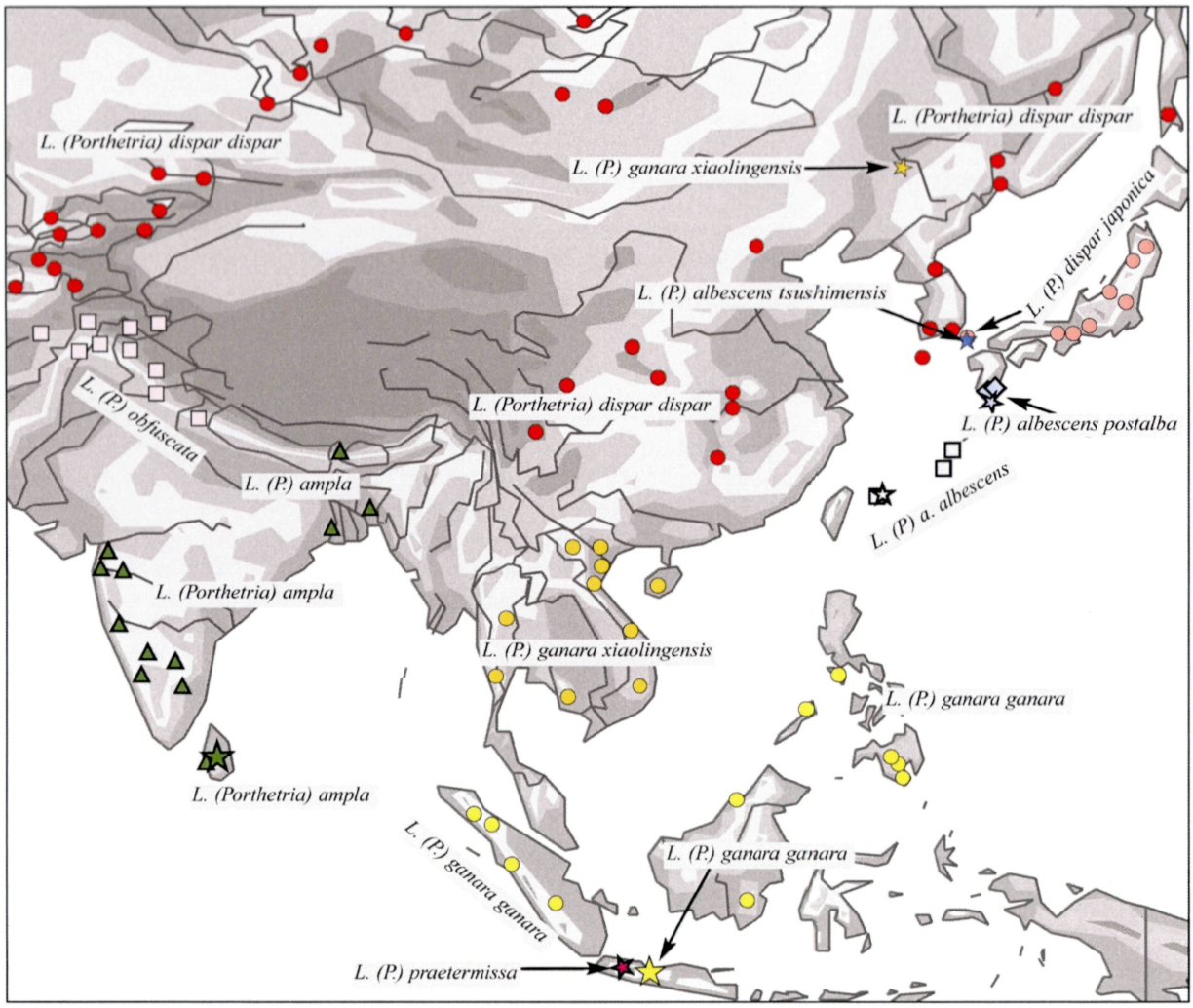



**Fig. 9:** Distribution of the subgenus *Porthetria.*

## *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865: 367

(Figs. 9, 50-58, 211, 265)

**Holotype:** North Hindostan – BMNH, London [examined].

**Taxonomy:** Externally this species greatly resembles *L. dispar* and differs only by a shorter wingspan, between 12-18 mm forewing length. The majority of the specimens spans 13-14 mm. The smallest specimen of *L. dispar* males from the wild spans 17 mm in forewing length.

However, individual variability is not so diverse as in *dispar.* All investigated males of *obfuscata* show a fuscous marginal fascia on the brown hindwings. Specimens from Afghanistan are of a paler brown ground colour, perhaps due to dryer climatic conditions.

Specimens from Ladakh (1700-3000 m) are 3-4 mm smaller in size than a series from Bhimtal (1000 m). The females have reduced wings, which are often without any fuscous pattern. In a few cases there are a prominent blackish discal spot and discal streak on the forewings. Females from Ladakh particularly have especially short wings, while specimens from Himachal Pradesh display more strongly developed wings.

**Genitalia** (Figs. 211, 265): The genitalia are virtually identical with *dispar*.

**Further remarks:** In coll. ZSM, Munich there is a longer series of bred hybrids between *dispar* ♂ x *obfuscata* ♀, which are the externally exact intermediates. Therefore it is possible, that *obfuscata* is only a subspecies of *dispar*, as both taxa could meet in Pamir Mts.

## *Lymantria (Porthetria) albescens albescens* HORI & UMENO, 1930: 18 stat.n. [*Lymantria dispar albescens*]

(Figs. 9, 23, 26, 27, 213)

**Lectotype:** Yakushima Isl., Ishigakijima – HUS, Sapporo [photograph examined].

**Taxonomy:** The lectotype was designated by KISHIDA & FURUKAWA (2000: 215, fig. 1). The species is easily to be distinguished externally by the prominent whitish wings. The females show remarkable and significant yellowish forewings and whitish hindwings. In all other known *dispar*-populations usually fore- and hindwings are of the same colour.

**Male genitalia** (Fig. 213): The male genitalia are different from those of *L. dispar* by longer valve processes, which are knob-shaped at the tip, an unusual feature in *Porthetria*.

**Further remarks:** The external differences and the unique male genitalia give reason to treat *L. albescens* as a distinct species, which is related rather closer to the *xylina*-group of species than to *dispar*. I have seen only a few specimens (n=7) from Ishigakijima Isl. and Okinawa Isl.

## *Lymantria (Porthetria) albescens postalba* INOUE, 1956: 141 stat.n. [*Lymantria dispar postalba*]

(Figs. 9, 26)

**Holotype:** Japan, Yakushima [not examined].

**Taxonomy:** INOUE (1982, pl. 150: 11-14) illustrated *L. postalba*. According to these photographs the pale brownish to white hindwings, where the costa and the discal spot are fuscous brown, characterizes *postalba*. The female, illustrated in INOUE (1982, pl. 150: 14) is nearly without fuscous markings.

**Further remarks:** I was not able to study any material of this taxon, particularly the male genitalia. However it seems that *postalba* is externally rather closer to *albescens* than to *dispar*. It actually is not clear, if *dispar* occurs in Kyushu. Only one male (n=1) from Yakushima Isl. was available to me for study. This subspecies inhabits Kyushu and some smaller islands nearby, e.g. Yakushima Isl.

## *Lymantria (Porthetria) albescens tsushimensis* INOUE, 1956: 141 stat.n. [*Lymantria dispar tsushimensis*]

(Figs. 9, 24, 24a)

**Holotype:** Japan, Tsushima Isl, Kubara [not examined].

**Taxonomy:** This is a small subspecies with a forewing length between 23-25 mm, which is also about 5 mm smaller than *L. dispar japonica*, which is externally similar. The general appearance of *L. albescens tsushimensis* is however fuscous greyish brown with paler median areas of the forewings and hindwings. The blackish markings on the forewings are reduced. Particularly the median band of the forewings, characteristic for *japonica* is absent in *tushimensis*. In comparison to ssp. *postalba* the

hindwings are much darker in *tsushimensis*. The underside of the wings is of whitish colour, not seen in *dispar japonica*. INOUE (1982, pl. 150: 10) illustrated a darker specimen of *tsushimensis*. I do not know of a female.

**Male genitalia**: The male genitalia (one dissection only) differ from *L. albescens albescens* by the shorter and thicker valve process. The male genitalia are therefore very similar to *L. dispar*. They can be distinguished from *dispar* by the slightly convex shape of the valve costa.

**Further remarks**: I have seen only a few specimens (n=3). This subspecies inhabits Tsushima Isl. and was reported by KIM (2002) from Soheusando Isl., S. Korea. KIM's illustrations (figs. 3 and 9) are similar to *tsushimensis* and do not belong to *dispar*. An illustrated specimen from Cheongwangsa, Jejudo Isl. (KIM 2002, fig. 4) belongs probably to *dispar*.

## *Lymantria* (*Porthetria*) *schaeferi* sp.n.

(Figs. 10, 21, 22, 25, 212)

**Holotype:** ♂, China, Jiangxi, Wuyi Shan, Xipaihe, 27°54'N, 117°20'E, June 2003, leg native collectors via V. Sinjaev in coll. A. Schintlmeister, Dresden.
**Paratypes** (73♂♂, 3♀♀) Jiangxi): 4♂♂, Wuyi Shan, Xipaihe, 27°54'N, 117°20'E, May 2003; 27♂♂, 1♀, ibid June 2003 (GU 62-07, 62-16); 24♂♂, ibid. July 2003; 7♂♂, Wuyi shan, 50km SE Yingtan, 1600m, 27°56'N, 117°25'E, May 2002; 8♂♂, ibid June 2002; Hubei: 1♂, Jingongshan, 1800m, July 2001; Guangdong: 1♀, Kwangtung, Linping, iii.[19]24, 1♀, Lungtaoshan; 2♂♂ [Guangdong] Mell 13.v.

**Diagnosis:** Fore wing length ♂♂ 24-28 mm (most specimens span 25 mm), ♀♀ 37 mm. Externally the species resembles (ground colour, shape of wings, antennae) *L. dispar*. The new species differs in the pattern of the forewings. The basal- and median area are somewhat greyish mixed in the ground colour, and therefore the basal fasciae and the brown spots in the basal area are prominent and contrasting. The post median area is crossed by 4 fasciae, which in *dispar* are weakly and diffusely marked; mostly in *dispar* only one fascia is visible. The best characters which help to separate *schaeferi* sp.n. from *dispar* are the pinkish coloured hairs on the underside of the thorax and the pinkish coloured forelegs. The females of *schaeferi* sp.n. have a pinkish coloured abdomen and display a prominent fuscous transverse median fascia and two further, a postmedian and a submarginal, fasciae. The pinkish elements never occur in *dispar*, though these are present in *apicebrunnea* and *xylina*. The latter two species show a prominent pinkish abdomen and lack the post median and sub marginal fasciae on the forewings. *L. schaeferi* sp.n. is correctly illustrated in colour by CHAO (1994, pl. 1: 6), though both sexes are classified under the wrong name, *Lymantria incerta*.

**Male genitalia** (Fig. 212): The male genitalia differ from those of *dispar* by the shape of the valves, particularly by the more slender and longer valve process. They resemble *apicebrunnea*, where the valve process is somewhat curved and not straight as in *schaeferi* sp.n. Furthermore the male genitalia of *xylina* and *postalbida* resemble *schaeferi* sp.n., though the process of *postalbida* is somewhat knob-shaped at the tip and thicker. In *xylina* the costal part of the valve does not run straight towards the base as in *schaeferi* sp.n.

**Further remarks:** The species is intermediate to the *dispar*-group and the *xylina*-group in *Porthetria* and, based on its male genitalia, more closely resembles the *xylina*-group than *dispar*.

**Etymology:** The species is named after Paul Schaefer Newark, Delaware, in honour of his studies in Eastern *Lymantria*.

## *Lymantria* (*Porthetria*) *apicebrunnea* GAEDE, 1932: 102, pl. 8g

(Figs. 10, 35-37, 216)

**Holotype:** [China, Sichuan] Chasseurs indigénes, Tà-tsien-lou [=Kangding] – BMNH, London [examined].

**Taxonomy:** This species shows a whitish ground colour on the forewings. The hindwings resemble *dispar*. The female shows a somewhat pinkish abdomen and because of the median band resembles *xylina* females more than *dispar* females. In *dispar* the abdomen of the females is never mixed with pinkish scales.

**Male genitalia** (Fig. 216): The male genitalia are different from *dispar*, since they have a longer and more slender valve process. This fact indicates that *apicebrunnea* is not a subspecies of *dispar*.
**Further remarks:** From Gonggashan, about 70 km south of Kangding I have a series of males of *Lymantria dispar dispar* in a fuscous form (like specimens from Shaanxi or Primorye).

## *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903: 490

(Figs. 10, 29, 30, 32, 33, 214)

**Holotype:** Formosa [= Taiwan] – BMNH, London [examined].

**Synonyms:**
*Lymantria nigricosta* MATSUMURA, 1921: 891.
Holotype: Formosa (=Taiwan), Horisha – HUS, Sapporo [not examined].
*Lymantria horishanella* MATSUMURA, 1927: 25, pl. 4: 24.
Holotype: Formosa (=Taiwan), Horisha – HUS, Sapporo [not examined].
*Lymantria sakaguchii* MATSUMURA, 1927: 26, pl. 4: 25.
Holotype: Japan, Okinawa Isl. – HUS, Sapporo [not examined].

**Taxonomy:** *Lymantria xylina* has a brownish white ground colour with a prominent brown median band at the dorsum. The females also show this marking and a somewhat pinkish abdomen. The antennae of the males are yellowish brown; the northern subspecies have fuscous brown antennae in the males. The populations from Okinawa often have richer markings (three transverse lines on forewings) and were described as *sakaguchii*. However, KISHIDA (1995) showed that there are intermediate specimens in maculation from the southwestern islands in Japan and concluded therefore that *sakaguchii* is a junior synonym of *xylina*.

## *Lymantria* (*Porthetria*) *xylina nobunaga* NAGANO, 1912: 264, pl. 14: 1, 2

(Figs. 10, 31, 34, 215)

**Holotype:** Japan, Honshu, Gifu, Mt. Kinka [not examined].

**Taxonomy:** In Japan (Honshu, Kyushu) there are more fuscous coloured specimens, which are clearly distinguished from the white southern subspecies.

## *Lymantria* (*Porthetria*) *detersa* WALKER, 1865: 365

(Figs. 59-61, 219)

**Lectotype:** Mauritius [in error] – BMNH, London.

**Taxonomy:** *L. detersa* is very similar to *obfuscata* and is distinguishable by lacking the fuscous discal spot and the absence of the fuscous marginal fascia on the hindwings. The female is wingless.

**Male genitalia** (Fig. 219): The male genitalia are very similar to *obfuscata*, though the shape of the valves is somewhat less rounded.

**Further remarks:** GUPTA et al. (1984: 25) designated a lecotype. However I actually know of only one type specimen (the so called lectotype) of *detersa*. The type locality is very probably not Mauritius but India (see also GUPTA et al. 1984).

It seems that *detersa* is allopatric to *obfuscata* and does not occur in the Himalayas. This fact could indicate that *detersa* might be the southern subspecies of *obfuscata* as well as the following *costalis*. Only a few (n<10) specimens are known to me.

## *Lymantria* (*Porthetria*) *incerta* WALKER, 1855: 880

(Figs. 42, 46, 47)

**Holotype:** N. India – BMNH, London [examined].

**Taxonomy:** Distinguished by the chequered fringe on all wings. The discal spot on the hind wings (as in *obfuscata* or *dispar*) is absent. Beside the type specimen I know only one more male (n=2). The wingless female illustrated here also probably belongs to *incerta*.

## *Lymantria* (*Porthetria*) *costalis* WALKER, 1865: 365 stat.rev.

(Figs. 63-65, 220)

**Holotype:** S. Hindostan [S. India] – BMNH, London [examined].

**Taxonomy:** *L. costalis* was treated in former times as a form of *detersa*. However, the holotype and further material from Southern India show that externally this species greatly differs from *detersa* of Northern India: forewing length 3 mm larger, the hindwings are paler with fuscous marginal fascia and chequered fringes on all wings. The two pale yellowish-brown spots on the costa of the forewings are diagnostic. The female is probably wingless as in the related species.

**Male genitalia** (Fig. 220): The male genitalia resemble somewhat *detersa*, but the shape of the valves is broader and shorter.

**Further remarks:** The number of examined specimens was n= 12.

## *Lymantria* (*Porthetria*) *ampla* (WALKER, 1855): 883 (*Enome*)

(Figs. 9, 38-41, 217)

**Lectotype:** Ceylon [Sri Lanka] – BMNH, London [examined].

**Taxonomy:** The species externally resembles *L. dispar*, though the forewings are more narrow pointed at the apex than rounded.

**Male genitalia** (Fig. 217): Due to the shape of the valves, *ampla* belongs to the *detersa*-group rather than to the *dispar*-group.

**Further remarks:** GUPTA et al. (1984: 24) designated a lecotype. The number of examined specimens was n< 15.

## *Lymantria* (*Porthetria*) *aryama* MOORE, 1859: 345

(Figs. 10, 43-45, 218)

**Holotype:** S. India, Canara [not examined].

**Taxonomy:** The species externally resembles *ampla*, though the forewings are more rounded on the apex. There is a pale greyish-brown and broad median band on the forewings, where the blackish discal spot is prominently marked.

**Male genitalia** (Fig. 218):The male genitalia resemble *ampla*, though they are distinguished by the long saccus and the unique shape of the valve process.

**Distribution:** Only a few collecting localities are known. It seems that *aryama* is distributed in Nepal and Sikkim and again, probably disjunct, in Southern India. The number of investigated specimens was n< 15.

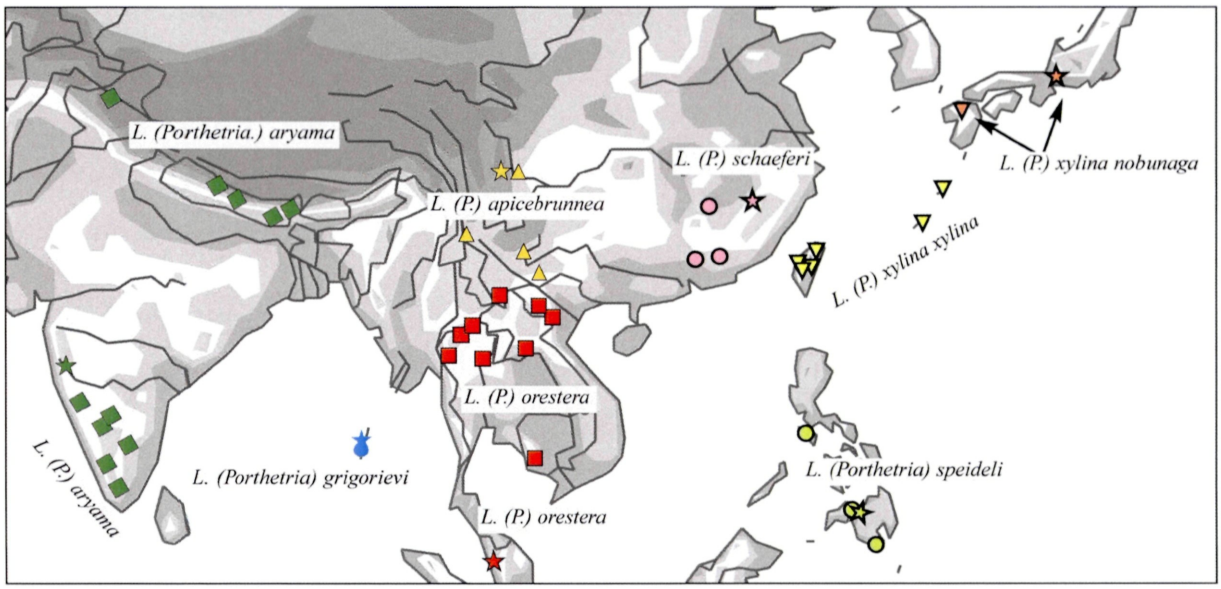



**Fig. 10:** Distribution of the subgenus *Porthetria*.

## *Lymantria* (*Porthetria*) *speideli* sp.n.

(Figs. 10, 48, 49, 223)

**Holotype:** ♂, Philippinen, Mindanao, Prov. Bukidnon, Mt. Kitanglad, 1400m, vii.1998 – in coll. A. Schintlmeister, Dresden.
**Paratypes** (3♂♂): Mindanao: 1♂, Mt. Kitanglad, 1400m, vii.1998 (GU 20-92); 1♂, Cotabato del sur, Mt. Busa, 700m, viii.1997, 6°08'N, 124°39'E (GU 60-58); Mindoro: 1♂, Mt. Halcon, 1000m, iv.2001.

**Diagnosis:** Fore wing length ♂♂ 24-26 mm. The species externally somewhat resembles *ampla*. The ground colour of all wings is chocolate brown. The discal spot is small and the V-shaped mark well developed. The species is easily identifiable by its pink fringe on all wings. The underside of the forewings shows a very prominent yellowish area between the median area and the margin.

**Male genitalia** (Fig. 223): The male genitalia are characterized by the very rounded shape of the valves. The costal process of the valve is relatively short.

**Further remarks:** Restricted to the Philippine Islands but rarely found there.

**Etymology:** I dedicate this interesting species to Wolfgang Speidel, Bonn, for his contributions to the phylogeny of the Noctuoidea and the invaluable help and assistance which he has provided to me for this present paper.

## *Lymantria* (*Porthetria*) *antennata* WALKER, 1855: 881

(Figs. 68-71, 221)

**Holotype:** Australia – BMNH, London [examined].

**Synonyms:**
*Lymantria turneri* SWINHOE, 1903: 484; unnecessary replacement name for *Lymantria aurora* BUTLER, 1877, which was misidentified by TURNER (1902: 181).
*Lymantria undifera* STRAND, 1923: 328, pl. 40c.
Holotype: Nord Australien [not examined].

**Taxonomy:** There are individual forms with white ground colour to dark greyish ground colour. The hindwings are with yellowish scales toward the base. The females have reduced wings.

**Male genitalia** (Fig. 221): The male genitalia are probably also a subject of variability. I have dissected a specimen from Magnetic Island, Queensland, which differs in the male genitalia from mainland Australia. Actually there is insufficient material available to me to solve this problem.

**Further remarks:** The variability of *antennata* males is a good example for a link between fuscous members of *Porthetria* and white coloured species.

The number of investigated specimens was n< 20.

## *Lymantria* (*Porthetria*) *pelospila* (TURNER, 1915): 24 (*Enome*)

(Figs. 62, 66, 67, 222)

**Holotype:** N. Australia, Port Darwin – CSRIO, Canberra [not examined].

**Synonyms:**
*Lymantria lutescens* AURIVILLIUS, 1920: 26, pl. 1: 3.
Holotype: Nordwest-Australien, Brooma – NMS, Stockholm [Co-Typus examined].
*Dura prionodesma* TURNER, 1921: 489.
Holotype: N. Australia, Port Darwin – CSRIO, Canberra [not examined].

**Further remarks:** The images of the imagines and their male genitalia were sent to me by courtesy of Robert Ingram, Canberra. The species is restricted to Australia. I saw only a paratype of *L. lutescens* (n=1).

## *Lymantria* (*Porthetria*) *lunata lunata* (STOLL, 1782): pl. 369c (*Bombyx*)

(Figs. 11, 74, 76, 82, 83, 224)

**Holotype:** [Indonesia] Amboina [not examined].

**Synonym:**
*Pegella ichorina* BUTLER, 1884: 201.
Holotype: [Indonesia] Amboina – BMNH, London [examined].

**Taxonomy:** The ground colour of the forewings is pale brown in the males. The yellowish-brown hindwings lack the fuscous margin but display an intensive red colour in the anal area. The sexual dimorphic female is of pale pinkish ground colour with a prominent brown band in the median area of the forewings.

**Male genitalia** (Fig. 224): The male genitalia are characterized by the unique shape of the valves and a pair of tegumen processes.

**Further remarks:** *L. lunata* shows a wide range of individual and geographical variation. The ssp. *lunata* occurs in the Moluccas, Ambon and Seram.

## *Lymantria* (*Porthetria*) *lunata ingrami* ssp.n.

(Figs. 11, 77, 78, 225)

**Holotype:** ♂, Indonesia, Irian Jaya, Insel Biak, Menoerwar, S.01.08640°/E. 136.33975°, 80m, 18.ii.1998, leg. M. Schaarschmidt/F. Roick – in coll. A. Schintlmeister, Dresden.
**Paratypes:** 3♂♂ Biak, Menoerwar, S.01.08640°/E. 136.33975°, 80m, 18.ii.1998; 1♂ Biak, 1km N Biak, 5.xii.1991 (GU 20-96).

**Diagnosis:** Fore wing length ♂♂ 27-28 mm. This subspecies is characterized by deep blackish brown ground colour of the forewings with contrasting pattern. The discal spot and the basal spots of the forewings are prominently blackish marked. The hindwings are yellowish with prominent fuscous margin. The discal spot on the hindwings is well developed, including on the underside. The female is unknown.

**Male genitalia** (Fig. 225): The male genitalia are virtually identical with ssp. *lunata*.

**Further remarks:** From Irian Jaya (Nabire, Arfak Mts.), there are 4 further specimens matching the type series, but these specimens are somewhat larger (28-33 mm) and are more reddish coloured on the hindwings. They are therefore not included in the type series.

**Etymology:** Namend after Robert Ingram, Canberra, for his help with Australian *Lymantria*.

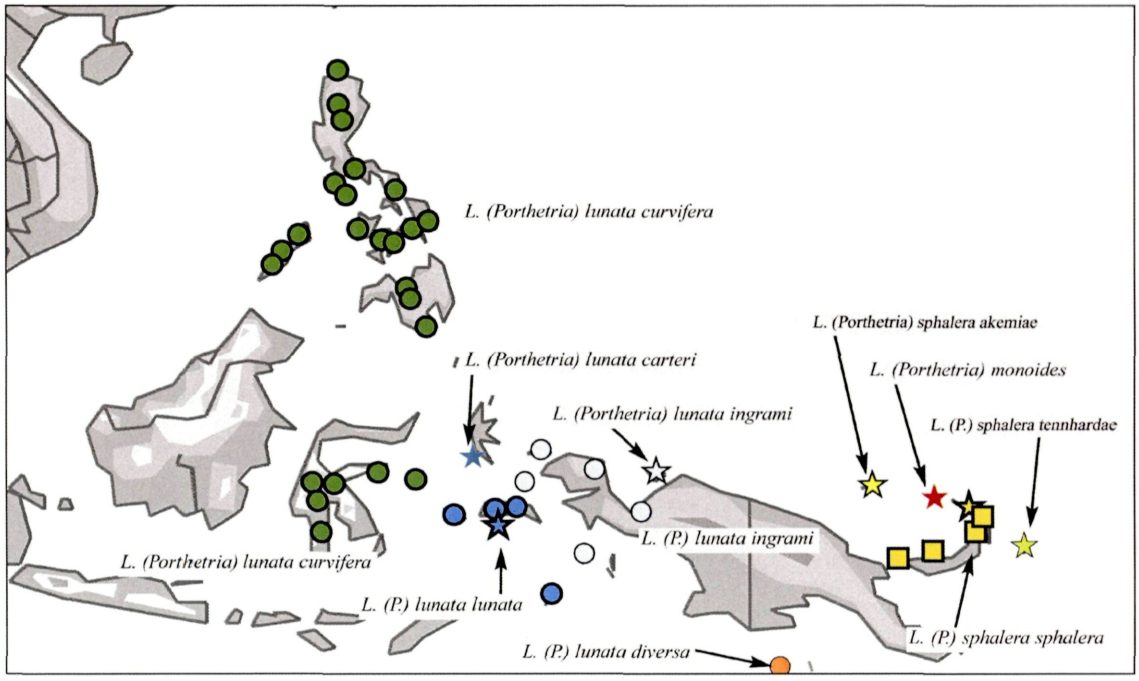



**Fig. 11:** Distribution of the subgenus *Porthetria*.

## *Lymantria* (*Porthetria*) *lunata diversa* TURNER, 1936: 46

(Figs. 11, 73, 81, 226)

**Holotype:** [Australia], N. Queensland, Cains – CSRIO, Canberra [not examined].

**Taxonomy:** The illustrated pair shows no reddish or pinkish scales. The abdomen of the illustrated male is not the abdomen of a Lymantrid moth.

**Male genitalia** (Fig. 226): The male genitalia of a specimen from Australia, (image courtesy of R. Ingram, Canberra) is illustrated here. It is very different (shape of the valve and tegumen) from the other known populations of *lunata*.

**Further remarks:** Still doubtful is the taxonomic value of *diversa*. I have seen one pair from Australia in BMNH, London (n=2), which is externally very different from Moluccan or New Guinean specimens. However, I cannot decide, if this is a case of geographical or individual variability. Due to these two specimens it would be probable that *diversa* represents a distinct species, if further material can reconfirm these differences.

## *Lymantria* (*Porthetria*) *lunata carteri* ssp.n.

(Figs. 11, 79, 80, 227)

**Holotype:** ♂, Indonesia, N. Moluccas, Bacan, Mt. Sibeta, 14km SE Labahua, 0°38'N, 127°32'E, 400m, 2.-13.ii.1996, leg. Afonin & Sinjaev – in coll. A. Schintlmeister, Dresden.
**Paratypes:** 4♂, Bacan, Mt. Sibeta, 14km SE Labahua, 0°38'N, 127°32'E, 400m, 2.-13.ii.1996 (GU 60-23); 2♂♂ "Batjan", 3. viii.1882 and 1893.

**Diagnosis:** Fore wing length ♂♂ 25-26 mm, one male spans only 23 mm. Distinguished by a uniform brown ground colour of the forewings while nearly without contrasting pattern. The discal spot and the basal spots are weakly developed. The hindwings are brownish. There are only very few reddish and yellowish scales and no contrasting fuscous margin on the hindwings. The female is unknown.

**Male genitalia** (Fig. 227): The male genitalia are indistinguishable from ssp. *lunata.*

**Further remarks:** Known from Bacan Island only. *L. lunata* has hitherto not been found on Halmahera.

**Etymology:** Namend in honour of David Carter, BMNH, for his help and assistance during my visits in London.

## *Lymantria* (*Porthetria*) *lunata curvifera* (WALKER, 1886): 1922 (*Pegella*)

(Figs. 11, 72, 75, 84-92, 228)

**Holotype:** Phil[ippine] Isl. – BMNH, London [examined].

**Taxonomy:** The populations from the Philippines show extensive geographical variability. Due to pragmatic reasons – the holotype is a female without exact geographical data – I will summarize all of the following populations under the name *curvifera.* However it is likely, that particularly in the Philippine Islands (e.g. Palawan), different subspecies occur which will be worthy of some description, when more females become known. Characteristic for the ssp. *curvifera* from the Philippines is the broad fuscous margin of the hindwings, which is not seen in ssp. *lunata.*

Populations from Sulawesi (including Peleng) somewhat resemble ssp. *lunata,* but they are generally more fuscous coloured and show a fuscous margin on the hindwings. A good series from Mindanao shows rather yellowish hindwings. Specimens from Negros, Panay and Leyte are similar to Sulawesian material. The populations from Luzon and Mindoro often have fuscous forewings, though the paler hindwings are mixed with reddish scales. The most reddish coloured hindwings occur in a larger series (n>40) of males from Palawan.

## *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930: 84, pl. 6: 6

(Figs. 11, 93-95, 101-103, 107, 229)

**Holotype:** [Papua New Guinea], Bismarck Archipelago, New Ireland – BMNH, London [examined].

**Synonym:**
*Lymantria sphalera talesea* COLLENETTE, 1933: 27, pl. 3: 8 **syn.n.**
Holotype: [Papua New Guinea], New Britain, Talesea – BMNH, London [examined].

**Taxonomy:** The species shows a very wide individual variability. The colour and pattern of the forewing of the males vary from fuscous brown to warm yellow with all kinds of intermediate patterns. There are forms with a very large and prominent blackish discal spot on the forewings and other forms with three blackish transverse bands. The hindwings of some forms display fuscous discal spots or a triangle shaped figure. The females are of a pinkish brown ground colour with several diffuse transverse brown bands.

**Further remarks:** COLLENETTE (1933: 27) described *talesea* as subspecies of *sphalera* using only one pair. He mentioned in his original description: "I have separated this form from the variable *sphalera sphalera* Collnt. (1930) of New Ireland, on account of the lighter ground colour and superior

size." As illustrated the holotype of *talesea* falls into the variation of ssp. *sphalera*, including the size. A further male from New Ireland matches the holotype of *talesea* exactly. The allotype, a female of *talesea* is similar to the female from New Ireland but shows somewhat more pinkish scales."

I examined the types of *sphalera* and *talesea* and I was not able to find differences apart from the wide individual variability. Therefore *talesea* is a junior synonym of *sphalera*.

The number of investigated specimens was n< 15.

From the Salomon and the Admirality Islands there is further material, which differs from the ssp. *sphalera*.

## *Lymantria* (*Porthetria*) *sphalera tennhardae* ssp.n.

(Figs. 11, 99, 100, 106, 230)

**Holotype:** ♂, [Papua New Guinea, Salomon Isl.] Bouganville, Buin [February] 1935, J. B. Poncelet, Rothschild Bequest B.M. 1939-1. – BMNH, London.
**Paratypes:** 1♂, 8♀♀, Bouganville, Buin [February] 1935 (GU BM 20/2003).

**Diagnosis:** Fore wing length ♂♂ 35-37 mm, the females span 54 mm. Externally similar to ssp. *sphalera* and probably with an analogous individual variability in pattern. The specimens differ from ssp. *sphalera* in their size. The forewing length of ssp. *sphalera* in the males is between 28-30 mm; the new subspecies is therefore about 20-25% larger in size. The pattern on the forewings is weak, but the marginal band is marked by relatively strong developed blackish dots.

The female is similar to ssp. *sphalera*, while lacking pinkish scales on the forewings. The pale whitish post median band on the forewings is more clearly developed and also a brown discal spot is visible.

**Male genitalia** (Fig. 230): The male genitalia differ from ssp. *sphalera* by the rather ellipsoid shape of the valves, and the valve process, which is thicker than in the other subspecies. The aedeagus is shorter and thinner than in ssp. *sphalera.*

**Further remarks:** Known to be originating from the Salomon Islands (Bouganville).

**Etymology:** Named after Gabriela Tennhard, Dresden, for helping me with the English grammar in this paper.

## *Lymantria* (*Porthetria*) *sphalera akemiae* ssp.n.

(Figs. 11, 231)

**Holotype:** ♂. [Papua New Guinea] Admirality Isl., Manus, Sept, Oct. 1913, Meek's Expedition, Rothschild Bequest B.M. 1939-1. – BMNH, London.
**Paratypes:** 4♂♂, Admirality Isl., Manus, Sept, Oct. 1913 (BM 23/2003 and BM 24/2003).

**Diagnosis:** Forewing length ♂♂ 29-34 mm. Externally similar to ssp. *sphalera* and probably with an analogous individual variability in pattern. However, blackish individuals are unknown. The specimens are only slightly larger in size than ssp. *sphalera.* The postbasal fascia are prominently blackish marked and the submarginal band is curved toward the base near the tornus of the forewings. The forewings show weakly developed marginal dots, which are not visible in ssp. *sphalera.* The female is unknown.

**Male genitalia** (Fig. 231): The male genitalia are similar to ssp. *tennhardae*, though the valves are rather more rounded than ellipsoid. The aedeagus is more slender than in ssp. *tennhardae*, though thicker than in ssp. *sphalera.*

**Etymology:** Named after Akemi Yoshikawa, Vienna, for her extensive help in the past especially with Japanese Lepidoptera.

## *Lymantria* (*Porthetria*) *monoides* COLLENETTE, 1932: 177, pl. 1: 9

(Figs. 11, 104, 105, 232)

**Holotype:** [Papua New Guinea], Bismarck Archipelago, New Hannover – BMNH, London [examined].

**Taxonomy:** COLLENETTE (1932) described *L. monoides* as a species and mentioned the relationship "to the variable *Lymantria sphalera*". In fact, this taxon is very small (forewing length of the males 20 mm). However, the markings with three darker tranversal bands on the forewings are similar to the melanic specimens from New Ireland. On the other hand it is remarkable in view of *L. sphalera*, that the investigated males (n= 8) from New Hannover (the type-series) virtually show no individual variability.

**Male genitalia** (Fig. 232): The male genitalia are very small. The shape of the very short valves and the sacculus are clearly different from *sphalera*.

**Further remarks:** The morphological differences including the different male genitalia indicate its rank as a distinct species.

## *Lymantria (Porthetria) buruensis buruensis* COLLENETTE, 1933: 29, pl. 3: 9

(Figs. 12, 108, 109, 233)

**Holotype:** [Indonesia], Central West Buru, Gamoe Mrapat – BMNH, London [examined].

**Taxonomy:** The deep shaped wings are characteristic for *buruensis* and the following 4 species. There is a doubled blackish postmedian band on the forewings. The hindwings only show a little reddish colour near the base. The fuscous margin is weakly developed.

**Male genitalia** (Fig. 233): The male genitalia resemble those of *novaguineensis*, though the uncus is more rounded than pointed. The valve process is somewhat thicker in ssp. *celebesa* than in *buruensis*.

**Further remarks:** The number of investigated specimens was n<10.

## *Lymantria (Porthetria) buruensis celebesa* COLLENETTE, 1947: 46, pl. 2: 18 stat.n. [*Lymantria celebesa*]

(Figs. 12, 110, 125, 234)

**Holotype:** [Indonesia] W. Celebes [=Sulawesi], Koelawi Paloe – BMNH, London [examined].

**Taxonomic note:** COLLENETTE (1947) mentioned the resemblance of *buruensis* but described *L. celebesa* as a distinct species because "having a very different appearance owing to the narrower forewing with less-rounded termen, and the different shade of red on the hind-wing". Furthermore, the fuscous margin is more strongly developed than in *buruensis*. However, in my opinion these differences are on a subspecific level, which lead to the new status as a subspecies of *buruensis*. Females with additional diagnostic fuscous costal spot near the apex.

**Further remarks:** Stefan Naumann, Berlin, successfully bred the species from eggs. The caterpillars fed on *Prunus*. The hatched imagines reconfirm, that both sexes illustrated here belong to one species.

## *Lymantria (Porthetria) behouneki* sp.n.

(Figs. 12, 111, 112, 235)

**Holotype:** ♂, Indonesia, N. Moluccas, Halmahera, 15km SW Baru, Mt. Talagaranu, 0°10'N, 127°32'E, 600m, 22.-31.i.1996, leg. Sinjaev & Tarasaov – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (11♂♂): Halmahera: 9♂♂, 15km SW Baru, Mt. Talagaranu, 0°10'N, 127°32'E, 600m, 22.- 31.i.1996 (GU 50-21); 2♂♂ Straße Baru-Basale, Gn. Talagarama, 600m, 2.-7.ii.1997 (GU 50-20); 1♂, 5km SE Baru, Gn. Api, 350m, 7.ii.1997; 1♂, Lorquin.

**Diagnosis:** Forewing length ♂♂ 25-30 mm, in the middle about 26-27 mm. The species externally resembles *novaguineensis* and *buruensis*. The forewing pattern is as in *novaguineensis*, though the black spots are more weakly developed. *Lymantria behouneki* sp.n. can be easily distinguished from *buruensis* and *novaguineensis* by the absence of any pinkish or yellowish scales on the hindwings. The abdomen is pinkish coloured as in *buruensis* and *novaguineensis*. The female is unknown.

**Male genitalia** (Fig. 235): Male genitalia resemble by the rounded uncus rather *buruensis* than *novaguineensis.* The valve process in *L. behouneki* sp.n. is of a triangular shape with pointed end. The valve and its process are smaller than in *buruensis* or *novaguineensis.*

**Etymology:** Dedicated to Mr. Gottfried Behounek, Daisenhofen/Munich, for his constant help with information, literature and material on Noctuoids.

## *Lymantria* (*Porthetria*) *novaguineensis novaguineensis* BETHUNE-BAKER, 1904: 407, pl. 6: 35

(Figs. 12, 115, 116, 126, 236, 237)

**Holotype:** British New [=Papua] Guinea, Ekeikei – BMNH, London [examined].

**Taxonomy:** This species somewhat externally resembles *behouneki* sp.n., although the black pattern on the forewings generally is more prominently developed, particularly the basal and post basal bands on the forewings. The hindwings are slightly yellowish to pinkish coloured. The colouration is subject to individual variability.

**Male genitalia** (Figs. 236, 237): The male genitalia have a pointed uncus.

## *Lymantria* (*Porthetria*) *rosina* PAGENSTECHER, 1900: 42, pl. 3: 19

(Figs. 12, 121, 238)

**Holotype:** [Papua New Guinea], Neu-Pommern [= New Britain], Kinigunang – BMNH, London [examined].

**Taxonomy:** *L. rosina* is unmistakable by its reddish hindwings, however it somewhat resembles *novaguineensis.* The female is unknown.

**Male genitalia** (Fig. 238): The male genitalia are very different from *novaguineensis* especially by the shorter uncus and the very short valve process.

**Further remarks:** I saw only six specimens (n=6) from New Britain.

## *Lymantria* (*Porthetria*) *doreyensis* COLLENETTE, 1933: 28, pl. 3: 15

(Figs. 12, 113, 114, 239)

**Holotype:** Dutch New Guinea [= Irian Jaya], Dorey, N.W. of Gelvink Bay– BMNH, London [examined].

**Taxonomy:** This is a smaller species, which differs mainly by the yellowish abdomen and the absence of any pinkish scales on the wings and body. The blackish pattern is more finely marked than in *novaguineensis.*

**Male genitalia** (Fig. 239): The male genitalia are much smaller than in *novaguineensis* but are very similar. There are slight differences in the shape of the valves.

**Further remarks:** Besides the type specimen, I have investigated only two other males. I have material from Nabire belonging to *novaguineensis* and Biak, belonging to *doreyensis,* but I actually do not know of a case of true sympatry; therefore the taxonomic value of *doreyensis* is not fully clear.

## *Lymantria* (*Porthetria*) *pagenstecheri* sp.n.

(Figs. 12, 118-120, 240)

**Holotype:** ♂, Dutch New Guinea [= Irian Jaya, Indonesia], Central Arfak Mts., Ninay Valley, 3500ft., Feb. and March '09 – BMNH, London.

**Paratypes** (5♂♂): Irian Jaya: 2♂♂, Central Arfak Mts., Ninay Valley, 3500ft., Nov. '08 – Jan'09 (BM 25/2003); 1♂, Arfak Mts., 30km S Manokwari, Ngat Biep, river Ngat valley, 850m, 18.- 19.xii.1993 (GU 60-55); 1♂ Arfak Mts., 4000ft, Feb-Mart 1909; 1♂, New Guinea (M.T.) Aitat x-xi.1936.

**Diagnosis:** Forewing length ♂♂ 22-26 mm. The ground colour of the forewings is pale greyish; there are two fuscous males having dark greyish ground colour. The blackish pattern somewhat resembles *novaguineensis*. The hindwings are dark brown. The (paler) holotype shows a yellowish dorsal area and yellowish coloured abdomen. There are no pinkish scales on the hindwings or the abdomen as in *novaguineensis*. The female is unknown.

**Male genitalia** (Fig. 240): The male genitalia have relatively small valves and a short saccus. The uncus is not pointed as in *novaguineensis* but rounded.

**Further remarks:** COLLENETTE (1933) misidentified this species as *novaguineensis*.

**Etymology:** Named in honour of Arnold Pagenstecher, who worked 100 years ago a great deal with Malaysian Heterocera.

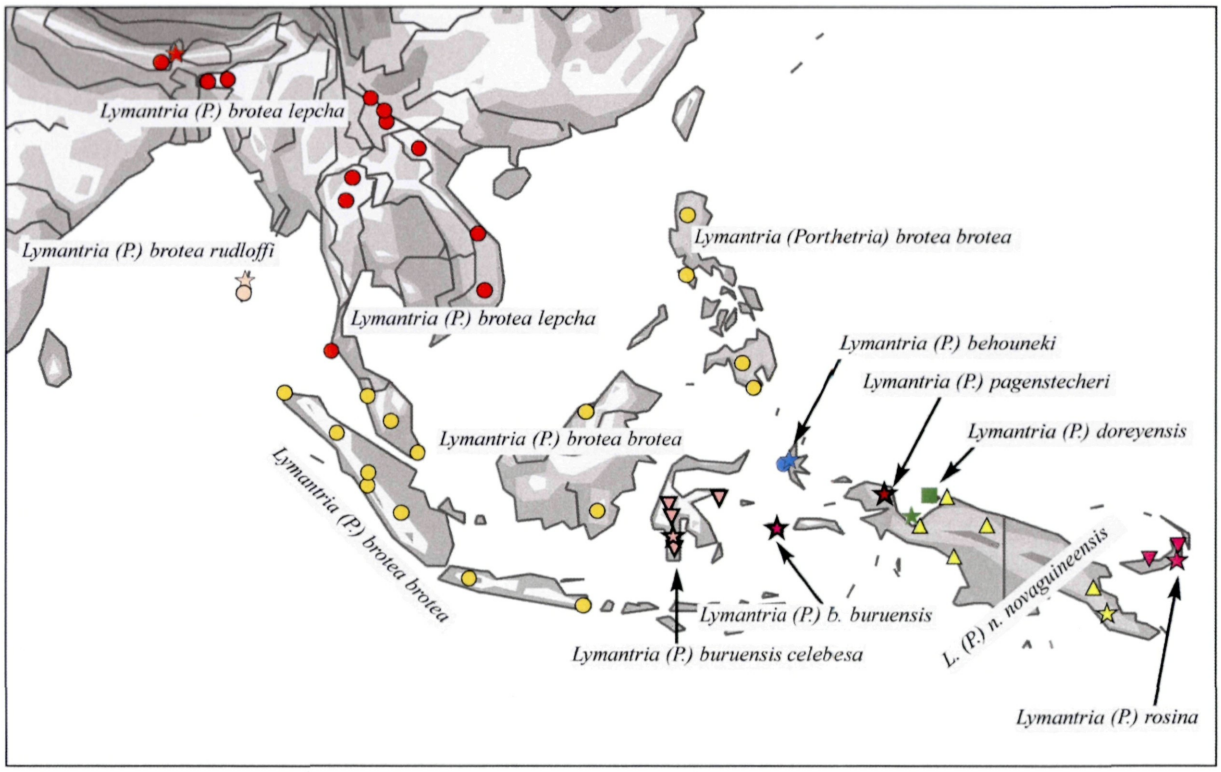



**Fig. 12:** Distribution of the subgenus *Porthetria*.

## *Lymantria* (*Porthetria*) *brotea brotea* (STOLL, 1781): 68, pl. 322 E (*Phalaena Bombyx*)

(Figs. 12, 134-137, 143, 243)

**Type locality:** [Indonesia], Amboina and Coromandel Coast [not examined].

**Synonym:**
*Lymantria galinara* SWINHOE, 1903: 490 **syn.n.**
Holotype: Singapore – BMNH, London [examined].

**Taxonomy:** *Lymantria brotea brotea* has less elongated forewings. Yellowish to orange scales replace the red colour of the hindwings of the ssp. *lepcha*. Specimens from Java are 2 mm larger in size than Sumatran specimens. A single male from Sumatra possesses red coloured hindwings suggestive of ssp. *lepcha*.

**Male genitalia** (Fig. 243): The individual/geographical variability is wide. Generally, the male genitalia of *L. galinara* syn.n. differ from ssp. *lepcha* by the shape of the valves and a shorter valve process, however it might be, that these characters are subject to individual variation.

**Further remarks:** The illustration in STOLL (1781) shows an insect which would very well match *L. galinara* syn.n. The type localities are doubtful. The species definitely does not occur on the Ambon Islands (Moluccas), and there is also no similar species known from Ambon. The Coromandel Coast means the Eastern coast of India. There are nearly no Lymantrids known from this region but due to zoogeographic reasons it cannot be excluded that *brotea* occurs there. On the other hand the illustration of STOLL rather matches the widespread ssp. *brotea* (Sundaland, Philippines) than the reddish coloured Indian subspecies *lepcha*. The type material of Cramer has very probably been lost.

To stabilize the nomeclatorical situation **I hereby designate as neotype** of *Phalaena Bombyx brotea* the holotype of *Lymantria galinara* SWINHOE, 1903 from Singapore.

From the Philippines I was able to study only a few (n< 7) males. They are inhomogeneous in their external appearance and also in the shapes of their valves (3 GU). Actually I choose to place them under *brotea.*

## *Lymantria* (*Porthetria*) *brotea lepcha* (MOORE, 1879): 54 (*Porthetria*)

(Figs. 12, 138-140, 144, 244)

**Lectotype:** [India], Darjiling – BMNH, London [examined].

**Synonym:**
*Barhona carneola* MOORE, 1879: 56.
Holotype: [India], Darjiling – BMNH, London [examined].

**Taxonomy:** The species is externally easily distinguishable by the reddish hindwings and the prominent blackish pattern on the forewings, particularly the post median fascia. The females are of an intensive pale pink colour. The black pattern on the forewings is in a few cases completely absent. A diagnostic character is the prominent pink coloured costa of the forewings.

**Male genitalia** (Fig. 244): The aedeagus has a small spine, not seen in any other species of *Porthetria.*

**Further remarks:** The lectotype of *lepcha* was designated by GUPTA (1984: 26). *Barhona carneola* is in fact the sexual dimorphic female of *lepcha*, which was confirmed in a successful breeding by Föhst, ex ovo in 1989, female from West Malaysia, the caterpillars are polyphagous.

## *Lymantria* (*Porthetria*) *brotea rudloffi* ssp.n.

(Figs. 12, 141, 142, 245)

**Holotype:** ♂, India, Andaman Isl. North Andaman, Beratang Isl. 21.-22.iii.1998, leg. E. Grigoriev & V. Sinjaev – in coll. A. Schintlmeister, Dresden.
**Paratypes** (156♂♂): 3♂♂, data as holotype (GU 60-29); 94♂♂, North Andaman, Mayabunder, 6km S Karmatany, 1°50'61"N, 9°56'06E, 17.-21.xi.2000; 1♂, Middle Andaman, Rangat, 100m, 22.-25.iii.1996 (GU 60-38); 51♂♂, Middle Andaman, Tangapure, 12°50'72"N, 92°49'29"E, 22.-26.xi.2000; 1♂, South Andaman Wandoor, Port Blair, 1.-2.iii.1998; 2♂♂, South Bambooflat, 11°42' 82"N, 92°42'02"E, 27.-28.xi.2000 Andaman; 1♂, Indien-M., Andaman, Tugapure, 3km südl. 12,4889°N, 92,4929°E, 14.-16. August 2001; 2♂♂, Indien-M, Andaman, Karmatang 1,5km E, 12,5072°N, 92,5610°E, 17.-22. August 2001; 1♂, Indien, Little Andaman, Huck-Bay, Quarry Hilus 10,3552°N, 92,3016°E, 26.-27. August 2001.

**Diagnosis:** Forewing length ♂♂ 27-29 mm. This subspecies differs from ssp. *lepcha* externally by the stronger developed fuscous pattern on the hindwings. Beside the prominently developed marginal band, there is a fuscous shadow from the discal spot toward the margin. Furthermore, the blackish pattern on the forewings is more prominent than in the other subspecies.The female is unknown.

**Male genitalia** (Fig. 245): The male genitalia do not significantly differ from ssp. *lepcha.*

**Etymology:** Named after Jan Rudloff, Roßlau/Germany, for his technical help (mounting and scanning of genitalia). He is also the collector of a part of the type series, which he collected under difficult circumstances.

## *Lymantria* (*Porthetria*) *grigorievi* sp.n.

(Figs. 10, 122-124, 246)

**Holotype:** ♂, India, Andaman Isl. North Andaman, Mayabunder, 6km S Karmatany, 1°50'61"N, 9°56'06E, 17.-21.xi.2000 leg. J.-P. Rudloff – in coll. A. Schintlmeister, Dresden.
**Paratypes** (24♂♂): 22♂♂ North Andaman, Mayabunder, 6km S Karmatany, 1°50'61"N, 9°56'06E, 17.-21.xi.2000 (GU 20-67a, 60-96); 1♂, North Andaman, 1,5km E Karmatany, 1°50'72"N, 9°56'10"E, 17.-22.viii..2001; 1♂, South Andaman, Bambooflat, 11° 42'82"N, 92°42'02"E, 27.-28.xi.2000.

**Diagnosis:** Forewing length ♂♂ 23-26 mm. Similar wing shape and pattern can be found in this species as in *L. brotea*. However, the new species is easily identifiable by the contrasting blackish-brown pattern on the forewings and the fuscous brown coloured hindwings. The absence of any reddish or yellowish colours is remarkable. The individual variability is similar to *brotea* particularly the area between the postmedian and median bands is often fuscous filled. The female is unknown.

**Male genitalia** (Fig. 246): The male genitalia resemble by the shape of the valves with ampulla rather the members of the subgenus *Lymantria*. The sacculus is long and straight, the uncus is pointed. The aedeagus shows a spine as in *brotea*.

**Further remarks:** This unmistakable and interesting species is endemic to the Andaman Islands.

**Etymology:** Named after Evgenij Grigoriev, Moscow, who accompanied Mr. Victor Siniaev during his trip to the Andaman Islands as medical doctor and surgeon in 1998.

## *Lymantria* (*Porthetria*) *ganara ganara* MOORE, 1859: 344

(Figs. 9, 127, 128, 131, 132, 241, 269)

**Holotype:** [Indonesia], Java – BMNH, London [examined].

**Taxonomic note:** The shape of the wings and their yellowish ground colour distinguish *ganara* from other species. The female is pink coloured with a prominent dorsal spot on the forewings.

**Male genitalia** (Fig. 269): The male genitalia show an additional costal process on the valves and a long saccus.

**Further remarks:** The preimaginal instars are described and illustrated by DEML & KOBES (2004).

## *Lymantria* (*Porthetria*) *ganara xiaolingensis* CHAO, 1985: 423, fig. 1 stat.n. [*Lymantria xiaolingensis*]

(Figs. 9, 129, 130, 133, 242)

**Holotype:** China, Heilongjiang, Xiaoling – CAS, Beijing [not examined].

**Taxonomic note:** The males from Indochina differ from the Sundaland specimens of *ganara* by the fuscous marginal band and a clearly marked fuscous discal spot on the hindwings. For these northern populations the name *xiaolingensis* is available.

**Male genitalia** (Fig. 242): The male genitalia are virtually not different from ssp. *ganara*.

**Further remarks:** CHAO (1985) compared in a very short description *Lymantria xiaolingensis* with *Lymantica russula* COLLENETTE, 1933, a species which was described from Madagascar. However, the illustrated male genitalia match those of *ganara* from Sumatra. The coloured illustration in CHAO (1994: pl. 1: 9, 2003: pl. 6: 109) shows a pale male with reduced black pattern, probably the holotype, doubtless conspecific with *ganara*. The type locality of *xiaolingensis* was given in the original description as Heilongjiang/NE China. I am very much in doubt that this locality is correct, as *ganara* is a tropical species from the lowland and would probably be unable to survive the winter time in Heilongjiang, when temperatures fall below -20° C. I know ssp. *xiaolingensis* from Hainan Isl. (China).

The paralectotype of *L. brunneiplaga* is in fact the female of *ganara*.

## *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895: 292

(Figs. 11, 151-156, 247, 267)

**Holotype:** Burmah [= Myanmar], Tilin Yaw – BMNH, London [examined].

**Taxonomy:** The following characters distinguish this species: greyish ground colour of the forewings with few fuscous greyish contrasting markings, fuscous brown hindwings and a pinkish abdomen. The fringe of all wings is pale and not chequered. The females have on all wings a greyish ground colour with prominent whitish costal region of the forewings. The basal, the postbasal and the postmedian fasciae are blackish marked near the costa. The species shows individual variability in size and in the darkness of the ground colour. Most specimens show a pale creamy ground colour.

**Further remarks:** The males are more rare in collections than the females. The ratio is about 3 females to 1 male.

## *Lymantria* (*Porthetria*) *ascetria* HÜBNER, [1819]: pl. 178: f. 1-4

(Figs. 11, 145-150, 248)

**Type locality:** [Indonesia, Java], [not examined].

**Synonyms:**
*Dasychira antica* WALKER, 1856: 1739.
Holotype: Java – BMNH, London [examined].
*Lymantria pramesta* MOORE, 1859: 344, pl. 9A: 3.
Holotype: Java [not examined].

**Taxonomy:** Characteristic are the brownish ground colour and the prominent median fascia of the forewings. The female very much resembles the female of *plumbalis* and differs by an additional black spot in the basal area near the costa of the forewings. The abdomen is less pinkish coloured than in *plumbalis*.

**Further remarks:** *Lymantria ascetria* is known to me only from older material (n< 15, all specimens more than 100 years old) and seems to be restricted to Java. In the literature (e.g. STRAND 1933, BRYK 1934) the species is often cited erroneously as "*asoetria*" throughout various years of publication.

## *Lymantria* (*Porthetria*) *praetermissa* COLLENETTE, 1933: 29, pl. 3: 13

(Figs. 9, 157, 159, 250)

**Holotype:** [Indonesia], Java, Buitenzorg, Bogor – BMNH, London [examined].

**Taxonomy:** The intensity of the black pattern on the forewings is subject to individual variation. The species is distinguished from other species by the many blackish fasciae running transverse on the forewings.

**Further remarks:** Restricted to W. Java and rarely collected.

## *Lymantria* (*Porthetria*) *loacana* SEMPER, 1898: 462

(Figs. 13, 160-162, 249)

**Type locality:** N.W. Luzon, Loacan, 1200m, hoch im Thal von Benguet [not examined].

**Taxonomy:** The ground colour of the forewings is pale grey with a strongly developed fuscous grey pattern. There is an individual variation in the fuscous pattern, particularly in the basal area.

**Further remarks:** It seems that the species inhabits only higher places over 1200 m (preferring altitudes of about 2000 m) in the mountainous North of Luzon. The type specimen was not found in FNS, Frankfurt/ Main, housing most of Semper's collection.

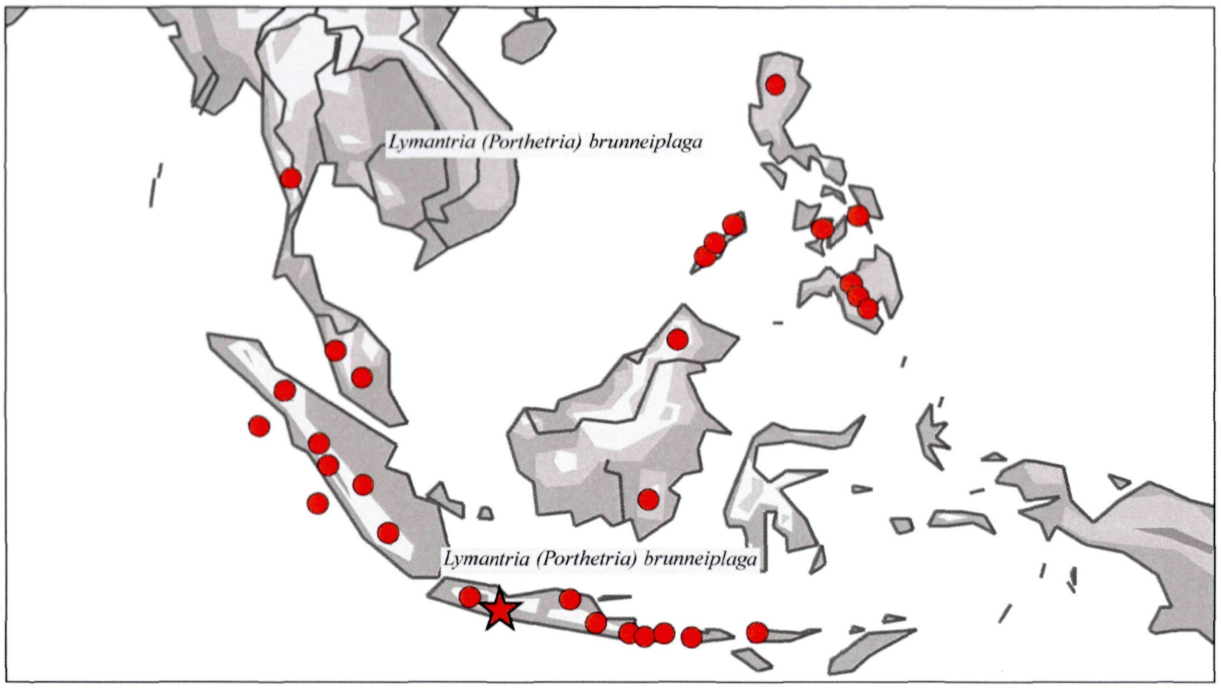



**Fig. 12a:** Distribution of *Lymantria* (*Porthetria*) *brunneiplaga*.

## *Lymantria* (*Porthetria*) *brunneiplaga* SWINHOE, 1903: 491

(Figs. 12a, 168-171, 176, 251)

**Lectotype:** [Indonesia], Java merid. – BMNH, London [examined].

**Taxonomy:** The species can be identified by the reduced brown pattern on the forewings, where 4 costal spots and the dorsal spot are prominently developed. There is a prominent brownish dorsal spot in the median area of the forewings. The female resembles the female of *diehli*, although the dorsal spot of the forewings is much more enlarged and the hindwings are less pinkish.

**Further remarks:** SWINHOE (1903) mentioned in his description a male and a female from Java as types. I was able to locate them in the BMNH collections. Both are not conspecific. **I hereby designate the male as the lectotype** bearing the following labels: blue label: "Java merid. – 150-1895 – H. Fruhstorfer"; white label: "*Lymantria brunneiplaga* ♂ Type". The paralectotype of *L. brunneiplaga* is the female of *L. ganara*. The lectotype is designated to ensure nomenclatural stability in this confusing group of species.

## *Lymantria* (*Porthetria*) *diehli* SCHINTLMEISTER, 1994: 123, pl. 1: 15, 16, fig. 7

(Figs. 11, 163-167, 252)

**Holotype:** [Indonesia], SW Sumatra, Barisan Ranges, Western Slopes – BMNH, London [examined].

**Taxonomy:** The species somewhat externally resembles *brunneiplaga*. *Lymantria diehli* is larger in size, the forewings show more brownish transverse fasciae and have less of a striking contrast between the brown patch on the dorsum and the light ground colour. The hindwings of *diehli* have a much darker brown than in *brunneiplaga*. The female is similar in pattern to the female of *brunneiplaga*, but the wings show a pinkish shine which is less developed in *brunneiplaga*.

**Male genitalia** (Fig. 252): The male genitalia are distinguished from *brunneiplaga* by the longer uncus and the more slender valve process.

**Further remarks:** *Lymantria diehli* is a mountainous species and is endemic, as far as known, to Sumatra above 1000 m.

## *Lymantria* (*Porthetria*) *orestera* COLLENETTE, 1932: 97, pl. 2: 42

(Figs. 10, 172-175, 253, 268)

**Holotype:** [Malaysia], Pahang, Cameron's Highlands, Tanah Rata – BMNH, London [examined].

**Taxonomy:** The species is characterized by the blackish brown area at the centre of the upper side of the forewings. The blackish pattern is subject to individual variation. The specimens from Malaysia are larger in size and show paler hindwings compared to material from Indochina. The probable females of *orestera* from Indochina rather resemble the females of *bivittata* more than *brunneiplaga*. They display less developed blackish markings than *brunneiplaga* but more than in *bivittata*.

## *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879): 58 (*Pegella*)

(Figs. 12b, 177-180, 189, 190, 254, 266)

**Syntypes:** [India], Darjiling – BMNH, London [examined] and ZMHU, Berlin [examined].

**Taxonomy:** The ground colour of the wings is silk-white and the brownish pattern less contrasting than in ssp. *marginalis*. There are no reddish scales on the wings. The female is similar to *marginalis* females but lacks the fuscous discal spots on the forewings.

From Assam and Meghalaya there are males (n=14 of totally 26 males from there) which display brown hindwings and where the forewings are somewhat elongated. Furthermore, the ground colour of the forewings is somewhat fuscous compared to the majority of the material. There is one female from Assam showing fuscous hindwings. On the other hand, there are very pale to whitish males where the black pattern is very reduced on Andaman Isl., Cambodia and particularly in N. Vietnam (in Vietnam about 30%, n>70). This geographical variability is not constant enough to recognize it as a distinct subspecies. However, the following subspecies occur:

**Genitalia** (Figs. 254, 266): The male genitalia (GU 50-10) of this mentioned population from Assam show virtually no differences compared to material from Darjeeling (GU 50-13).

**Further remarks:** At the BMNH Gupta selected a lectotype of *bivittata*, a female. I was not able to find any paper, where the designation was published. The second female also from Darjeeling was found in ZMHU.

## *Lymantria* (*Porthetria*) *bivittata marginalis* WALKER, 1862: 131 stat.n. [*Lymantria marginalis*]

(Figs. 12b, 181, 182, 191)

**Holotype:** [Borneo], Sarawak – HEO, Oxford [examined].

**Taxonomic note:** The differences between *bivittata* and *marginalis* are small but distinct. Compared to ssp. *bivittata* the ground colour is a more splendid white and the pattern contrasts more. The females have a prominent fuscous discal spot on the forewings, lacking in ssp. *bivittata*. The species is variable in the intensity of the blackish pattern.

**Male genitalia:** The male genitalia are virtually identical with ssp. *bivittata*. However, there is more individual variability in the shape of the valve process.

**Further remarks:** Due to the absent differences in male genitalia, *marginalis* will be combined to a subspecies of *bivittata*.

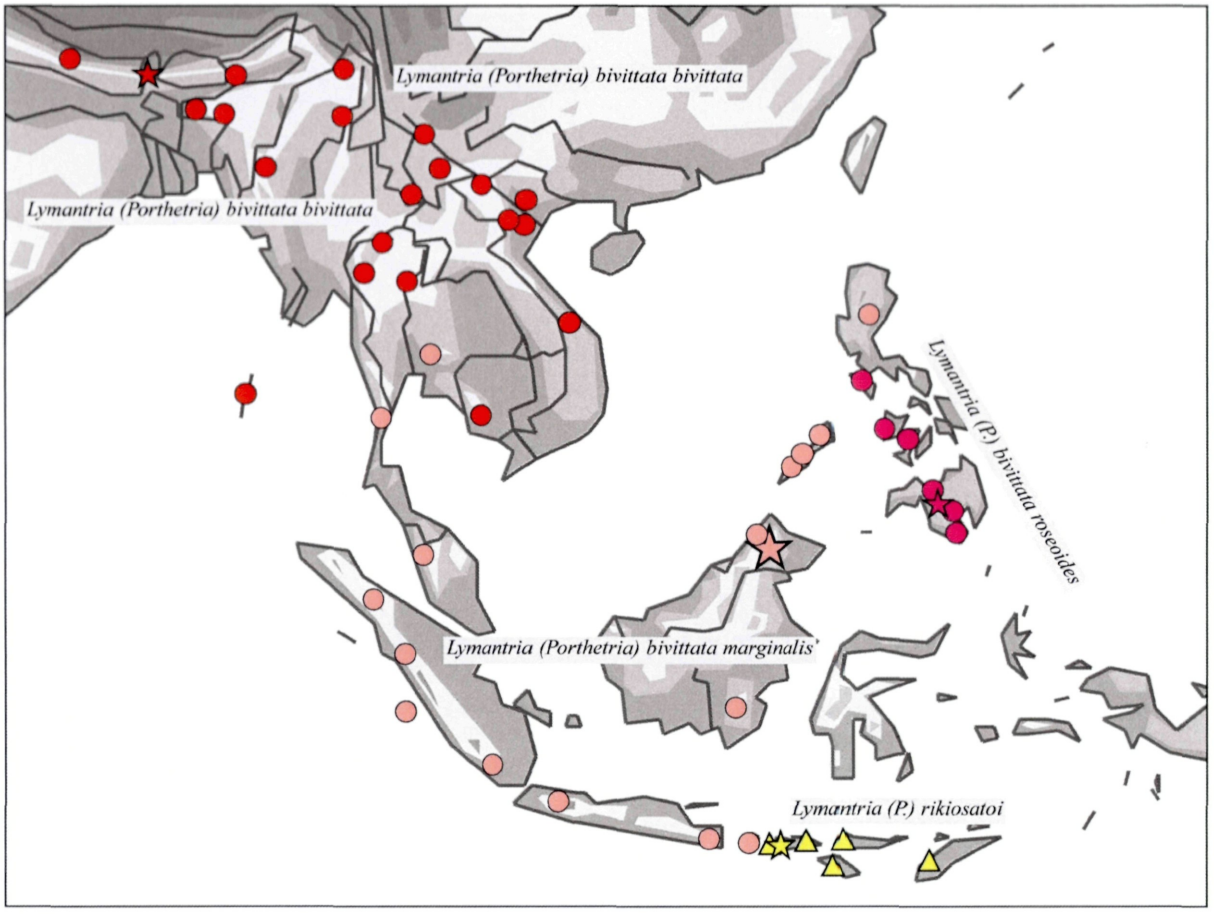



**Fig. 12b:** Distribution of the subgenus *Porthetria.*

## *Lymantria* (*Porthetria*) *bivittata roseoides* ssp.n.

(Figs. 12b, 183, 184, 192, 255)

**Holotype:** ♂, Philippines, Mindanao, Bukidnon, 40km NW Maramag, Dalongdong, 800m, 7°53'N, 124°40'E, 1.-3.x.1988, leg. Cerny & Schintlmeister – in coll. A. Schintlmeister, Dresden.

**Paratypes** (213♂♂, 2♀♀): Mindanao: 3♂, Phil./Mindanao, Bukidnon, Dalongdong, 40km NW Maramag, Talakag, Urwaldrand, 800m, 7°53''N /124°40''E; 1♂, Davao del Norte, Mt. Caragan, July 1998; 14♂, ibid., i.1998; 1♂, Davao del Sur, Mt. Apo, SE Route via Kapatagan, 2230m, 8.vii.1996; 1♀, ibid 2600m, 9.vii.1996; 19♂♂, ibid 1570m, 10.-12.vii.1996; 15♂♂, ibid., 1500m, 10.-20.ii.1999 (GU W 9138); 3♂♂, ibid., 1200m, 1.-21.v.1999; 1♂, ibid., 1300m, 25.ix.-5.x.2000; 2♂, Mt. Apo, W-Flanke, 6°57'N, 123°17'E, 1200m, 28.-30.vii.1993; 3♂♂, Philippinen, Mindanao, Bukidnon, Mt. Kitanglad S-Seite, Intavas, Primärwald, 1650m, 2.-5.VIII.1993, 8° 07''N, 124° 55'' E; 4♂♂, ibid, 2200m, 15.viii.-15.ix.1993; 3♂♂, Mt. Kitanglad, Bukidnon, 8°07'N, 124°55'E, iv. 1997; 5♂♂, Mt. Kitanglad. vii.1998; 6♂♂, Mt. Matutum S.Cotabato, I.1997; 10♂♂, Cotabato del sur, Mt. Busa, 700m, August 1997, 6°08''N 124° 39''E; 23♂♂, ibid., xii.1998; 1♂ Mindanao, Misami Prov., Mt. Malasag, 300m, 8.-15.iv.1996; 1♂ Dalongdong, iv.2000; Negros: 39♂♂, Mt. Kanlaon, W Route via Mambucal, 1010m, 15.-18.vii.1996 (GU 50-05) 16♂♂, ibid xii.1996-vii.1997; 1♀, ibid Dec.1997; 4♂♂, ibid. i.-iv.1995; 14♂♂, ibid., 600-800m, iv.1998; 11♂♂, Mt. Mandalagan, xii.1997; 4 ♂♂, ibid., near Don Salvador Bennedicto, 800m, ii.1998; 1♂, iibid., v.-vi.1998; Panay: Mt. Baloy, vi.1998; Mindoro: 4♂♂, Mt. Halcon, 2000m, 6.-24.iii.2000; 1♂, ibid. iv.2001; 1♂, Mt. Malasembo, Puerto Gallero, Halcon Mts.,viii.1998

**Diagnosis:** Forewing length ♂♂ 24-26 mm, ♀♀ 30 mm and 38 mm. This subspecies from the Philippines differs from the other populations (including Palawan) by a reddish shine toward the base of the hindwings and a stronger developed blackish pattern. Particularly, the hindwings have a closed

fuscous margin, which is in the ssp. *marginalis* only present to the anal angel. The series from Mindoro show the pinkish colour on the hindwings more prominently. There are only two rubbed females, which are very similar to ssp. *marginalis*.

**Male genitalia** (Fig. 255): The male genitalia virtually do not differ from ssp. *marginalis*.

**Further remarks:** The ssp. *roseoides* inhabits probably all Philippine Islands except Palawan. There is a single male from N. Luzon, Banaue, belonging phaenotypical to ssp. *marginalis* (not included in the type series).

**Etymology:** Named after the slightly reddish shine on the wings.

## *Lymantria* (*Porthetria*) *rikiosatoi* sp.n.

(Figs. 12b, 185-188, 256, 257)

**Holotype:** ♂, Indonesia, Sumbawa, Nusa Tenggara Barat, Kempo, 30km W Dompu, 80m, 17.-18.iii.1996, leg. Dr. Ron Brechlin – in coll. A. Schintlmeister, Dresden.

**Paratypes** (30♂♂): Sumbawa: 8♂♂, Kempo, 30km W Dompu, 80m, 17.-18.iii.1996; 1♂, Lara, 16km E Dompu, 160m, Prim. Forest, 24./25.IV.1996; 10♂♂, Parado, 80km to Bima, 21.-30.xii.1996 (GU 60-90); 2♂♂, Gunung Tambora, Panca-Sila, 430m, 16.iii.1996; 1♂, Mt. Takan, 800m, 300km SW Sumbawa-Besar, 10.-20.12.1996, Lombok: 1♂, Batugendeng, 1km N Menkaki, 50m, 6.-7.i.1999; 1♂, Sapit 2000', Mai-Juni 1896; Flores: 7♂♂, 15km E Labuhanbajo, 200m, 9.-12./22.iv.1996; 1♂, Ruteng, 1500m, v. 1993 (GU 60-89); Sumba: Gunung aimual, 150km S Sumbawa-Besar, 40m, 11.-20.xi.1996; 4♂♂, Gunung Ares, 50m, iii.1997.

**Diagnosis:** Forewing length ♂♂ 23-24 mm, one male from Sumbawa spans 26.5 mm. The species somewhat externally resembles *L. bivittata*. The ground colour of the forewings is not silk white as in *bivittata marginalis* but pale greyish-white, somewhat hyaline and without shine. The blackish markings are contrasting and fine. The median band of the forewings is prominent and closed to the dorsum. The hindwings have a weakly marked fuscous submarginal fascia. Besides this there is a weakly marked discal spot. The female is unknown.

**Male genitalia** (Figs. 256, 257): The male genitalia resemble *bivittata*, although the dorsal shape of the valves is rather rounded than rectangular.

**Further remarks:** Occur in the Lesser Sunda Islands. From Timor, Gunung Mutis 700-1300 m (GU 20-79a, GU 50-24), there are two rubbed males, which probably belong to a different subspecies (not included in the type series). One day these specimens might be described, when more material becomes available.

**Etymology**: Named after Rikio Sato, Niigata, a well- known specialist for Geometridae, for his contributions to the knowledge of Malaysian Geometridae.

## *Lymantria* (*Porthetria*) *narindra* MOORE, 1859: 342

(Figs. 13, 193-196, 258)

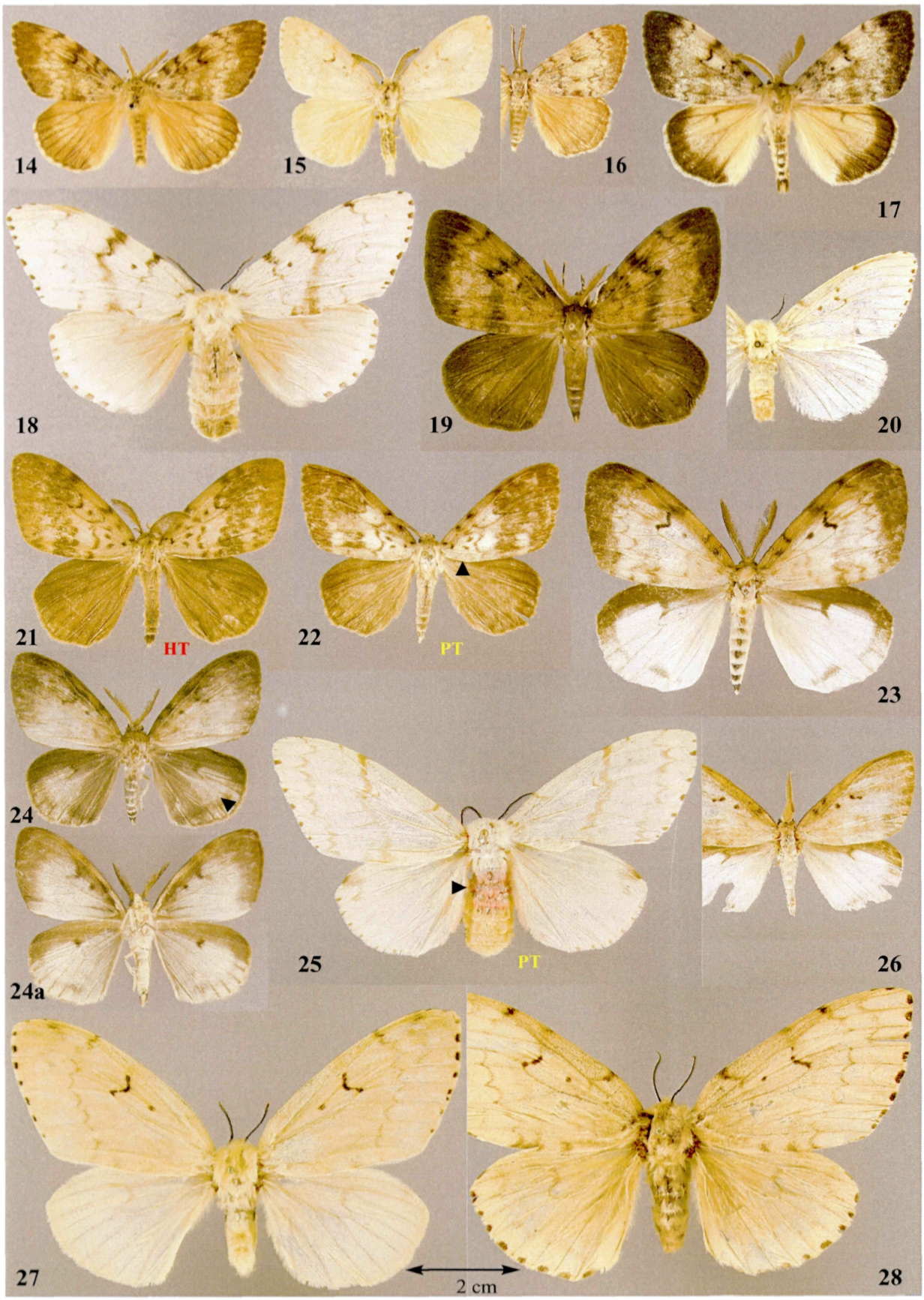
**Holotype:** [Indonesia], Java – BMNH, London [examined].

**Synonym:**

*Lymantria* (*Liparis*) *hilaris* VOLLENHOVEN, 1863: 143, pl. 10: 2, 3.

Syntypes: Sumatra et fortasse Java [not examined].

**Taxonomy:** A large species, particularly the females. The ground colour of the forewings of the males is white with a yellowish-greenish shine. The black pattern is well developed. The sexual dimorphic female has a reduced submarginal fascia, consisting of an apical spot and a spot near the tornus of the forewings. The caterpillar was found and reared in W. Malaysia on *Cinnamonum* by W. Nässig, Mühlheim.



**Figs. 14-28:** previous page

**Fig. 14:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – ♂, Poland.
**Fig. 15:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – ♂, Turkey.
**Fig. 16:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – ♂, Turkey.
**Fig. 17:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – ♂, Russia, Altaij Mts.
**Fig. 18:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – ♀, N. Mongolia.
**Fig. 19:** *Lymantria* (*Porthetria*) *dispar japonica* (MOTSCHULSKY, [1861]) – ♂, Japan, Tsushima Isl.
**Fig. 20:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – ♀, China, Sichuan.
**Fig. 21:** *Lymantria* (*Porthetria*) *schaeferi* **sp.n.** –♂, China, Jiangxi, Holotype.
**Fig. 22:** *Lymantria* (*Porthetria*) *schaeferi* **sp.n.** – ♂, China, Jiangxi, Paratype.
**Fig. 23:** *Lymantria* (*Porthetria*) *albescens albescens* HORI & UEMO, 1930 – ♂, Japan, Ryu Kyu Isl.
**Fig. 24:** *Lymantria* (*Porthetria*) *albescens tsushimensis* INOUE, 1956 – ♂, Japan, Tsushima Isl.
**Fig. 24a:** *Lymantria* (*Porthetria*) *albescens tsushimensis* INOUE, 1956 – ♂, Japan, Tsushima Isl, underside.
**Fig. 25:** *Lymantria* (*Porthetria*) *schaeferi* **sp.n.** – ♀, China, Jiangxi, Paratype.
**Fig. 26:** *Lymantria* (*Porthetria*) *albescens postalba* INOUE, 1956 – ♂, Japan, Yakushima Isl.
**Fig. 27:** *Lymantria* (*Porthetria*) *albescens albescens* HORI & UEMO, 1930 – ♀, Japan, Ryu Kyu Isl.
**Fig. 28:** *Lymantria* (*Porthetria*) *dispar japonica* (MOTSCHULSKY, [1861]) – ♀, Japan, Honshu.

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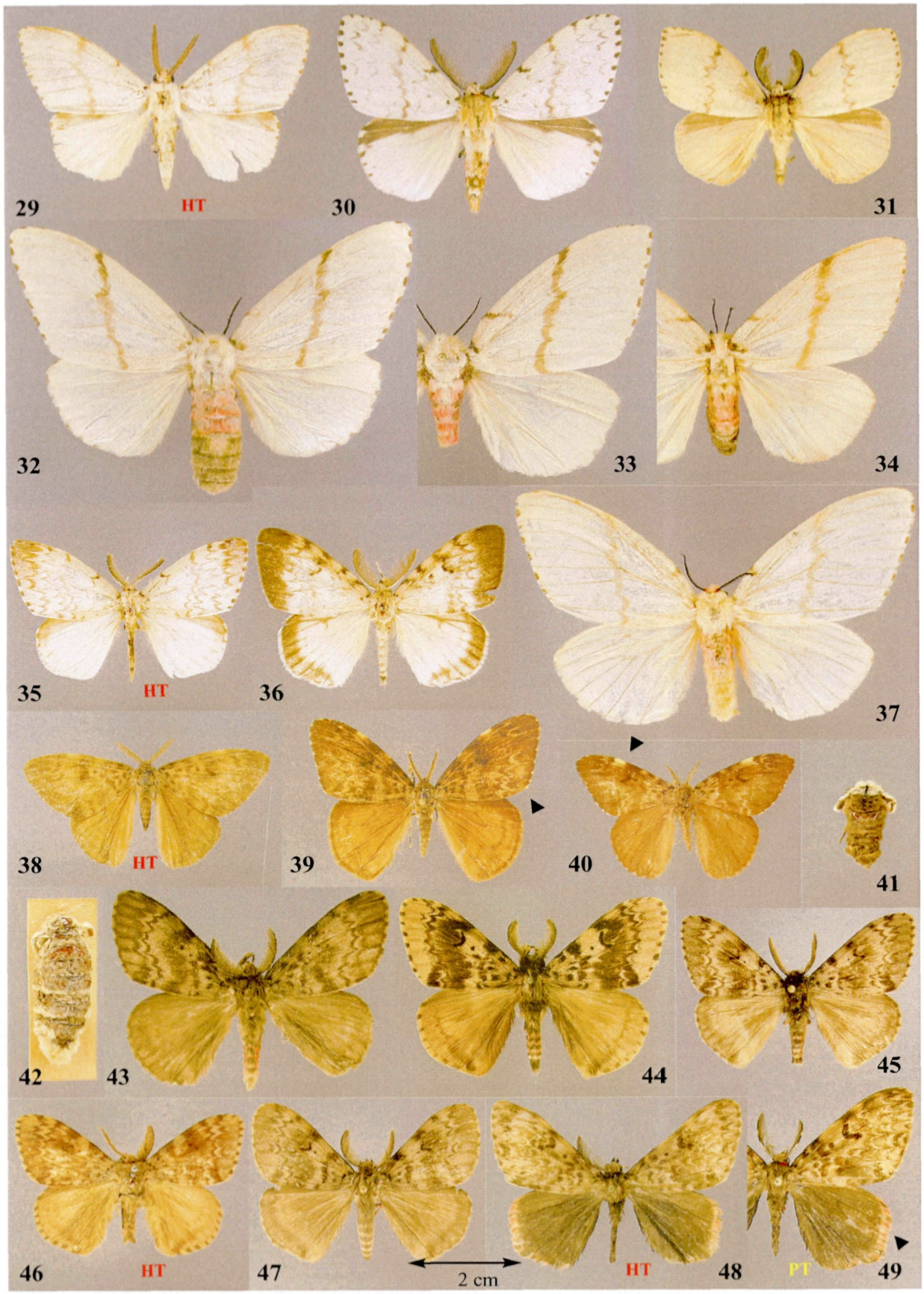
**Fig. 29:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – ♂, Taiwan, Holotype.
**Fig. 30:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – ♂, Taiwan.
**Fig. 31:** *Lymantria* (*Porthetria*) *xylina nobunaga* NAGANO, 1912 – ♂, Japan, Honshu.
**Fig. 32:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – ♀, Taiwan.
**Fig. 33:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – ♀, Japan, Okinawa.
**Fig. 34:** *Lymantria* (*Porthetria*) *xylina nobunaga* NAGANO, 1912 – ♀, Japan, Honshu.
**Fig. 35:** *Lymantria* (*Porthetria*) *apicebrunnea* GAEDE, 1932 – ♂, China, Sichuan, Holotype.
**Fig. 36:** *Lymantria* (*Porthetria*) *apicebrunnea* GAEDE, 1932 – ♂, China, Sichuan.
**Fig. 37:** *Lymantria* (*Porthetria*) *apicebrunnea* GAEDE, 1932 – ♀, China, Yunnan.
**Fig. 38:** *Lymantria* (*Porthetria*) *ampla* (WALKER, 1855) – ♂, Sri Lanka, Holotype.
**Fig. 39:** *Lymantria* (*Porthetria*) *ampla* (WALKER, 1855) – ♂, Bangladesh.
**Fig. 40:** *Lymantria* (*Porthetria*) *ampla* (WALKER, 1855) – ♂, S. India.
**Fig. 41:** *Lymantria* (*Porthetria*) *ampla* (WALKER, 1855) – ♀, S. India.
**Fig. 42:** *Lymantria* (*Porthetria*) *incerta* WALKER, 1855– ♀, S. India.
**Fig. 43:** *Lymantria* (*Porthetria*) *aryama* MOORE, 1859 – ♂, S. India.
**Fig. 44:** *Lymantria* (*Porthetria*) *aryama* MOORE, 1859 – ♂, S. India.
**Fig. 45:** *Lymantria* (*Porthetria*) *aryama* MOORE, 1859 – ♂, Nepal.
**Fig. 46:** *Lymantria* (*Porthetria*) *incerta* WALKER, 1855 – ♂, N. India, Holotype.
**Fig. 47:** *Lymantria* (*Porthetria*) *incerta* WALKER, 1855 – ♂, NW. India.
**Fig. 48:** *Lymantria* (*Porthetria*) *speideli* **sp.n.** – ♂, Philipppines, Mindanao, Holotype.
**Fig. 49:** *Lymantria* (*Porthetria*) *speideli* **sp.n.** – ♂, Philipppines, Mindanao, Paratype.



**Figs. 50-75:** next page

**Fig. 50:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♂, N. India, Holotype.
**Fig. 51:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♂, NW. India, Ladakh.
**Fig. 52:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♂, Afghanistan, ex larva.
**Fig. 53:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♂, NW. India, Himachal Pradesh, ex ovo.
**Fig. 54:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♀, NW. India, Himachal Pradesh, ex ovo.
**Fig. 55:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♂, N. India, Bhimtal.
**Fig. 56:** *Lymantria* (*Porthetria*) dispar ♂ x *obfuscata* ♀– ♂, ex ovo.
**Fig. 57:** *Lymantria* (*Porthetria*) dispar ♂ x *obfuscata* ♀– ♀, ex ovo.
**Fig. 58:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♀, NW. India, Kashmere, ex larva.
**Fig. 59:** *Lymantria* (*Porthetria*) *detersa* WALKER, 1865 – ♂, India, Lectotype.
**Fig. 60:** *Lymantria* (*Porthetria*) *detersa* WALKER, 1865 – ♂, S. India.
**Fig. 61:** *Lymantria* (*Porthetria*) *detersa* WALKER, 1865 – ♂, W. India.
**Fig. 62:** *Lymantria* (*Porthetria*) *pelospila* (TURNER, 1915) – ♀, N. Australia (Photo courtesy R. Ingram).
**Fig. 63:** *Lymantria* (*Porthetria*) *costalis* WALKER, 1865 – ♂, India, Lectotype.
**Fig. 64:** *Lymantria* (*Porthetria*) *costalis* WALKER, 1865 – ♂, Sri Lanka.
**Fig. 65:** *Lymantria* (*Porthetria*) *costalis* WALKER, 1865 – ♂, Sri Lanka.
**Fig. 66:** *Lymantria* (*Porthetria*) *pelospila* (TURNER, 1915) – ♂, N. Australia (Paratype of *Lymantria lutescens* AURIVILLIUS, 1920).
**Fig. 67:** *Lymantria* (*Porthetria*) *pelospila* (TURNER, 1915) – ♂, N. Australia (Photo courtesy R. Ingram).
**Fig. 68:** *Lymantria* (*Porthetria*) *antennata* WALKER, 1855 – ♂, Australia, Holotype.
**Fig. 69:** *Lymantria* (*Porthetria*) *antennata* WALKER, 1855 –♂, Australia, Queensland.
**Fig. 70:** *Lymantria* (*Porthetria*) *antennata* WALKER, 1855 – ♂, Australia, Queensland.
**Fig. 71:** *Lymantria* (*Porthetria*) *antennata* WALKER, 1855 – ♀, Australia, Queensland.
**Fig. 72:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♀, Philippines, Holotype.
**Fig. 73:** *Lymantria* (*Porthetria*) *lunata diversa* TURNER, 1936 – ♀, Australia, Queensland.
**Fig. 74:** *Lymantria* (*Porthetria*) *lunata lunata* (STOLL, 1782) – ♀, Indonesia, Ambon, (Holotype of *Pegella ichorina* BUTLER, 1884).
**Fig. 75:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♀, Philippines, Mindanao.

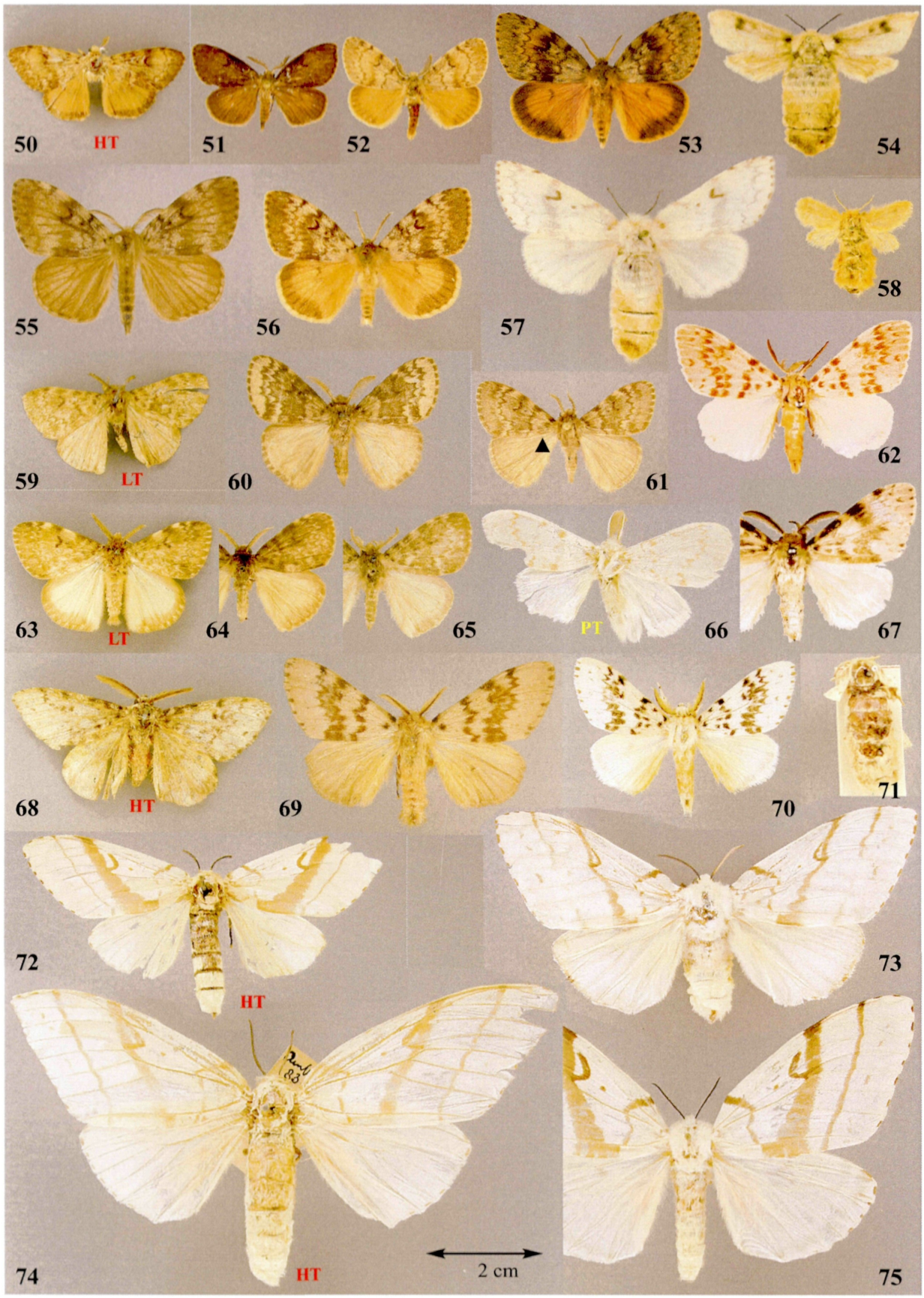


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**Fig. 76:** *Lymantria* (*Porthetria*) *lunata lunata* (STOLL, 1782) – ♂, Indonesia, Ambon.
**Fig. 77:** *Lymantria* (*Porthetria*) *lunata ingrami* **ssp.n.** – ♂, Indonesia, Irian Jaya, Biak Isl., Holotype.
**Fig. 78:** *Lymantria* (*Porthetria*) *lunata ingrami* **ssp.n.** – ♂, Indonesia, Irian Jaya, Biak Isl., Paratype.
**Fig. 79:** *Lymantria* (*Porthetria*) *lunata carteri* **ssp.n.** – ♂, Indonesia, Moluccas, Bacan Isl., Holotype.
**Fig. 80:** *Lymantria* (*Porthetria*) *lunata carteri* **ssp.n.** – ♂, Indonesia, Moluccas, Bacan Isl., Paratype.
**Fig. 81:** *Lymantria* (*Porthetria*) *lunata diversa* TURNER, 1936 – ♂, Indonesia, N. Australia.
**Fig. 82:** *Lymantria* (*Porthetria*) *lunata* (STOLL, 1782) – ♂, Indonesia, Moluccas, Misool Isl.
**Fig. 83:** *Lymantria* (*Porthetria*) *lunata* (STOLL, 1782) – ♂, Indonesia, Tanimbar Isl.
**Fig. 84:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♂, form, Indonesia, Sulawesi.
**Fig. 85:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♂, Indonesia, Sulawesi.
**Fig. 86:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♂, Indonesia, Sula Isl.
**Fig. 87:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 –♂, Philippines, Mindanao.
**Fig. 88:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♂, Philippines, Mindanao.
**Fig. 89:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♂, Philippines, Negros.
**Fig. 90:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♂, Philippines, Palawan.
**Fig. 91:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♀, Philippines, Negros.
**Fig. 92:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♀, Indonesia, Peleng Isl.

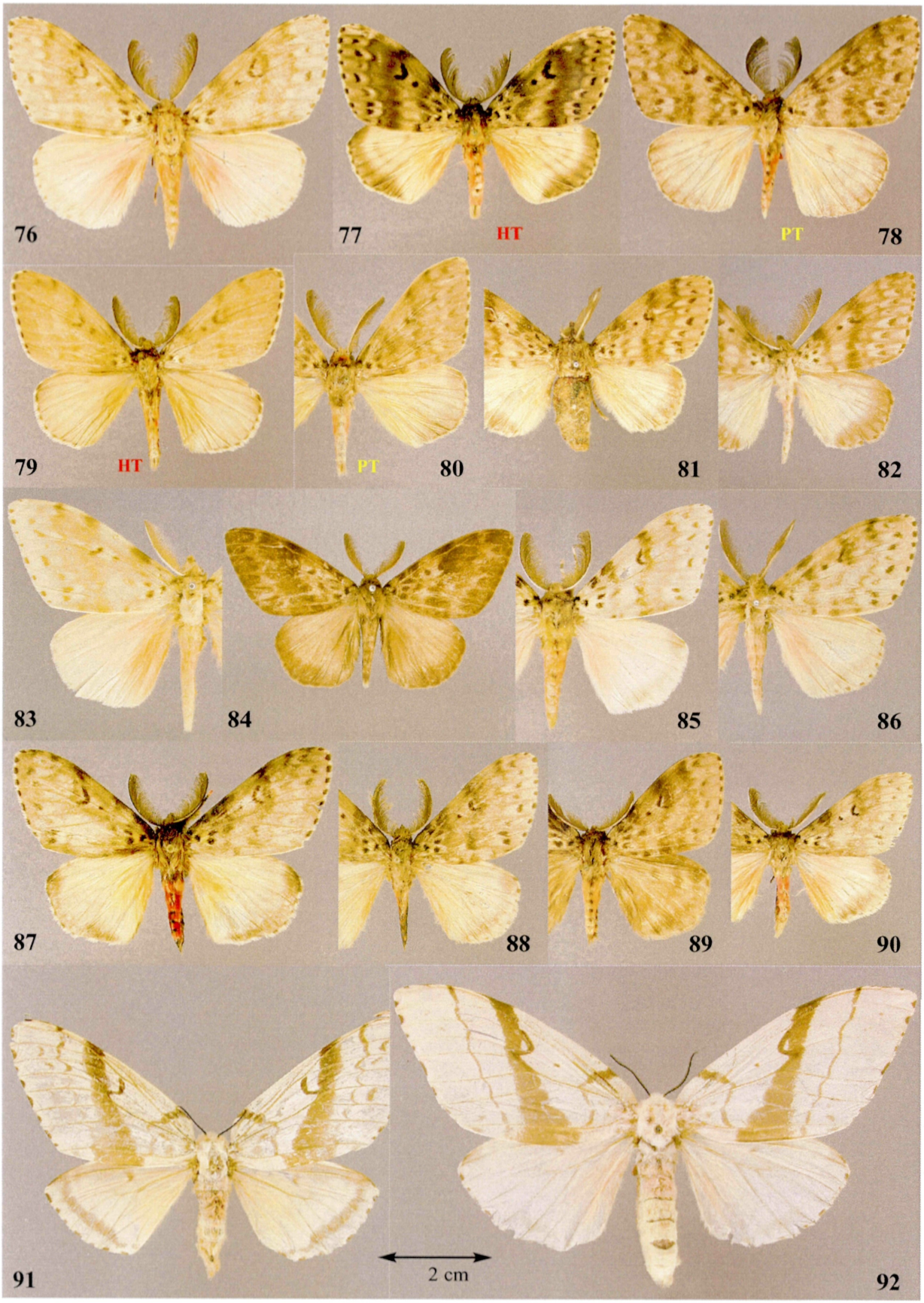

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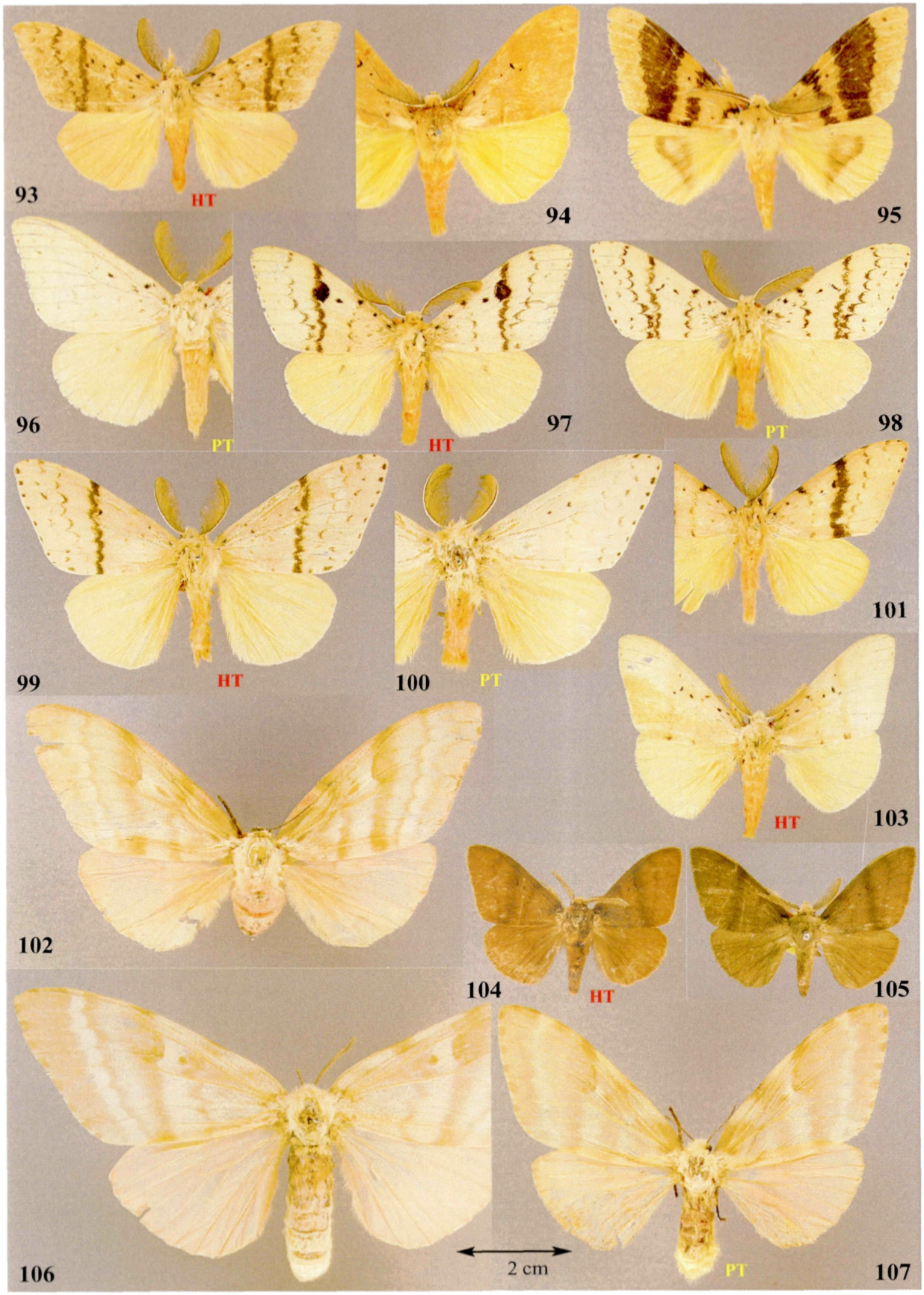
**Fig. 93:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♂, Papua New Guinea, New Ireland, Holotype.
**Fig. 94:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♂, Papua New Guinea, New Ireland.
**Fig. 95:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♂, Papua New Guinea, New Ireland.
**Fig. 96:** *Lymantria* (*Porthetria*) *sphalera akemiae* **ssp.n.** – ♂, Papua New Guinea, Admirality Isl., Paratype.
**Fig. 97:** *Lymantria* (*Porthetria*) *sphalera akemiae* **ssp.n.** – ♂, Papua New Guinea, Admirality Isl., Holotype.
**Fig. 98:** *Lymantria* (*Porthetria*) *sphalera akemiae* **ssp.n.** – ♂, Papua New Guinea, Admirality Isl., Paratype.
**Fig. 99:** *Lymantria* (*Porthetria*) *sphalera tennhardae* **ssp.n.** – ♂, Papua New Guinea, Salomon Isl., Holotype.
**Fig. 100:** *Lymantria* (*Porthetria*) *sphalera tennhardae* **ssp.n.** – ♂, Papua New Guinea, Salomon Isl., Paratype.
**Fig. 101:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♂, Papua New Guinea, New Ireland.
**Fig. 102:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♀, Papua New Guinea, New Ireland (Allotype of *Lymantria sphalera talesea* COLLENETTE, 1933).
**Fig. 103:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♂, Papua New Guinea, New Ireland (Holotype of *Lymantria sphalera talesea* COLLENETTE, 1933).
**Fig. 104:** *Lymantria* (*Porthetria*) *monoides* COLLENETTE, 1932 – ♂, Papua New Guinea, New Hannover, Holotype.
**Fig. 105:** *Lymantria* (*Porthetria*) *monoides* COLLENETTE, 1932 – ♂, Papua New Guinea, New Hannover.

**Fig. 106:** *Lymantria* (*Porthetria*) *sphalera tennhardae* **ssp.n.** – ♀, Papua New Guinea, Salomon Isl., Paratype.
**Fig. 107:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♀, Papua New Ireland, "Neallotype".



**Figs. 108-126:** next page

**Fig. 108:** *Lymantria* (*Porthetria*) *buruensis buruensis* COLLENETTE, 1933 – ♂, Indonesia, Buru Isl., Holotype.
**Fig. 109:** *Lymantria* (*Porthetria*) *buruensis buruensis* COLLENETTE, 1933 – ♂, Indonesia, Buru Isl., Paratype.
**Fig. 110:** *Lymantria* (*Porthetria*) *buruensis celebesa* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi, Holotype.

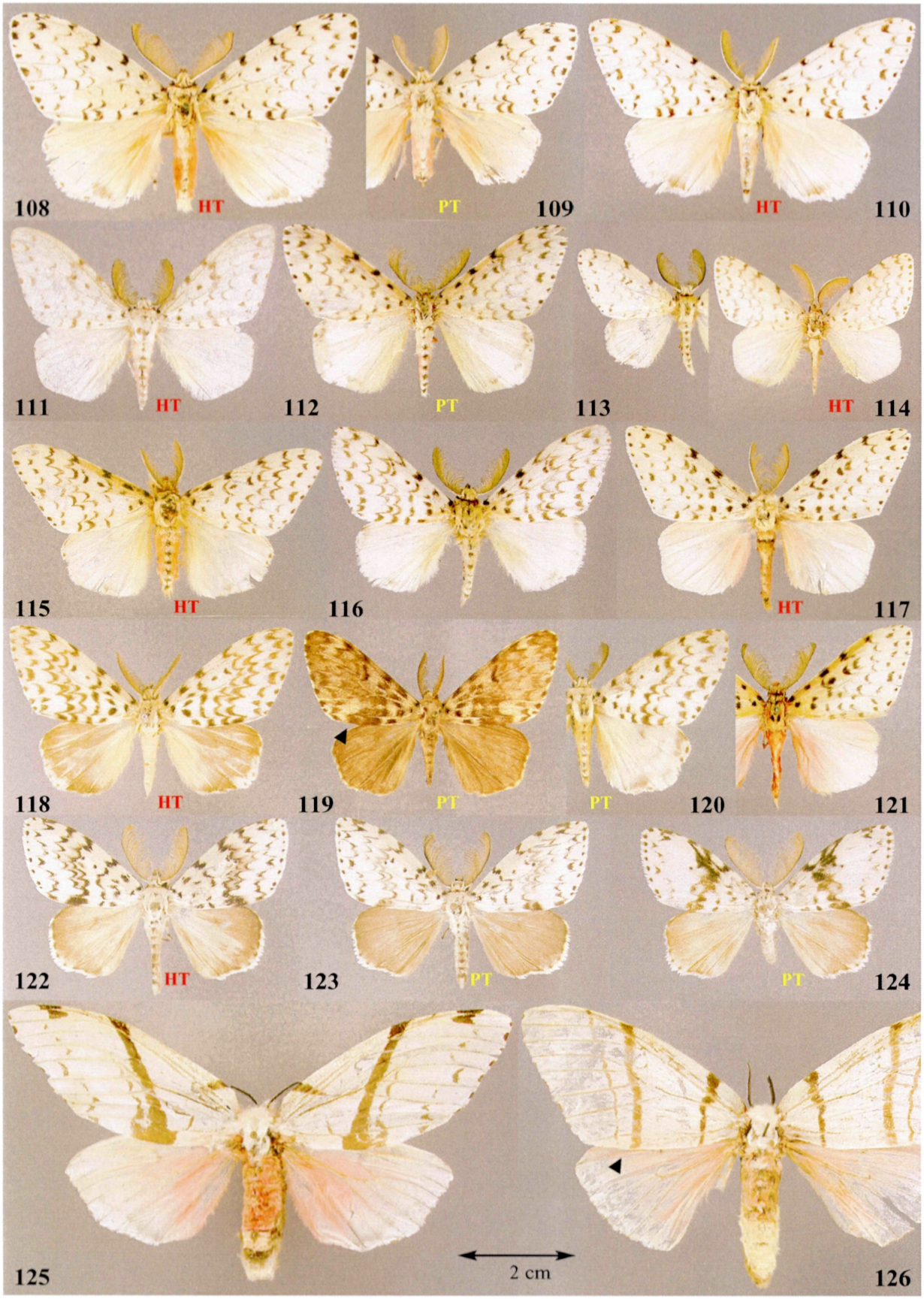
**Fig. 111:** *Lymantria* (*Porthetria*) *behouneki* **sp.n.** – ♂, Indonesia, Halmahera, Holotype.
**Fig. 112:** *Lymantria* (*Porthetria*) *behouneki* **sp.n.** – ♂, Indonesia, Halmahera, Paratype.
**Fig. 113:** *Lymantria* (*Porthetria*) *doreyensis* COLLENETTE, 1933 – ♂, Indonesia, Irian Jaya, Nabire.
**Fig. 114:** *Lymantria* (*Porthetria*) *doreyensis* COLLENETTE, 1933 – ♂, Indonesia, Irian Jaya, Dorey Isl., Holotype.

**Fig. 115:** *Lymantria* (*Porthetria*) *novaguineensis* BETHUNE-BAKER, 1904 – ♂, S. Papua New Guinea, Holotype.
**Fig. 116:** *Lymantria* (*Porthetria*) *novaguineensis* BETHUNE-BAKER, 1904 – ♂, Irian Jaya, Nabire.
**Fig. 117:** *Lymantria* (*Porthetria*) *rosina* PAGENSTECHER, 1900 – ♂, Papua New Guinea, New Britain, Holotype.

**Fig. 118:** *Lymantria* (*Porthetria*) *pagenstecheri* **sp.n.** – ♂, Indonesia, Irian Jaya, Arfak Mts., Holotype.
**Fig. 119:** *Lymantria* (*Porthetria*) *pagenstecheri* **sp.n.** – ♂, Indonesia, Irian Jaya, Arfak Mts., Paratype.
**Fig. 120:** *Lymantria* (*Porthetria*) *pagenstecheri* **sp.n.** – ♂, Indonesia, Irian Jaya, Arfak Mts., Paratype.
**Fig. 121:** *Lymantria* (*Porthetria*) *rosina* PAGENSTECHER, 1900 – ♂, Papua New Guinea, New Britain.

**Fig. 122:** *Lymantria* (*Porthetria*) *grigorievi* **sp.n.** – ♂, India, Andaman Isl., Holotype.
**Fig. 123:** *Lymantria* (*Porthetria*) *grigorievi* **sp.n.** – ♂, India, Andaman Isl., Paratype.
**Fig. 124:** *Lymantria* (*Porthetria*) *grigorievi* **sp.n.** – ♂, India, Andaman Isl., Paratype.

**Fig. 125:** *Lymantria* (*Porthetria*) *buruensis celebesa* COLLENETTE, 1947 – ♀, Indonesia, S. Sulawesi.
**Fig. 126:** *Lymantria* (*Porthetria*) *novaguineensis* BETHUNE-BAKER, 1904 – ♀, Papua New Guinea, "Neallotype".



**Figs. 127-144:** next page

**Fig. 127:** *Lymantria* (*Porthetria*) *ganara ganara* MOORE, 1859 – ♂, Indonesia, Java, Holotype.
**Fig. 128:** *Lymantria* (*Porthetria*) *ganara ganara* MOORE, 1859 – ♂, Indonesia, Sumatra.
**Fig. 129:** *Lymantria* (*Porthetria*) *ganara xiaolingensis* CHAO, 1985 – ♂, SW Cambodia.
**Fig. 130:** *Lymantria* (*Porthetria*) *ganara xiaolingensis* CHAO, 1985 – ♂, Laos.

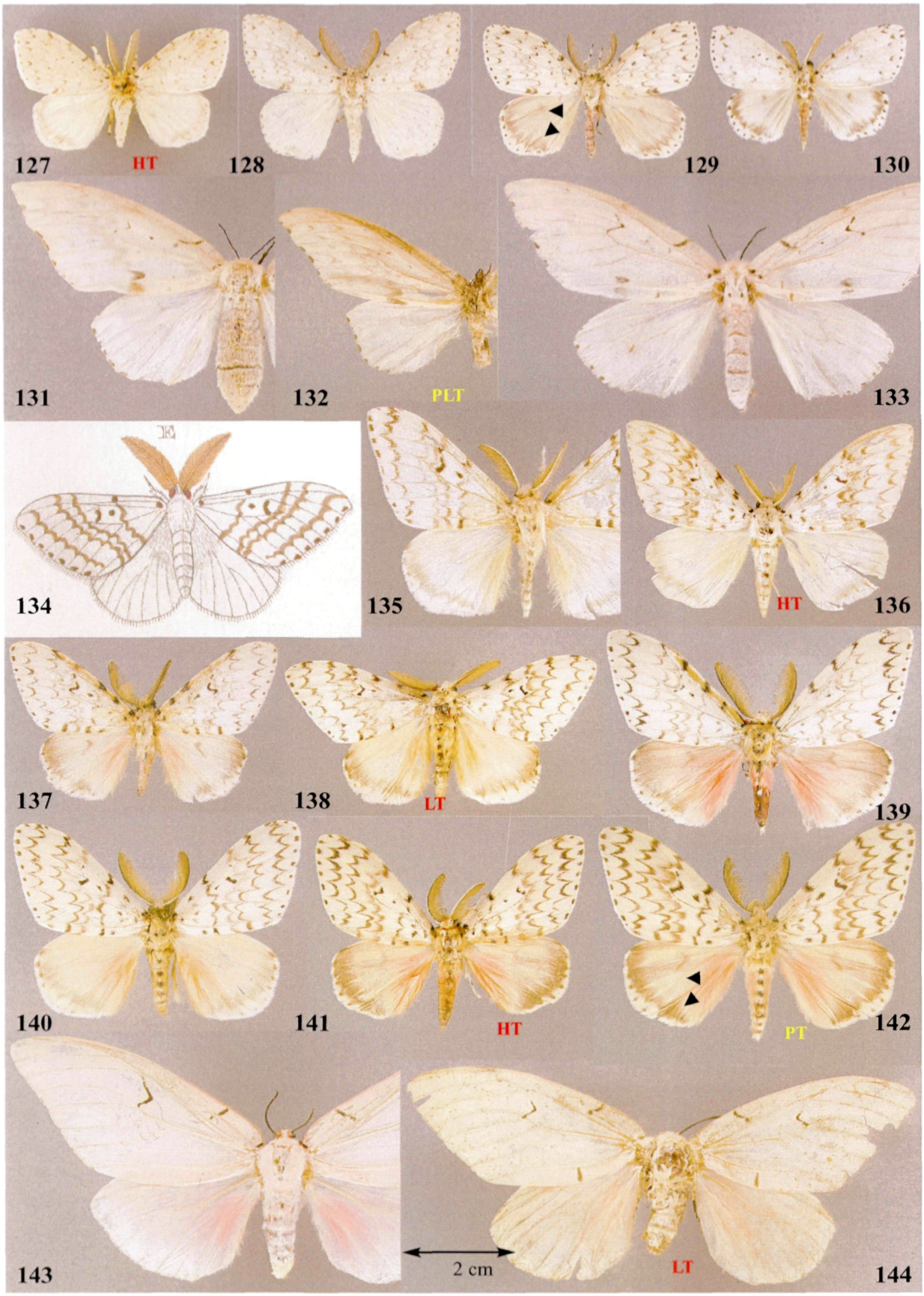
**Fig. 131:** *Lymantria* (*Porthetria*) *ganara ganara* MOORE, 1859 – ♀, Indonesia, Sumatra.
**Fig. 132:** *Lymantria* (*Porthetria*) *ganara ganara* MOORE, 1859 – ♀, Indonesia, Java (Paralectotype of *Lymantria brunneiplaga* SWINHOE, 1903).
**Fig. 133:** *Lymantria* (*Porthetria*) *ganara xiaolingensis* CHAO, 1985 – ♀, N. Vietnam.

**Fig. 134:** *Lymantria* (*Porthetria*) *brotea brotea* (STOLL, 1781) – ♂, pl. 322E, from the original description by STOLL 1781.
**Fig. 135:** *Lymantria* (*Porthetria*) *brotea brotea* (STOLL, 1781) – ♂, Indonesia, Java.
**Fig. 136:** *Lymantria* (*Porthetria*) *brotea brotea* (STOLL, 1781) – ♂, Singapore; Neotype of *brotea* (Holotype of *Lymantria galinara* SWINHOE, 1903).

**Fig. 137:** *Lymantria* (*Porthetria*) *brotea brotea* (STOLL, 1781) – ♂, Indonesia, Sumatra (individual form).
**Fig. 138:** *Lymantria* (*Porthetria*) *brotea lepcha* MOORE, 1879 – ♂, N.India, Darjeeling, Lectotype.
**Fig. 139:** *Lymantria* (*Porthetria*) *brotea lepcha* MOORE, 1879 – ♂, Thailand.

**Fig. 140:** *Lymantria* (*Porthetria*) *brotea lepcha* MOORE, 1879 – ♂, N. India, Sikkim.
**Fig. 141:** *Lymantria* (*Porthetria*) *brotea rudloffi* **ssp.n.** – ♂, India, Andaman Isl., Holotype.
**Fig. 142:** *Lymantria* (*Porthetria*) *brotea rudloffi* **ssp.n.** – ♂, India, Andaman Isl., Paratype.

**Fig. 143:** *Lymantria* (*Porthetria*) *brotea brotea* (STOLL, 1781) – ♀, Indonesia, Sumatra.
**Fig. 144:** *Lymantria* (*Porthetria*) *brotea lepcha* MOORE, 1879 – ♀, N. India, Darjeeling, (Lectotype of *Barhona carneola* MOORE, 1879).



**Figs. 145-159:** next page

**Fig. 145:** *Lymantria* (*Porthetria*) *ascetria* HÜBNER, [1819] – ♂, pl. 178: 1, from the original description by HÜBNER 1819.
**Fig. 146:** *Lymantria* (*Porthetria*) *ascetria* HÜBNER, [1819] – ♂, Indonesia, Java.
**Fig. 147:** *Lymantria* (*Porthetria*) *ascetria* HÜBNER, [1819] – ♂, Indonesia, Java.
**Fig. 148:** *Lymantria* (*Porthetria*) *ascetria* HÜBNER, [1819] – ♀, Indonesia, Java (Holotype of *Dasychira antica* WALKER, 1856).
**Fig. 149:** *Lymantria* (*Porthetria*) *ascetria* HÜBNER, [1819] – ♂, pl. 178: 3, from the original description by HÜBNER 1819.
**Fig. 150:** *Lymantria* (*Porthetria*) *ascetria* HÜBNER, [1819] – ♂, Indonesia, Java.
**Fig. 151:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♂, Thailand, ex ovo.
**Fig. 152:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♂, Myanmar, Holotype.
**Fig. 153:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♂, Thailand.
**Fig. 154:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♂, Thailand.
**Fig. 155:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♀, Thailand.
**Fig. 156:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♀, Myanmar.
**Fig. 157:** *Lymantria* (*Porthetria*) *praetermissa* COLLENETTE, 1933 – ♂, Indonesia, Java, Holotype.
**Fig. 158:** *Lymantria* (*Porthetria*) *brotea lepcha* MOORE, 1879 – ♀, N. Vietnam.
**Fig. 159:** *Lymantria* (*Porthetria*) *praetermissa* COLLENETTE, 1933 – ♂, Indonesia, Java.

## *Lymantria* (*Porthetria*) *sapaensis* KISHIDA, 1998: 211, figs. 1, 3

(Figs. 13, 198, 199, 202, 259)

**Holotype:** Vietnam, Lao Cai Prov., Sa Pa – National Science Museum, Tokyo [photograph examined].

**Taxonomy:** *Lymantria sapaensis* is the sister species of *narindra* and differs in the males by the rather greyish ground colour of the forewings with weaker developed black markings. The female lacks the fuscous apical spot on the forewings as seen in *narindra*. The black pattern of the forewings is reduced.

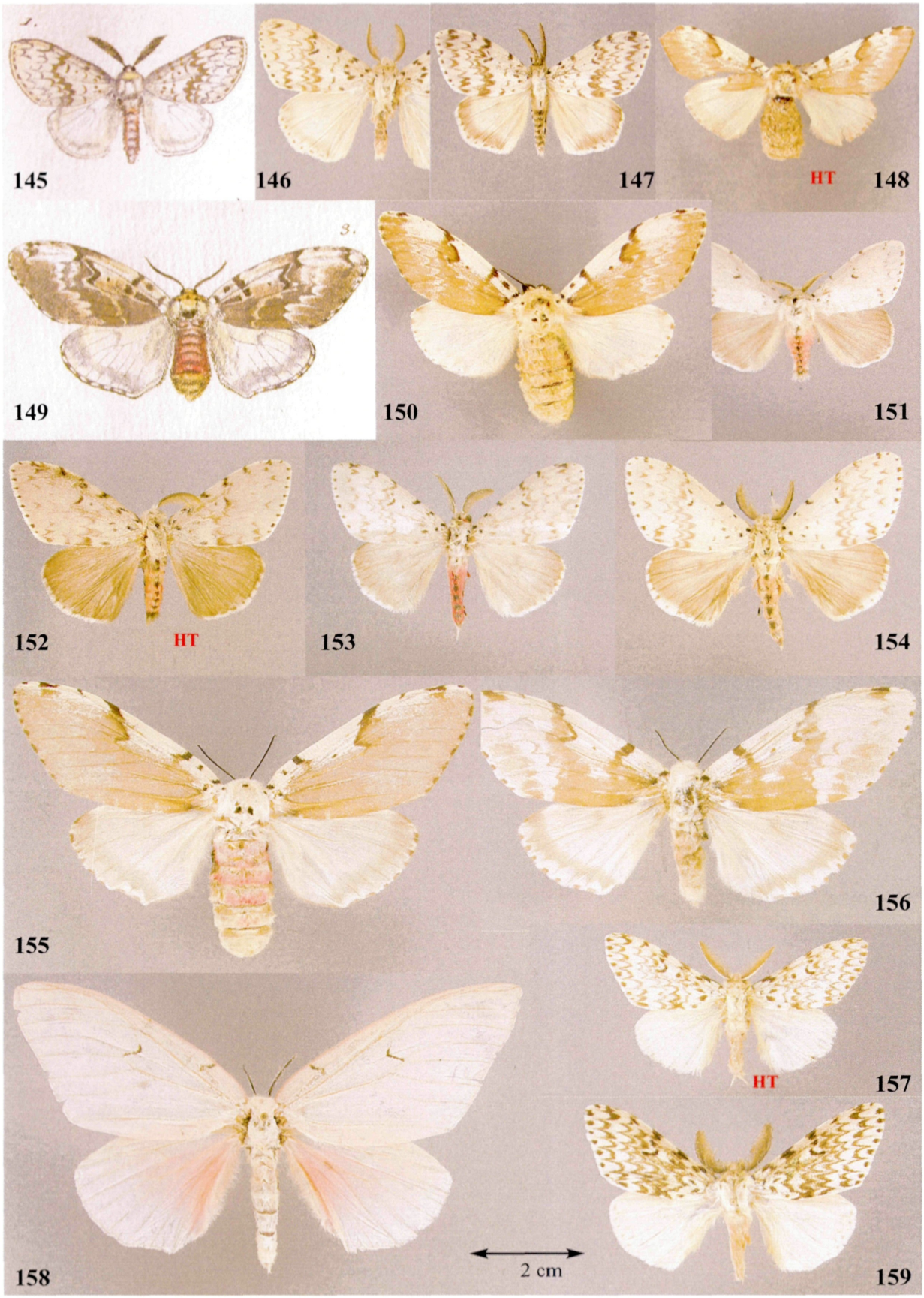
**Male genitalia** (Fig. 259): The male genitalia are characterized by the shorter valve processes, the long and pointed sacculus and the long and slender aedeagus.

## *Lymantria (Porthetria) kishidai* sp.n.

(Figs. 13, 200, 203, 204, 260)

**Holotype:** ♂, Indonesia, Flores, prov. Nusa tenggara Timur, Gunung Ranaka, 3km S Mano (18km SE Ruteng), Prim. forest, 1270m, 17.-21.iv.96, leg. Dr. Ronald Brechlin – in coll. A. Schintlmeister, Dresden.
**Paratypes** (10♂♂, 1♀): Flores: 2♂♂, Gunung Ranaka, 3km S Mano (18km SE Ruteng), Prim. forest, 1270m, 17.-21.iv.96; 1♂, Ranggawatu, Telekom Station, 33km E Labuhanbajo, 900m, 13.iv.1996; 6♂♂, 1♀, 7km south of Ruteng, Golo Lusang, 1750m, 20.ix.-1.x.1992; 17.x.1995, 4.xi.1995, 23.xi.1995; 1♂, 9km S Kuleng, Golo Luseng, 1820m, 27.ii.-9.iii.1992, (GU 20-31).

**Diagnosis:** Forewing length ♂♂ 31-38 mm, the ♀ spans 56 mm. The species externally resembles *sapaensis*. Particularly the ground colour of the forewings of the males is very similar. The markings on the forewings are more strongly developed than in *sapaensis* but less contrasting than in *narindra*. The doubled postmedian fascia is particularly prominent near the dorsum of the forewings. The sexual dimorphic female differs from the females of *narindra* and *sapaensis* by the well marked submarginal fascia on the forewings.



**Male genitalia** (Fig. 260): The male genitalia are similar to *narindra* but the valve process is shorter and rather pointed.

**Further remarks:** Known only from Flores, but probably wider distributed than other endemic species of the Lesser Sunda Islands.

**Etymology:** Dedicated to Yasunori Kishida, Tokyo, for his constant help with the Notodontidae and Lymantriidae over the last 25 years.

## *Lymantria* (*Porthetria*) *paukstadti* sp.n.

(Figs. 13, 205, 206, 261)

**Holotype:** ♂, Indonesia, isl. Timor, prov. NTT, Fatumnasi SE slopes Gg. Mutis, 1720m, 24.iv.-27.iv.1993 leg. U. Paukstadt – in coll. A. Schintlmeister, Dresden.
**Paratypes:** 19♂♂, 1♀, Timor, Fatumnasi SE slopes Gg. Mutis, 1720m, 24.iv.-27.iv.1993 (GU 20-32).

**Diagnosis:** Forewing length ♂♂ 36-44 mm, the ♀ spans 54 mm. The ground colour of all wings and the body is a greyish brown and the forewings are more elongated than in the related *narindra* or *kishidai* sp.n. The pattern resembles *kishidai* sp.n., though the submarginal fascia is more prominently developed. The fuscous hindwings are without a pale fringe as in the other 3 species belonging to this group. The sexual dimorphic female somewhat resembles the female of *kishidai* sp.n. but with a much darker colour. The abdomen in the male and the female is fuscous brown, mixed slightly with pink scales. In *kishidai* sp.n. the abdomen in both sexes is a prominent pinkish colour as in *narindra* or *sapaensis*.

**Male genitalia** (Fig. 261): The male genitalia differ from *kishidai* sp.n. by the long and curved valve process, the pointed sacculus and the long and slender aedeagus.

**Further remarks:** *Lymantria paukstadti* sp.n. is without a doubt closely related to *L. kishidai* sp.n. from Flores. Endemic to Timor.

**Etymology:** Named in honour of Mr. U. Paukstadt, Wilhelmshavn, who has provided me over the years with very valuable material, particularly from several smaller Indonesian Islands.

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**Figs. 160-176:** next page

**Fig. 160:** *Lymantria* (*Porthetria*) *loacana* SEMPER, 1898 – ♂, Philippines, N. Luzon.
**Fig. 161:** *Lymantria* (*Porthetria*) *loacana* SEMPER, 1898 – ♂, Philippines, N. Luzon.
**Fig. 162:** *Lymantria* (*Porthetria*) *loacana* SEMPER, 1898 – ♀, Philippines, N. Luzon.
**Fig. 163:** *Lymantria* (*Porthetria*) *diehli* SCHINTLMEISTER, 1994 – ♂, Indonesia, N. Sumatra, Holotype.
**Fig. 164:** *Lymantria* (*Porthetria*) *diehli* SCHINTLMEISTER, 1994 – ♂, Indonesia, N. Sumatra, Paratype.
**Fig. 165:** *Lymantria* (*Porthetria*) *diehli* SCHINTLMEISTER, 1994 – ♂, Indonesia, N. Sumatra, Paratype.
**Fig. 166:** *Lymantria* (*Porthetria*) *diehli* SCHINTLMEISTER, 1994 – ♀, Indonesia, N. Sumatra.
**Fig. 167:** *Lymantria* (*Porthetria*) *diehli* SCHINTLMEISTER, 1994 – ♀, Indonesia, N. Sumatra.
**Fig. 168:** *Lymantria* (*Porthetria*) *brunneiplaga* SWINHOE, 1903 – ♂, Indonesia, Java, Holotype.
**Fig. 169:** *Lymantria* (*Porthetria*) *brunneiplaga* SWINHOE, 1903 – ♂, Indonesia, Sumatra.
**Fig. 170:** *Lymantria* (*Porthetria*) *brunneiplaga* SWINHOE, 1903 – ♂, Indonesia, Sumatra.
**Fig. 171:** *Lymantria* (*Porthetria*) *brunneiplaga* SWINHOE, 1903 – ♂, Malaysia, Borneo.
**Fig. 172:** *Lymantria* (*Porthetria*) *orestera* COLLENETTE, 1932 – ♂, W. Malaysia, Holotype.
**Fig. 173:** *Lymantria* (*Porthetria*) *orestera* COLLENETTE, 1932 – ♂, W. Malaysia.
**Fig. 174:** *Lymantria* (*Porthetria*) *orestera* COLLENETTE, 1932 – ♂, Thailand.
**Fig. 175:** *Lymantria* (*Porthetria*) *orestera* COLLENETTE, 1932 – ♀, Vietnam.
**Fig. 176:** *Lymantria* (*Porthetria*) *brunneiplaga* SWINHOE, 1903 – ♀, Philippines, Negros.

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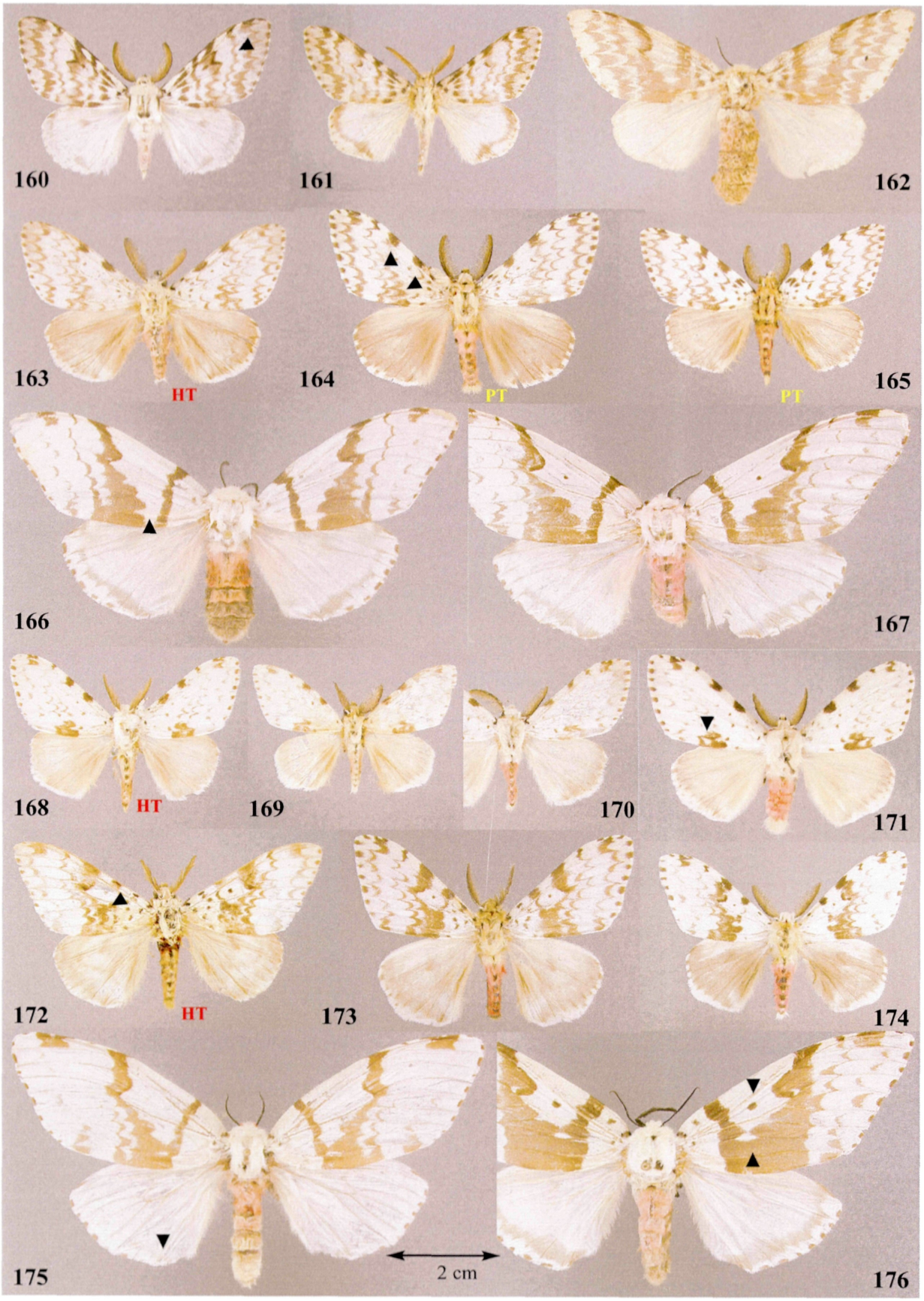


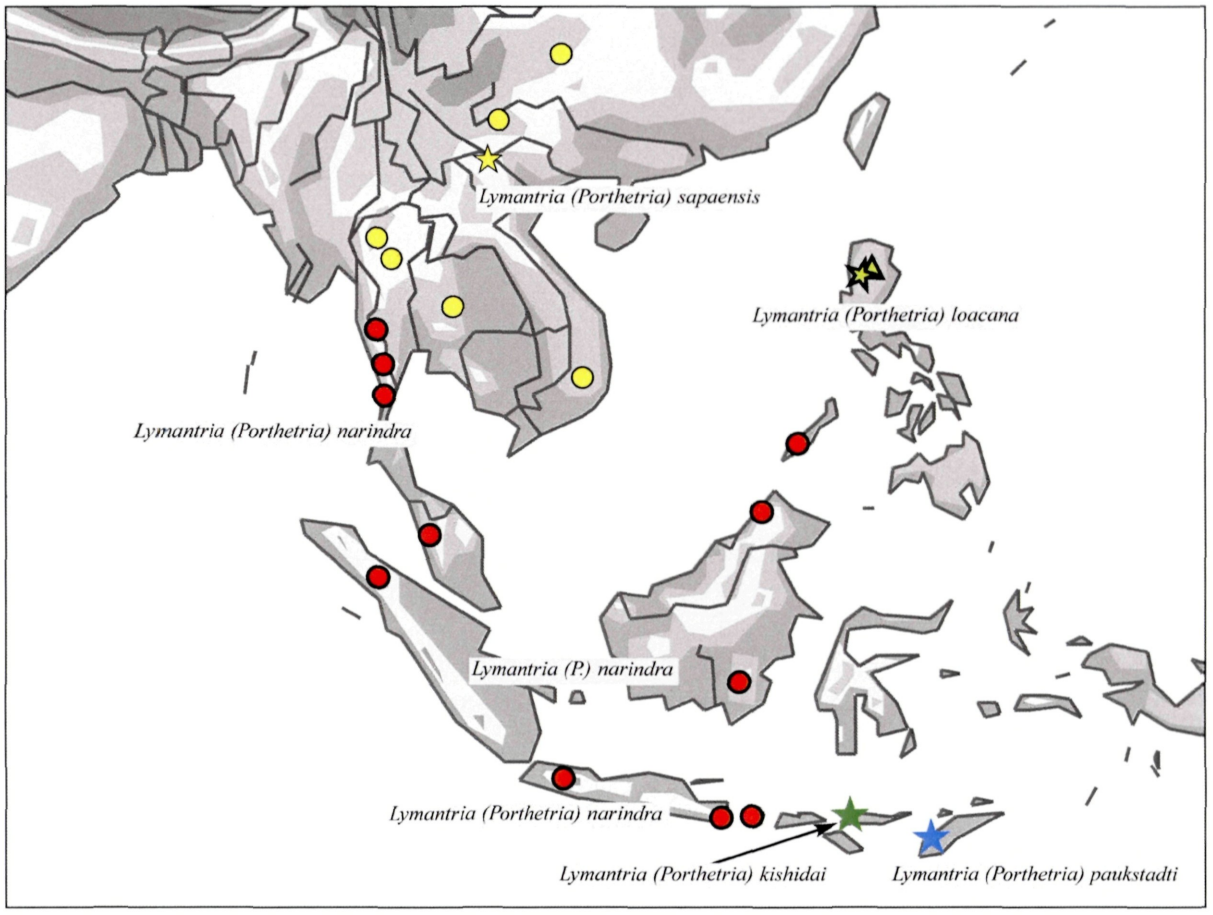
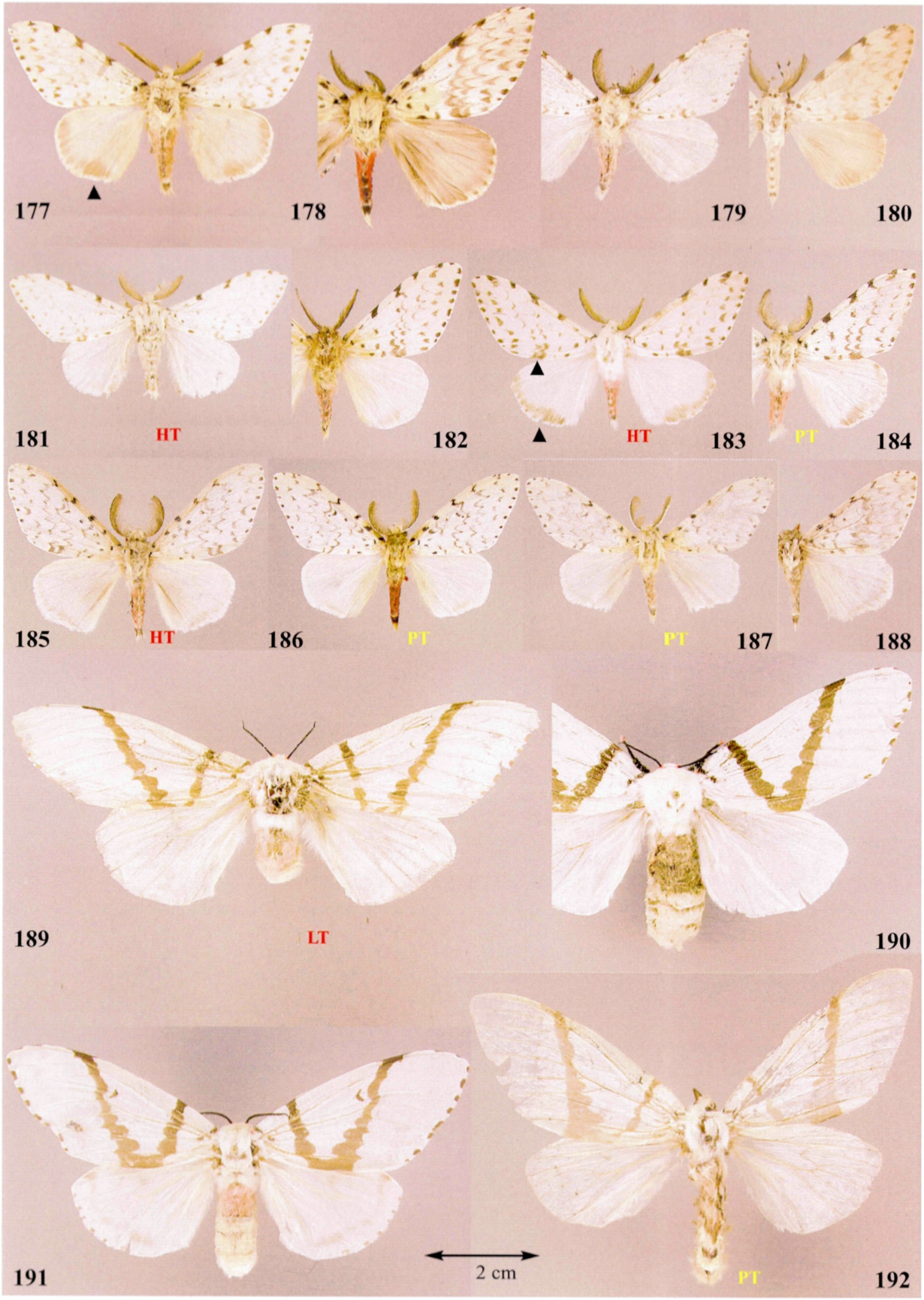



**Fig. 13:** Distribution of the subgenus *Porthetria*.

**Figs. 177-192:** next page

**Fig. 177:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♂, N. India, Darjeeling, "Neallotype".
**Fig. 178:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♂, form, N. India, Assam.
**Fig. 179:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♂, form, S. Vietnam.
**Fig. 180:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♂, form (? ssp.), India, Andaman Isl.
**Fig. 181:** *Lymantria* (*Porthetria*) *bivittata marginalis* WALKER, 1862 – ♂, Borneo, Holotype.
**Fig. 182:** *Lymantria* (*Porthetria*) *bivittata marginalis* WALKER, 1862 – ♂, Indonesia, Sumatra.
**Fig. 183:** *Lymantria* (*Porthetria*) *bivittata roseoides* **ssp.n.** – ♂, Philippines, Mindanao, Holotype.
**Fig. 184:** *Lymantria* (*Porthetria*) *bivittata roseoides* **ssp.n.** – ♂, Philippines, Mindoro Paratype.
**Fig. 185:** *Lymantria* (*Porthetria*) *rikiosatoi* **sp.n.** – ♂, Indonesia, Lesser Sunda Isls., Sumba, Holotype.
**Fig. 186:** *Lymantria* (*Porthetria*) *rikiosatoi* **sp.n.** – ♂, Indonesia, Lesser Sunda Isls., Lombok, Paratype.
**Fig. 187:** *Lymantria* (*Porthetria*) *rikiosatoi* **sp.n.** – ♂, Indonesia, Lesser Sunda Isls., Sumbawa, Paratype.
**Fig. 188:** *Lymantria* (*Porthetria*) *rikiosatoi* **sp.n.** – ♂, Indonesia, Timor.
**Fig. 189:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♀, N. India, Darjeeling, Lectotype.
**Fig. 190:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♀, S. Thailand.
**Fig. 191:** *Lymantria* (*Porthetria*) *bivittata marginalis* WALKER, 1862 – ♀, Indonesia, Sumatra.
**Fig. 192:** *Lymantria* (*Porthetria*) *bivittata roseoides* **ssp.n.** – ♀, Philippines, Negros, Paratype.



## SPECIES INCERTAE SEDIS

### *Lymantria nephrographa* TURNER, 1915: 23

(Figs. 207-209, 262, 264)

**Holotype:** Australia, Queensland, Mt. Tambourine – [not examined].

**Synonym:**

*Lymantria mjöbergi* AURIVILLIUS, 1920: 27, Taf. 1: 1. – Holotype: Australia, Queensland, Mount Tambourine [not examined].

**Taxonomy:** The species is unmistakable by the forewing pattern ranging from reddish-brown to blackish-brown. The shape of the quadrangular hindwings resembles rather a *Dura* MOORE-species than a *Lymantria*-species.

**Genitalia** (Figs. 262, 264): The male genitalia are characterized by the shape of the valves without costal processes.

**Further remarks:** *Lymantria nephrographa* does very probably not belong to the subgenus *Porthetria*. Besides the external differences also the male genitalia show no valve process, which is characteristic for *Porthetria*. Due to lack of material it is actually not possible to fix the systematic position.

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**Figs. 193-199:** next page

**Fig. 193:** *Lymantria* (*Porthetria*) *narindra* MOORE, 1859 – ♀, Indonesia, Java, Holotype.
**Fig. 194:** *Lymantria* (*Porthetria*) *narindra* MOORE, 1859 – ♂, Philipppines, Palawan.

**Fig. 195:** *Lymantria* (*Porthetria*) *narindra* MOORE, 1859 – ♂, Indonesia, Bali.
**Fig. 196:** *Lymantria* (*Porthetria*) *narindra* MOORE, 1859 – ♀, S. Myanmar.
**Fig. 197:** *Lymantria* (*Porthetria*) *sapaensis* KISHIDA, 1998 – ♂, N. Vietnam.

**Fig. 198:** *Lymantria* (*Porthetria*) *sapaensis* KISHIDA, 1998 – ♀, N. Vietnam.
**Fig. 199:** *Lymantria* (*Porthetria*) *sapaensis* KISHIDA, 1998 – ♂, S. China, Guizhou.

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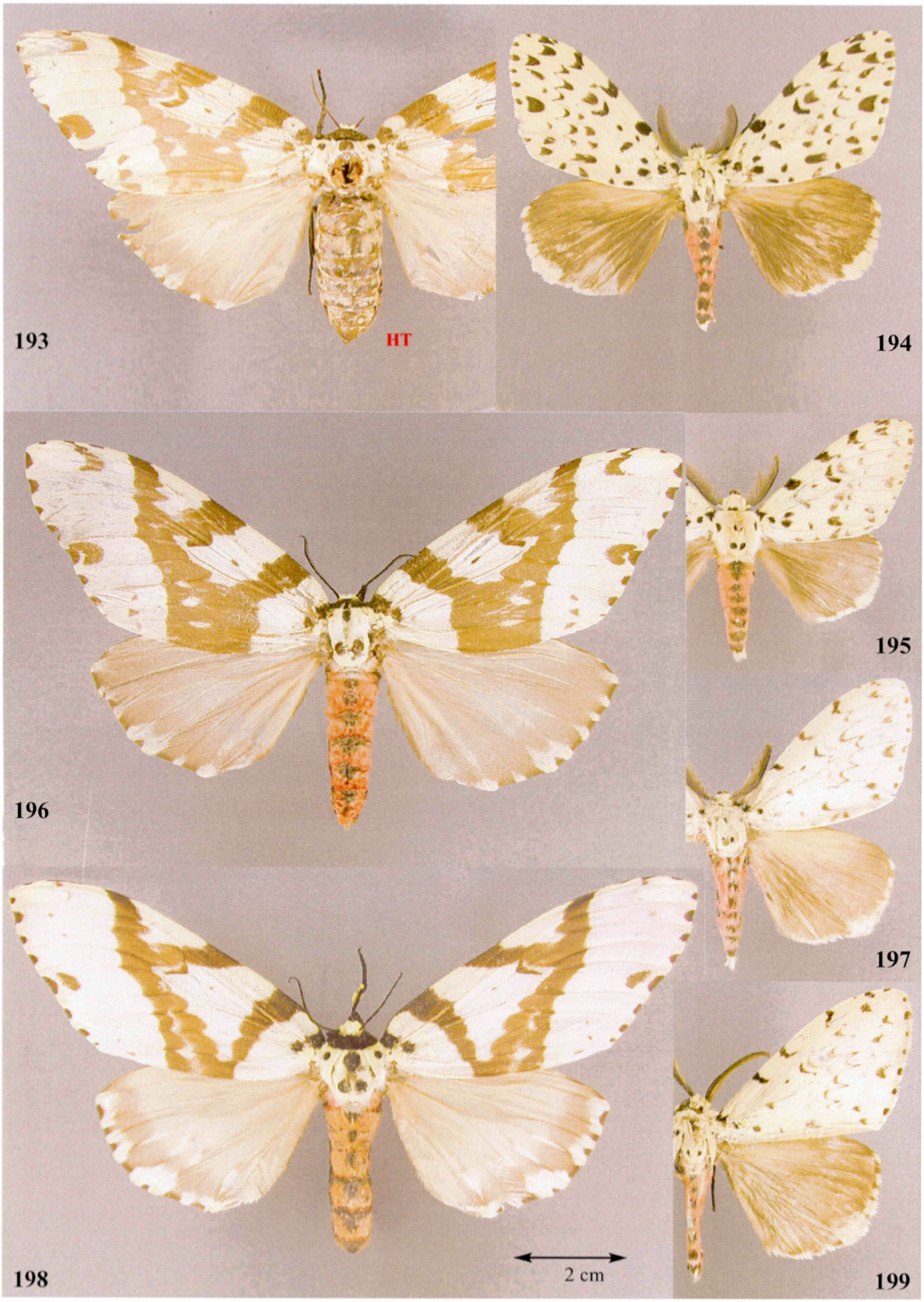


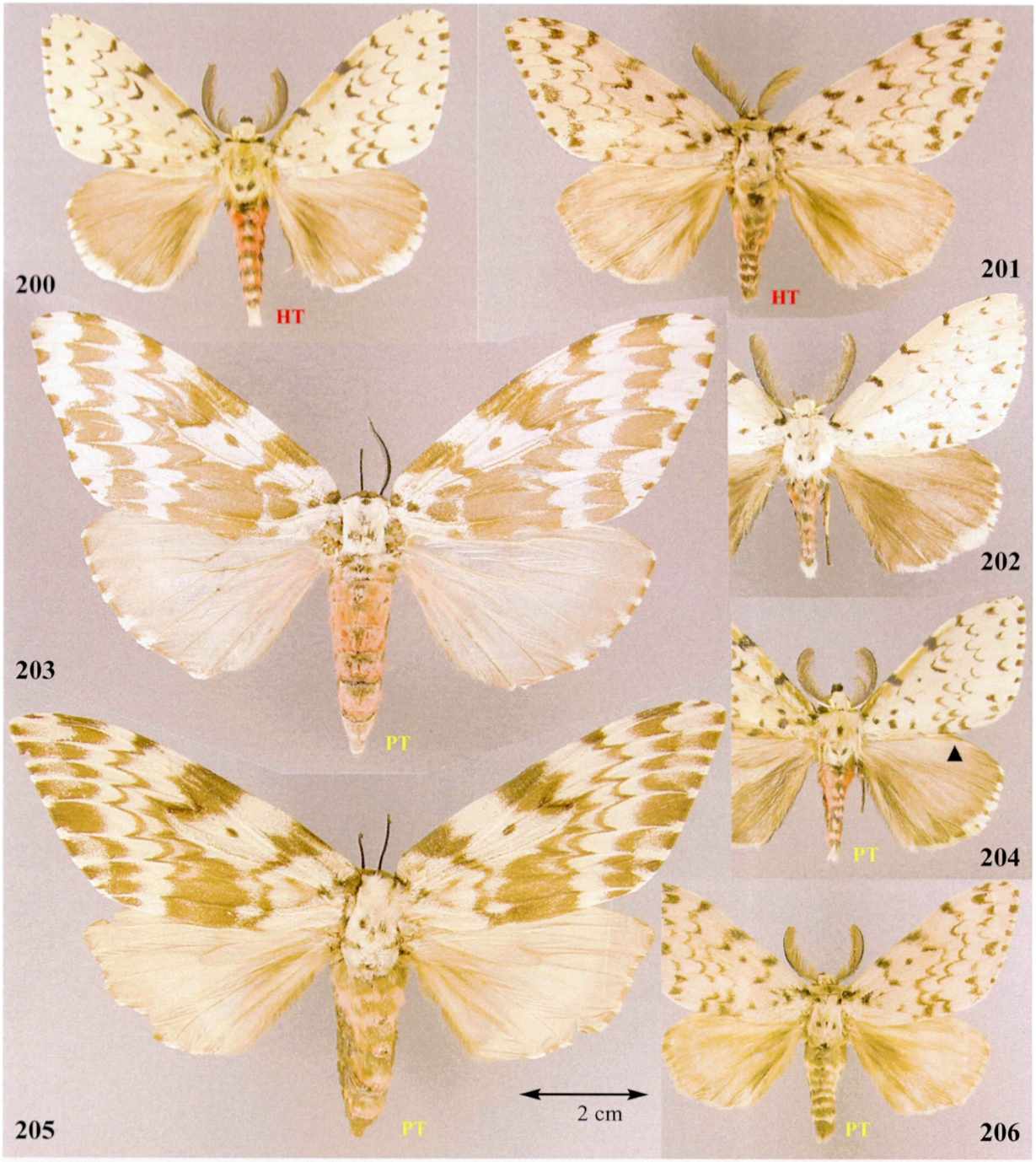
**Figs. 200-209:** next page

**Fig. 200:** *Lymantria* (*Porthetria*) *kishidai* **sp.n.** – ♂, Indonesia, Flores, Holotype.
**Fig. 201:** *Lymantria* (*Porthetria*) *paukstadti* **sp.n.** – ♂, Indonesia, Timor, Holotype.

**Fig. 202:** *Lymantria* (*Porthetria*) *sapaensis* KISHIDA, 1998 – ♂, S. China, Yunnan.
**Fig. 203:** *Lymantria* (*Porthetria*) *kishidai* **sp.n.** – ♀, Indonesia, Flores, Paratype.
**Fig. 204:** *Lymantria* (*Porthetria*) *kishidai* **sp.n.** – ♂, Indonesia, Flores, Paratype.

**Fig. 205:** *Lymantria* (*Porthetria*) *paukstadti* **sp.n.** – ♀, Indonesia, Timor, Paratype.
**Fig. 206:** *Lymantria* (*Porthetria*) *paukstadti* **sp.n.** – ♂, Indonesia, Timor, Paratype.

**Fig. 207:** *Lymantria nephrographa* TURNER, 1915 – ♂, Australia (Photo courtesy R. Ingram).
**Fig. 208:** *Lymantria nephrographa* TURNER, 1915 – ♂, Australia (Photo courtesy R. Ingram).
**Fig. 209:** *Lymantria nephrographa* TURNER, 1915 – ♂, Australia (Photo courtesy R. Ingram).

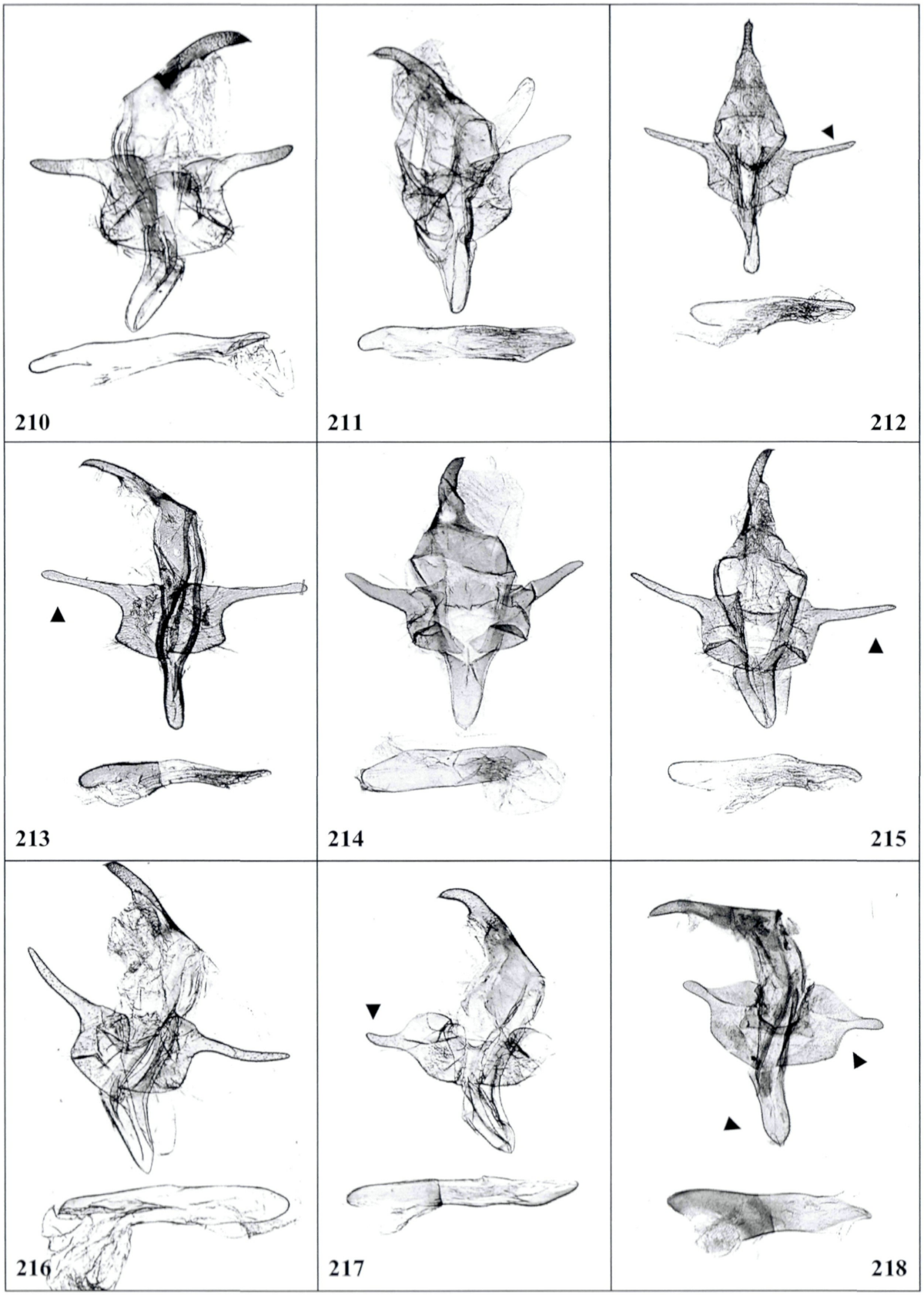



**Figs. 210-218:** next page

**Fig. 210:** *Lymantria* (*Porthetria*) *dispar dispar* (LINNAEUS, 1758) – ♂, China, Sichuan, GU 20-97.
**Fig. 211:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♂, NW India, Ladakh, GU 49-81.
**Fig. 212:** *Lymantria* (*Porthetria*) *schaeferi* **sp.n.** – ♂, China, Jiangxi, GU 62-07, Paratype.

**Fig. 213:** *Lymantria* (*Porthetria*) *albescens albescens* HORI & UEMO, 1930 – ♂, Japan, Okinawa, GU 62-24.
**Fig. 214:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – ♂, Taiwan, GU 62-43.
**Fig. 215:** *Lymantria* (*Porthetria*) *xylina nobunaga* NAGANO, 1912 – ♂, Japan, Honshu, GU 04-12a.

**Fig. 216:** *Lymantria* (*Porthetria*) *apicebrunnea* GAEDE, 1932 – ♂, China, Yunnan, GU 20-100.
**Fig. 217:** *Lymantria* (*Porthetria*) *ampla* (WALKER, 1855) – ♂, S. India, GU 20-93.
**Fig. 218:** *Lymantria* (*Porthetria*) *aryama* MOORE, 1859 – ♂, S. India, GU 20-29.

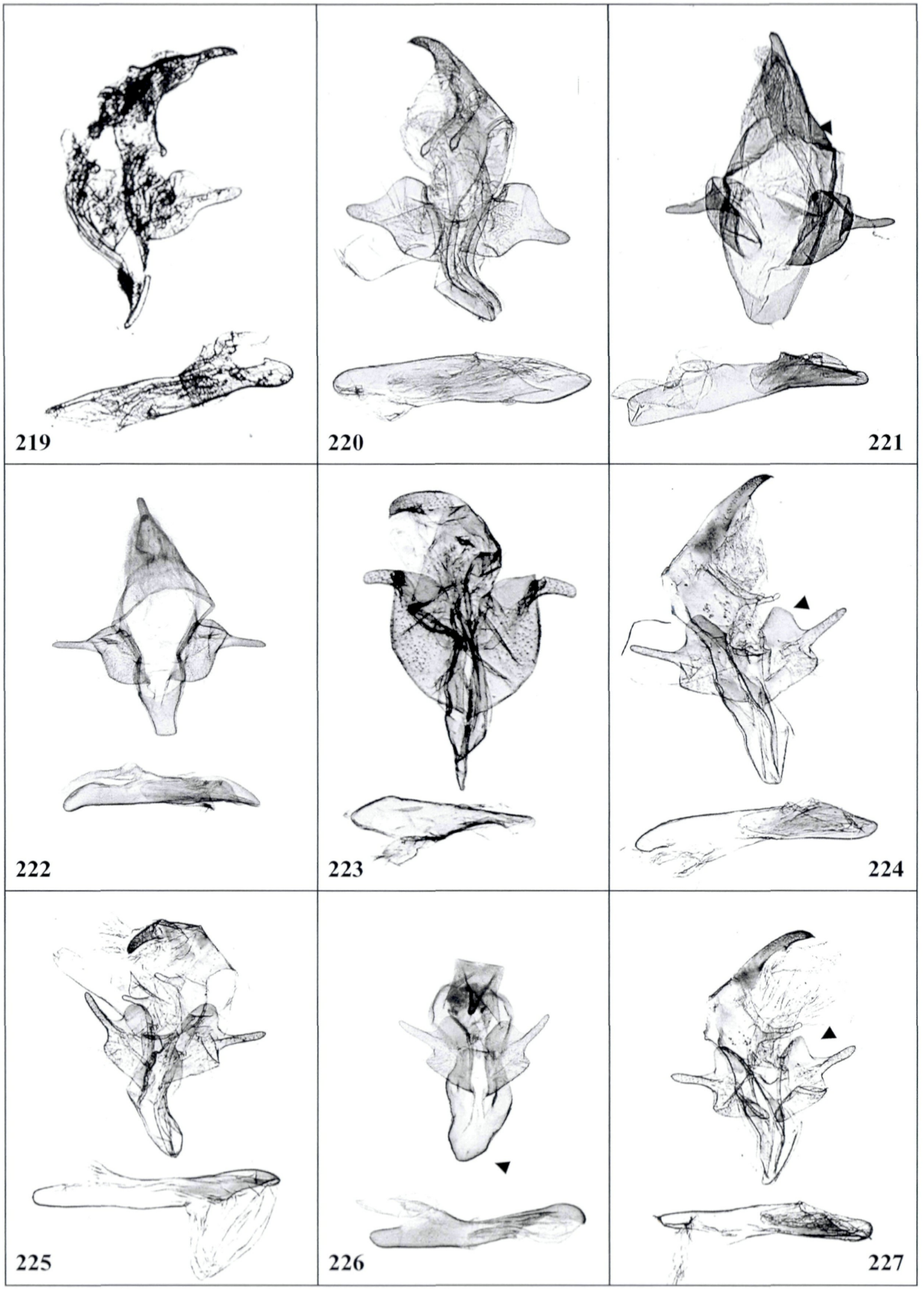


**Figs. 219-227:** next page

**Fig. 219:** *Lymantria* (*Porthetria*) *detersa* WALKER, 1865 – ♂, S. India, Mhow, BM 06/2003.
**Fig. 220:** *Lymantria* (*Porthetria*) *costalis* WALKER, 1865 – ♂, – Sri Lanka, GU 49-80.
**Fig. 221:** *Lymantria* (*Porthetria*) *antennata* WALKER, 1855 – ♂, Australia, Queensland, Magnetic Isl., GU 60-65.

**Fig. 222:** *Lymantria* (*Porthetria*) *pelospila* (TURNER, 1915) – ♂, N. Australia (Photo courtesy R. Ingram).
**Fig. 223:** *Lymantria* (*Porthetria*) *speideli* **sp.n.** – ♂, Philipppines, Mindanao, Paratype, GU 20-92.
**Fig. 224:** *Lymantria* (*Porthetria*) *lunata lunata* (STOLL, 1782) – ♂, Indonesia, Ambon, GU 20-99.

**Fig. 225:** *Lymantria* (*Porthetria*) *lunata ingrami* **ssp.n.** – ♂, Indonesia, Irian Jaya, Biak Isl., Paratype, GU 20-96.
**Fig. 226:** *Lymantria* (*Porthetria*) *lunata diversa* TURNER, 1936 – ♂, Australia, Queensland (Photo courtesy R. Ingram).
**Fig. 227:** *Lymantria* (*Porthetria*) *lunata carteri* **ssp.n.** – ♂, Indonesia, Moluccas, Bacan Isl., Paratype, GU 37-81.



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**Figs. 228-236:** next page

**Fig. 228:** *Lymantria* (*Porthetria*) *lunata curvifera* WALKER, 1866 – ♂, Philippines, Mindanao, GU 37-96.
**Fig. 229:** *Lymantria* (*Porthetria*) *sphalera sphalera* COLLENETTE, 1930 – ♂, Papua New Guinea, New Ireland, BM 22/2003.
**Fig. 230:** *Lymantria* (*Porthetria*) *sphalera tennhardae* **ssp.n.** – ♂, Papua New Guinea, Salomon Isl., Paratype, GU BM 20/2003.

**Fig. 231:** *Lymantria* (*Porthetria*) *sphalera akemiae* **ssp.n.** – ♂, Papua New Guinea, Admirality Isl., Paratype.
**Fig. 232:** *Lymantria* (*Porthetria*) *monoides* COLLENETTE, 1932 – ♂, Papua New Guinea, New Hannover, BM 20/2003.
**Fig. 233:** *Lymantria* (*Porthetria*) *buruensis buruensis* COLLENETTE, 1933 – ♂, Indonesia, Buru Isl., Paratype, BM 19/2003.

**Fig. 234:** *Lymantria* (*Porthetria*) *buruensis celebesa* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi, GU 20-98.
**Fig. 235:** *Lymantria* (*Porthetria*) *behouneki* **sp.n.** – ♂, Indonesia, Halmahera, Paratype, GU 50-20.
**Fig. 236:** *Lymantria* (*Porthetria*) *novaguineensis* BETHUNE-BAKER, 1904 – ♂, Indonesia, Irian Jaya, GU 20-94.

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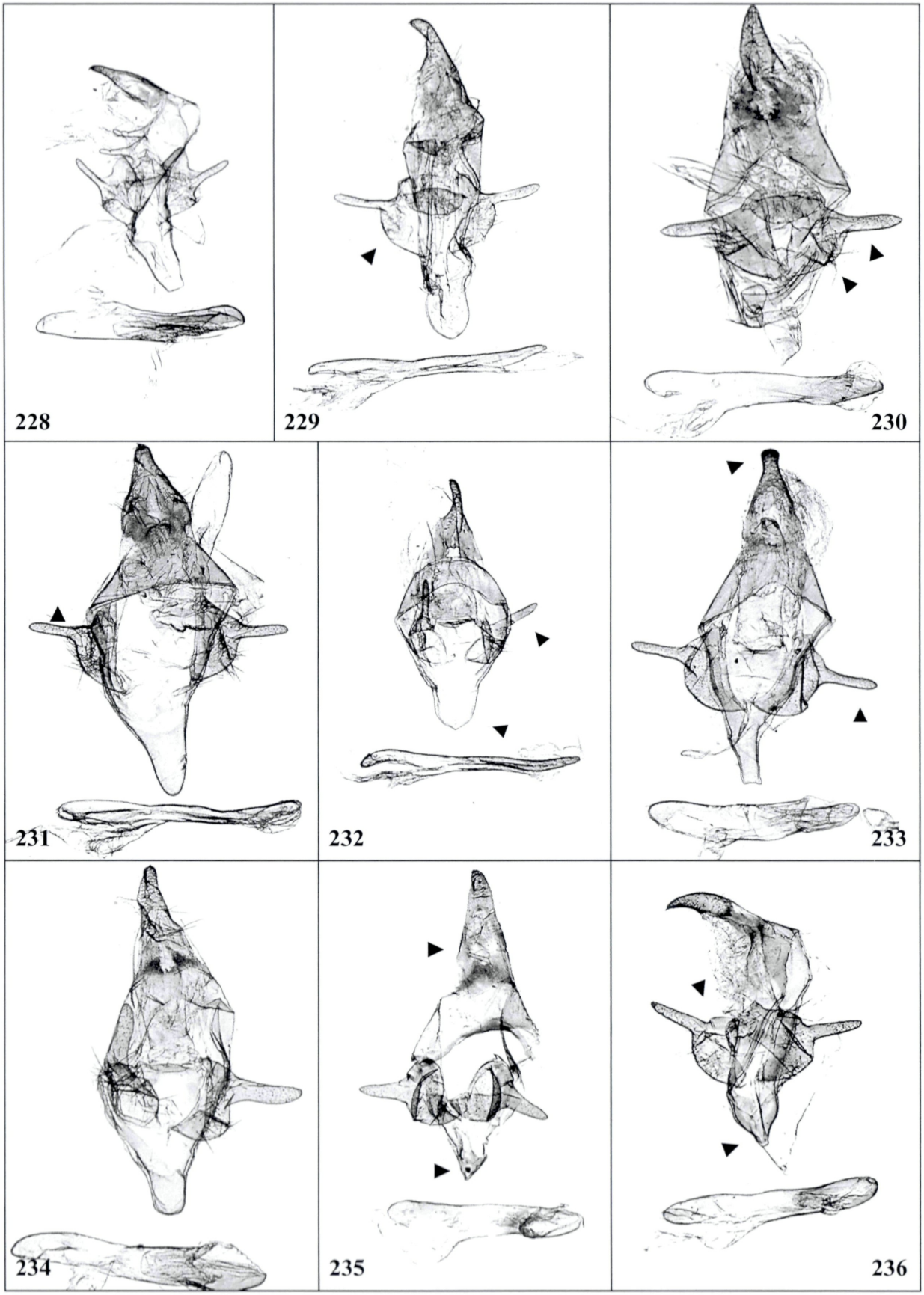

**Figs. 237-245:** next page

**Fig. 237:** *Lymantria* (*Porthetria*) *novaguineensis* BETHUNE-BAKER, 1904 – ♂, Papua New Guinea, GU 37-100.
**Fig. 238:** *Lymantria* (*Porthetria*) *rosina* PAGENSTECHER, 1900 – ♂, Papua New Guinea, New Britain, W 9164.
**Fig. 239:** *Lymantria* (*Porthetria*) *doreyensis* COLLENETTE, 1933 – ♂, Indonesia, Irian Jaya, Nabire, GU 37-80.

**Fig. 240:** *Lymantria* (*Porthetria*) *pagenstecheri* **sp.n.** – ♂, Indonesia, Irian Jaya, Arfak Mts., Paratype, BM 25/2003.
**Fig. 241:** *Lymantria* (*Porthetria*) *ganara ganara* MOORE, 1859 – ♂, Indonesia, Sumatra, GU 62-11.
**Fig. 242:** *Lymantria* (*Porthetria*) *ganara xiaolingensis* CHAO, 1985 – ♂, N. Vietnam, GU 50-38.

**Fig. 243:** *Lymantria* (*Porthetria*) *brotea brotea* (STOLL, 1781) – ♂, Indonesia, Mindanao, GU 50-32.
**Fig. 244:** *Lymantria* (*Porthetria*) *brotea lepcha* MOORE, 1879 – ♂, S. Vietnam, GU 50-34.
**Fig. 245:** *Lymantria* (*Porthetria*) *brotea rudloffi* **ssp.n.**– ♂, India, Andaman Isl., Paratype, GU 60-29.

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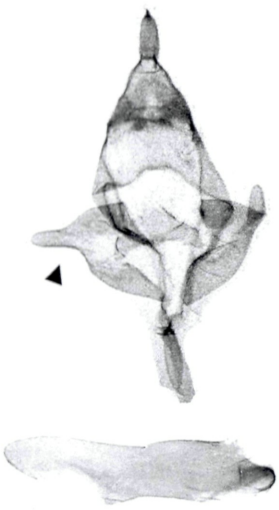

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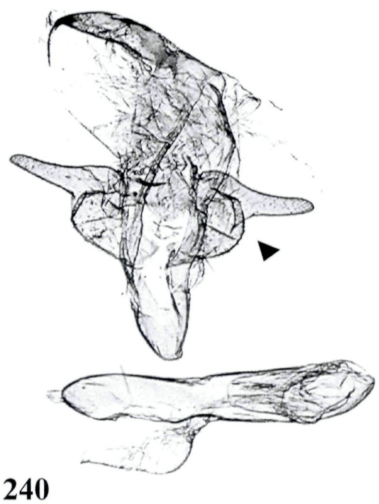

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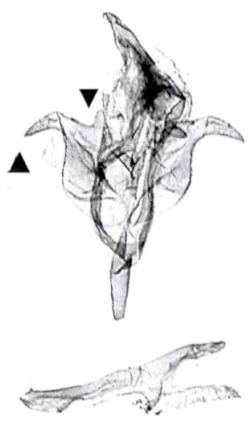

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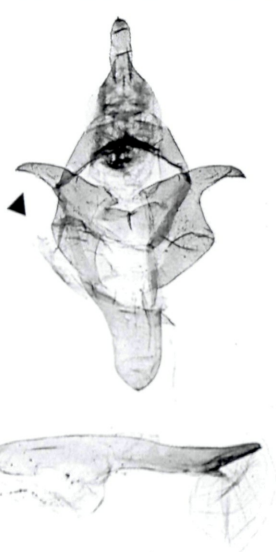

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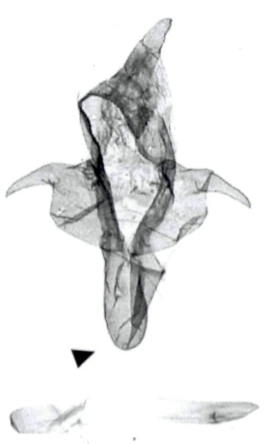

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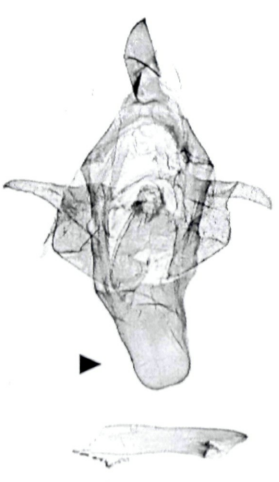

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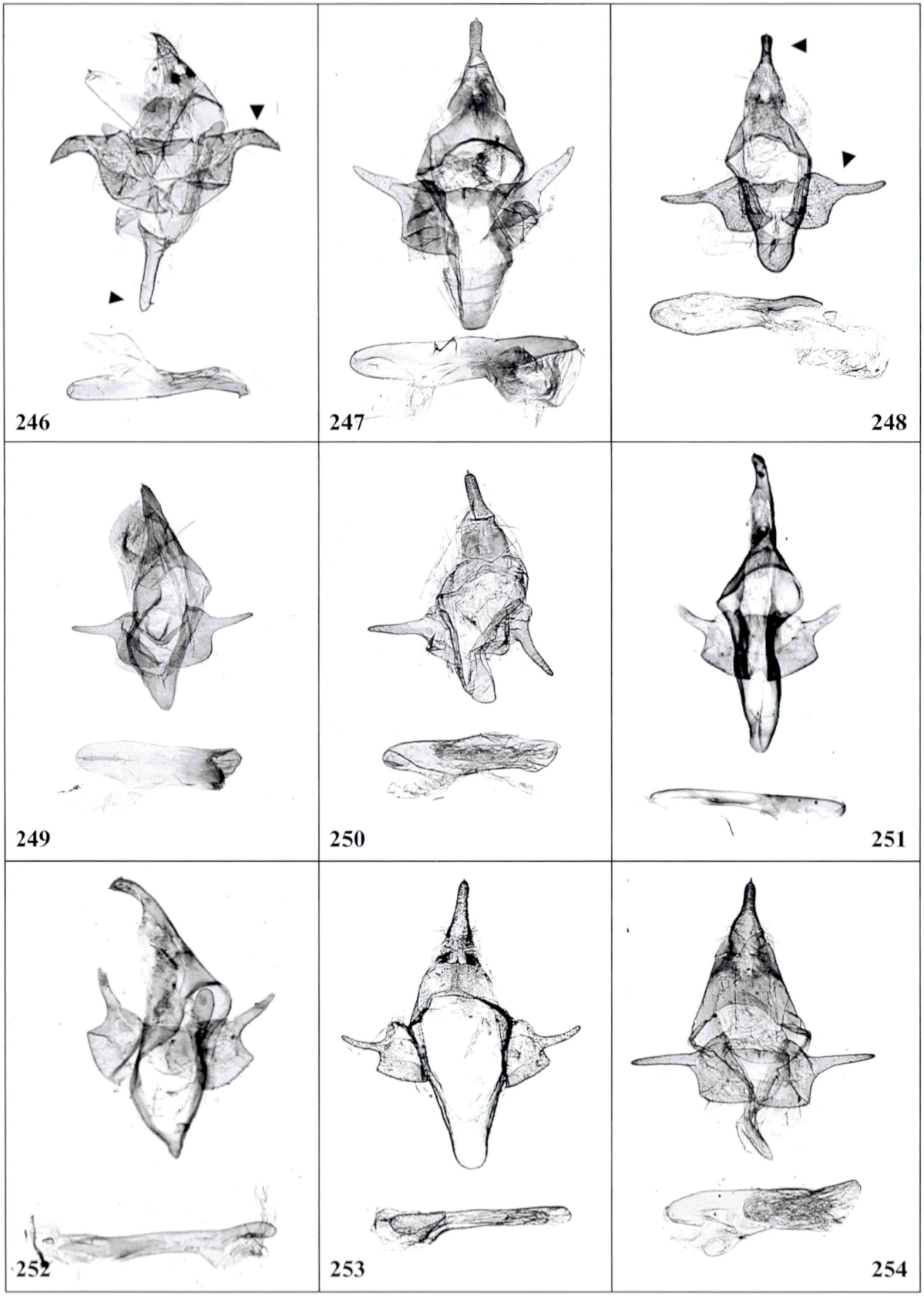
**Figs. 246-254:** next page

**Fig. 246:** *Lymantria* (*Porthetria*) *grigorievi* **sp.n.** – ♂, India, Andaman Isl., Paratype, GU 20-67a.
**Fig. 247:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♂, Thailand, GU 50-40.
**Fig. 248:** *Lymantria* (*Porthetria*) *ascetria* HÜBNER [1819] – ♂, Indonesia, Java, GU 62-05.

**Fig. 249:** *Lymantria* (*Porthetria*) *loacana* SEMPER, 1898 – ♂, Philippines, N. Luzon, GU 50-31.
**Fig. 250:** *Lymantria* (*Porthetria*) *praetermissa* COLLENETTE, 1933 – ♂, Indonesia, Java, GU 11-59a.
**Fig. 251:** *Lymantria* (*Porthetria*) *brunneiplaga* SWINHOE, 1903 – ♂, Indonesia, Sumatra, Nias Isl., GU 01-50a.

**Fig. 252:** *Lymantria* (*Porthetria*) *diehli* SCHINTLMEISTER, 1994 – ♂, Indonesia, N. Sumatra, Paratype, GU BM 1948.
**Fig. 253:** *Lymantria* (*Porthetria*) *orestera* COLLENETTE, 1932 – ♂, Thailand, GU 62-06.
**Fig. 254:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♂, N. India, Assam GU 35-92a.



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**Figs. 255-262:** next page

**Fig. 255:** *Lymantria* (*Porthetria*) *bivittata roseoides* **ssp.n.** – ♂, Philippines, Negros, Paratype, GU 50-05.
**Fig. 256:** *Lymantria* (*Porthetria*) *rikiosatoi* **sp.n.** – ♂, Indonesia, Lesser Sunda Isls., Sumbawa, Paratype, GU 60-90.
**Fig. 257:** *Lymantria* (*Porthetria*) *rikiosatoi* **sp.n.** – ♂, Indonesia, Timor, GU 20-79a.

**Fig. 258:** *Lymantria* (*Porthetria*) *narindra* MOORE, 1859 – ♂, Indonesia, Sumatra, GU 01-60.
**Fig. 259:** *Lymantria* (*Porthetria*) *sapaensis* KISHIDA, 1998 – ♂, N. Vietnam, GU 62-12.
**Fig. 260:** *Lymantria* (*Porthetria*) *kishidai* **sp.n.** – ♂, Indonesia, Flores, Paratype, GU 62-10.

**Fig. 261:** *Lymantria* (*Porthetria*) *paukstadti* **sp.n.** – ♂, Indonesia, Timor, Paratype, GU 20-32.
**Fig. 262:** *Lymantria nephrographa* TURNER, 1915 – ♂, Australia (Photo courtesy R. Ingram).

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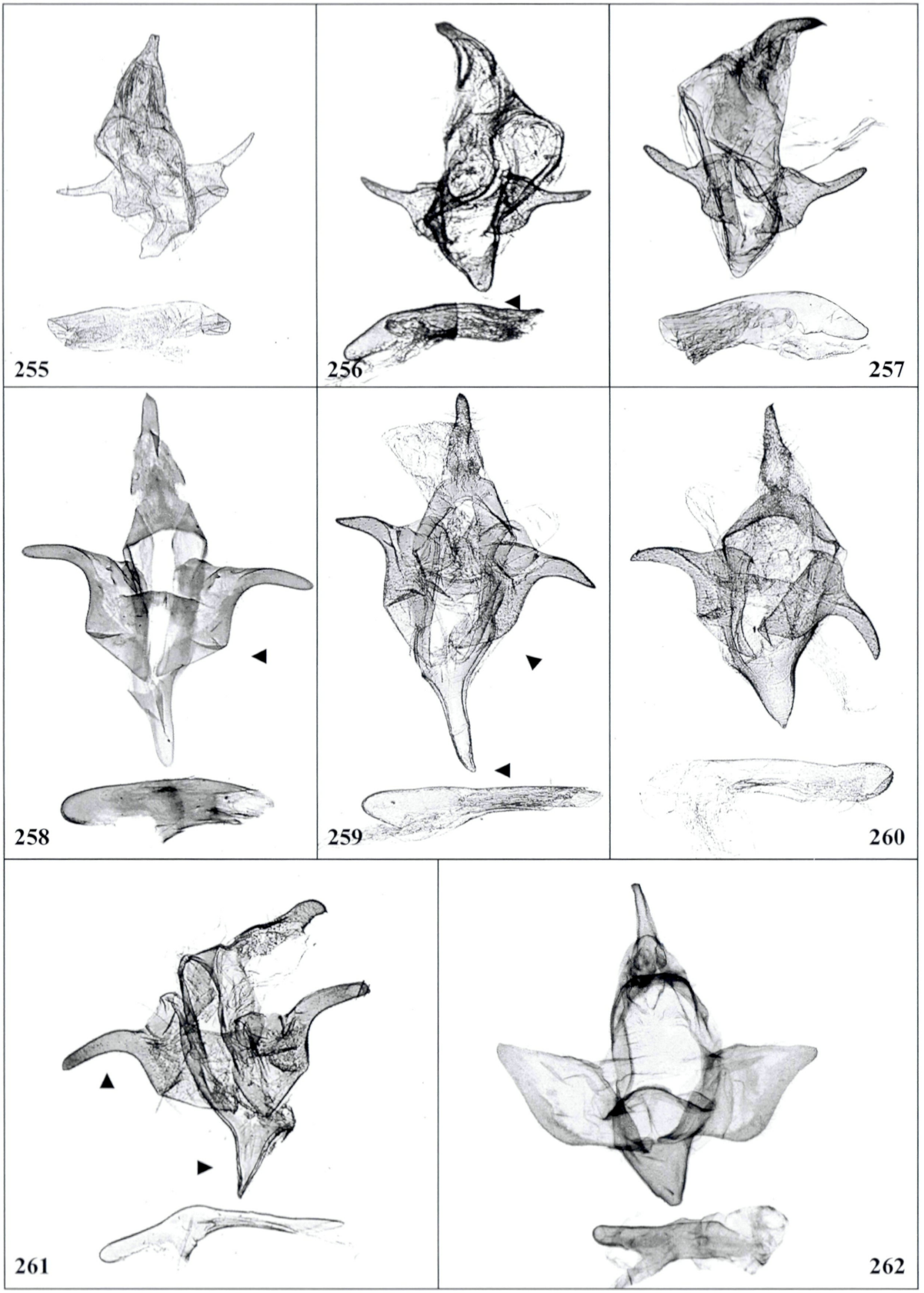
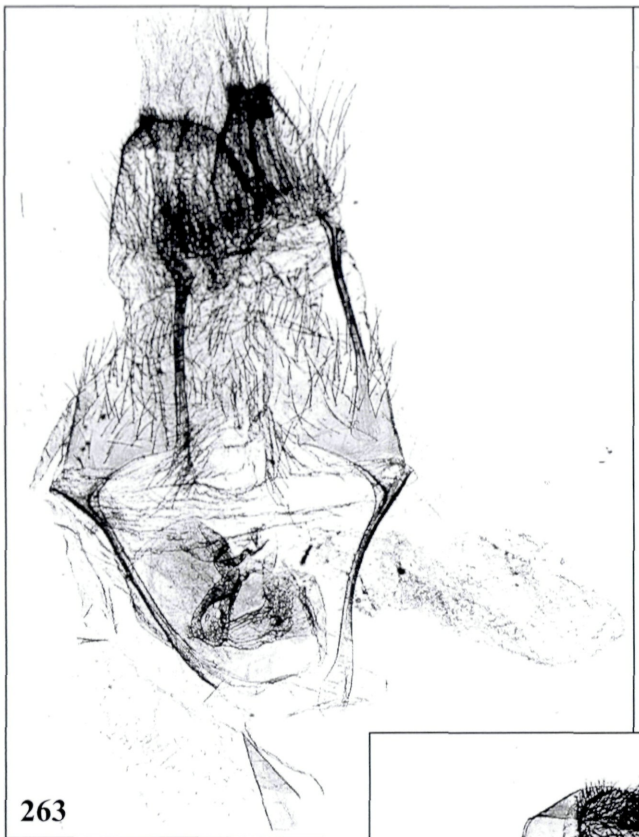


**Figs. 263-269:** next page

**Fig. 263:** *Lymantria* (*Porthetria*) *dispar dispar* (LINNAEUS, 1758) – ♀, N. Korea, GU 62-02.
**Fig. 264:** *Lymantria nephrographa* TURNER, 1915 – ♀, Australia (Photo courtesy R. Ingram).

**Fig. 265:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♀, NW. India, Ladakh, GU 62-03.

**Fig. 266:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♀, N. Vietnam GU 50-15.
**Fig. 267:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♀, Thailand, GU 49-100.
**Fig. 268:** *Lymantria* (*Porthetria*) *orestera* COLLENETTE, 1932 – ♀, N.Vietnam, GU 50-03.
**Fig. 269:** *Lymantria* (*Porthetria*) *ganara ganara* MOORE, 1859 – ♀, Indonesia, Sumatra, GU 50-37.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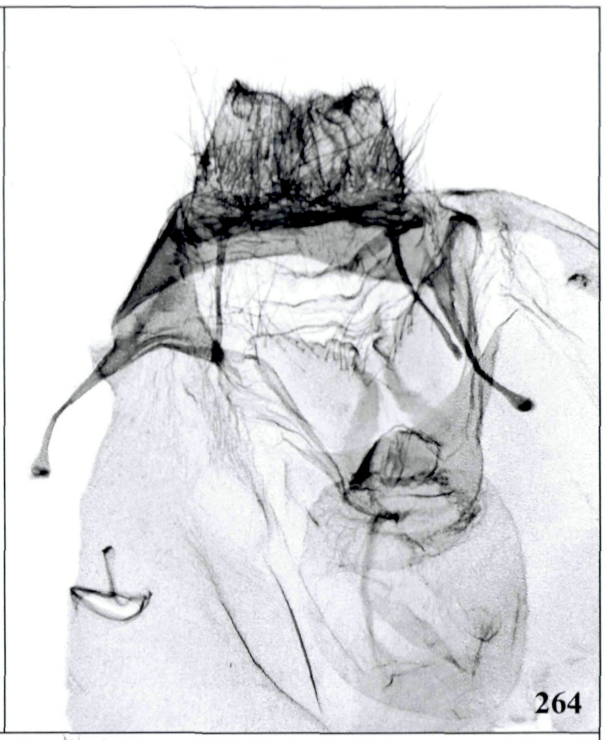
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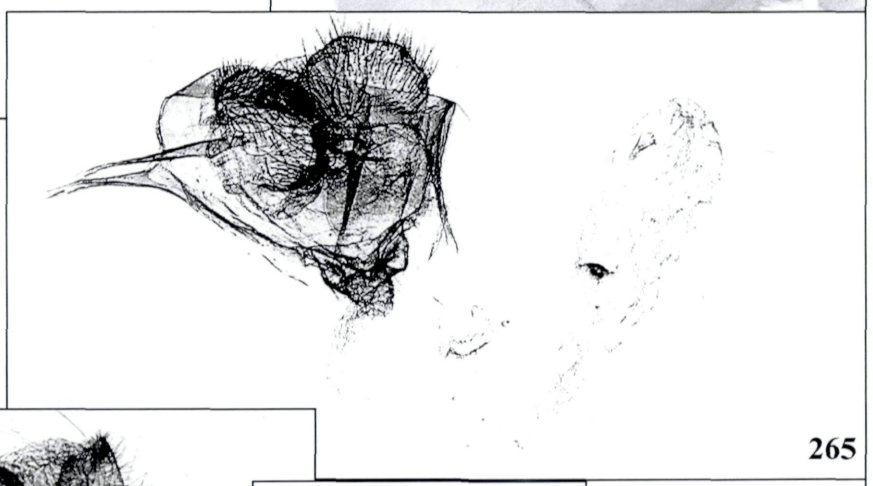
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# The subgenus *Papuatria* subgen.n.

## *Lymantria* (*Papuatria*) *ninayi* BETHUNE-BAKER, 1910: 447

(Figs. 270-272, 275, 279-281, 283)

**Holotype:** [Irian Jaya], Arfak Mountains., Ninay valley – BMNH, London [examined].

**Taxonomy:** This unmistakable species varies individually in the extension of the white areas on the wings. The strongly sexual dimorphic female resembles some females of *Porthetria*.

**Further remarks:** In Papua New Guinea the species is known as a pest of *Pinus patula* afforestations (ROBERTS 1979).

## *Lymantria* (*Papuatria*) *kebeae* BETHUNE-BAKER, 1904: 105, pl. 6: 22

(Figs. 270, 273, 274, 276-278, 282)

**Holotype:** [Papua] B.C. New Guinea, Mount Kebea – BMNH, London [examined].

**Taxonomy:** This unmistakable species varies individually much in the extension of the yellow areas on the wings. The probably strongly sexual dimorphic female is still unknown.

**Further remarks:** Both species, *ninayi* and *kebeae* occur often sympatrically.

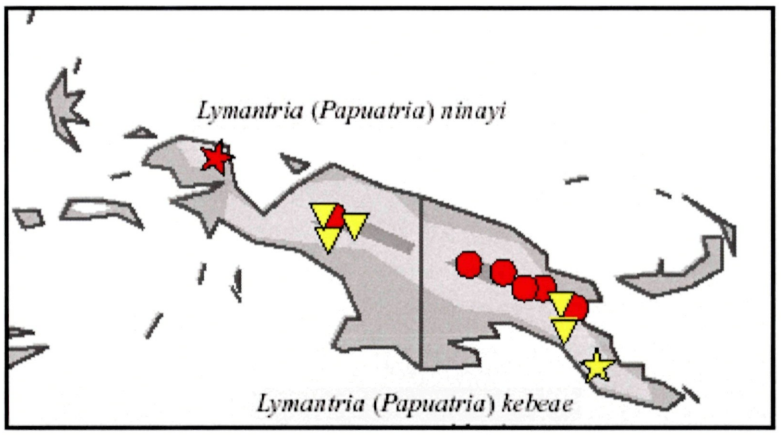
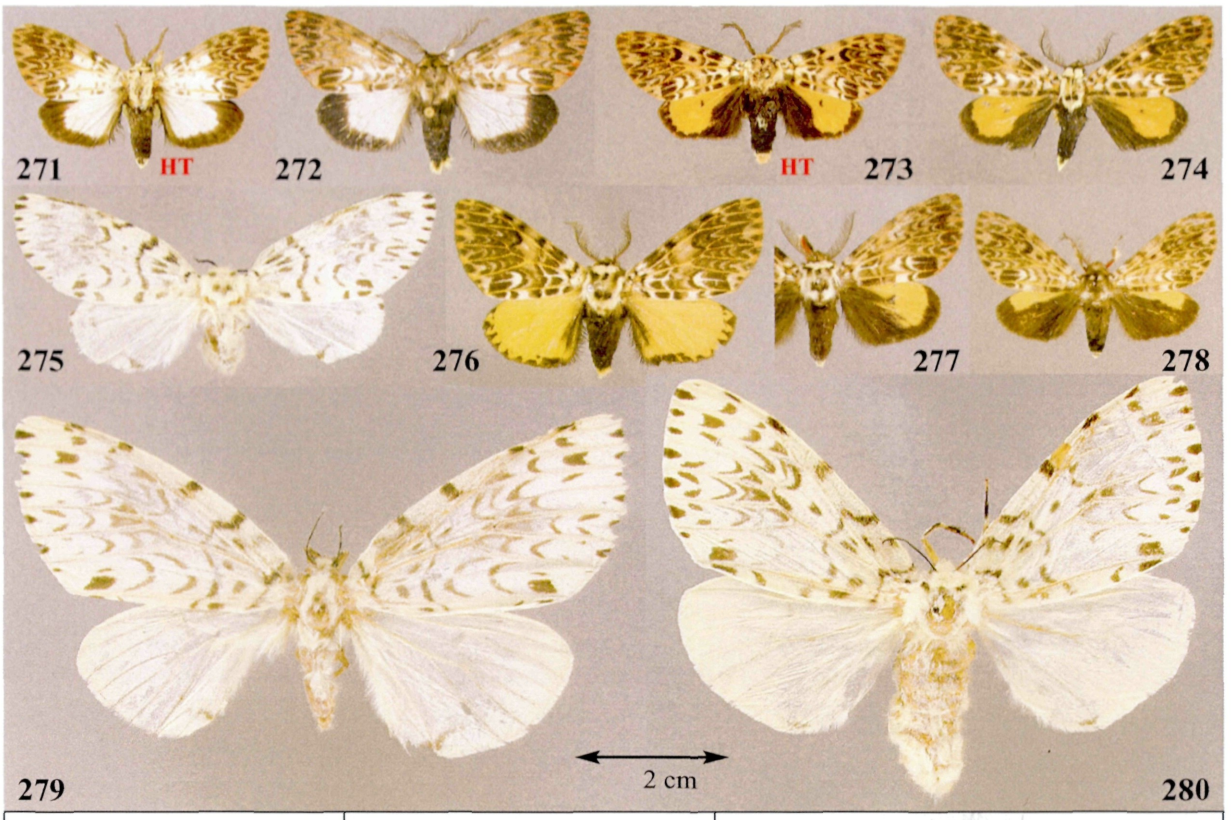



**Fig. 270:** Distribution of the subgenus *Papuatria*.



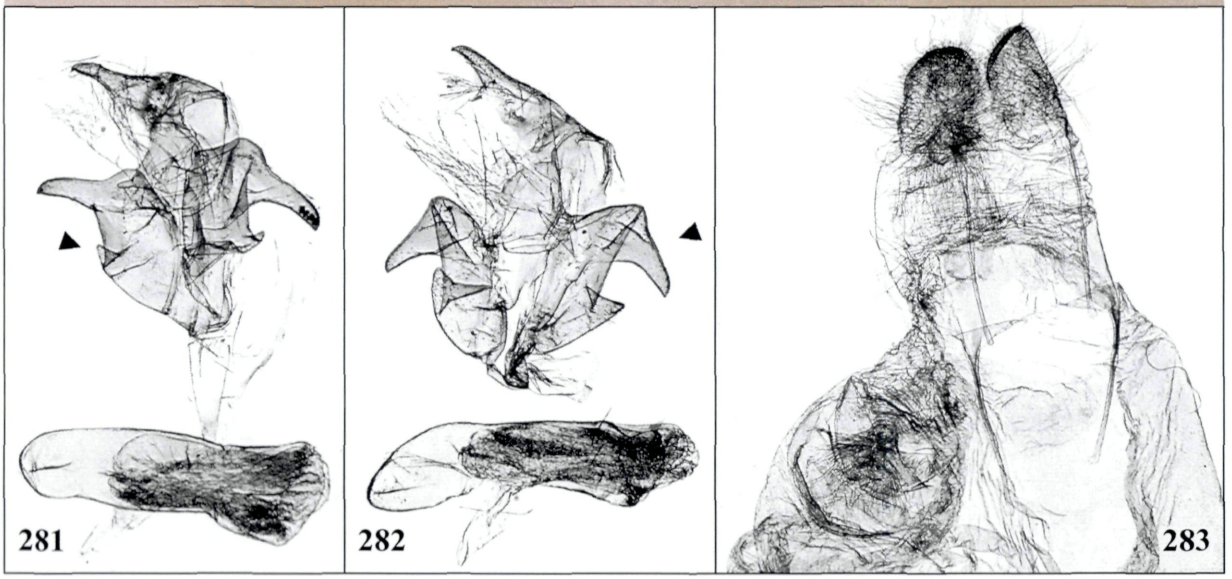




**Fig. 271:** *Lymantria* (*Papuatria*) *ninayi* – ♂, Papua New Guinea, Holotype;
**Fig. 272:** *Lymantria* (*Papuatria*) *ninayi* – ♂, Irian Jaya;
**Fig. 273:** *Lymantria* (*Papuatria*) *kebeae* – ♂, P. N. G., Holotype;
**Fig. 274:** *Lymantria* (*Papuatria*) *kebeae* – ♂, P. N. G.;
**Fig. 275:** *Lymantria* (*Papuatria*) *ninayi* – ♀, P. N. G.;
**Fig. 276:** *Lymantria* (*Papuatria*) *kebeae* – ♂, Irian Jaya;
**Fig. 277:** *Lymantria* (*Papuatria*) *kebeae* – ♂, P. N. G.;
**Fig. 278:** *Lymantria* (*Papuatria*) *kebeae* – ♂, P. N. G.;
**Fig. 279:** *Lymantria* (*Papuatria*) *ninayi* – ♀, P. N. G.;
**Fig. 280:** *Lymantria* (*Papuatria*) *ninayi* – ♀, P. N. G.;
**Fig. 281:** *Lymantria* (*Papuatria*) *ninayi* – ♂, Irian Jaya, GU 20-65a;
**Fig. 282:** *Lymantria* (*Papuatria*) *kebeae* – ♂, P. N. G., GU 20-64a;
**Fig. 283:** *Lymantria* (*Papuatria*) *ninayi* – ♀, P. N. G., GU 20-62a.

# The subgenus *Lymantria* HÜBNER, [1819]

## *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758): 501 (*Phalaena*)

(Figs. 284, 290-296, 311, 312, 429, 466)

**Holotype:** not stated, Europe – Linnean Society, London [not examined].

**Synonyms:**
*Noctua heteroclita* MÜLLER, 1764: 47.
Holotype: [Germany] [not examined].
*Bombyx monacha eremita* HÜBNER, 1804: f. 246.
Holotype: Lappland [not examined].
*Bombyx monacha nigra* FREYER, 1833: 5, pl. 98: 2.
Holotype: Germany, Augsburg [not examined].
*Psilura monacha transiens* MIEG, 1886: 236.
Holotype: Europe septentrionale [not examined].
*Lymantria monacha chosenibia* BRYK, 1949: 16, pl. 2: 11.
Holotype: Korea, Shuotsu – NMS, Stockholm [not examined].
*Lymantria monacha matuta* BRYK, 1949: 16, pl. 2: 3, pl. 3: 10.
Holotype: Korea, Chidisan – NMS, Stockholm [not examined].
*Lymantria monacha lateralis* BRYK, 1949: 17, pl. 3: 9.
Holotype: Korea, Motojondo – NMS, Stockholm [not examined].
*Lymantria monacha idae* BRYK, 1949: 17, pl. 3: 7.
Holotype: [Japan, Honshu], Kariuzewa [= Karuizewa] – NMS, Stockholm [not examined].
*Lymantria monacha neirai* AGENJO, 1959: 109.
Holotype: Spain [not examined].
*Lymantria monacha ceballosi* AGENJO, 1959: 110.
Holotype: Spain [not examined].

**Taxonomy:** There is a wide individual variation, including size. The blackish pattern on the forewings is also subject to variation. There are forms with reduced black pattern and totally melanic forms, which are genetically fixed as many breeding experiments by various entomologists have shown (e.g. Schadewald; material in the Phyletic Museum, Jena). Blackish specimens without white pattern are called f. *atra* LINSTOW, 1907. The taxa *nigra* and *eremita* are infrasubspecific intermediate forms as well. In Japan the melanic forms of *monacha* are still unknown. In southern Europe and Turkey the blackish forms are absent or rare.

A further remarkable infrasubspecific form is *subfusca* SCHULTZ, 1910, where brown scales replace the entire blackish pattern. This form is also genetically fixed as the breedings of Schadewald have shown (pers. comm. 1972 – reared material in longer series in the Phyletic Museum, Jena and in my collection). However, it seems that *subfusca* is found rarely in the wild.

From Japan there are individuals with contrasting forewings and yellowish hindwings which somewhat resemble *todara*. In my collection there is one male from Hokkaido, and another male is illustrated in INOUE (1982: pl. 152, fig. 7). Such forms are hitherto unknown outside of Japan.

Apart from the individual forms, I was not able to find significant geographic variation. Specimens from the Far East tend to be somewhat larger and less contrasting in pattern of the wings. Such specimens are from Primorye (Russia), N. Korea (GU 20-87) and a single specimen originates from Shaanxi, Dabashan (GU 20-86).

BRYK (1949) described several "subspecies" from Korea and Japan. I have not dissected the type material but according to the descriptions given by him and his illustrations of the type specimens, these forms are part of the individual variation of *monacha* and will therefore all be synonymized.

**Male genitalia** (Fig. 429, 466): The male genitalia are diagnostic by their sharp pointed uncus.

**Further remarks:** The species occurs in Europe as well as Korea and Japan but rarely in Middle Asia e.g. Kazachstan, Uzbekistan and Tadshikistan. I do not know of any material from Siberia except Primorye.

## *Lymantria* (*Lymantria*) *minomonis minomonis* MATSUMURA, 1933: 137, pl. 3: 10

(Figs. 285, 297, 298, 301, 430)

**Holotype:** Honshu, Minomo near Osaka – HUS, Sapporo [not examined].

**Taxonomy:** The species externally resembles *monacha*, although the antennae are brown instead of black as in *monacha*. The ground colour of the wings is creamy white to pale brownish.

**Further remarks:** Individual variability is low, so far as known. I was able to check only a few males and one female (n<10) from Honshu.

## *Lymantria* (*Lymantria*) *minomonis okinawaensis* KISHIDA, 1987: 292

(Figs. 285, 299, 300, 302, 431)

**Holotype:** Japan, Okinawa Isl., Yona – coll. Y. Kishida, Tokyo [photograph examined].

**Taxonomy:** From Okinawa KISHIDA (1987) described ssp. *okinawaensis*, which externally somewhat resembles *monacha* by the white ground colour of the forewings.

**Male genitalia** (Fig. 431): The male genitalia are more similar to *yunannensis* than *monacha*, particularly due to the shape of the valves. However, the ampulla of the valves is significantly different being the triangular shaped in *minomonis*.

## *Lymantria* (*Lymantria*) *sugii* KISHIDA, 1986: 26, figs. 2, 4 stat.n. [*Lymantria minomonis sugii*]

(Figs. 284, 303-308, 432, 469)

**Holotype:** Taiwan, Paling, Taoyuan Hsien – coll. Y. Kishida, Tokyo [photograph examined].

**Taxonomic note:** *Lymantria sugii* externally resembles *similis* by the white ground colour and the contrasting black pattern on the forewings. Particularly the female –illustrated here for the first time – is very different from *minomonis* and externally resembles *similis*. The black pattern differs from *minomonis* in the connected postbasal fascia and the median fascia, which are confluent at the dorsum on the forewings.

**Male genitalia** (Figs. 432, 469): The male genitalia differ from *minomonis* and *similis* by the shape of the ampulla and the broader valves. The saccus is triangular and pointed (not mentioned by KISHIDA 1986) and the aedeagus is significantly more curved.

**Further remarks:** KISHIDA (1986) described *sugii* as a subspecies of *minomonis* most likely because of the relatively small differences in the male genitalia (shape of valves and ampulla). Particularly the very different females give reason to treat *sugii* as a distinct species. The species is restricted to Taiwan as far as known. The species is endemic to Taiwan.

## *Lymantria* (*Lymantria*) *similis similis* MOORE, 1879: 402

(Figs. 284, 309, 310, 319, 433, 435, 467)

**Lectotype:** India, Calcutta district – BMNH, London [examined].

**Synonyms:**

*Lymantria cara* BUTLER, 1881: 56, pl. 90: 13.

Holotype: Bhotan [=Bhutan] – BMNH, London [examined].

*Lymantria monacha yunnanensis* COLLENETTE, 1933: 23, pl. 3: 3 **syn.n.**
Holotype: China, Yunnan, Tse-kou, SW of Tat-tsien-lou, – BMNH, London [examined].

**Taxonomy:** *Lymantria similis* is probably the sister species of *sugii*. The white ground colour of the wings with fine black pattern characterizes the adult. The females are richer marked than *sugii*.

**Genitalia** (Fgis. 433, 435, 467): The male genitalia differ from *sugii* by the shape of the valves and the less curved aedeagus.

**Further remarks:** The lectotype of *similis* was designated by GUPTA et al. (1984: 27). COLLENETTE described *yunnanensis* as a subspecies of *monacha*. The type series from Tsekou includes females (the holotype is a female) and males. The males are externally similar to *monacha*. However, the females are externally very distinct as illustrated by their reduced blackish markings. In the collections of BMNH, there is a single specimen from Bhutan, which is the female holotype of *cara*, a taxon that was synonymized with *similis* in former times.

The holotype male of *similis* differs somewhat from the allotype male of *yunnanensis*, which shows less contrasting patterns. The material from NE India (Assam, Meghalaya), Myanmar and Thailand shows individual variability (n>100), which also covers the appearance of *yunnanensis*. Therefore *yunnanensis* becomes a subjective synonym to *similis*.

## *Lymantria* (*Lymantria*) *similis loeffleri* ssp.n.

(Figs. 284, 318)

**Holotype:** ♂, S. Vietnam, Prov. Lam Dong, 28km W da Lat, 1320m, Bhu Son lam Ha, 11°55'N, 108°11'E, 18.-18.vii.2002, leg. S. Löffler & Hoffmann – in coll. A. Schintlmeister, Dresden.
**Paratypes** (4♂♂, 1♀): S. Vietnam: 3♂♂, Plato Tay Nguyen, Mt. Ngoc Linh, 15°01'N, 107°59'E, 900-1400m, 10.-25.viii.1996 (GU 60-94); Cambodia: 1♂, Cardamon Mts., Tumpor area, 12°22'N, 103°02'E, 1250m, 27.ii.-5.iii.2000. Thailand: 1♀, Khao Khieo, Khao Yai N.P., 1100m, 2.ii.1989.

**Diagnosis:** Forewing length ♂♂ 19-21 mm, somewhat smaller than ssp. *similis* (19-24 mm, Ø 22 mm), the female spans 37 mm. This subspecies differs by the contrasting and well-developed blackish markings on the forewings.

**Male genitalia:** The male genitalia differ slightly from Indian and Thailand specimens (ssp. *similis*) by the more slender tip of the valves.

**Further remarks:** The subspecies seems to be restricted to SE Indochina. In Northern Vietnam there are some specimens showing intermediate characters to the new subspecies.

**Etymology:** Named after the collector of the holotype, Mr. Swen Löffler, Lichtenstein/ Saxonia.

## *Lymantria* (*Lymantria*) *similis monachoides* ssp.n.

(Figs. 284, 313, 314, 317, 434, 468)

**Holotype:** ♂, China, Shaanxi, Taibaishan Nat. Park, 33°35'N, 107°43'E, 1300-1500m, 20.viii.-4.ix.1998, leg. V. Murzin & V. Siniaev in coll. A. Schintlmeister, Dresden.
**Paratypes** (150♂♂, 24♀♀): China - Shaanxi: 105♂♂, 17♀♀ Taibaishan Nat. Park, 33°35'N, 107°43'E, 1300-1500m, 20.viii.-4.ix.1998 (GU 49-99, 60-31, 60-33, 60-34); 3♂♂, 2♀♀, ibid, 2000m, July 2001; 37♂♂, 3♀♀, ibid, 33°53'N, 107°49', 1600m, 27.v.-8.vi.1999; 2♂♂, ibid vi.1999; 1♂, 1♀ Dabashan, Shou Man, 32°14'N, 108°34'E, 1700m, July 2000; 1♂, ibid. 15.viii.-15.x.1999; 13♂♂, ibid. ix.2000; Sichuan: 1♀, Guanmianshan, Northern slopes, 31°37'N, 108°55'E, 1500m, 25.viii.-15.ix.2000.

**Diagnosis:** Forewing length ♂♂ 19-22 mm (Ø 21 mm), ♀♀ 30-34 mm. The imagines are generally (in the series) about 1-1.5 mm smaller than the populations from Yunnan, Myanmar and NE India. The ssp. *similis* shows brownish antennae in the males, which differs from *monachoides* ssp.n. having blackish-brown antennae. The ground colour of the forewings in *monachoides* ssp.n. is white rather than creamy-white as in ssp. *similis*. The blackish pattern is better developed than in *similis*. The hindwings of *monachoides* ssp.n. are more fuscous brown in both sexes than in *similis*.

**Male genitalia** (Figs. 434, 468): The male genitalia do not virtually differ from *similis*, though they are different to *monacha* by shorter valves but with longer developed appendix and the longer saccus.

**Further remarks:** From Taibaishan, China-Shaanxi there is a longer series (n>100) of both sexes, which indicates that the illustrated males and females are conspecific. However, the males in Shaanxi are externally more similar to *monacha* through the more contrasting black and white pattern and the fuscous hindwings.

The subspecies *monachoides* seems to be univoltine, as extensive collections made from March through the summer brought no further material. The subspecies occurs sympatrically and synchronicly with *concolor* in the Taibaishan Mts. The type series was mainly taken from Taibaishan Mts. The single female from Guanmianshan perfectly matches the females from Taibaishan.

**Etymology:** Named according to the external similarities to *monacha*, which rarely occurs in Shaanxi (only 1 ♂ was caught sympatric with *monachoides* ssp.n. in Taibaishan Mts.).

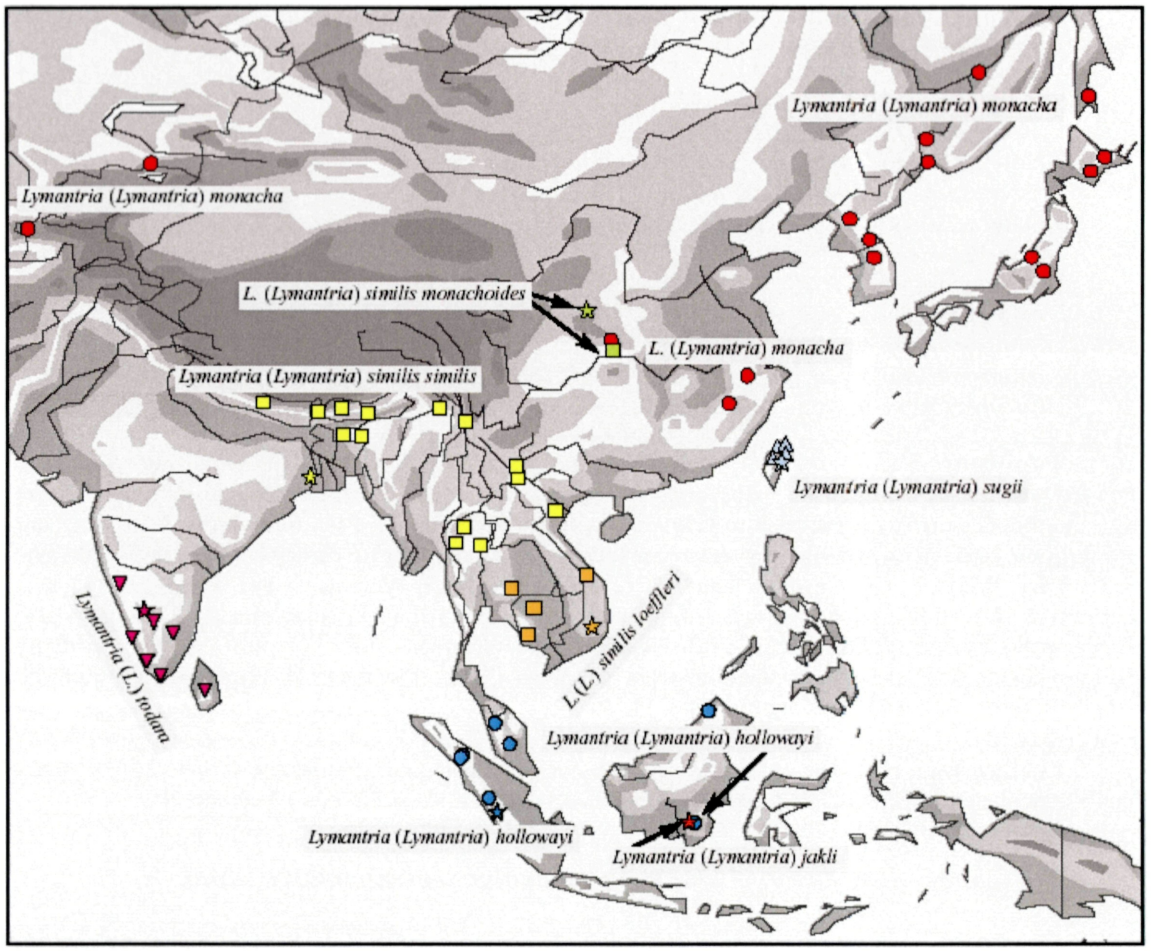



**Fig. 284:** Distribution of the subgenus *Lymantria*.

## *Lymantria* (*Lymantria*) *todara* MOORE, 1879: 402, pl. 33: 6

(Figs. 284, 320-325, 436)

**Lectotype:** S. India, Nilgiris – BMNH, London [examined].

**Taxonomy:** The species is easily distinguishable by the yellow-whitish coloured abdomen and hindwings. The females show the yellowish colour less prominently but somewhat resemble the females

of *similis*. The ground colour of the forewings is pure white with prominent black and contrasting markings.

**Further remarks:** The lectotype was designated by GUPTA et al. (1984: 26). I caught the species in Southern India mainly in altitudes over 1300 m in secondary vegetations by light trapping. A female laid eggs, which were successfully reared in Dresden. The caterpillars are polyphagous and externally resemble those of *monacha*. The breeding from egg to imago required about 12 weeks. Restricted to Sri Lanka and the Western Ghats of Southern India.

## *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855: 876

(Figs. 285, 326-329, 331, 334, 335)

**Holotype:** N. India, Sikkim – BMNH, London [examined].

**Synonyms:**
*Lymantria carnecolor* MOORE, 1888: 399.
Holotype: N. India, Kangra – BMNH, London [examined].
*Lymantria micans* FELDER & FELDER, 1874: 4, pl. 99: 2.
Holotype: Silhet – BMNH, London [examined].
*Lymantria horishana* MATSUMURA, 1931: 713 f. 485 **syn.n.**
Holotype: Taiwan – HUS, Sapporo [not examined].
*Lymantria concolor superans* WALKER, 1855: 876 **syn.n.**
Lectotype: N. India – BMNH, London [examined].
*Lymantria concolor lacteipennis* COLLENETTE, 1933: 24, pl. 3: 4 **syn.n.**
Holotype: China, Sze-chwan Tatsienlou [= Sichuan, Kangding] – BMNH, London [examined].

**Taxonomy:** The holotype of *concolor* comes from Sikkim. Except *horishana* all types were examined and all are conspecific with *concolor*. The taxon *lacteipennis* is a melanic individual form, where the females display a greenish to yellowish-white ground colour of the forewings. Such forms are more frequent in Yunnan and Sichuan, however there is also material of f. *lacteipennis* from Meghalaya, Thailand and Vietnam. On the other hand, there are (rarely, n<5) specimens with a reduced blackish pattern on the forewings. The colouration of the hindwings varies from whitish to black. The insect is also variable in the wingspan, particularly in the females. The specimens from Taiwan (n>60) are virtually indistinguishable from the female material from mainland China. The males display a slightly reduced blackish pattern. According to these minor differences, it seems unnecessary to designate an own subspecies status.

**Further remarks:** The lectotype of *superans* was designated by GUPTA (1984: 24). A series from Taibaishan externally differs from the other known populations and is described here as:

## *Lymantria* (*Lymantria*) *concolor septentrionalis* ssp.n.

(Figs. 285, 330, 332, 333, 437, 470)

**Holotype:** ♂, China, Shaanxi, Taibaishan Nat. Park, 33°35'N, 107°43'E, 1300-1500m, 20.viii.-4.ix.1998, leg. V. Murzin & V. Siniaev in coll. A. Schintlmeister, Dresden.
**Paratypes** (123♂♂, 12♀♀): China - Shaanxi: 120♂♂, 11♀♀ Taibaishan Nat. Park, 33°35'N, 107°43'E, 1300-1500m, 20.viii.-4.ix.1998 (GU 20-90, 37-92, 37-99, 60-30); 1♂, 1♀ Taibaishan, Houzhenji, 34°00'N, 107°20'E, 2000m, July 2001; 1♂, Taipaishan im Tsinling, ca. 1700m, 11.viii.1936; Sichuan: 1♂, Tonghua, 20km W Wenchuan, 1800m, 7.-9.viii.2002.

**Diagnosis:** Forewing length ♂♂ 19-22 mm, ♀♀ 25-30 mm. The series is generally about 2 mm smaller in wingspan compared to the nominotypical subspecies. The large series differs from the other populations by a less contrasting pattern and somewhat fuscous hindwings. The discal spot on the hindwings is more prominently developed in *septentrionalis* ssp.n. Females are significantly different due to the fuscous hindwings, compared to f. *lacteipennis*, where the females have whitish hindwings. A single male from Sichuan matches this series well and is therefore included in the type series.

**Genitalia** (Figs. 437, 470): The genitalia are virtually indistinguishable from ssp. *concolor*.

**Further remarks:** The subspecies *septentrionalis* ssp.n. seems to be univoltine, as extensive collections made from March through the summer months brought no additional material of *concolor*. The new subspecies was collected both with *similis monachoides* synchronicly and sympatricly.

**Etymology:** The name is derived from "septentrionalis" (latin for northern) referring to the most northern point of its distribution.

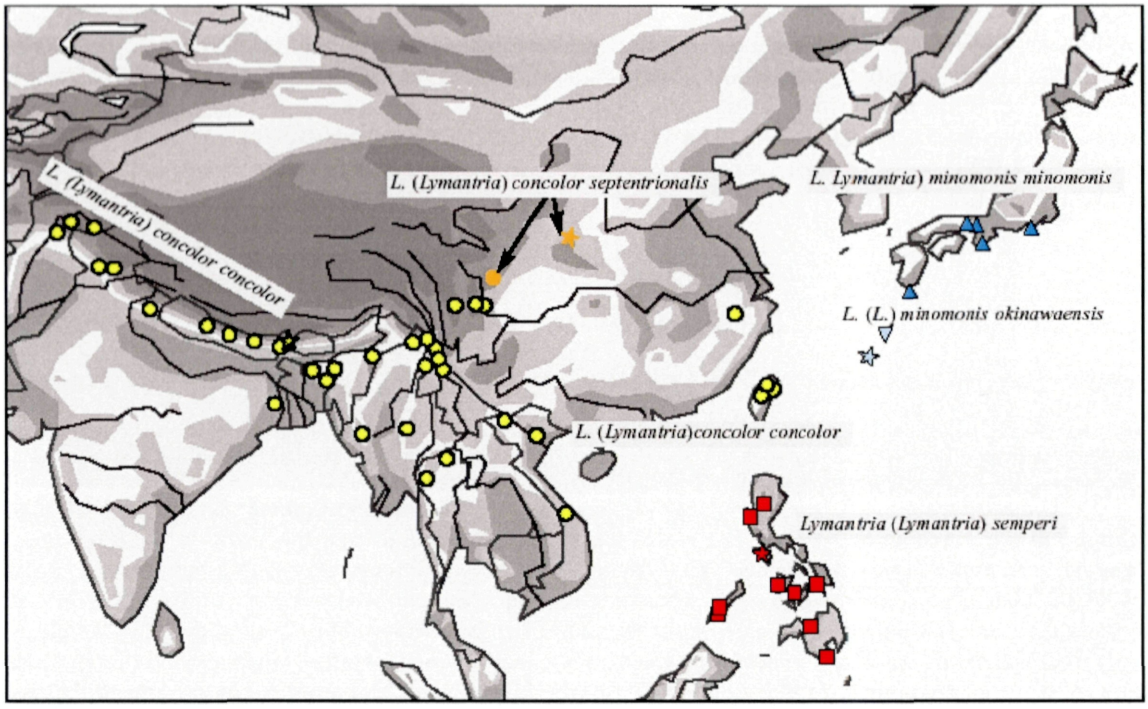



**Fig. 285:** Distribution of the subgenus *Lymantria*.

## *Lymantria* (*Lymantria*) *ossea* TOXOPEUS, 1948: 435, fig. 4

(Figs. 286, 336, 337, 438)

**Holotype:** [Indonesia], W. Java, Mt Gedé, Tjibodas– Zoological Museum of the Botanic Gardens, Bogor [not examined].

**Taxonomy:** *Lymantria ossea* is an unmistakable and rare species characterized by the contrasting developed black pattern on the forewings. The female is still unknown.

**Further remarks:** I know, besides a few specimens from the type locality in NNML, Leiden, only 6 males from Pagrange Nat. Park (Mt. Gedeh) in my collection collected in February and July 1996. These specimens show virtually no variability (n<10).

## *Lymantria* (*Lymantria*) *hollowayi* SCHINTLMEISTER, 1994: 123, pl 1: 15, 16, fig. 7

(Figs. 284, 340, 341, 344, 439, 440)

**Holotype:** [Indonesia], S.W. Sumatra, Slopes of Mt. Korintji, GU BM # 1949 – BMNH, London [examined].

**Taxonomy:** Distinguished from the following species by the rounded apex of the forewings and the stronger submarginal band to the hindwing. The species varies individually by the development of the

black pattern on the forewings. Five males from S. Kalimantan, Loksado, resemble *jakli* sp.n. by their fine markings on the forewings. The females of *hollowayi* and *alexandrae* are externally very similar. The latter have only a weakly developed submarginal band to the hindwings.

**Male genitalia** (Figs. 439, 440): The broader valves, less hooked ampulla, a longer saccus and aedeagus, distinguish the male genitalia of *hollowayi.*

**Further remarks:** The male genitalia of the holotype from W. Sumatra differ from specimens dissected from W. Malaysia, Fraser's Hills (GU 35-93) by the length of the uncus, length of the ampulla and the length of the saccus. Both male genitalia are illustrated here. The material from Borneo matches the W. Malaysian specimen (see genitalia illustration in HOLLOWAY 1999: fig. 15). Externally the individual variability covers all of these populations. The situation becomes more complicated, because a further genitalic dissection (GU 05-98) from W. Malaysia, Genting Highlands exactly matches the holotype genitalia (BM 1949) from Sumatra. Therefore the complex needs further investigation with more material from Malaya and Borneo.

## *Lymantria* (*Lymantria*) *jakli* sp.n.

(Figs. 284, 342, 343, 346, 441)

**Holotype:** ♂, Indonesia, Kalimantan Selatan, 30km E Kandangan, 15km NE of Loksado, 2°52'S, 115°38'E, 1100m, January 1998, leg. St. Jakl – coll. A. Schintlmeister, Dresden.
**Paratypes:** 24♂♂, 1♀, Kalimantan Selatan, 30km E Kandangan, 15km NE of Loksado, 2°52'S, 115°38'E, 1100m, September, November, Dezember 1997 and January 1998 (GU 48-01, 49-86, 60-87); 1♂ Kalimantan Tengah, Barito Ulu, at Busang/Rekut River Junction, 0°03'S, 113°59'E, viii.2001 (GU BM 51/2003).

**Diagnosis:** Forewing length ♂♂ 19-20 mm, the ♂ from Central Kalimantan has a length of only 16 mm and the ♀ length is 24 mm. The males resemble *hollowayi*, though the shape of the forewings, particularly the apex, is more rounded. The blackish pattern of the forewings is fine but more strongly developed than in *alexandrae*. The best character for identification is the warm reddish shine in the ground colour of all wings, particularly on the dorsum of the hindwings. The sexual dimorphic female is easily distinguishable from other species by the very rounded shape of the forewings and the fine reddish shine in the ground colour. The black dorsal spot of the forewings is less prominently developed than in *hollowayi* or *alexandrae* females.

**Male genitalia** (Fig. 441): The male genitalia resemble *hollowayi* rather than *alexandrae*. The shape of the ampulla with its pointed lobes is diagnostic as well as the long triangular sacculus. The aedeagus is as in *hollowayi* smooth and slightly curved.

**Further remarks:** The species occurs sympatricly and synchronicly with the closely related *hollowayi* and *alexandrae*. Known only from the type locality, except one male taken in Central Kalimantan. The species probably does not occur in the Kinabalu area in Sabah (a longer series of *hollowayi* specimens was checked).

**Etymology:** Named after the collector of the type series, Mr. Stanislav Jakl, Prague.

## *Lymantria* (*Lymantria*) *alexandrae* SCHINTLMEISTER, 1994: 124, pl 1: 19, 20, fig. 8

(Figs. 286, 338, 339, 345, 442)

**Holotype:** [Indonesia], Sumatra, Jambi, 28km SW Sarolangun – BMNH, London [examined].

**Taxonomy:** The species is distinguishable from *hollowayi* and *jakli* sp.n. by the less deep shaped forewings. The lines of the forewings are finer and sharper than in the other two species. The hindwings show a yellowish shine. The females are very similar to *hollowayi*, though they are distinguishable by the weakly developed fuscous submarginal band of the hindwings. The postmedian fascia of the forewings is more strongly developed than in the females of *hollowayi.*

**Further remarks:** From N. Thailand there is a single male showing a reduced blackish pattern of the forewings.

## *Lymantria* (*Lymantria*) *ganaroides* STRAND, 1915: 325, pl 41c

**Syntypes:** "? Neu Guinea" [New Guinea] [not examined].

**Taxonomic note:** The existence of the species remains doubtful as it has not been possible to locate the three type specimens yet. STRAND (1915: 325) has also noted that the origin of the specimens is doubtful. The illustration shows a weakly marked insect with yellowish hindwings resembling *alexandrae*. STRAND also noted that he possessed a specimen from Perak (N. Malaya), which is similar to his *ganaroides*. It is without a doubt that the mentioned specimen from Perak must be *alexandrae*.

I do not know a species from New Guinea, which would fully match the description of STRAND. *L.* (*Porthetria*) *doreyensis* is probably the most similar species from New Guinea known to me.

## *Lymantria* (*Lymantria*) *witti* sp.n.

(Figs. 286, 347-349, 366, 443)

**Holotype:** ♂, Philippines, Mindoro Isl., Mt. Halcon. 1000m, iv. 2001 – in coll. A. Schintlmeister, Dresden.
**Paratypes** (46♂♂, 9♀♀) Mindoro: 5♂♂, 3♀♀ Mt. Halcon. 1000m, iv. 2001; 4♂♂, ibid ix. 2001 (GU 49-82), 1♂, ibid. 6.-24.iii.2000; 1 ♂, Mt. Malasembo, Puerto Gallero, Halcon Mts., viii.1998; Luzon: 2♂♂, Ifugao, Mt. Polis Paß, 20km N Banaue, 3.-18.8.1996, 2000m; 2♂♂, 1♀, Zambales, Mtn., Coto, 110m, 5.-6.v.1999; 1♂ ibid., 9,-1°.xi.1998; Leyte: 1♀, Mt. Balocaue, May 2001; Samar: 1♂, Concord, Cadac-an, 150m, 22.-24.iv.1997; Negros: 3♂♂ Mt. Canlaon, 600m, 10°22'N, 123°12'E, W Route via Mabucal, April 1998, 2♂♂, ibid, Jan./März 1997; 1♂♀, ibid, vi.1998; 4♂♂ ibid 15. vii.1996; 1♂♀, ibid July 1997; 1♂, ibid 1010m, 17.-18. vii.1996 (GU 60-27); 1♂ Mt. Mandalagan, xii.1997; Panay: 1♂, Mt. Baloy, vi.1998; Mindanao: 2♂♂ Corabato, Prov. Sumangani, Mt. Busa, near Kainba, 700m, December 1998; 3♂♂ Bukidnon, Mt. Kitanglad, Intavas, 1700m, 15.viii.-15.ix.1993; 2♀♀, Davao or., 1889.

**Diagnosis:** Forewing length ♂♂ 21-23 mm, ♀♀ 30-32 mm. The imago externally resembles *Lymantria alexandrae*. The black pattern is stronger developed and particularly the black discal spot on the forewings is prominent. A diagnostic feature is the broad fuscous marginal area to the hindwings. The hindwings of the males display a yellowish shine as in *alexandrae*. The female shows a stronger developed black pattern than in *alexandrae*, particularly the fuscous marginal area of the hindwings.

**Male genitalia** (Fig. 443): The male genitalia resemble *alexandrae*, though the uncus is shorter and the valves are straight and not curved at the tip as in *alexandrae*. The ampulla has a short lobe in the curved part.

## *Lymantria* (*Lymantria*) *demotes demotes* COLLENETTE, 1947: 45, pl. 1: 19

(Figs. 286, 352, 353, 444)

**Holotype:** [Indonesia], W. Celebes [= Sulawesi], Loda, Paloe – BMNH, London [examined].

**Taxonomy:** This is a polytypic species showing geographical variation belonging to the *alexandrae*-group of species. The species is distinguishable by the reduced V-shaped spot on the forewings and the somewhat hyaline wings without yellowish or reddish scales. The fuscous markings on the forewings are not black as in most species of the subgenus *Lymantria* but a rather blackish sepia. The underside of the forewings shows a fuscous area near the apex.

**Male genitalia:** (Fig. 444): The male genitalia lack the ampulla of the valves, which would lead to the subgenus *Porthetria*. However the other features (shape of valves and sacculus, aedeagus) and particularly the external appearance indicate that *demotes* is closer related to the *alexandrae*-group of species than to *Porthetria*.

**Further remarks:** The species is distributed on many islands from Sulawesi to Seram. The ssp. *demotes* occurs in Sulawesi.

## *Lymantria* (*Lymantria*) *demotes galai* ssp.n.

(Figs. 286, 356-359, 363, 364, 445)

**Holotype:** ♂, [Indonesia], Molukken, Halmahera, ca. 15km südöstlich Baru, 300m, Mai 1998, leg. Gala – in coll. A. Schintlmeister, Dresden.
**Paratypes** (35♂♂, 3♀♀): Halmahera: 3♂♂, 15km SW Baru, Mt. Talagaranu, 600m, 0°10'N – 127°32'E, 22.-31.i.1996 (GU 50-28, 60-51); 3♂♂, ca. 15km südöstlich Baru, 300m, Mai 1998; 27♂♂, 3♀♀, Halmahera, vi. 1998. Bacan: 2♂♂, 6km N Labuha (GU ZSM 1/2004).

**Diagnosis:** Forewing length ♂♂ 21-23 mm, ♀♀ 30 mm. The antennae of the males are more blackish than brownish as in the other subspecies of *demotes*. The fuscous pattern of the forewings is somewhat diffuse. The intensity of the black pattern is subject to individual variation, but most specimens display a weakly developed black pattern. The ground colour is similar to ssp. *demotes*, though the colour has a tendency to be a slight yellowish-creamy colour. The hindwings show well-developed submarginal fascia near the apex and a second fuscous spot on the apex. The latter spot is only weakly developed in the other subspecies. The females resemble the female from Seram, though the fuscous pattern is less developed and the markings are more diffuse.

**Male genitalia** (Fig. 445): The male genitalia differ from ssp. *demotes* in the shorter and the less pointed sacculus and the shorter and thicker aedeagus. The male genitalia from Halmahera and Bacan are virtually identical.

**Further remarks:** The species is known from Halmahera and from Bacan. The specimens from Bacan display the apical spot on the hindwings more prominently. The markings of the forewings are somewhat sharper.

**Etymology:** Named after the local collector of the holotype, Mr. Gala.

## *Lymantria* (*Lymantria*) *demotes prattorum* ssp.n.

(Figs. 286, 360, 361, 446)

**Holotype:** ♂, Indonesia, Central Buru, Kako Takalago, 2700ft., may [19]22, C., F. & J. Pratt – BMNH, London.
**Paratypes:** 1♂ Central Buru, Kako Takalago, 2700ft., v. 1922 (GU BM 2/2004); 1♂ Buru Isl., xi.1998.

**Diagnosis:** Forewing length 22 mm. The specimens from Buru differ by a greyish-yellowish ground colour other than Sulawesian and Halmaherian populations. The markings are virtually identical with ssp. *demotes,* however, the colour is rather brownish than blackish as in ssp. *demotes* and *galai* ssp.n. The hindwings are more fuscous, particularly in the dorsal area, than in the other subspecies.

**Male genitalia** (Fig. 446): The male genitalia resemble those of *galai* ssp.n. and *seramensis* ssp.n., though the uncus is significantly shorter, the aedeagus longer and thinner.

**Further remarks:** Restricted to Buru Island.

**Etymology:** Named after the collectors of the holotype, the family Pratt, who were all successful collectors of Heterocera in the Oriental tropics.

## *Lymantria* (*Lymantria*) *demotes seramensis* ssp.n.

(Figs. 286, 354, 355, 362, 365, 447)

**Holotype:** ♂, Indonesia, Central Ceram [=Seram], 4600ft., Jan. [19]20, C., F., & J. Pratt – BMNH, London.
**Paratypes** (22♂♂, 1♀): Seram: 8♂♂, Central Ceram, 4900ft., Jan. [19]20 (GU BM 2353); 3♂♂, Central Ceram, Manusela, 6000ft., Oct.-Dec. 1919 (GU BM 3/2004); 3♂♂, Kanikeh Manusela NP, 03°6'W, 129°29'E, vi.1998 (GU 11-05a); 7♂♂, 1♀, Ceram vi.1998.

**Diagnosis:** Forewing length ♂♂ 23-25 mm, ♀ 30 mm. The subspecies is somewhat (about 10%) larger in size than the other subspecies. The antennae of the males are of a paler yellowish brown compared to *prattorum* ssp.n. and the ssp. *demotes*. The ground colour and the pattern are as in *prattorum* ssp.n. The female is darker than the females from Halmahera, particularly its hindwings.

**Male genitalia** (Fig. 447): The male genitalia are similar to those of *galai* ssp.n., though the shape of the uncus and the aedeagus are differing slightly.

**Further remarks:** Restricted to Seram Island, not known yet from Ambon.

**Etymology:** Named after the type locality, the island of Seram.

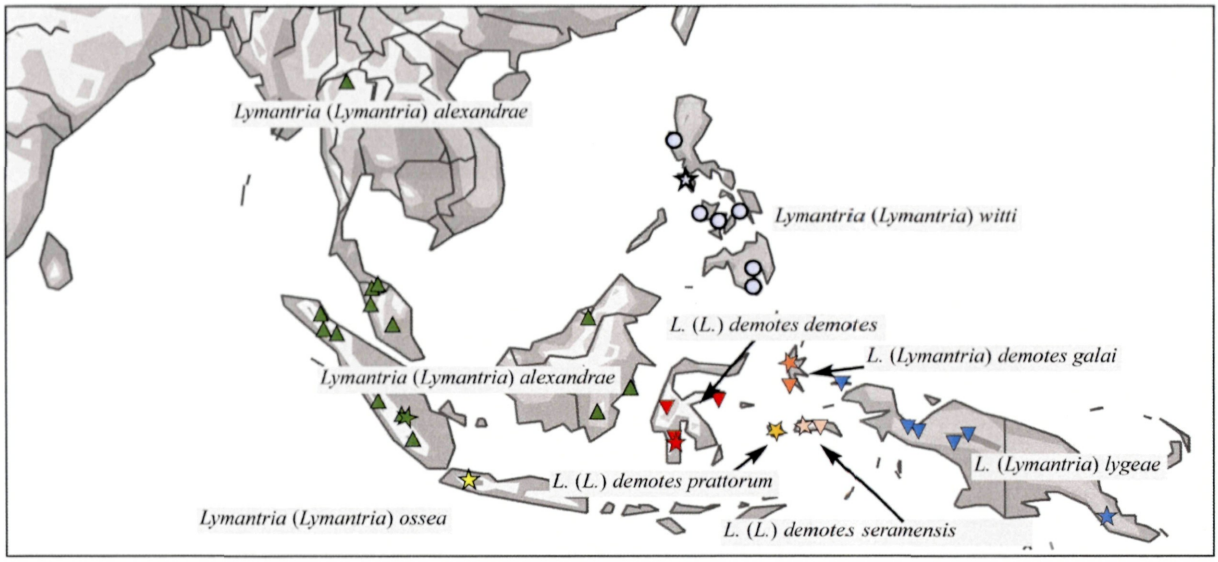



**Fig. 286:** Distribution of the subgenus *Lymantria.*

## *Lymantria* (*Lymantria*) *subrosea* SWINHOE, 1903: 489 (Replacement name for *Lymantria rosea* HAMPSON, 1892)

(Figs. 287, 368, 369, 448)

**Holotype:** Ceylon (= Sri Lanka), Colombo – BMNH, London [examined].

**Homonym:** *Lymantria rosea* HAMPSON, 1892 nec *Lymantria rosea* BUTLER, 1879: 239 [Madagascar].

The male is unmistakable by the reddish coloured hindwings with broad fuscous marginal area. Specimens from Sri Lanka and Southern India are 1-2 mm larger in wing span compared to material from other areas. The blackish markings on the forewings are more weakly developed. The fuscous marginal area of the hindwings is broader. The one female I have studied also shows a reduced blackish pattern on the forewings, where the hindwings are of a yellowish-brownish colour.

## *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906: 547 stat.n. [*Lymantria singapura*]

(Figs. 287, 367, 370-377, 449, 450)

**Holotype:** Singapore – BMNH, London [examined].

**Synonym:**
*Lymantria similis niasica* STRAND, 1915: 320, pl. 40e **syn.n.**
Holotype: [Indonesia], Nias – FNS, Frankfurt/Main.

**Taxonomy:** The imago shows a wider individual variation. There are forms with reduced reddish colour on the hindwings and fuscous greyish ground colour of the forewings. Restricted to NE India (Assam and Meghalaya) there are melanic forms in the males and also the corresponding females (from Assam) showing somewhat fuscous forewings. In my collection I have a single male from Hainan, where all reddish scales are replaced by yellow scales. The size is also subject to individual variation,

where the forewing length in the females varies from 28-45 mm. The female occurs polymorphic: there are individual forms displaying warm yellowish coloured hindwings.

**Genitalia** (Figs. 449, 450): The male genitalia of both subspecies, *subrosea* and *singapura*, are virtually identical.

**Further remarks:** The taxon *niasica* was described as a subspecies of *similis* from Nias Island near Sumatra. I have studied the holotype female and a series of males from Nias and have found no differences to *singapura*.

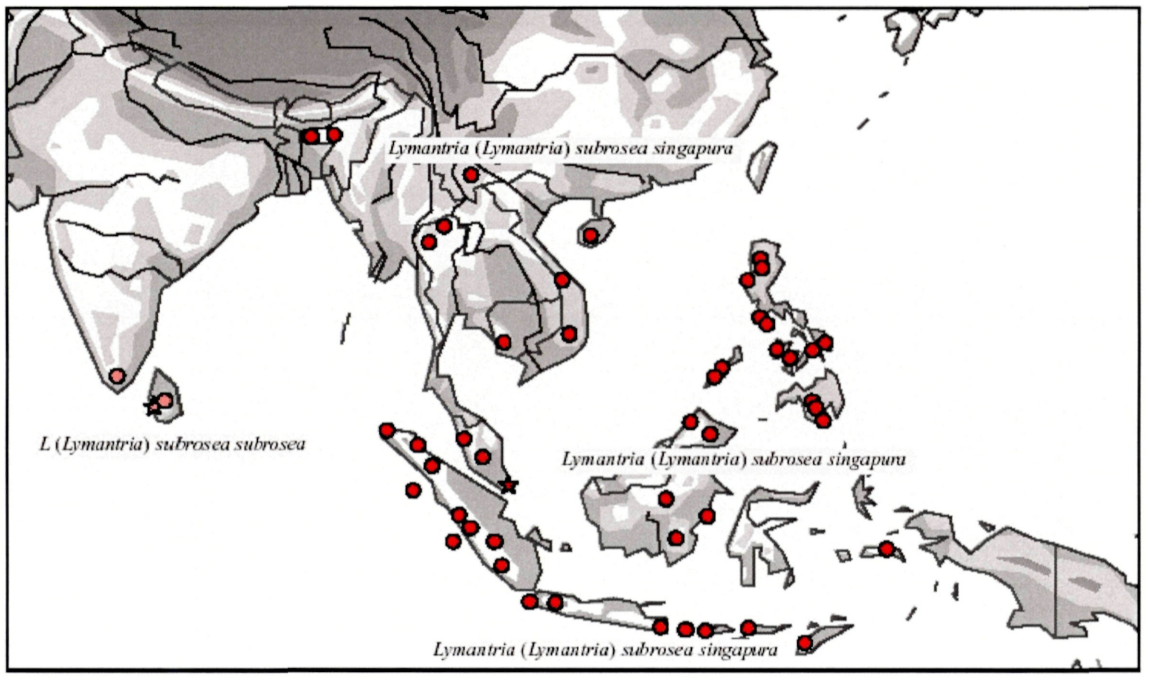



**Fig. 287:** Distribution of *Lymantria singapura.*

## *Lymantria* (*Lymantria*) *semperi* sp.n.

(Figs. 285, 451, 378-382)

**Holotype:** ♂, Philippines, Mindoro Isl., Mt. Halcon. 1000m, iv. 2001 – in coll. A. Schintlmeister, Dresden.
**Paratypes** (163♂♂, 11♀♀): Palawan: 2♂♂, Mt. Matalinghan, 8°46.99'N, 117°42.11'E, 800m, Dezember 1997, 1♂, ibid xi.1997; 1 ♂♀, ibid 2.-12.viii.2000; 4♂♂, ibid. 14.iii.1999; 1♂, Mt. Matalinghan, Tagembung, 11550m, 17.ix.1961; 1♂, Mainit, Brooke's Point, 3.-6.xi.1996; 1♂, Mt. Magcaw, 600-900m, 25.ii.2000; 1♂, Mt. Magcasaw, 600-900m, 3.-6.XI.1996; Luzon: 4♂♂, Mt. Banahaw, 1100m, October 1998; 1♂, Mts. Province, 15km SE Bontoc, Chatol, 1600m, 17°02'N, 121°03'E, 24.ix.1988; 1♀, Zambales, Mtn., Coto, 110m, 5.-6.v.1999; 8♂♂, Prov. Ifugao, Mt. Polis-Paß, 2000m, 20km N Banaue, 3.-18.8.1996; Mindoro: 28 ♂♂, 3♀♀, Mt. Halcon. 1000m, iv. 2001; 4 ♂♂, 2♀♀, ibid., May 2001; 2♂♂, ibid ix. 2001, 1♂, 6.-24.iii.2000; 1♂, ibid, 2000m, 8.-20.ix.1999; Leyte: 1♀ Mt. Balocaue, May 2001; 1♂, Mt. Damao, 16.x.1998; 1 ♂, Mt. Bolog, 1140m, 10km E of Mahaplag, vi. 1997; Negros: 10♂♂, Mt. Kanlaon, 600m, 10°22'N, 123°12'E, W Route via Mabucal, iv. 1998; 5♂♂, ibid 15. vii.-18.vii.1996 (GU 49-78); 1♂, ibid. i.1997; 17♂♂, ibid. ii.1997 (GU 50-22); 5♂♂, ibid., iii.1997; 1♂, ibid., vii.1997; 1♂, ibid., xii.1997, 6♂♂, xii.1996; 11♂♂, v-vi.1998, 800m; 3 ♂♂, Mt. Kanlaon, i.-iv.1995; 1♂, ibid. x.1995; 1♂, ibid. 820m, 15.vii.1996; 4♂♂, ibid, 1010m, 17.-18.vii.1997; 8♂♂, ibid, 3.-18.viii.1996, 1♂, ibid. 600m, 19.vii.1996; 1♂, Mt. Mandalagan, 800m near Don Salvador Benedicto, xii.1997; 2♂♂, ibid, ii.1998; 1♂, ibid, v.-vi.1998; 1 ♂, Mt. Talinis, 1200m, March 1998; Panay: 10♂♂, 1♀, Mt. Baloy, June 1998 (W 9131); 1♀, Mt. Malindog, Aklan, 600-800m, 10.x.1996; Mindanao: 9♂♂, 1♀, Corabato, Prov. Sumangani, Mt. Busa, near Kainba, 6°08'N, 124°39'E, 700m, August 1998; 1♂, ibid. xii.1998; 1♂, Mt.Kitanglad, 1400m, vii.1998; 9♂♂, Prov. Davao del Norte, Mt. Caragan, Jan. 1998.

**Diagnosis:** Forewing length ♂♂ 28-31 mm, ♀♀ 37-50 mm, in the middle approximately 42-45 mm. This is the largest member of the *monacha*-group and easily identifiable by its red hindwings with

fuscous margin. The species is much smaller than *subrosea* and both species are sympatric. The ground colour of the forewings is creamy in the males and pale brownish to brownish white in the females. The size, particularly in the females, is subject to individual variation. The pattern is not black as in *singapura* but somewhat fuscous grey, so that the markings are less contrasting. The individual variability is seen in the development of the fuscous pattern to the forewings.

**Male genitalia** (Fig. 451): The male genitalia are similar to most of the other members of the *monacha*-group. The ampulla of the valves is developed as a triangular lobe and the long sacculus is rounded.

**Further remarks:** The species is widespread and common throughout the Philippine Islands including southern Palawan.

**Etymology:** Named after Georg Semper, the author of an important book about the Philippine Lepidoptera (SEMPER 1891-1901).

## *Lymantria* (*Lymantria*) *lygaea* BETHUNE-BAKER, 1908: 189

(Figs. 286, 350, 351, 452)

**Holotype:** B.C. [=Papua] New Guinea, Ekeikei – BMNH, London [examined].

**Taxonomy:** Easily distinguishable by the unusual chocolate brown ground colour of the wings and the prominently coloured pink abdomen. The female is still unknown.

**Male genitalia** (Fig. 452): The male genitalia are of the type of the subgenus *Lymantria*. The ampulla is reduced to a small valve process.

**Further remarks:** Restricted to New Guinea Island; however, there are actually only two localities in West SE Papua (Owen Stanley Range) and NW West Papua (Nabire) and very few males (n= 5) are known.

## *Lymantria* (*Lymantria*) *sobrina sobrina* MOORE, 1879: 402, pl. 33: 5

(Figs. 289, 383-386, 453)

**Holotype:** NW. India Dharmsala – BMNH, London [examined].

**Taxonomy:** The species is distinguishable by the brown habitus, the pink abdomen and the pinkish dorsal region of the hindwings. The blackish pattern of the forewings and the size of the imagines are subject to individual variation.

## *Lymantria* (*Lymantria*) *sobrina buchsbaumi* ssp.n.

(Figs. 289, 387-390, 454)

**Holotype:** ♂, C. Nepal, Kali-Gandaki-Tal, Choklopani nördl. Tukche 2600m, 24.vi.1973, leg. Dierl-Lehmann – coll. ZSM, München.
**Paratypes** (36♂♂, 5♀♀): C. Nepal, Kali-Gandaki-Tal, Choklopani nördl. Tukche 2600m, 20.-26.vi.1973 (GU 50-97); 1♂, ibid. 3200m, 24.vi.1973.

**Diagnosis:** Forewing length ♂♂ 19-20 mm, ♀♀ 25-27 mm. The new subspecies differs from the West Himalayan populations by the smaller size, which is approximately 3 mm smaller in the ♂♂ and 9 mm smaller in the ♀♀ (this is 15% and 33% difference respectively in forewing length). The imagines of *buchsbaumi* ssp.n. lack all pinkish colour and the fuscous brown median band of the forewings is absent.
**Male genitalia** (Fig. 454): The male genitalia however are virtually indistinguishable from ssp. *sobrina.*

**Further remarks:** *L. sobrina* is common and widely distributed in the West Himalaya. The species seems to be absent in Bhimtal. From Nepal *sobrina* is known only from the type locality of *buchsbaumi* ssp.n.

**Etymology:** Named after Ulf Buchsbaum, Munich, the technical assistent for Lepidoptera at the ZSM in Munich who helped me in many ways during my stays in Munich.

## *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855: 620) (*Alope*)

(Figs. 289, 391-393, 395, 401, 455, 471)

**Lectotype:** N. India – BMNH, London [examined].

**Synonym:**
*Lymantria rhodina* WALKER, 1865: 366.
Holotype: India – BMNH, London [examined].

**Taxonomy:** *Lymantria semicincta* is unmistakable, particularly the female, by the blackish ground colour of the forewings and the pinkish hindwings with broad fuscous margin. It was used as the type species of *Nagunda* MOORE, 1879. However, the male genitalia (shape of the valves) indicate that this species belongs to the subgenus *Lymantria*. I possess in my collection a female, where all pinkish colour of the hindwings is replaced by yellow and the fuscous margin is absent. The abdomen is pinkish. A few males from Thailand show yellow-whitish hindwings instead of pinkish, although the females from Thailand display the usual pinkish colour.

**Further remarks:** The lectotype female was designated by GUPTA et al. (1984: 27). The conspecifity of the illustrated males and females was confirmed by breeding by Liedgens (ex. ovo) with live stock from Bhimtal.

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**Figs. 290-308:** next page

**Fig. 290:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♂, France.
**Fig. 291:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♂, f. *infuscata* SCHULZ, Germany.
**Fig. 292:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♂, Japan, Hokkaido.
**Fig. 293:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♂, f. *eremita* HÜBNER, Germany.

**Fig. 294:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♀, Poland.
**Fig. 295:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♀, f. *infuscata* SCHULZ, Germany.
**Fig. 296:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♀, f. *eremita* HÜBNER, Germany.

**Fig. 297:** *Lymantria* (*Lymantria*) *minomonis minomonis* MATSUMURA, 1934 – ♂, Japan, Honshu.
**Fig. 298:** *Lymantria* (*Lymantria*) *minomonis minomonis* MATSUMURA, 1934 – ♂, Japan, Honshu.
**Fig. 299:** *Lymantria* (*Lymantria*) *minomonis okinawaensis* KISHIDA, 1987 – ♂, Japan, Okinawa.
**Fig. 300:** *Lymantria* (*Lymantria*) *minomonis okinawaensis* KISHIDA, 1987 – ♂, Japan, Okinawa.

**Fig. 301:** *Lymantria* (*Lymantria*) *minomonis minomonis* MATSUMURA, 1934 – ♀, Japan, Tsushima.
**Fig. 302:** *Lymantria* (*Lymantria*) *minomonis okinawaensis* KISHIDA, 1987 – ♀, Japan, Okinawa.

**Fig. 303:** *Lymantria* (*Lymantria*) *minomonis sugii* KISHIDA, 1986 – ♂, Taiwan, Paratype.
**Fig. 304:** *Lymantria* (*Lymantria*) *minomonis sugii* KISHIDA, 1986 – ♂, Taiwan.
**Fig. 305:** *Lymantria* (*Lymantria*) *minomonis sugii* KISHIDA, 1986 – ♂, Taiwan.
**Fig. 306:** *Lymantria* (*Lymantria*) *minomonis sugii* KISHIDA, 1986 – ♂, Taiwan.

**Fig. 307:** *Lymantria* (*Lymantria*) *minomonis sugii* KISHIDA, 1986 – ♀, Taiwan.
**Fig. 308:** *Lymantria* (*Lymantria*) *minomonis sugii* KISHIDA, 1986 – ♀, Taiwan.

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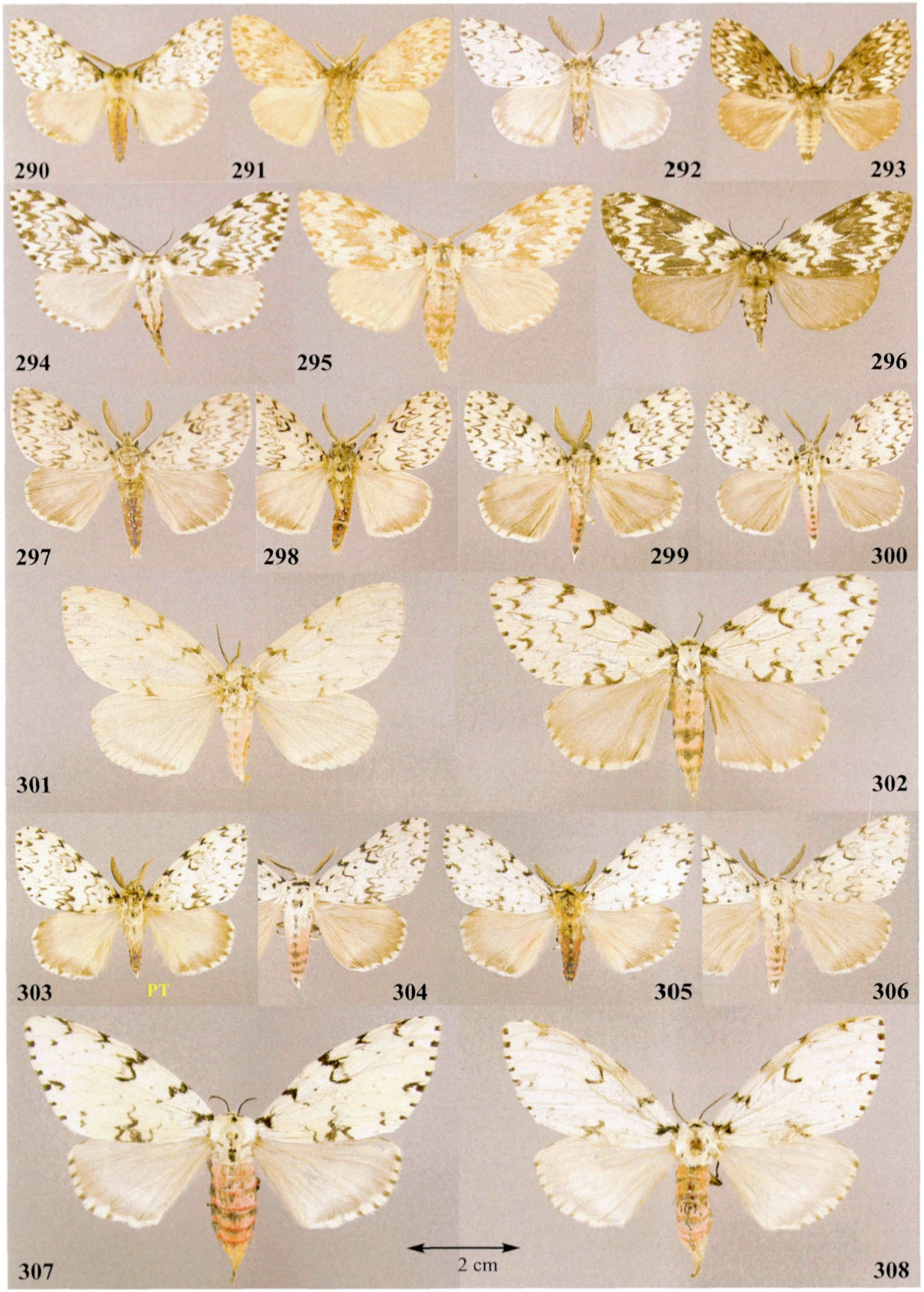

## *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910: 309

(Figs. 288, 394, 396-400, 402, 403, 456-458, 472)

**Holotype:** Formosa [= Taiwan], Rantaizan – BMNH, London [examined].

**Synonym:**
*Lymantria dissoluta f. takasagonis* MATSUMURA, 1933: 136, pl. 3: 7, 12.
Syntypes: Formosa, [=Taiwan], Horisha – HUS, Sapporo [not examined].

**Taxonomy:** This and the next 4 species are a complex of greyish species of general fuscous habitus. *Lymantria umbrifera* shows in fresh specimens a pinkish shine on all wings. The hindwings are marked with a diagnostic broad fuscous marginal area.

**Male genitalia** (472): The male genitalia have a shorter valve compared to the other similar species of the complex. The male genitalia of this and the following species usually display a pointed costal process of the valves.

**Further remarks:** There are a few specimens collected at higher altitudes (3000 m and above), which greatly differ externally from the lowland populations by a whitish ground colour. It is actually not clear how to classify this high-altitude populations. The male genitalia of the whitish form are slightly different due to their reduced costal process.

Endemic to Taiwan.

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**Figs. 309-325:** next page

**Fig. 309:** *Lymantria* (*Lymantria*) *similis similis* MOORE, 1879 – ♂, N. India, Calcutta, Holotype.
**Fig. 310:** *Lymantria* (*Lymantria*) *similis similis* MOORE, 1879 – ♂, N. India, Assam.
**Fig. 311:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♂, China, Fujian.
**Fig. 312:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♂, China, Fujian.

**Fig. 313:** *Lymantria* (*Lymantria*) *similis monachoides* **ssp.n.** – ♂, China, Shaanxi, Holotype.
**Fig. 314:** *Lymantria* (*Lymantria*) *similis monachoides* **ssp.n.** – ♂, China, Shaanxi, Paratype.
**Fig. 315:** *Lymantria* (*Lymantria*) *similis loeffleri* **ssp.n.** – ♂, S. Vietnam, Holotype.
**Fig. 316:** *Lymantria* (*Lymantria*) *similis loeffleri* **ssp.n.** – ♂, Cambodia, Paratype.

**Fig. 317:** *Lymantria* (*Lymantria*) *similis monachoides* **ssp.n.** – ♀, China, Shaanxi, Paratype.
**Fig. 318:** *Lymantria* (*Lymantria*) *similis loeffleri* **ssp.n.** – ♀, China, Shaanxi, Paratype.
**Fig. 319:** *Lymantria* (*Lymantria*) *similis similis* MOORE, 1879 – ♀, N. India, Assam.

**Fig. 320:** *Lymantria* (*Lymantria*) *todara* MOORE, 1879 – ♂, S. India, Syntype.
**Fig. 321:** *Lymantria* (*Lymantria*) *todara* MOORE, 1879 – ♂, S. India ex ovo (material reared in Germany).
**Fig. 322:** *Lymantria* (*Lymantria*) *todara* MOORE, 1879 – ♂, S. India, Cocon (material reared in Germany).
**Fig. 323:** *Lymantria* (*Lymantria*) *todara* MOORE, 1879 – ♀, S. India, resting position at light.

**Fig. 324:** *Lymantria* (*Lymantria*) *todara* MOORE, 1879 – ♀, S. India, Syntype.
**Fig. 325:** *Lymantria* (*Lymantria*) *todara* MOORE, 1879– ♂, S. India, ex ovo (material reared in Germany).

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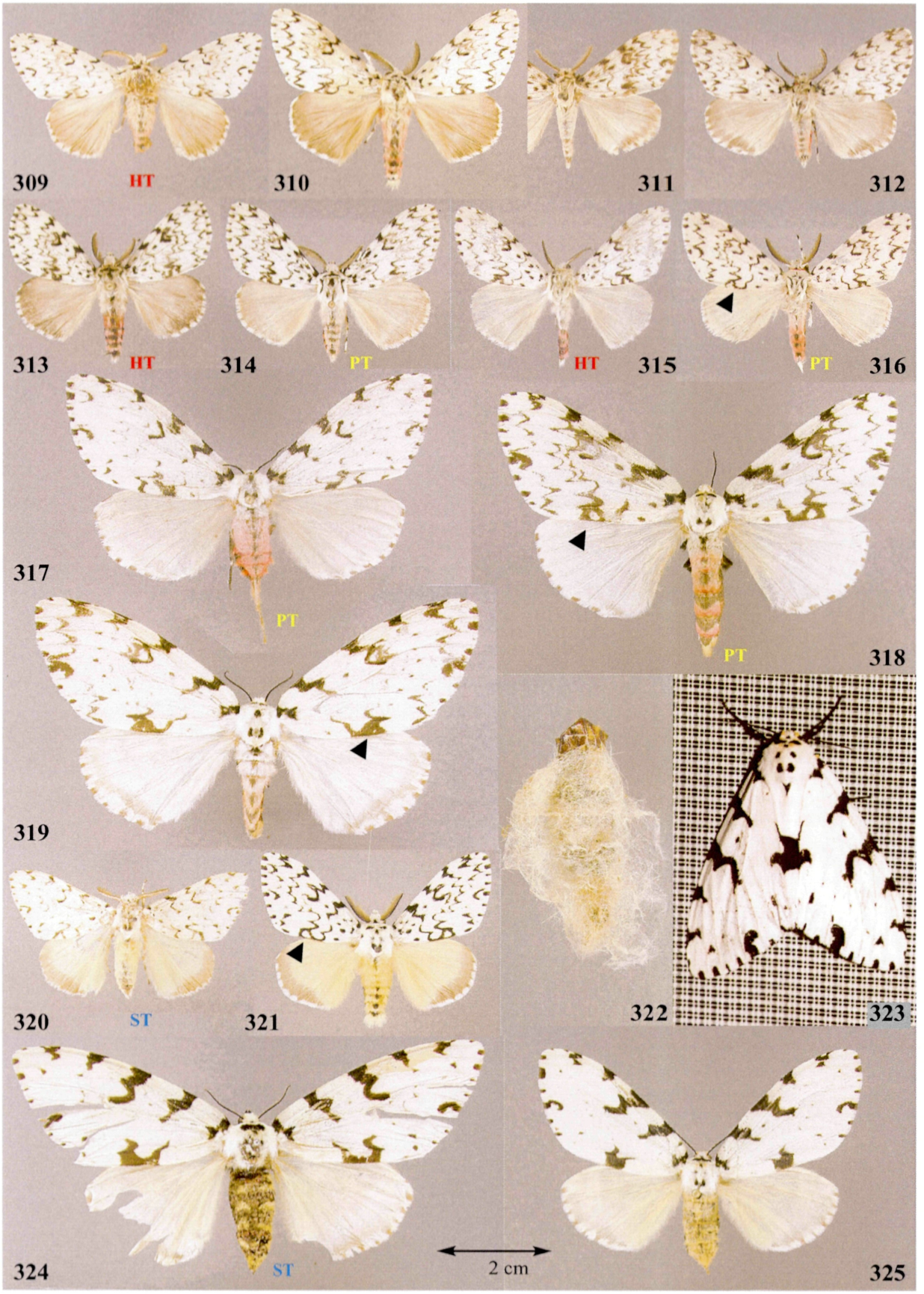


**Figs. 326-346:** next page

**Fig. 326:** *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855 – ♂, N. Vietnam.
**Fig. 327:** *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855 – ♂, Taiwan.
**Fig. 328:** *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855 – ♀, Bangladesh "Silhet", (Holotype of *Lymantria micans* FELDER & FELDER, 1874).

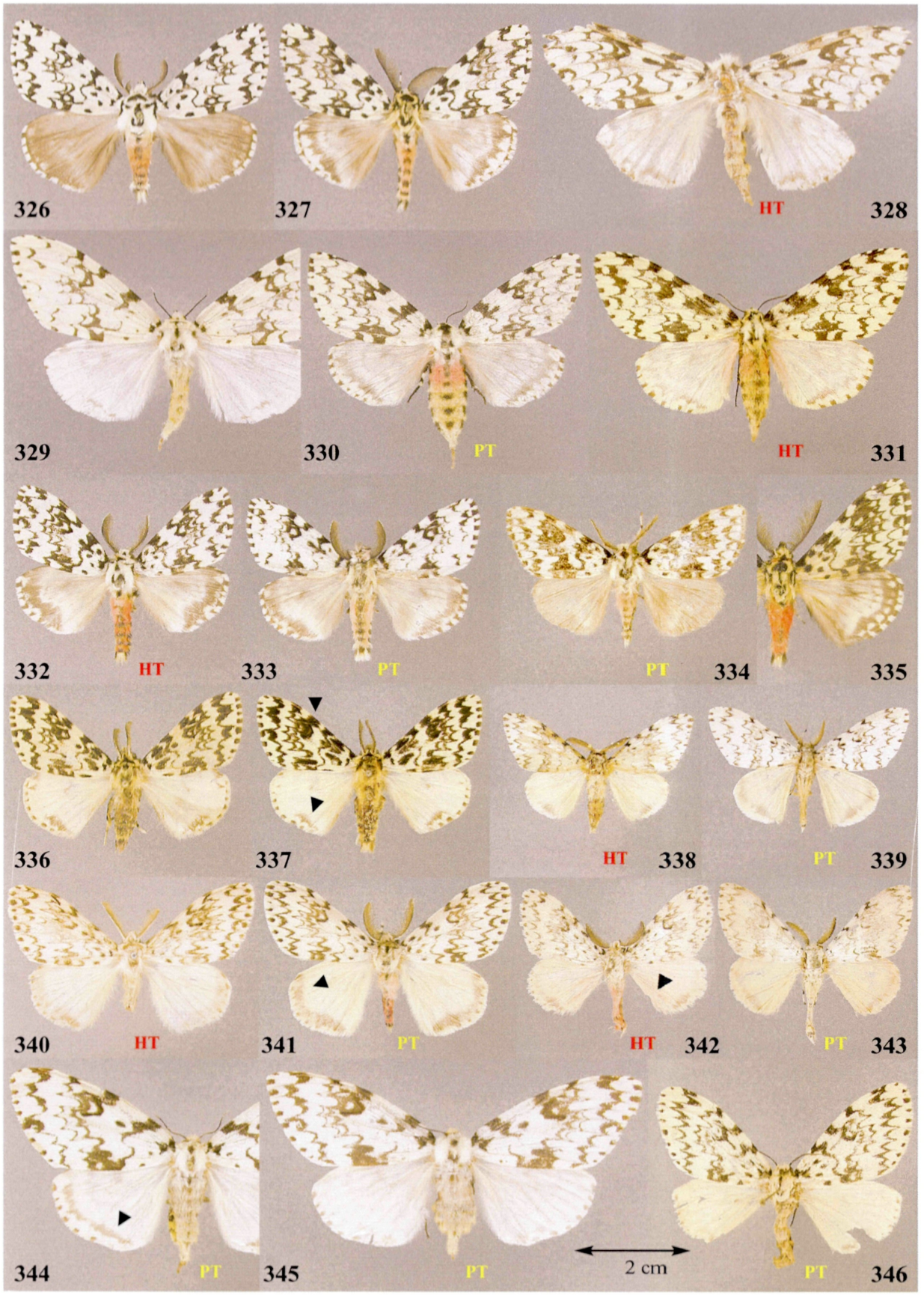
**Fig. 329:** *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855 – ♀, N. Vietnam.
**Fig. 330:** *Lymantria* (*Lymantria*) *concolor septentrionalis* **ssp.n.** – ♀, China, Shaanxi, Paratype.
**Fig. 331:** *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855 – ♀, China, Sichuan, Holotype of *Lymantria concolor lacteipennis* COLLENETTE, 1933).

**Fig. 332:** *Lymantria* (*Lymantria*) *concolor septentrionalis* **ssp.n.** – ♂, China, Shaanxi, Holotype.
**Fig. 333:** *Lymantria* (*Lymantria*) *concolor septentrionalis* **ssp.n.** – ♂, China, Shaanxi, Paratype.
**Fig. 334:** *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855 – ♂, China, Sichuan, "Allotype" of *Lymantria concolor lacteipennis* COLLENETTE, 1933).
**Fig. 335:** *Lymantria* (*Lymantria*) *concolor concolor* WALKER, 1855 – ♂, f. *lacteipennis* COLLENETTE, Thailand.

**Fig. 336:** *Lymantria* (*Lymantria*) *ossea* TOXOPEUS, 1948 – ♂, Indonesia, Java.
**Fig. 337:** *Lymantria* (*Lymantria*) *ossea* TOXOPEUS, 1948 – ♂, Indonesia, Java.
**Fig. 338:** *Lymantria* (*Lymantria*) *alexandrae* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 339:** *Lymantria* (*Lymantria*) *alexandrae* SCHINTLMEISTER, 1994 – ♂, W. Malaysia, Paratype.

**Fig. 340:** *Lymantria* (*Lymantria*) *hollowayi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 341:** *Lymantria* (*Lymantria*) *hollowayi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Paratype.
**Fig. 342:** *Lymantria* (*Lymantria*) *jakli* **sp.n.** – ♂, Indonesia, S. Kalimantan, Holotype.
**Fig. 343:** *Lymantria* (*Lymantria*) *jakli* **sp.n.** – ♂, Indonesia, S. Kalimantan, Paratype.

**Fig. 344:** *Lymantria* (*Lymantria*) *hollowayi* SCHINTLMEISTER, 1994 – ♀, Indonesia, Sumatra, Paratype.
**Fig. 345:** *Lymantria* (*Lymantria*) *alexandrae* SCHINTLMEISTER, 1994 – ♀, Indonesia, Sumatra, Paratype.
**Fig. 346:** *Lymantria* (*Lymantria*) *jakli* **sp.n.** – ♀, Indonesia, S. Kalimantan, Paratype.



**Figs. 347-367:** next page

**Fig. 347:** *Lymantria* (*Lymantria*) *witti* **sp.n.** – ♂, Philippines, Mindoro, Holotype.
**Fig. 348:** *Lymantria* (*Lymantria*) *witti* **sp.n.** – ♂, Philippines, Mindoro, Paratype.
**Fig. 349:** *Lymantria* (*Lymantria*) *witti* **sp.n.** – ♂, Philippines, Negros, Paratype.
**Fig. 350:** *Lymantria* (*Lymantria*) *lygaea* BETHUNE-BAKER, 1908 – ♂, Papua New Guinea, Holotype.
**Fig. 351:** *Lymantria* (*Lymantria*) *lygaea* BETHUNE-BAKER, 1908 – ♂, Indonesia, Irian Jaya.

**Fig. 352:** *Lymantria* (*Lymantria*) *demotes demotes* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi, Holotype.
**Fig. 353:** *Lymantria* (*Lymantria*) *demotes demotes* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi.
**Fig. 354:** *Lymantria* (*Lymantria*) *demotes seramensis* **ssp.n.** – ♂, Indonesia, Moluccas, Seram, Holotype.
**Fig. 355:** *Lymantria* (*Lymantria*) *demotes seramensis* **ssp.n.** – ♂, Indonesia, Moluccas, Seram, Paratype.

**Fig. 356:** *Lymantria* (*Lymantria*) *demotes galai* **ssp.n.** – ♂, Indonesia, Halmahera, Holotype.
**Fig. 357:** *Lymantria* (*Lymantria*) *demotes galai* **ssp.n.** – ♂, Indonesia, Halmahera, Paratype.
**Fig. 358:** *Lymantria* (*Lymantria*) *demotes galai* **ssp.n.** – ♂, Indonesia, Moluccas, Bacan, Paratype.
**Fig. 359:** *Lymantria* (*Lymantria*) *demotes galai* **ssp.n.** – ♂, Indonesia, Moluccas, Bacan, Paratype.

**Fig. 360:** *Lymantria* (*Lymantria*) *demotes prattorum* **ssp.n.** – ♂, Indonesia, Moluccas, Buru, Holotype.
**Fig. 361:** *Lymantria* (*Lymantria*) *demotes prattorum* **ssp.n.** – ♂, Indonesia, Moluccas, Buru, Paratype.
**Fig. 362:** *Lymantria* (*Lymantria*) *demotes seramensis* **ssp.n.** – ♂, Indonesia, Moluccas, Seram, Paratype.

**Fig. 363:** *Lymantria* (*Lymantria*) *demotes galai* **ssp.n.** – ♀, Indonesia, Moluccas, Bacan, Paratype.
**Fig. 364:** *Lymantria* (*Lymantria*) *demotes galai* **ssp.n.** – ♀, Indonesia, Moluccas, Bacan, Paratype.
**Fig. 365:** *Lymantria* (*Lymantria*) *demotes seramensis* **ssp.n.** – ♀, Indonesia, Moluccas, Seram, Paratype.

**Fig. 366:** *Lymantria* (*Lymantria*) *witti* **sp.n.** – ♀, Philippines, Mindoro, Paratype.
**Fig. 367:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♀, form, Philippines, Negros.

**Figs. 368-382:** next page

**Fig. 368:** *Lymantria* (*Lymantria*) *subrosea subrosea* SWINHOE, 1903 – ♂, Sri Lanka, Holotype.
**Fig. 369:** *Lymantria* (*Lymantria*) *subrosea subrosea* SWINHOE, 1903 – ♂, Sri Lanka.
**Fig. 370:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, form, China, Hainan.

**Fig. 371:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, Singapore, Holotype.
**Fig. 372:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, NW. India, Assam.
**Fig. 373:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, melanic form, NW. India, Assam.
**Fig. 374:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, melanic form, NW. India, Assam.
**Fig. 375:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, melanic form, NW. India, Assam.

**Fig. 376:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♀, Indonesia, Nias Isl. (Holotype of *Lymantria similis niasica* STRAND, 1915).
**Fig. 377:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♀, melanic form, NW. India, Assam.

**Fig. 378:** *Lymantria* (*Lymantria*) *semperi* **sp.n .**– ♂, Philippines, Mindoro, Holotype.
**Fig. 379:** *Lymantria* (*Lymantria*) *semperi* **sp.n.** – ♂, Philippines, Mindoro, Paratype.
**Fig. 380:** *Lymantria* (*Lymantria*) *semperi* **sp.n.** – ♀, Philippines, Palawan, Paratype.

**Fig. 381:** *Lymantria* (*Lymantria*) *semperi* **sp.n.** – ♀, Philippines, Mindanao, Paratype.
**Fig. 382:** *Lymantria* (*Lymantria*) *semperi* **sp.n.** – ♀, form, Philippines, Leyte, Paratype.

**Figs. 383-403:** next page

**Fig. 383:** *Lymantria* (*Lymantria*) *sobrina sobrina* MOORE, 1879 – ♂, NW. India, Lectotype.
**Fig. 384:** *Lymantria* (*Lymantria*) *sobrina sobrina* MOORE, 1879 – ♂, NE. Pakistan.
**Fig. 385:** *Lymantria* (*Lymantria*) *sobrina sobrina* MOORE, 1879 – ♀, NW. India, Paralectotype.

**Fig. 386:** *Lymantria* (*Lymantria*) *sobrina sobrina* MOORE, 1879 – ♀, NE. Pakistan.
**Fig. 387:** *Lymantria* (*Lymantria*) *sobrina buchsbaumi* **ssp.n.** – ♀, Nepal, Paratype.

**Fig. 388:** *Lymantria* (*Lymantria*) *sobrina buchsbaumi* **ssp.n.** – ♂, Nepal, Holotype.
**Fig. 389:** *Lymantria* (*Lymantria*) *sobrina buchsbaumi* **ssp.n.** – ♂, Nepal, Paratype.
**Fig. 390:** *Lymantria* (*Lymantria*) *sobrina buchsbaumi* **ssp.n.** – ♀, Nepal, Paratype.

**Fig. 391:** *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855) – ♂, India (Holotype of *Lymantria rhodina* WALKER, 1865).
**Fig. 392:** *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855) – ♂, NW. India.
**Fig. 393:** *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855) – ♂, N. India Lectotype.
**Fig. 394:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, Taiwan.

**Fig. 395:** *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855) – ♀, form, NE. India, Meghalaya.
**Fig. 396:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, Taiwan, Holotype.
**Fig. 397:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♀, Taiwan.

**Fig. 398:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, Taiwan.
**Fig. 399:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, form, Taiwan.
**Fig. 400:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, form, Taiwan.

**Fig. 401:** *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855) – ♀, NW. India.
**Fig. 402:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♀, form, Taiwan.
**Fig. 403:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♀, form, Taiwan.

**Figs. 404-427:** next page

**Fig. 404:** *Lymantria* (*Lymantria*) *argyrochroa* COLLENETTE, 1936 – ♂, China, Yunnan, Holotype.
**Fig. 405:** *Lymantria* (*Lymantria*) *argyrochroa* COLLENETTE, 1936 – ♂, China, Yunnan.
**Fig. 406:** *Lymantria* (*Lymantria*) *argyrochroa* COLLENETTE, 1936 – ♀, China, Yunnan.

**Fig. 407:** *Lymantria* (*Lymantria*) *dissoluta* SWINHOE, 1903 – ♀, China, Hongkong, Syntype.
**Fig. 408:** *Lymantria* (*Lymantria*) *dissoluta* SWINHOE, 1903 – ♀, China, Zhejiang.
**Fig. 409:** *Lymantria* (*Lymantria*) *dissoluta* SWINHOE, 1903 – ♂, China, Hongkong, Syntype.
**Fig. 410:** *Lymantria* (*Lymantria*) *dissoluta* SWINHOE, 1903 – ♂, China, Yunnan.

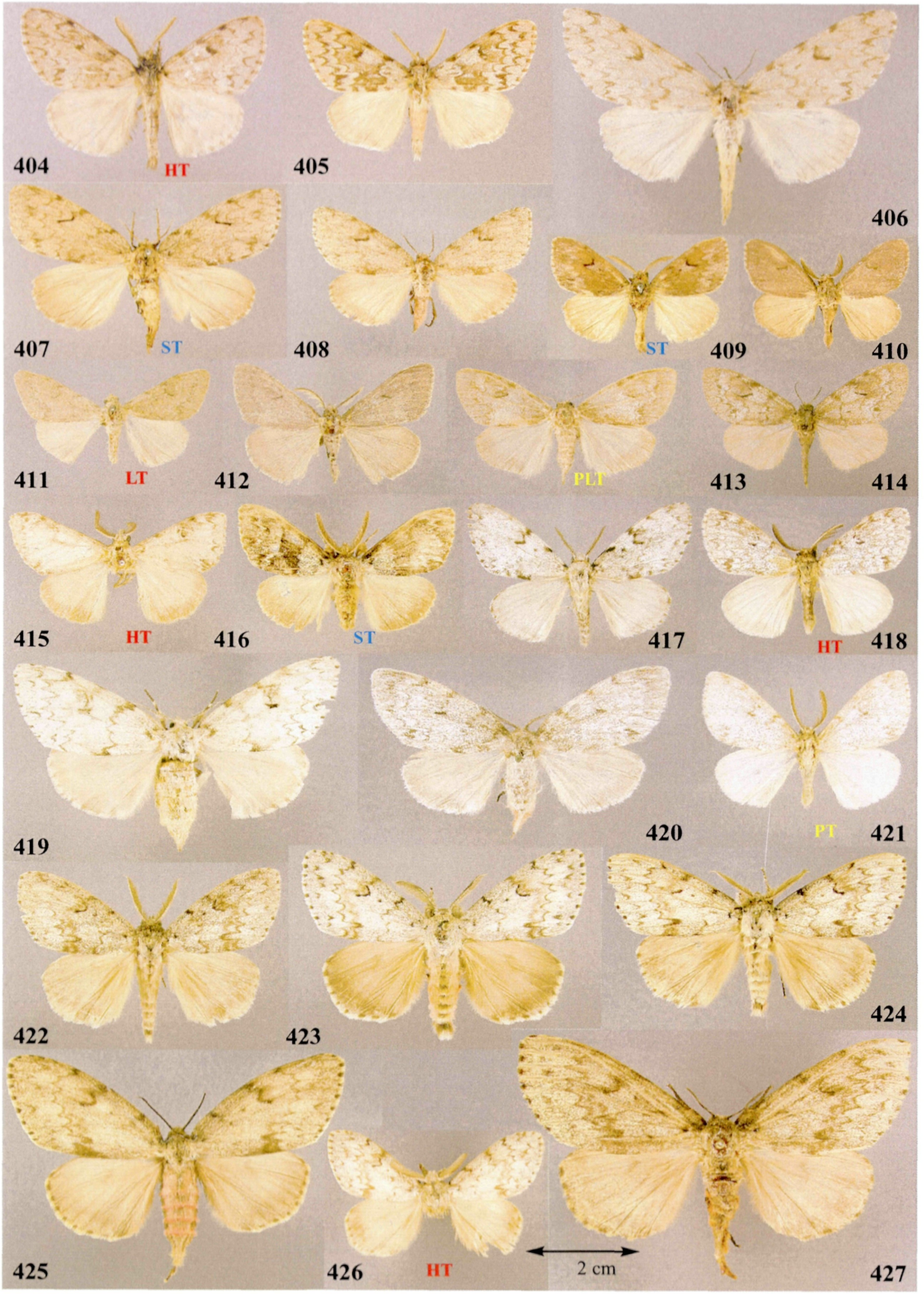
**Fig. 411:** *Lymantria* (*Lymantria*) *moesta* SWINHOE, 1903 – ♂, NW. India, Lectotype.
**Fig. 412:** *Lymantria* (*Lymantria*) *moesta* SWINHOE, 1903 – ♂, NW. India.
**Fig. 413:** *Lymantria* (*Lymantria*) *moesta* SWINHOE, 1903 – ♀, NW. India, Paralectotype.
**Fig. 414:** *Lymantria* (*Lymantria*) *moesta* SWINHOE, 1903 – ♀, Nepal.

**Fig. 415:** *Lymantria* (*Lymantria*) *sinica sinica* MOORE, 1879 – ♂, N. China, Holotype.
**Fig. 416:** *Lymantria* (*Lymantria*) *sinica sinica* MOORE, 1879 – ♂, Taiwan (Syntype of *Lymantria nebulosa* WILEMAN, 1910).
**Fig. 417:** *Lymantria* (*Lymantria*) *sinica sinica* MOORE, 1879 – ♂, Taiwan.
**Fig. 418:** *Lymantria* (*Lymantria*) *sinica albido* **ssp.n.** – ♂, N. Vietnam, Holotype.

**Fig. 419:** *Lymantria* (*Lymantria*) *sinica sinica* MOORE, 1879 – ♀, Taiwan (Syntype of *Lymantria nebulosa* WILEMAN, 1910).
**Fig. 420:** *Lymantria* (*Lymantria*) *sinica sinica* MOORE, 1879 – ♀, China, Hainan.
**Fig. 421:** *Lymantria* (*Lymantria*) *sinica albido* **ssp.n.** – ♂, N. Vietnam, Paratype.

**Fig. 422:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) – ♂, Japan, Honshu.
**Fig. 423:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) – ♂, Japan, Honshu, ex ovo.
**Fig. 424:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) – ♂, N. Korea.

**Fig. 425:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) – ♀, Japan, Honshu, ex ovo.
**Fig. 426:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) – ♂, Japan, Honshu, Holotype.
**Fig. 427:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) – ♀, N. Korea.



## *Lymantria* (*Lymantria*) *argyrochroa* COLLENETTE, 1936: 484

(Figs. 288, 404-406, 459)

**Holotype:** China, Nord-Yuennan, Li-kiang [=Lijiang] – ZFMK, Bonn [examined].

**Taxonomy:** This species externally resembles *umbrifera* from Taiwan (diagnostic is the broad fuscous marginal area of the hindwings), though the male genitalia are more similar to *dissoluta*. The imago however is larger than *dissoluta* and the wings have a deeper shape. *Lymantria dissoluta* lacks the greyish pattern in the basal area of the forewings.

**Male genitalia** (Fig. 459): The male genitalia differ from *dissoluta* only slightly by the shape of the valves.

**Further remarks:** The species seems to be restricted to Yunnan. Besides this there is a single female from N. Myanmar, Putao, which would match in general appearance *argyrochroa*.

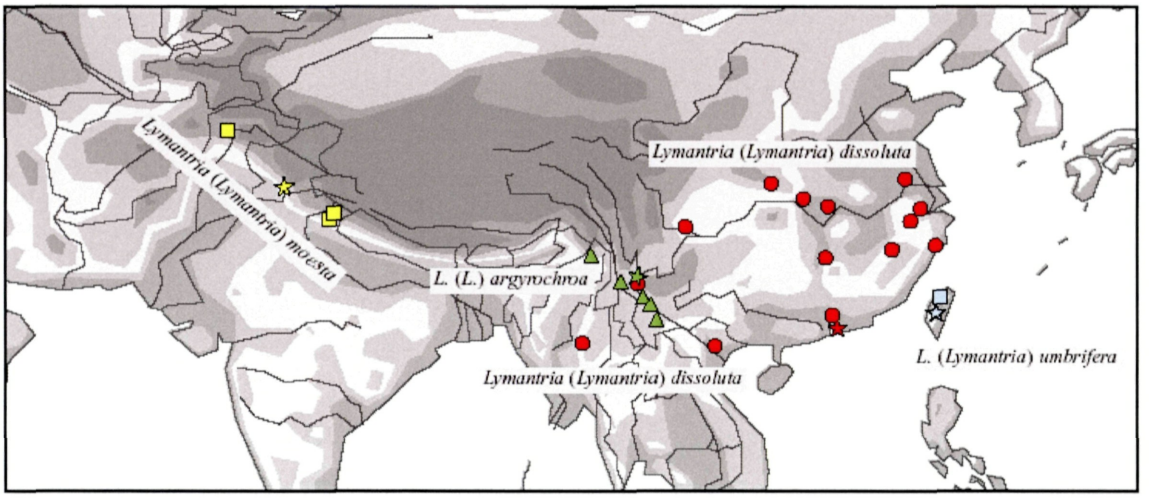



**Fig. 288:** Distribution of the subgenus *Lymantria*.

**Figs. 429-437:** next page

**Fig. 429:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♂, China, Shaanxi, GU 20-86.
**Fig. 430:** *Lymantria* (*Lymantria*) *minomonis minomonis* MATSUMURA, 1934 – ♂, Japan, Honshu, GU 50-100.
**Fig. 431:** *Lymantria* (*Lymantria*) *minomonis okinawaensis* KISHIDA, 1987 – ♂, Japan, Okinawa, GU 62-25.

**Fig. 432:** *Lymantria* (*Lymantria*) *sugii* KISHIDA, 1986 – ♂, Taiwan, GU 49-85.
**Fig. 433:** *Lymantria* (*Lymantria*) *similis similis* MOORE, 1879 – ♂, Bhutan, GU 11-42.
**Fig. 434:** *Lymantria* (*Lymantria*) *similis monachoides* **ssp.n.** – ♂, China, Shaanxi, GU 60-33, Paratype.

**Fig. 435:** *Lymantria* (*Lymantria*) *similis* MOORE, 1879 – ♂, China, Jiangxi, GU 62-38.
**Fig. 436:** *Lymantria* (*Lymantria*) *todara* MOORE, 1879 – ♂, S. India, Kerala, GU 37-90.
**Fig. 437:** *Lymantria* (*Lymantria*) *concolor septentrionalis* **ssp.n.** – ♂, China, Shaanxi, GU 37-99, Paratype.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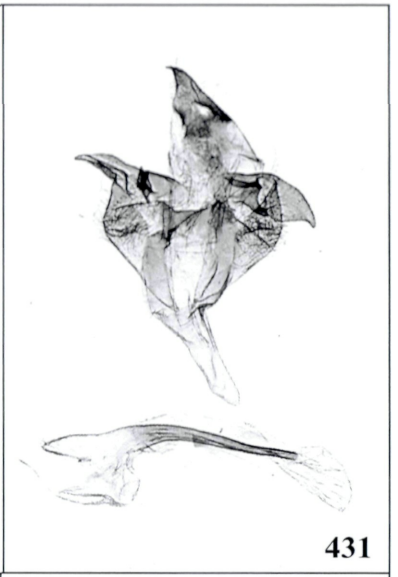
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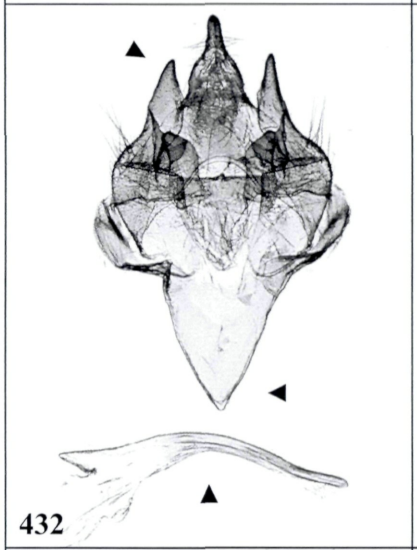
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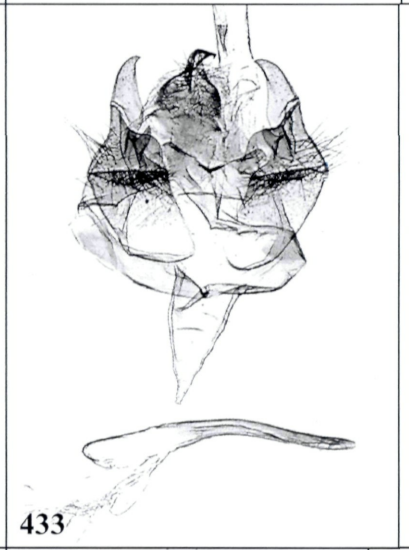
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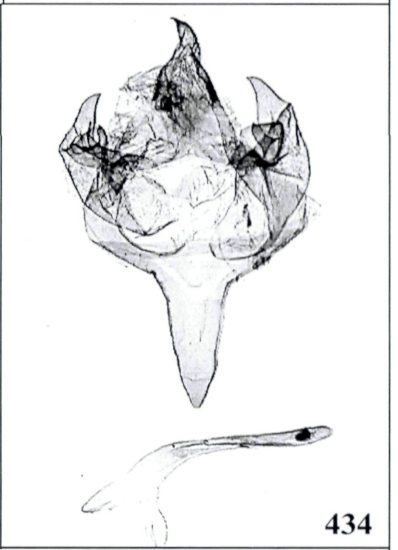
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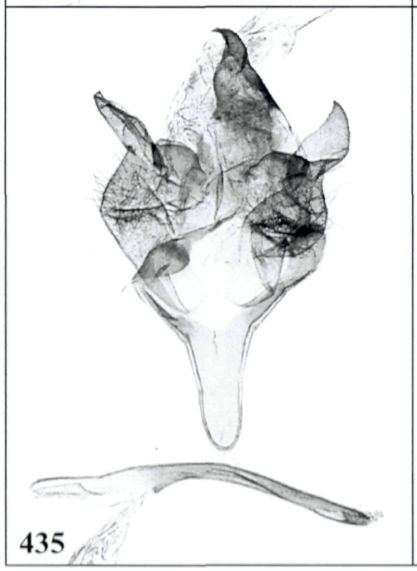
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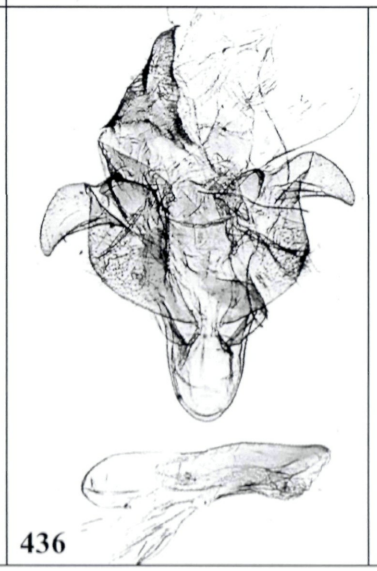
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437

## *Lymantria* (*Lymantria*) *dissoluta* SWINHOE, 1903: 484

(Figs. 288, 407-410, 460, 461)

**Syntypes:** [China], Hongkong – BMNH, London [examined].

**Taxonomy:** This is the smallest of a complex of externally similar species. The ground colour is mixed with warm brownish scales. The pattern of the forewings is usually a uniform greyish with a black discal streak, although there are also individual forms with a contrasting post median area containing greyish zigzag bands.

**Male genitalia** (Figs. 460, 461): The male genitalia are characterized by the prominent and pointed costal valve process and the slender somewhat curved aedeagus.

**Further remarks:** The distribution extends from Eastern China toward Myanmar, but only a few localities are known to me. In Yunnan, where the sister species *argyrochroa* occurs, *dissoluta* has not been found yet.

## *Lymantria* (*Lymantria*) *moesta* SWINHOE, 1903: 484

(Figs. 288, 411-414, 463)

**Lectotype:** [India], N.W. Himalaya, Kussowlee [= Kasauli] – BMNH, London [examined].

**Taxonomy:** The species greatly externally resembles weakly marked *dissoluta.*

**Male genitalia** (Fig. 463): The male genitalia are very different from *dissoluta* by the shape of their valves, particularly the large ampulla.

**Further remarks:** The lectotype was designated by GUPTA et al. (1984: 26). It seems that the species is restricted to the Western Himalayas. The number of investigated specimens was n<15, with only 5 males (males were dissected for GU from males from Bhimtal and Pakistan/Balakot).

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**Figs. 438-447:** next page

**Fig. 438:** *Lymantria* (*Lymantria*) *ossea* TOXOPEUS, 1948 – ♂, Indonesia, Java, GU 60-32.
**Fig. 439:** *Lymantria* (*Lymantria*) *hollowayi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, BM #1949, Holotype.
**Fig. 440:** *Lymantria* (*Lymantria*) *hollowayi* SCHINTLMEISTER, 1994 – ♂, W. Malaysia, GU 35-93.

**Fig. 441:** *Lymantria* (*Lymantria*) *jakli* **sp.n.** – ♂, Indonesia, S. Kalimantan, GU 49-86, Holotype.
**Fig. 442:** *Lymantria* (*Lymantria*) *alexandrae* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, BM #1735, Holotype.
**Fig. 443:** *Lymantria* (*Lymantria*) *witti* **sp.n.** – ♂, Philippines, Mindoro, 49-82, Paratype.

**Fig. 444:** *Lymantria* (*Lymantria*) *demotes demotes* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi, GU 37-94.
**Fig. 445:** *Lymantria* (*Lymantria*) *demotes galai* **ssp.n.** – ♂, Indonesia, Moluccas, Bacan, GU 11-56, Paratype.
**Fig. 446:** *Lymantria* (*Lymantria*) *demotes prattorum* **ssp.n.** – ♂, Indonesia, Moluccas, Buru, BM 2/2003, Paratype.
**Fig. 447:** *Lymantria* (*Lymantria*) *demotes seramensis* **ssp.n.** – ♂, Indonesia, Moluccas, Seram, GU 11-05, Paratype.

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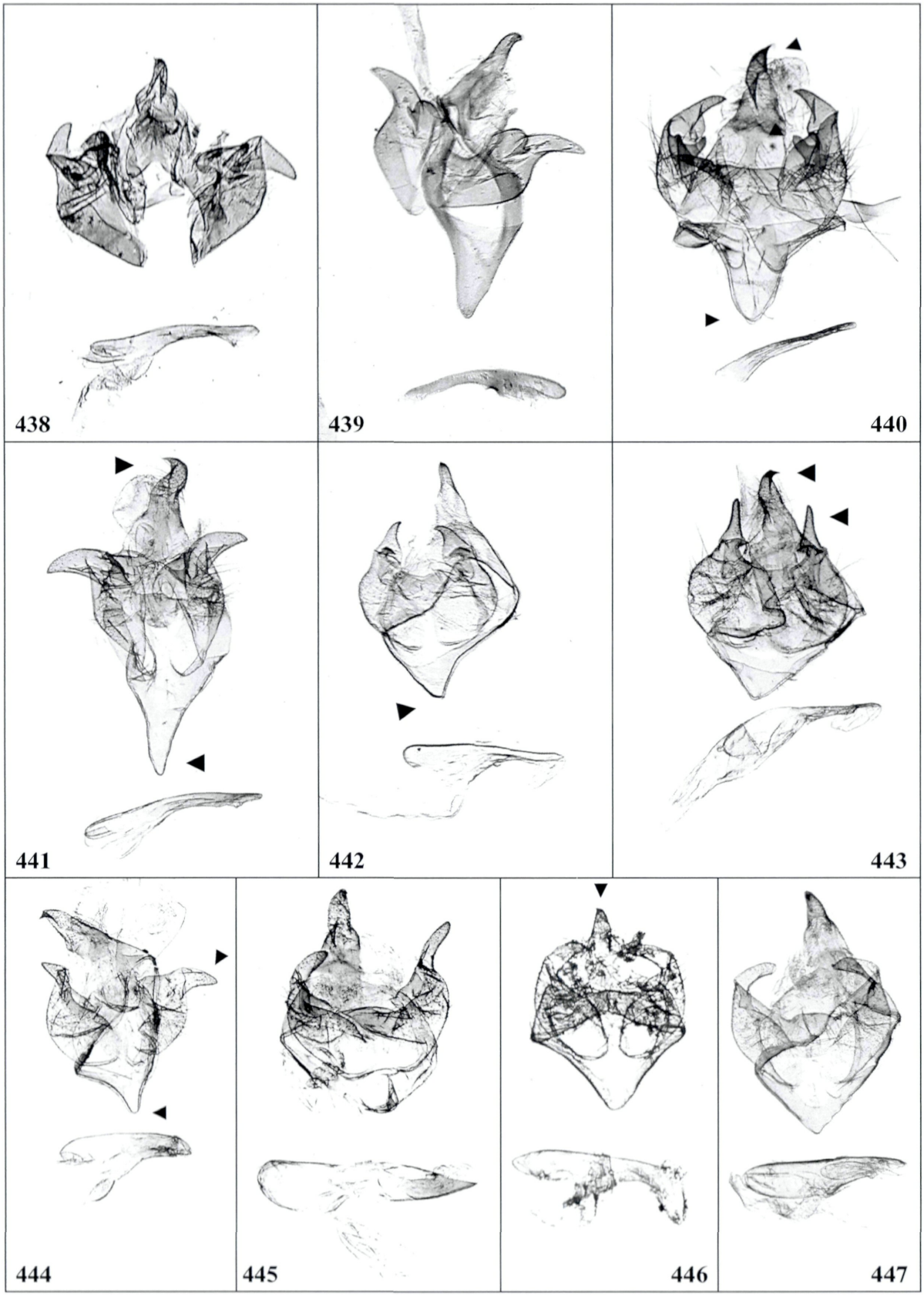

## *Lymantria* (*Lymantria*) *sinica sinica* MOORE, 1879: 403

(Figs. 289, 415-417, 419, 420, 462)

**Holotype:** N. China, Shanghai – BMNH, London [examined].

**Synonyms:**
*Lymantria nebulosa* WILEMAN, 1910: 309 **syn.n.**
Syntypes: Formosa [= Taiwan], Kanshirei – BMNH, London [examined].
*Lymantria formosana* MATSUMURA, 1911.
Holotype: Formosa [= Taiwan], – HUS, Sapporo [not examined].
*Lymantria melanopogon* STRAND, 1914: 331 **syn.n.**
Syntypes: Formosa [=Taiwan], Kosempo – in coll. DEI, Eberswalde [not examined].
*Lymantria baibarana* MATSUMURA, 1931: 713, f. 484 **syn.n.**
Holotype: Formosa [=Taiwan] – HUS, Sapporo [not examined].

**Taxonomy:** The species is quite variable. There are individual forms of pale greyish ground colour to blackish individuals. The pale greyish basal area of the forewings is diagnostic. The females are greyish-white with two transverse blackish bands on the forewings. The hindwings have a weakly developed fuscous submarginal area. The females possess a whitish abdomen mixed with yellow hairs at the tip.

**Male genitalia** (Fig. 462): The male genitalia are easily distinguishable by the diagnostic forked ampulla of the valves and the large aedeagus.

## *Lymantria* (*Lymantria*) *sinica albido* ssp.n.

(Figs. 289, 418, 421, 464)

**Holotype:** ♂, N. Vietnam Mt. Fan-si-pan, Cha-pa, 22°15'N, 103°46'E, 1800m, 8.-29.v.1993, leg. V. Sinjaev & A. Simonov – in coll. A. Schintlmeister, Dresden.
**Paratypes** (5♂♂, 1♀): N. Vietnam: 2♂♂, Mt. Fan-si-pan, Cha-pa, 22°15'N, 103°46'E, 1800m, 8.-29.v.1993; 2♂♂, ibid v.1995; 1♂, Tam Dao, 60km NW Hanoi, 21°34'N, 105°20'E, 950m, 1.-5.v.1993; China, Guangxi: 1♀, Shiwan Dashan, 30km SW Nanan, 21°43'N, 107°32'E, 900m, 1.-14.iv.2003.

**Diagnosis:** Forewing length ♂♂ 18-20 mm, the ♀ spans 27 mm. The populations from Vietnam differ from the nominotypical populations by the pale greyish-white ground colour of the males. There are no fuscous individual forms known to me. The male genitalia however are virtually identical with specimens from Zhejiang or Taiwan. The female rather resembles the females of ssp. *sinica*, although the ground colour is more whitish.

**Etymology:** Named for the white ground colour of the wings.

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**Figs. 448-456:** next page

**Fig. 448:** *Lymantria* (*Lymantria*) *subrosea subrosea* SWINHOE, 1903 – ♂, Sri Lanka, BM 17/2003.
**Fig. 449:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, Indonesia, Sunda Isls., Flores, GU 20-50.
**Fig. 450:** *Lymantria* (*Lymantria*) *subrosea singapura* SWINHOE, 1906 – ♂, China, Jiangxi, GU 62-26.
**Fig. 451:** *Lymantria* (*Lymantria*) *semperi* **sp.n.** – ♂, Philippines, Negros, GU 50-22, Paratype.
**Fig. 452:** *Lymantria* (*Lymantria*) *lygaea* BETHUNE-BAKER, 1908 – ♂, Indonesia, Irian Jaya, GU 11-28.
**Fig. 453:** *Lymantria* (*Lymantria*) *sobrina sobrina* MOORE, 1879 – ♂, N. Pakistan, GU 35-99.
**Fig. 454:** *Lymantria* (*Lymantria*) *sobrina buchsbaumi* **ssp.n.** – ♂, Nepal, GU 50-97, Paratype.
**Fig. 455:** *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855) – ♂, NW. India, Bhimtal, GU 09-90.
**Fig. 456:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, Taiwan, GU 20-66a.

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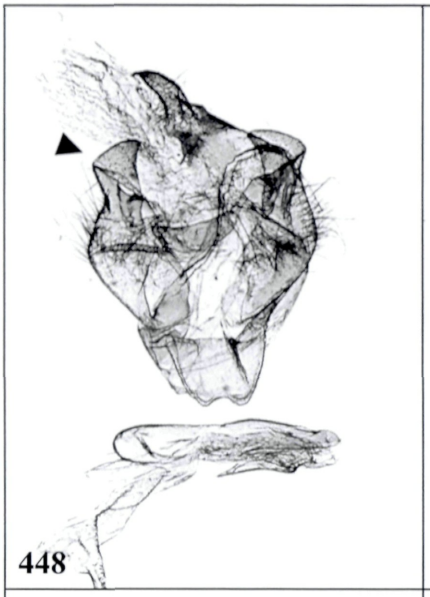
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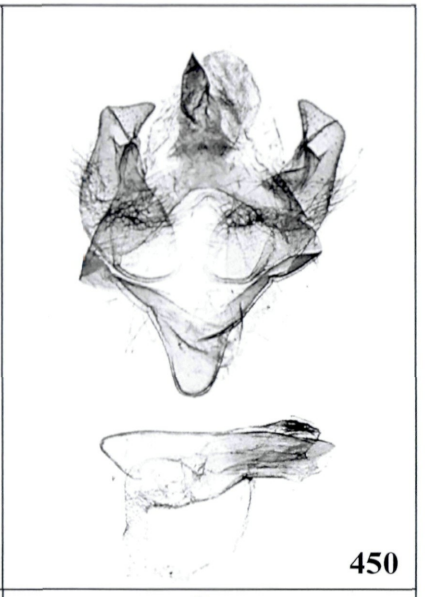
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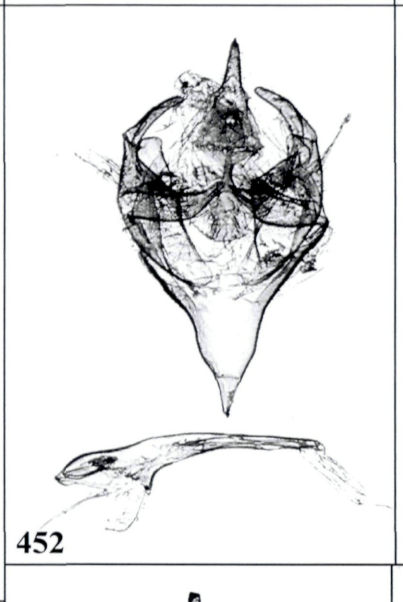
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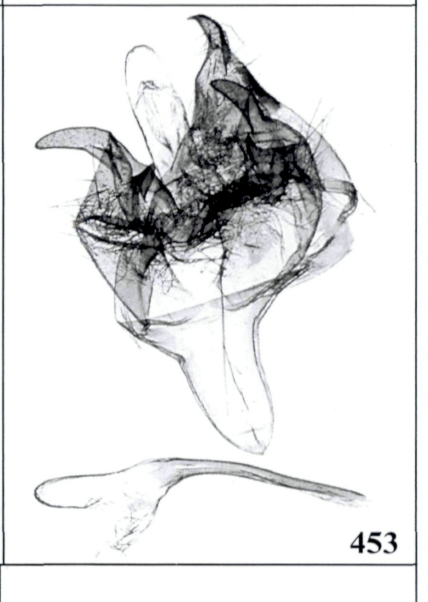
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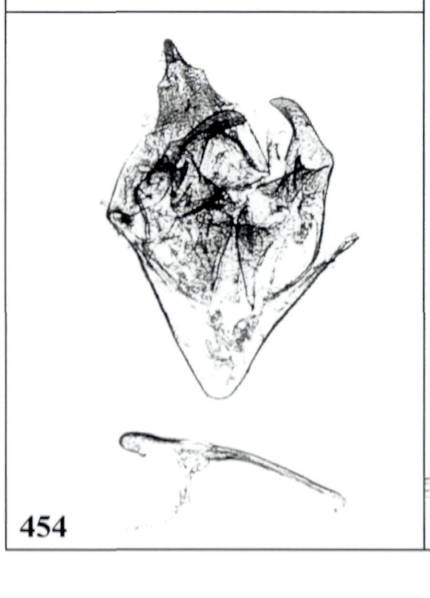
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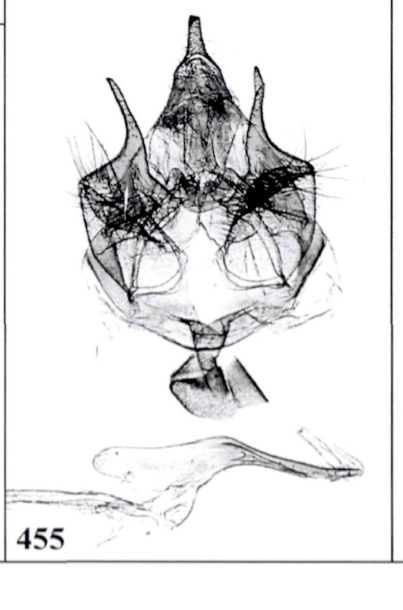
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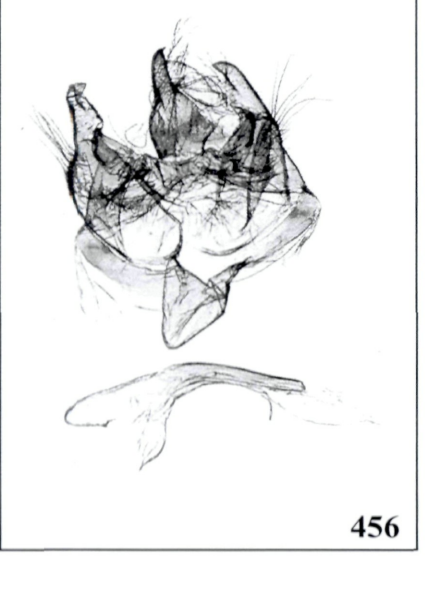
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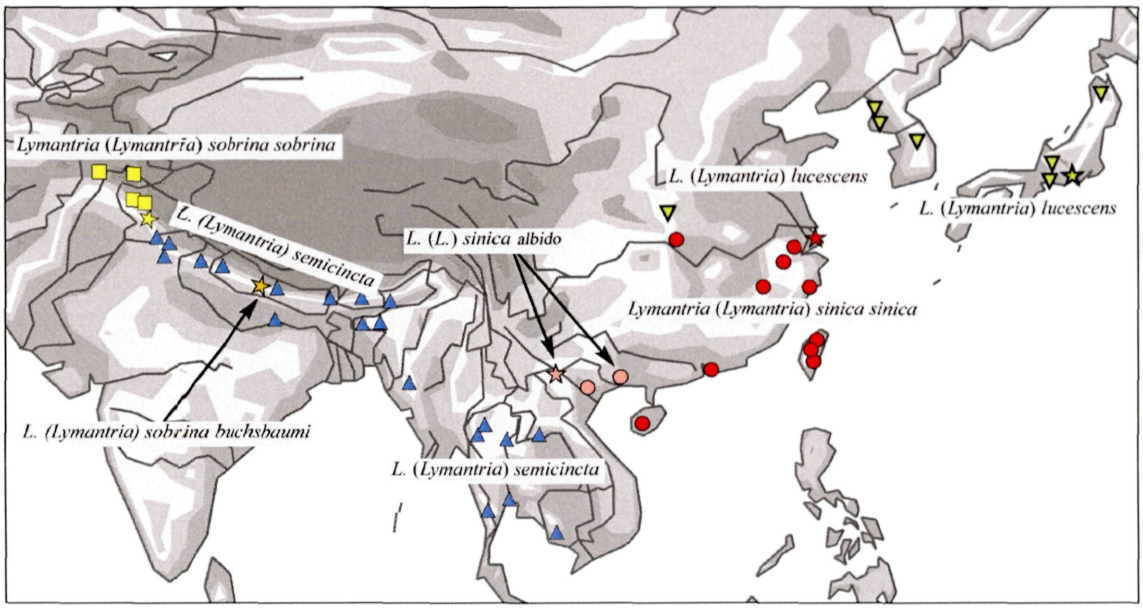


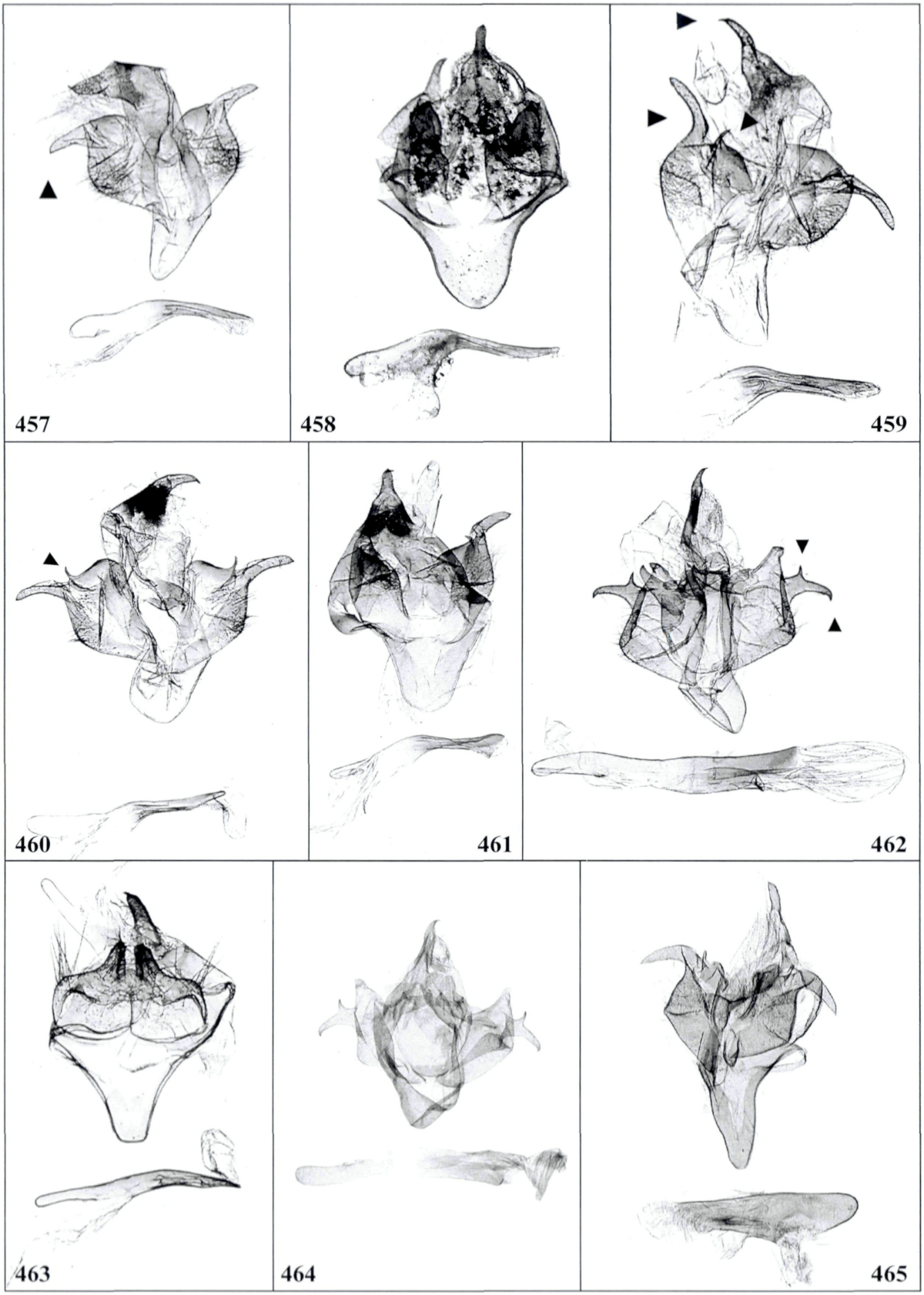

**Fig. 289:** Distribution of the subgenus *Lymantria*.

**Figs. 457-465:** next page

**Fig. 457:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, form, Taiwan, GU 37-88.
**Fig. 458:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♂, form, Taiwan, GU 62-79.
**Fig. 459:** *Lymantria* (*Lymantria*) *argyrochroa* COLLENETTE, 1936 – ♂, China, Yunnan, GU 37-91.

**Fig. 460:** *Lymantria* (*Lymantria*) *dissoluta* SWINHOE, 1903 – ♂, China, Sichuan, GU 37-89.
**Fig. 461:** *Lymantria* (*Lymantria*) *dissoluta* SWINHOE, 1903 – ♂, China, Jiangxi, GU 62-40.
**Fig. 462:** *Lymantria* (*Lymantria*) *sinica sinica* MOORE, 1879 – ♂, China, Fujian, GU 20-78.

**Fig. 463:** *Lymantria* (*Lymantria*) *moesta* SWINHOE, 1903 – ♂, NW. India, Bhimtal, GU 11-54a.
**Fig. 464:** *Lymantria* (*Lymantria*) *sinica albido* **ssp.n.** – ♂, N. Vietnam, GU 50-69, Paratype.
**Fig. 465:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) – ♂, N. Korea, GU 20-28.



## *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881): 11 (*Porthetria*)

(Figs. 289, 422-427, 465)

**Holotype:** Japan, Tokei – BMNH, London [examined].

**Synonyms:**
*Lymantria takamukui* NAGANO, 1917: 411.
Syntypes: Japan, Honshu: Gifu and Kibune [not examined].
*Lymantria aomoriensis* MATSUMURA, 1921: 876, pl. 62: 5.
Syntypes: Japan, Honshu Aomori, Ohminato – HUS, Sapporo [not examined].

**Taxonomy:** This species externally somewhat resembles *L.* (*Porthetria*) *dispar*, though the long ovipositor of the female and the male genitalia place this species into the subgenus *Lymantria*.

The males have rather quadrangular shaped forewings with a whitish ground colour. The hindwings are fuscous and the abdomen pinkish. The females greatly resemble the females of *fumida*, though the abdomen is of a pinkish colour.

**Further remarks:** The conspecifity of both sexes was reconfirmed by breeding on *Quercus* by Paul Schaefer, where a pair from Honshu is illustrated here.

Almost nothing is known of its distribution outside Japan. In my collection I have a few specimens from the Korean peninsula and a single specimen from Hubei, Wudang Shan. The number of investigated specimens was n=14.

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**Figs. 466-472:** next page

**Fig. 466:** *Lymantria* (*Lymantria*) *monacha* (LINNAEUS, 1758) – ♀, N. Korea, W 9168.
**Fig. 467:** *Lymantria* (*Lymantria*) *similis similis* MOORE, 1879 – ♀, China, Sichuan, GU 49-99.
**Fig. 468:** *Lymantria* (*Lymantria*) *similis monachoides* **ssp.n.** – ♀, China, Shaanxi, GU 37-92, Paratype.

**Fig. 469:** *Lymantria* (*Lymantria*) *sugii* KISHIDA, 1986– ♀, Taiwan, W 9121.
**Fig. 470:** *Lymantria* (*Lymantria*) *concolor septentrionalis* **ssp.n.**– ♀, China, Shaanxi, GU 37-92, Paratype.
**Fig. 471:** *Lymantria* (*Lymantria*) *semicincta* (WALKER, 1855) – ♀, NW. Thailand, GU 49-87.
**Fig. 472:** *Lymantria* (*Lymantria*) *umbrifera* WILEMAN, 1910 – ♀, Taiwan, W 9125.

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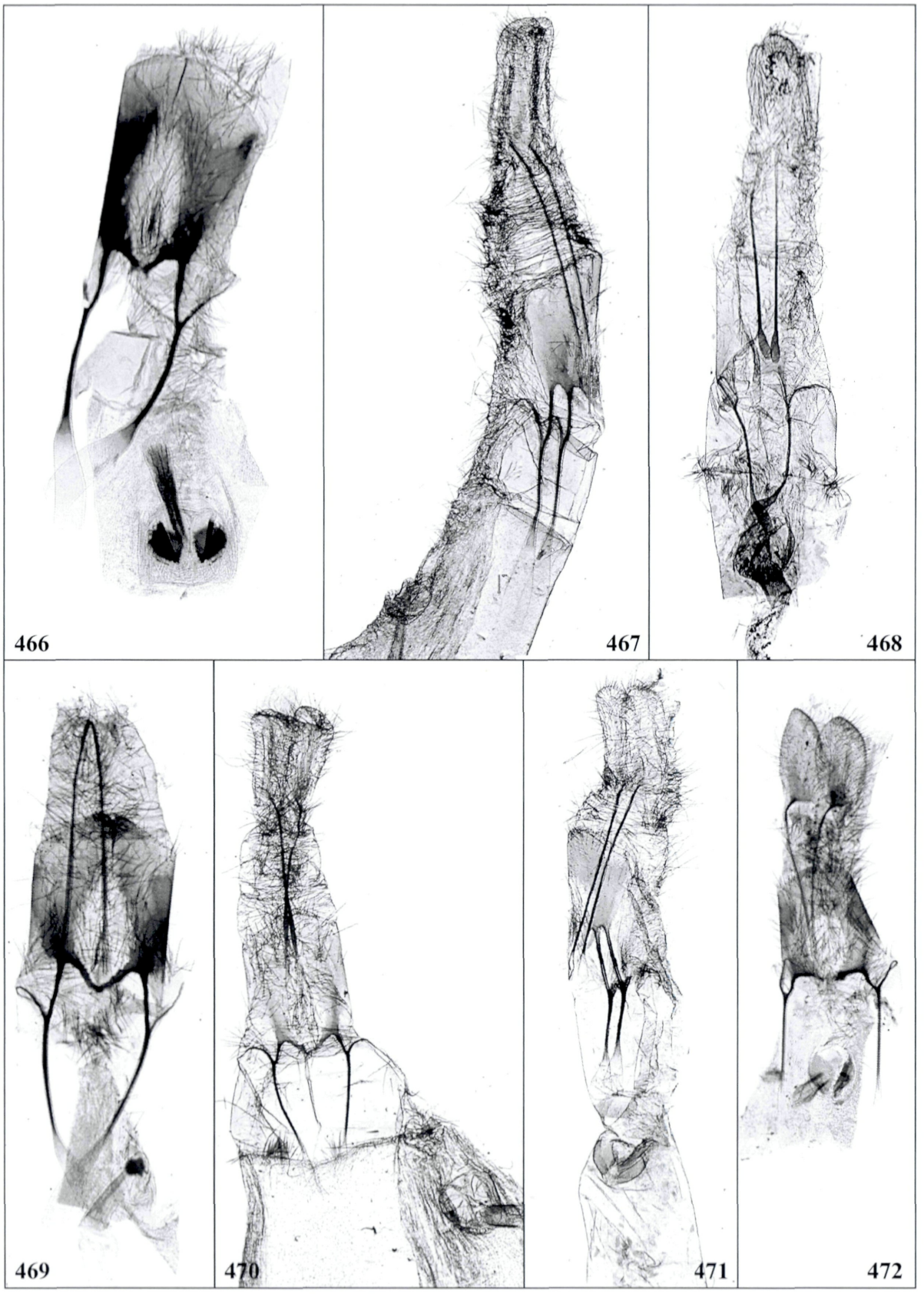

# The subgenus *Beatria* subgen.n.

## *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791): pl. 40: 2 (*Phalaena Bombyx*)

(Figs. 473-480, 516, 517)

**Type locality:** [Indonesia, Java], Batavia [examined].

**Synonym:**
*Lymantria ganaha* SWINHOE, 1903: 487.
Syntypes: Java – BMNH, London [examined].

**Taxonomy:** Distinguishable from *marginata* and *hauensteini* by the yellow coloured abdomen with black dots. The sexual dimorphic female varies individually in the ground colour of the forewings from pale brownish grey to greyish blue.

**Male genitalia** (Figs. 516, 517)**:** The upper arms of the valves have a small process, which varies in the length. The juxta is bilobed without tooths.

**Further remarks:** Known from Sundaland including Palawan but not yet confirmed from the Malayan Peninsula.

## *Lymantria* (*Beatria*) *marginata* WALKER, 1855: 877

(Figs. 473, 481-486, 518)

**Holotype:** [Bangladesh] Silhet – BMNH, London [examined].

**Synonyms:**
*Lymantria nigra* MOORE, 1888: 399.
Lectotype: [NW India] Kangra – BMNH, London [examined].
*Lymantria pulsilla* FELDER & FELDER, 1868: 4, pl. 99: 3.
Holotype: [NE. India] Bengal – BMNH, London [examined].

**Taxonomy:** This is the smallest species of *L.* (*Beatria*). The pattern is less contrasting than in the other species of the group. In the males all paler parts are dark blackish-grey coloured. The sexual dimorphic females have brownish grey pattern on whitish ground colour.

**Male genitalia** (Fig. 518): The juxta is bilobed, not straight as in the next species. The upper arm of the valves has a reduced spine.

**Further remarks:** Distributed in the Western Himalayas east to Myanmar.

## *Lymantria* (*Beatria*) *hauensteini hauensteini* sp.n.

(Figs. 473, 519, 524, 487-489, 492)

**Holotype:** ♂, North Thailand, Prov. Mae Hong Son, 1250m, between Pa Pae and Khun Sa, 98°39'E, 19°08'N, 31.x.2002, leg. B. Herczig et G. Ronkay – in coll. A. Schintlmeister, Dresden.
**Paratypes** (161♂♂, 35♀♀): Thailand: 1♂, Prov. Nan, Doi Phuka NP, 1350m, between Pua and Bo Luang, 101°05'E, 19°12'N, 3.xi.2002; 1♂, Prov. Nan, 61km Pua to Ban, Boklana road, 800m, 22.vii.1990 (BMNH); 1♂, Chiang Mai, km 15 Samoeng to Hang Dong road, 700m, 3.vii.1988 (BMNH); 1♂, Changwat Nan, 25km of Bo Luang, 1150m, 24.i.1999; 1♂♀, prov. Nam, 25km nördlich Bo Luang, 11150m, 11.xi.1999; 1♀, Chiangmai, Sanpalong, 17.x.1988; 1♀, Kanchanaburi Dist., 60m, 29.xii.1987; 1♂, Chiang Mai, Doi Inthanon Nat. P., km 43,5 road N of Chom Thong, 5.5km above check-point 2, 2050m, 15.-19.xi.1998; 1♂, Chaing Raij, iang Pa Pao, 15.ix.1988; 1♂, Chiang Mai, Doi Suthep, 1440m, 7.xii.1985, 1♂, Chiang Mai prov., Huai Nam Dang, 1500-1700m, 25.-27.x.1984; 1♂, Chiangmai, Maetaeng, 6.x.1988; 1♂, Chiangmai, Doi Suthep, 24.xi.1984; 2♂♂, Chiangmai, Doi Phuka, 3.xi.2002; 1♂, Nan Prov, 4km W Pha Lak, 100°34'W, 19°21'E; 5.xi.2002; Myanmar: 1♂, Nan Thi, 50km E Putao, 980m, 27°21'N, 97°55'E, 11.-16.xi.1996; 2♂♂, Nan Sa Boa, 21km E Putao, 550m, 27°21'N, 97°37'E, 1.-5.v.1998 (GU 60-47); 3♂♂, Nan Sa Boa, 25km E Putao, 800m, 27°21'N, 97°40'E, 6.-9.v.1998; 1 ♂, Wa Sa Dam, 50km NW Putao, 950m, 27°39'N, 97°02'E, 17.v.1998; 1P, 50km E Putao, 950m, 11.-16.v.1998; 1♀, "Burmah"; Yunnan: 40♂♂, Xishuangbanna, 30km S Simao, Puwen, 900m, 22°30'N, 101°02'E, 16.iii.- 10.iv.2000 (GU W 8721); 3♂♂, Xishuangbanna, 50km N Jinhong, Guanping, 900m, 22°10'N, 101°00'E, 9.i.-6.ii.2003; 2♂♂, 3♀♀, 130km SW Kunming, Lincang, 1430m, 23°45'N, 102°20'E, 25.xi.-5.xii.1998; 1♂, 18km S Simao, Mangxi Ba Mts., 1280m, 22°49'N, 101°00'E, 26.ii.-20.iii.1999; 5♂♂, 11♀♀, 42km N Fugong, 1390m, Lishadi, 27°15'N, 98°55'E, 14.-24.x.1999 (GU 49-90); 18♂♂, 1♀, Daxing, 120km S Dali, 24°30'N, 100°01'E, 16.iii.-10.iv.2000; 9♂♂, Puer, Male Forest, 33°07'N,

101°00'E, ix.1999; 3 ♂♂, Mow Ding county, 1300m, 25°19"N 100°32"E, 16.3.-10.4.2000; 5♂♂, N-Lanchang Hei Mt., 2500m, September 1999; 2♂♂, 1♀, Daxue Shan E Vongde county, IX.1999, 2500m; 1♂, Ailao Mt., 3500m, IX.1999; 1♂, Puer Male Forest, 33°07'N-101°00'E, IX.1999; 1♂♀, Tsekou; 1♂♀, Loutse Kiang; Sichuan: 1♂, 4♀♀, Moupin, June 1890; 1♀, Siaou Lou 1903; 1♂, Gaomushan, 1900m, vii.2002; Vietnam: 10 ♂♂ 2♀♀, Tuan Giao, 21°35'N, 103°25'E, 1200m, 5.-10.xi.1994; 15♂♂, Cuc Phuong, 60km SW Hanoi, 20°15'N, 105°20'E, 400m, 18.xi.-3.xii.1992; 1♂, ibid. 21.xi.1994; 3♂♂, ibid., 2.iv.1995; 7♂♂, 1♀, Ben En Nat. Park, 200m, 40km SW Than Hoa, 18°40'N, 105°40'E, 22.-30.xi.1994; 4♂♂, 2♀♀, Mai-chau, 25km SE Moc-chau, 1400m, 20°50'N, 104°40'E, 14.-18.xi.1994 (GU W 8713); 1♀, Mt. Fan-si-pan, N. Side, 1600m, 22°17'N, 103°44'E, 1.-7.xi.1995; 1♀, Mt. Fan-si-pan, W. Side, Cha-pa, 1600m-1800m, 22°20'N, 103°40'E, 30.vi.-12.vii.1994; 1♀, Mt. Fan-si-pan, 1700m, 22°15'N, 103°46'E, 8.-29.v.1993; 1♀, ibid. v.1995; 3♂♂, ibid., 2.-4.iii.1995, 2240m; 4♂♂, Prov. Tuyen Quang Na Hang Nature Reserve, 300m, 105°5'E, 22°3'N, 22.II.-5.III.1997; 1 ♂, Tam Dao, 60km NW Hanoi, 950m, 21°34'N,105°20'E, 17.x.1994.

**Diagnosis:** Forewing length ♂♂ 22-26 mm, ♀♀ 32-36 mm. Externally similar to *marginata* but about 2 mm larger in size. The females of *hauensteini* sp.n. are on average 6 mm larger in size than *marginata*. The fore head is splendid white (in *marginata* brown with two exceptions from Myanmar, GU 60-49). The ground colour of the males is more blackish than brownish, the pattern much more contrasting than in *marginata*. The contrasting pale pattern of the forewings somewhat resembles *beatrix* rather than *marginata*. The females show more white pattern on their wings, particularly in the broad fuscous margin band on the hindwings. The black markings are more contrasting to the white ground colour than in *marginata*.

**Genitalia** (Figs. 519, 524): The male genitalia differ from *marginata* in the rather straight and not concave shape of the juxta. The dorsal arm of the bifid valves has no second processes as in *marginata*. The aedeagus is thinner and longer.

**Further remarks:** This is the Eastern vicariant of *marginata*. Both species are matching in Myanmar.

**Etymology:** Named after Armin Hauenstein, Schönenberg/Germany, with thanks for permission of using his rich collection for this study.

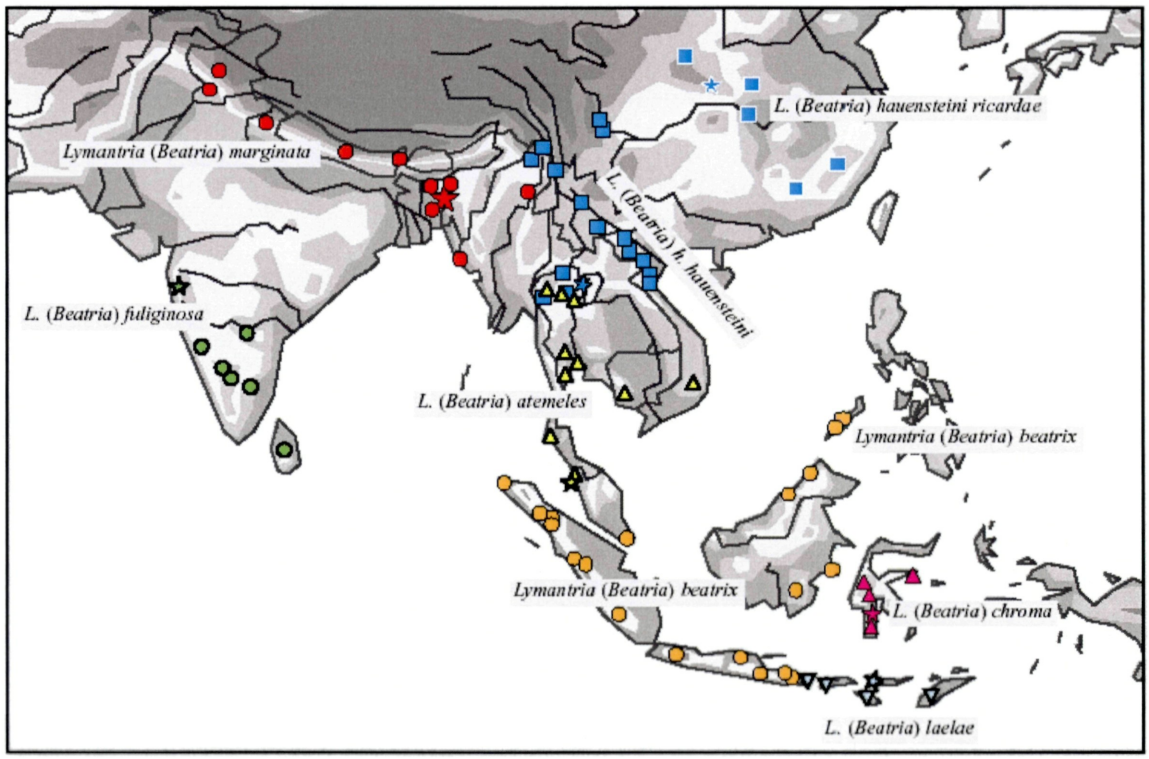


**Fig. 473:** Distribution of the subgenus *Beatria*.

## *Lymantria* (*Beatria*) *hauensteini ricardae* ssp.n.

(Figs. 473, 490, 491, 493, 494, 520)

**Holotype:** ♂, China, S. Shaanxi, N. Dabashan, 15km S Shou-Man, 1800m, 32°08'N, 108°37'E, June 2000, leg. local collectors – in coll. A. Schintlmeister, Dresden.
**Paratypes** (30♂♂, 22♀♀): Shaanxi: 2♂♂, 2♀♀, China, S. Shaanxi, N. Dabashan, 15km S Shou-Man, 1800m, 32°08'N, 108°37'E, June 2000 (GU 35-95); 2♀♀, S. Taibaishan, Tsinling Mts., Houzhenzi, 1400m, 33°51'N, 107°49'E, x.1999; 2♂♂, ibid., 27.v.-8.vi.1999; 1♀, Taibaishan Nat. Park, 1300-1500m, 33°35'N, 107°43'E, 20.viii.-4.ix.1998; 5♀♀, Taipaishan im Tsinling, 1700m, 7.-12.viii.1936; Jiangxi: 1♂, 50km E Xunwu, Tonguzhang, 24°55'N, 115°50'E, 1200m, vii.2000; Hubei: 1♂, 1♀, Wudang shan, 32°16'N, 110°57'E, ix.2000 (GU 20-91); 2 ♂♂, 2♀♀, ibid, 1500m, July 2000; 1♀, Chang Yang, July 1888; 2♀♀, NO Wuhan City, Tapieh Shan, 900-1600m M VI.-E VIII.1999; Henan: 12♂♂, Dabie Shan, S.Xin Xian, 1200-1500m, 31°33''N 114°48''E, ix. 2000; Fujian: 6♀, Zhenghe, Zhengqian, ix.1998.

**Diagnosis:** Forewing length ♂♂ 22-24 mm, ♀♀ 30-56 mm. The males are externally not distinguishable from ssp. *hauensteini*. The females of *ricardae* ssp.n. display a deeper black colour in the pattern of the forewings. The black submarginal area is more contrasting compared with ssp. *hauensteini*.

**Male genitalia** (Fig. 520): The male genitalia are distinguished by a well developed secondary process on the upper valve arm and the shape of the toothed juxta.

**Etymology:** Named after Ricarda Hauenstein, Schönenberg/Germany, wife of Armin Hauenstein with thanks for her hospitality, during my visits in Schönenberg.

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**Figs. 474-494:** next page

**Fig. 474:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♂, Indonesia, Java.
**Fig. 475:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♂, Indonesia, Sumatra.
**Fig. 476:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♂, Philippines, Palawan.
**Fig. 477:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♀, Indonesia, Java (Holotype of *Lymantria ganaha* SWINHOE, 1903).
**Fig. 478:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♀, Indonesia, Sumatra.
**Fig. 479:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♀, pl. 40: 2, from the original description by STOLL 1791.
**Fig. 480:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♀, form, Indonesia, Java.
**Fig. 481:** *Lymantria* (*Beatria*) *marginata* WALKER, 1855 – ♂, NW. India (Lectotype of *Lymantria nigra* MOORE, 1888).
**Fig. 482:** *Lymantria* (*Beatria*) *marginata* WALKER, 1855 – ♂, NE. Bengal (Holotype of *Lymantria pulsilla* C. FELDER & R. FELDER, 1868).
**Fig. 483:** *Lymantria* (*Beatria*) *marginata* WALKER, 1855 – ♂, NE. India, Meghalaya.
**Fig. 484:** *Lymantria* (*Beatria*) *marginata* WALKER, 1855 – ♀, Bangladesh, Silhet, Holotype.
**Fig. 485:** *Lymantria* (*Beatria*) *marginata* WALKER, 1855 – ♀, NW. India (Paralectotype of *Lymantria nigra* MOORE, 1888).
**Fig. 486:** *Lymantria* (*Beatria*) *marginata* WALKER, 1855 – ♀, Nepal.
**Fig. 487:** *Lymantria* (*Beatria*) *hauensteini hauensteini* **sp.n.** – ♀, China, Yunnan, Paratype.
**Fig. 488:** *Lymantria* (*Beatria*) *hauensteini hauensteini* **sp.n.** – ♂, NW Thailand, Holotype.
**Fig. 489:** *Lymantria* (*Beatria*) *hauensteini hauensteini* **sp.n.** – ♂, China, Yunnan, Paratype.
**Fig. 490:** *Lymantria* (*Beatria*) *hauensteini ricardae* **ssp.n.** – ♂, China, Shaanxi, Holotype.
**Fig. 491:** *Lymantria* (*Beatria*) *hauensteini ricardae* **ssp.n.** – ♂, China, Shaanxi, Holotype, underside.
**Fig. 492:** *Lymantria* (*Beatria*) *hauensteini hauensteini* **sp.n.** – ♀, NW Thailand, Paratype.
**Fig. 493:** *Lymantria* (*Beatria*) *hauensteini ricardae* **ssp.n.** – ♀, China, Shaanxi, Paratype.
**Fig. 494:** *Lymantria* (*Beatria*) *hauensteini ricardae* **ssp.n.** – ♀, China, Jiangxi, Paratype.

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## *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883: 17

(Figs. 473, 495-501, 521, 526)

**Lectotype:** [India], Bombay – BMNH, London [examined].

*Lymantria postfusca* SWINHOE, 1906: 547 **syn.n.**
Syntypes: Ceylon [= Sri Lanka], Kaindy – BMNH, London [examined].

**Taxonomy:** Diagnostic in males is the pale ground colour of the forewings, where the hindwings are mixed with yellow scales but less prominent than in *atemeles*. The females have a very broad fuscous submarginal fascia and extensive white areas on the forewings. The males also occur in a more fuscous individual form with greyish ground colour. The whitish morphe is named as *fuliginosa* f. *postfusca*.

**Further remarks:** A lectotype male (of the fuscous form) was designated by GUPTA (1984: 25). Distributed from Bombay south into Sri Lanka.

## *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932: 93, pl. 2: 36, 41

(Figs. 473, 502-508, 522, 525)

**Holotype:** Malaysia, Penang Isl. – BMNH, London [examined].

**Taxonomy:** This is probably the sister species of *fuliginosa*. The males occur in two forms as in *fuliginosa*, where the ground colour of the forewings is white respectively brownish-grey. The prominent yellow coloured hindwings are diagnostic. The females show reduced the yellow colour on the hindwings; but with most of the yellow scales near the base.

**Genitalia** (Figs. 522, 525): The male genitalia are characterized by the unusual shape of the valves with a tendency to establish a process as in subgenus *Porthetria*. The upper arm of the valves bears a small process, which is missing in *fuliginosa*.

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**Figs. 495-515:** next page
**Fig. 495:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♂, India, Bombay, Lectotype.
**Fig. 496:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♂, Sri Lanka (Syntype of *Lymantria postfusca* SWINHOE, 1906).
**Fig. 497:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♂, S. India.
**Fig. 498:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♂, S. India.
**Fig. 499:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♀, India, Bombay, Paralectotype.
**Fig. 500:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♀, Sri Lanka (Syntype of *Lymantria postfusca* SWINHOE, 1906).
**Fig. 501:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♀, Sri Lanka.
**Fig. 502:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♂, W. Malaysia, Penang Isl., Holotype.
**Fig. 503:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♂, form, Thailand.
**Fig. 504:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♂, Thailand.
**Fig. 505:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♂, Thailand.
**Fig. 506:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♀, W. Malaysia, Penang Isl., Paratype.
**Fig. 507:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♀, Thailand.
**Fig. 508:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♀, SW. Cambodia.
**Fig. 509:** *Lymantria* (*Beatria*) *laelae* **sp.n.** – ♂, Indonesia, Flores, Holotype.
**Fig. 510:** *Lymantria* (*Beatria*) *laelae* **sp.n.** – ♂, Indonesia, Timor, Paratype.
**Fig. 511:** *Lymantria* (*Beatria*) *laelae* **sp.n.** – ♂, Indonesia, Sumbawa, Paratype.
**Fig. 512:** *Lymantria* (*Beatria*) *chroma* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi, Holotype.
**Fig. 513:** *Lymantria* (*Beatria*) *laelae* **sp.n.** – ♀, Indonesia, Lombok, Paratype.
**Fig. 514:** *Lymantria* (*Beatria*) *chroma* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi, Peleng Isl.
**Fig. 515:** *Lymantria* (*Beatria*) *chroma* COLLENETTE, 1947 – ♀, Indonesia, Sulawesi.

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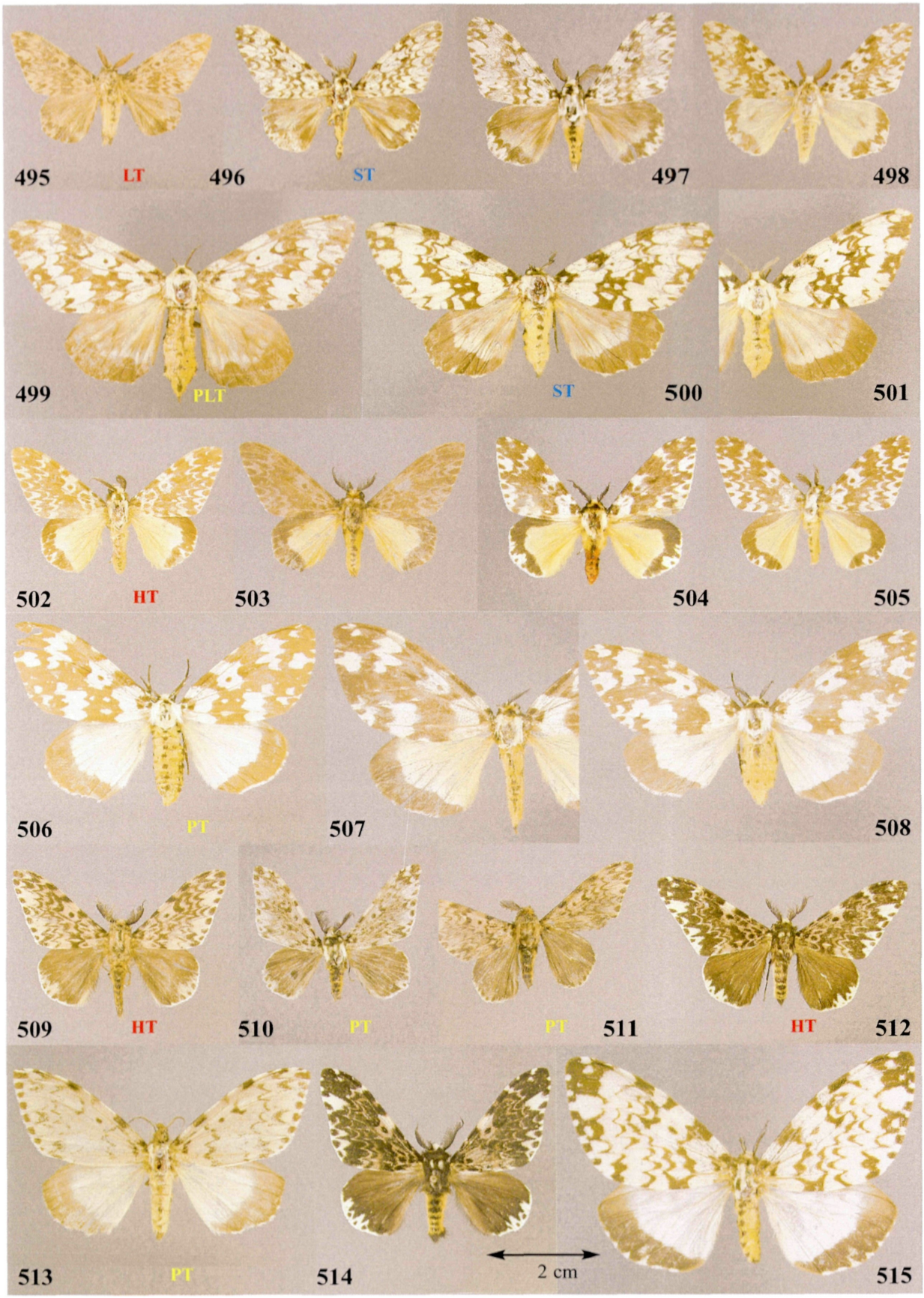

## *Lymantria* (*Beatria*) *laelae* sp.n.

(Figs. 473, 509-511, 513, 523)

**Holotype:** ♂, Indonesia, Flores, prov. Nusa Tenggara Timur, 9km S Rutreng, Golo Luseng, 1820m, 27.ii.-9.iii.1992, leg. U. Paukstadt – in coll. Schintlmeister, Dresden.
**Paratypes** (29♂♂, 2♀♀): Flores: 2♂♂, 9km S Ruteng, Golo Luseng, 1820m, 27.ii.-9.iii.1992 (GU 20-38); 8♂♂, Gunung Ranaka, 3km S Mano (18km SE Rutreng), 1270m, 17.-21.iv.1996; 4♂♂, Gunung Ranaka, 9km E Ruteng, 14.-15.iv.1996; 3♂♂, 15km E Labuhanbajo, 200m, 9.-12./22.iv.1996; 1♂, Ruteng area, Kampung Lebor, 700m, May 1993 (GU 60-52); Lombok: 1♀, Sapit, 2000', Mai-Jun. 1896; Sumba: 1♀, "Sumba"; 3♂♂, Gunung Ares, 50m, iii.1997 (GU W 8720); Sumbawa: 2♂♂, Parado, 80km to Bima, 60m, 21.-30.xii.1996 (GU 60-97); 4♂♂, Gunung Takan, 800m, 10.-20.xii.1996 (60-48); Timor: 1♂, Kapan, SE Slopes Gg. Mutis, 1320m, April 1993; 1♂, Gg. Mutis, Fatumnasi, 200m, 21.- 23.iii.1996.

**Diagnosis:** Forewing length ♂♂ 20-21 mm, female length 30 mm. Externally between *beatrix* and *chroma*. The ground colour of the forewings pale grey, paler than *beatrix*. Fresh specimens show a pinkish shine on the forewings, not seen in the other known species of *Beatria*. The pale pattern on the forewings less contrasting than in *beatrix* or *chroma*. The abdomen not orange as in *beatrix*, but fuscous blackish coloured as in *chroma*.

**Male genitalia** (Fig. 523): The male genitalia resemble *beatrix*. The valves are shorter than in *beatrix*. The upper arm of the valves with a longer developed process. The juxta with teeth is broader and less deep bilobed than in *beatrix*. One specimen from Flores (GU 60-52) shows a long and pointed uncus, probably an individual variation.

**Further remarks:** Distributed on the Lesser Sunda Islands.

**Etymology:** Named after Laela Paukstadt, Wilhelmshavn, who collected very successfully moths several times together with her husband in the Lesser Sunda Islands.

## *Lymantria* (*Beatria*) *chroma* COLLENETTE, 1947: 46, pl. 3: 3

(Figs. 473, 512, 514, 515, 527, 528)

**Holotype:** W. Celebes [=Sulawesi], G. Tompoe, Paloe. – BMNH, London [examined].

**Taxonomy:** The species is easy to identify by the contrasting black and white pattern in the males. The females resemble more closely *marginata* than *beatrix* but the fuscous band on the hindwings is without white spots.

**Further remarks:** Restricted to Sulawesi and Peleng.

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**Figs. 516-523:** next page

**Fig. 516:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♂, Sumatra, GU 01-03.
**Fig. 517:** *Lymantria* (*Beatria*) *beatrix* (STOLL, 1791) – ♂, Palawan, GU 60-50.
**Fig. 518:** *Lymantria* (*Beatria*) *marginata* WALKER, 1855 – ♂, NE India, Meghalaya, GU 35-98.
**Fig. 519:** *Lymantria* (*Beatria*) *hauensteini hauensteini* **sp.n.** – ♂, China, Yunnan GU 62-08, Paratype.
**Fig. 520:** *Lymantria* (*Beatria*) *hauensteini ricardae* **ssp.n.** – ♂, China, Hubei, GU 20-91, Paratype (Juxta enlarged).
**Fig. 521:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♂, S. India, Kerala, GU 20-69a.
**Fig. 522:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♂, Thailand, GU 60-43.
**Fig. 523:** *Lymantria* (*Beatria*) *laelae* **sp.n.** – ♂, Indonesia, Flores, GU 62-09, Paratype.

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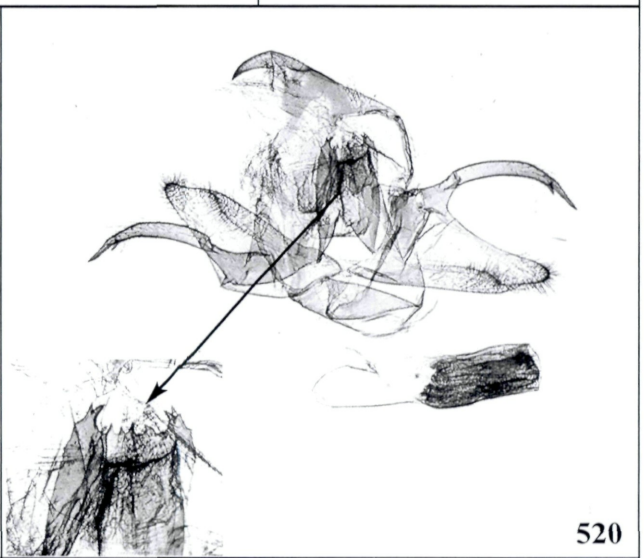

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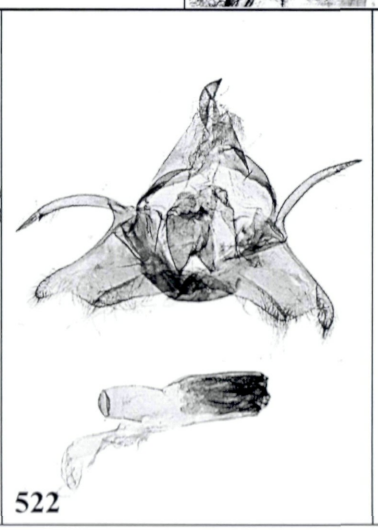

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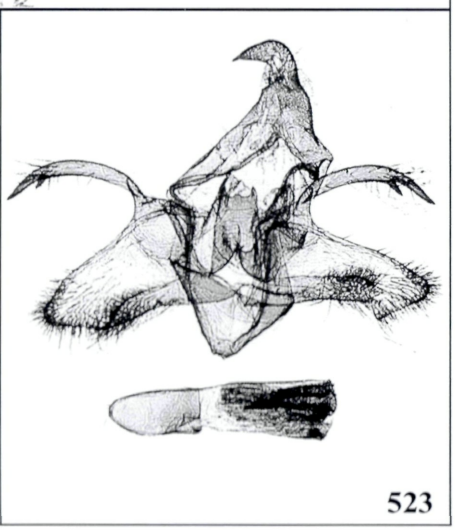

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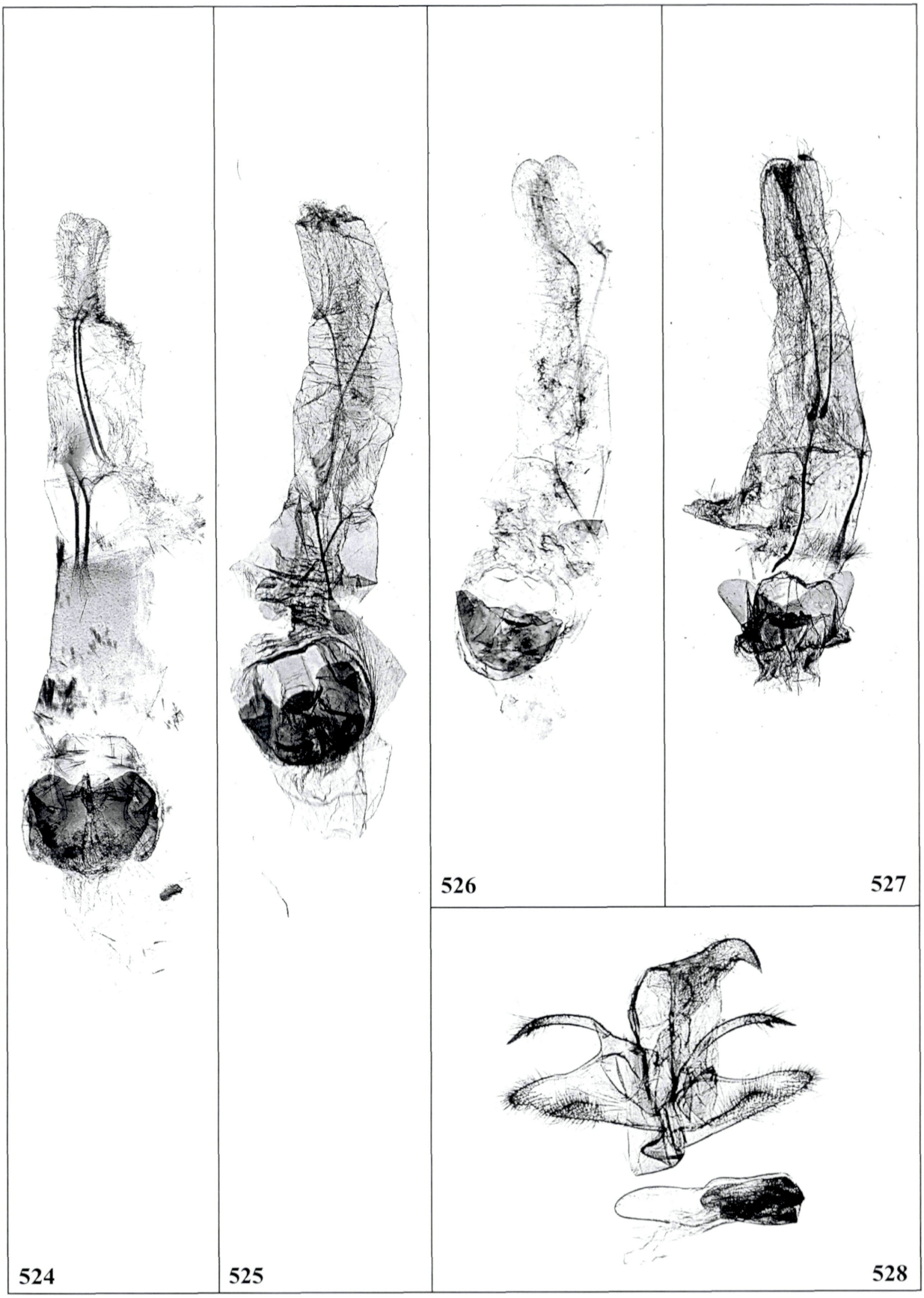

**Figs. 524-528:** previous page

**Fig. 524:** *Lymantria* (*Beatria*) *hauensteini hauensteini* **sp.n.**– ♀, China, Yunnan GU 62-01, Paratype.
**Fig. 525:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – ♀, Thailand, GU 60-42.
**Fig. 526:** *Lymantria* (*Beatria*) *fuliginosa* MOORE, 1883 – ♀, S. India, Kerala, GU 60-46.
**Fig. 527:** *Lymantria* (*Beatria*) *chroma* COLLENETTE, 1947 – ♀, Indonesia, Sulawesi, GU 60-45.
**Fig. 528:** *Lymantria* (*Beatria*) *chroma* COLLENETTE, 1947 – ♂, Indonesia, Sulawesi, GU 62-13.

## The subgenus *Nyctria* subgen.n.

### *Lymantria* (*Nyctria*) *mathura mathura* MOORE, 1865: 805

(Figs. 529, 533-535, 561, 567)

**Holotype:** [India] N.E. Bengal – BMNH, London [examined].

**Taxonomy:** This species occurs in two main forms. The nomino typical form shows a greyish-white ground colour and olive-green pattern. The hindwings are yellow with blackish markings. The other form is melanic with a visible blackish pattern on the forewings.

### *Lymantria* (*Nyctria*) *mathura aurora* BUTLER, 1877: 403

(Figs. 529, 537-539, 560)

**Holotype:** Japan – BMNH, London.

**Synonyms:**
*Lymantria aurora fusca* LEECH, 1888: 629, pl. 31: 9 [examined].
Holotype: [Japan], Nagahama – BMNH, London.
*Lymantria mathura subpallida* OKANO, 1960: 36, pl.5: 1, 2 **syn.n.**
Holotype: Central Formosa [=Taiwan], Puli-Wushe [not examined].

**Taxonomy:** The males of the northern subspecies *aurora* show less contrasting and rather fuscous colours. The hindwings are fuscous yellowish and the forewing pattern is brownish. The pale ground colour of the forewings is reduced. The melanic form *fusca* is brownish instead of blackish as in ssp. *mathura,* and the greyish ground colour is paler. The females are much smaller than in ssp. *mathura* and the pinkish colour of the hindwings is less intensive.

I have studied a larger series (n>100) of specimens originating from Taiwan. The individual variability is very wide (a few individuals of the males are illustrated). There are specimens (about 10%, more in the South of Taiwan) matching externally well the ssp. *mathura*, but the majority rather resembles the northern ssp. *aurora*. Particularly the forewings are generally more fuscous than in ssp. *mathura*. I therefore include the Taiwanese populations into ssp. *aurora*.

**Further remarks:** OKANO (1960) described from Taiwan a subspecies *subpallida*. His poor diagnosis gives no features, which would allow separating Taiwanese populations from others. Therefore *subpallida* must become a junior synonym of *aurora*.

## *Lymantria* (*Nyctria*) *grandis* (WALKER, 1855): 874

(Figs. 529, 541-545, 562-564, 568, 589)

**Holotype:** [Sri Lanka], Ceylon – BMNH, London [examined].

**Synonyms:**
*Lymantria maculosa* WALKER, 1855: 881.
Holotype: NS Holl, Hustier. [= Australia, ex errore] – BMNH, London [examined].
*Lymantria metarhoda* WALKER, 1862: 78.
Holotype: Ceylon – HEO, Oxford [examined].
*Lymantria viola* SWINHOE, 1989: 406 **syn.n.**
Lectotype: [S. India, Bombay], Wangni Thanna Distr. – BMNH, London [examined].

**Taxonomic note:** The species is closely related to *mathura* and also occurs in a fuscous individual form (f. *viola*). The distinguishing character is the pinkish coloured hindwings. The female resembles the females of *mathura*; the submarginal band of the forewings is only marked by a number of brown spots.

**Male genitalia** (Fig. 589): The male genitalia are virtually identical to *mathura*.

**Further remarks:** Since the absence of differences in the male genitalia it might be possible that *grandis* is the southern subspecies of *mathura*.

Besides the individual variability of the forewing pattern there is a form with a somewhat pointed apex of the forewings, which is probably a result of climatic conditions (4 specimens of this form from the Nilgiris, collected in July, during the monsoon). The possibility, that there are two similar species occurring in S. India, is low. Both forms are therefore united under *grandis*.

## *Lymantria* (*Nyctria*) *minora* (VAN EECKE, 1928): 105

(Figs. 529, 548-551, 565, 566, 569)

**Holotype:** [Indonesia, Sumatra], Upper Palembang – BMNH, London [examined].

**Synonyms:**
*Lymantria pendleburyi* COLLENETTE, 1932: 95, pl.5: 1, 2.
Holotype: Malay Peninsula, Kedah Peak – BMNH, London [examined].
*Lymantria harimuda* ROEPKE, 1937: 95 **syn.n.**
Holotype: West Java, Perbawatie [paratype examined].

**Taxonomy:** The males are externally similar to *mathura*, however there is virtually no individual variation (particularly no fuscous forms). The olive-greenish pattern is somewhat more weakly developed than in *mathura* and the hindwings are without a black pattern. The brown discal spot on the hindwings is only faintly visible. The supposed females, described as *harimuda* syn.n., resemble the female of *mathura* although their brownish pattern is very faint. Because the females of *capnodes* are still unknown, it cannot be excluded that *harimuda* belongs to *capnodes* instead of *minora*.

**Male genitalia** (Fig. 569): The male genitalia resemble *mathura*. The divided valve shows a different shape, where the lower part is shorter than in *mathura*.

**Further remarks:** It should be noticed that males of *minora* are hitherto not known from Java or Bali. On the other hand there is a single female from Tenassarim, Myanmar, which was collected together with males and females of *mathura*.

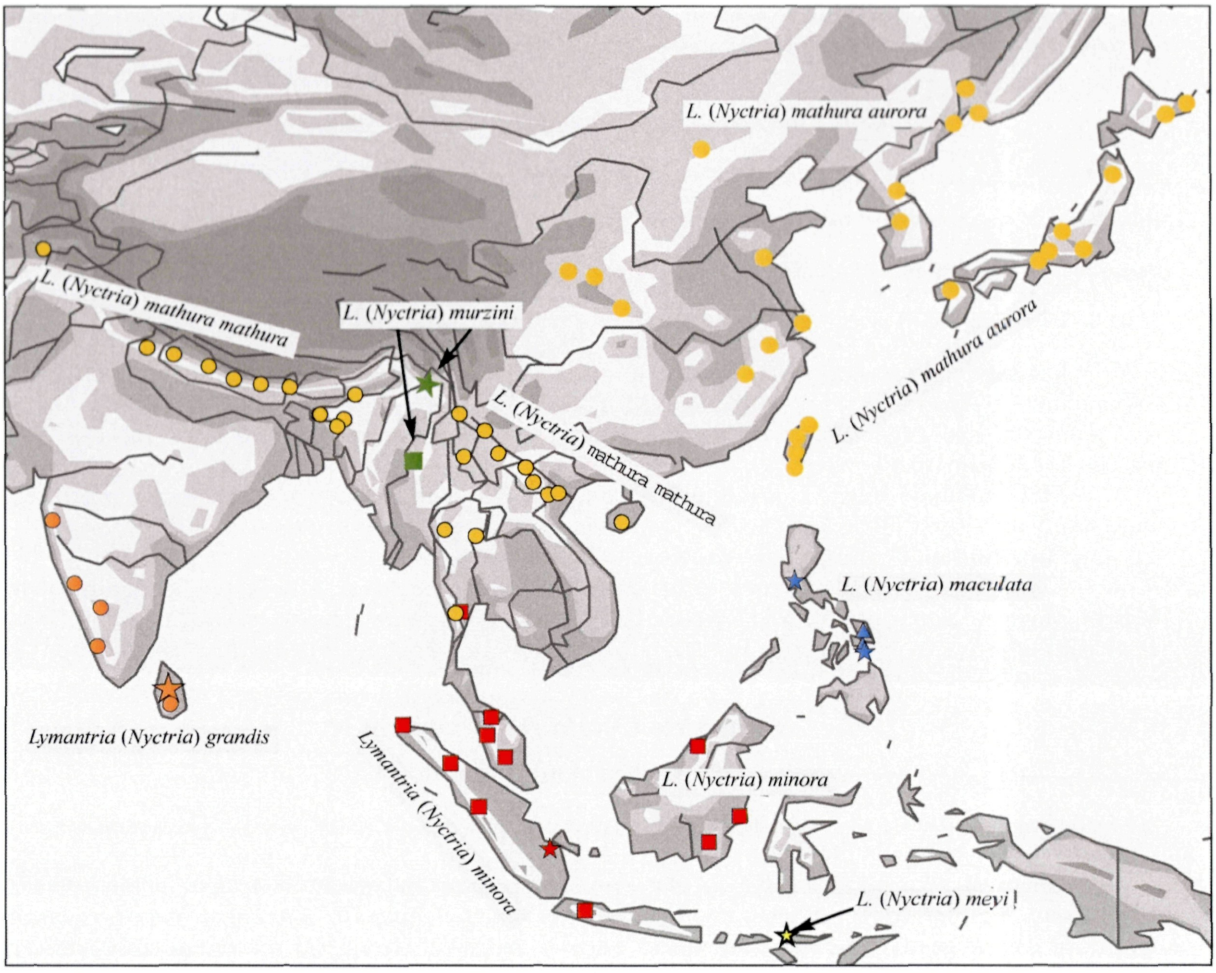


**Fig. 529:** Distribution of the subgenus *Nyctria*.

## *Lymantria* (*Nyctria*) *meyi* sp.n.

(Figs. 529, 546, 547, 570)

**Holotype:** ♂, Indonesia, Prov. NTT, Flores, 9km S Ruteng, Golo Lusang, 27.ii.-9.iii.1992, 1820m leg. U. Paukstadt – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (9♂♂): Flores: 3♂♂, Flores, 7km south of Ruteng, Golo Lusang, 1750m, 20.ix.-1.x.92; 1P Ruteng, Golo Lusang, 1500m, 25.vii.1991; 5♂♂, 9km S Ruteng, Golo Lusang, 27.ii.-9.iii.1992, 1820m (GU 20-37, 62-72); 1♂, 7km S Ruteng, Golo Lusang 17.x.1995; Sumba: 1♂, xi.1998.

**Diagnosis:** Forewing length ♂♂ 26.5-28 mm, in general about 3 mm larger than *minora*. Externally, the imago corresponds to *minora*. The olive-green pattern on the forewings is more strongly developed, particularly the discal spot and the well-developed green tornal spot on the forewings. The colour of the hindwings is a somewhat warmer yellowish than in *minora*. There are some blackish patterns visible in the anal angle. The type series (from different years) shows virtually no individual variation.

**Male genitalia** (Fig. 570): The male genitalia resemble *mathura*, but the new species shows a small additional process on the valves.

**Distribution:** Restricted to the Lesser Sunda Islands.

**Etymology:** Named after Wolfram (Won) Mey, the curator of the Lepidoptera in ZMHU, Berlin, for many fruitful discussions as well as assistance with rare literature.

## *Lymantria* (*Nyctria*) *murzini* sp.n.

(Figs. 529, 536, 540, 571)

**Holotype:** ♂, N. Myanmar, 65km NW Putao, Zi Yar Dam, 1250m, 27°50'N, 97°01'E, 18.-21.v.1998, leg. S. Murzin & V. Sinjaev – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (12♂♂): Myanmar: 4 ♂♂ 65km NW Putao, Zi Yar Dam, 1250m, 27°50'N, 97°01'E, 18.-21.v.1998; 6♂♂, 50km NW Putao, Wa Sa Dam, 950m, 27°39'N, 97°02'E, 17.v., 22.v.1998 (GU 10-33a, 60-41); 1♂, 70km E Mandalay, Pyin U Lwin, 1150m, 22°00'N, 96°05'E, 23.iv.1998.

**Diagnosis:** Forewing length ♂♂ 21-23 mm. The males resemble *mathura* by pattern and colouration. The greenish pattern on the forewings of *murzini* sp.n. is prominently developed, the discal spot prominent and large. The hindwings are of a warm yellow colour with two black spots on the margin. The female is still unknown.

**Male genitalia** (Fig, 571): The male genitalia have a short uncus, very long tegumen processes and a nearly undivided valve. The uncus is more slender than in *minora* or *mathura.*

**Distribution:** Found in Myanmar only.

**Etymology:** Named after one of the collector of the type series, Mr. Sergey Vladimirowitch Murzin, Moscow, a coleopterist, who supported me for many years with valuable material of moths from many parts of Asia.

## *Lymantria* (*Nyctria*) *hausmanni* sp.n.

(Figs. 530, 554, 575)

**Holotype:** ♂, Indonesia, Sulawesi, Mt. Sampuraga, 1400m, 2°10'S, 120°45'E; 1.-6.ii.1995 (GU 60-59) – in coll. A. Schintlmeister, Dresden.

**Diagnosis:** Forewing length ♂ 24 mm. This species somewhat resembles *mathura* in the melanic form. There is a pink fringe on all wings and the frons, which distinguish *hausmanni* sp.n. from other species of the subgenus. The underside of the wings is yellowish-brown and shows distinctly marked fuscous discal spots on all wings and a fuscous margin on the hindwings. The tornus of the forewings is fuscous yellow. The species resembles the forewings and pattern of *geoffmartini* sp.n. from New Guinea, but the veins are not yellowish.

**Male genitalia** (Fig. 575): The deeply divided valves and the thin uncus characterize the male genitalia. The tegumen processes are relatively short and thick.

**Etymology:** Named after Mr. Axel Hausmann, ZSM, Munich, who enabled me to intensify my studies using the rich material in the collection he curates.

## *Lymantria* (*Nyctria*) *maculata* SEMPER, 1896: 462, pl. 49: 1

(Figs. 529, 558, 588a)

**Syntypes:** Philipines, Luzon, Mt. Arayat and Panaon – FNS, Frankfurt/Main [examined].

**Taxonomy:** Unmistakable by the hindwings with their characteristic yellow pattern. The female is unknown.

**Male genitalia** (Fig. 588a): The male genitalia are very small in size.

**Further remarks:** The species is known only from a few Philippine localities. Apart from the mapped localities I was not able to locate "Mt. Makiling in Luzon". The total number of examined specimens was n=11.

## *Lymantria* (*Nyctria*) *capnodes* (COLLENETTE, 1932): 95, pl. 2: 48

(Figs. 530, 552, 553, 558, 573)

**Holotype:** Malay Peninsula, Selangor, Bukit Kutu – BMNH, London [examined].

**Synonym:**
*Lymantria capnodes bisextilis* TOXOPEUS, 1948: 432 **syn.n.**
Holotype: W. Java, Mt. Gedé, Tjibodas – West Java Experiment Station, Buitenzorg [Bogor][not examined].

**Taxonomy:** This is a small blackish species, which somewhat externally resembles *beatrix* but lacks the greyish submarginal band on the forewings. The female is still unknown.

**Further remarks:** TOXOPEUS (1948) mentioned in his short description of *bisextilis* the differences of the colouration on the underside of the wings. I have a good series from Sumatra and Thailand showing unique blackish undersides as well as pure yellow dorsum on the forewings. One dissected specimen from Java shows virtually no differences in the male genitalia, compared with material from Thailand and Sumatra.

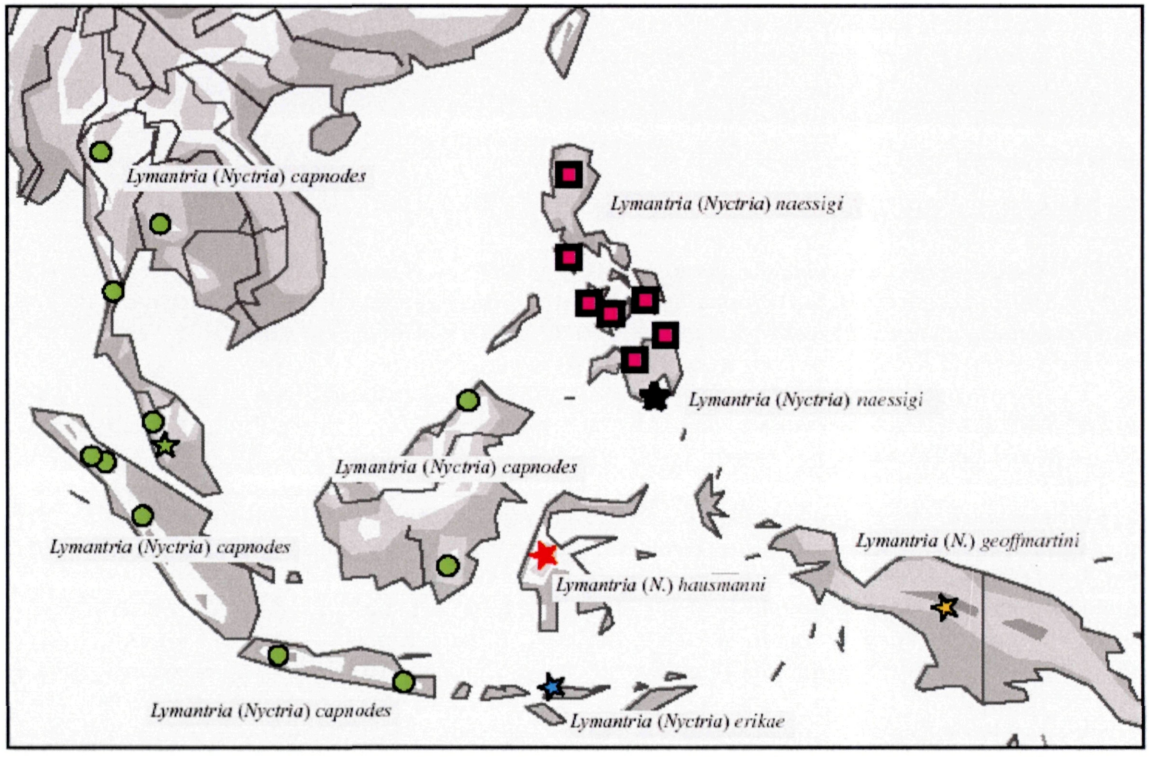


**Fig. 530:** Distribution of the subgenus *Nyctria*.

## *Lymantria* (*Nyctria*) *erikae* sp.n.

(Figs. 530, 559, 588)

**Holotype:** ♂, Indonesia, Prov. NTT, Flores, 7km south of Ruteng, Golo Lusang, 1750m, 20.ix.-1.x.1992 (GU 24-34) – in coll. A. Schintlmeister, Dresden.

**Diagnosis:** The species externally resembles *capnodes*. Forewing length of the holotype is 17 mm. The forewings are of a uniform brown colour, nearly without any pattern. The postmedian fascia and

the postbasal fascia are marked with yellowish-brown. The discal spot on the forewings is also marked with yellowish-brown. The hindwings toward the dorsum are a paler yellowish brown.

**Male genitalia** (Fig. 588): The male genitalia greatly differ from *capnodes*. The shape of the valves and the very prominent tegumen process characterize them. Unfortunately the genitalia are not complete.

**Further remarks:** Known only from Flores.

**Etymology:** Named after Mrs. Erika Schellbach, for her constant hospitality during my stays in Berlin.

## *Lymantria* (*Nyctria*) *geoffmartini* sp.n.

(Figs. 530, 555, 574)

**Holotype:** ♂, [Indonesia], Dutch N. Guinea, Mt. Kunupi, Menoo Valley, Weyland Mts., 6000ft., Dec. '20-Jan'21, (BM 44/2003) – BMNH, London.

**Diagnosis:** Forewing length of the holotype 24 mm. Related to *capnodes* but the forewing length is larger. Forewings ground colour brownish-black with yellowish marked veins. It differs from the externally similar *L. hausmanni* sp.n. by lacking the pinkish fringes on the wings.

**Male genitalia** (Fig. 574): The male genitalia are remarkably similar to those of *capnodes*. The characteristic sacculus process of the valves is present as in *capnodes*. The tegumen processes are absent. The valve differs from *capnodes* by an additional costal valve process.

**Etymology:** Named in honour of Mr. Geoff Martin, BMNH, for his help and assistance during my stays in London.

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**Figs. 533-555:** next page

**Fig. 533:** *Lymantria* (*Nyctria*) *mathura mathura* MOORE, 1865 – ♂, N. India, Holotype.
**Fig. 534:** *Lymantria* (*Nyctria*) *mathura mathura* MOORE, 1865 – ♂, form, NE. India, Darjeeling.
**Fig. 535:** *Lymantria* (*Nyctria*) *mathura mathura* MOORE, 1865 – ♂, China, Yunnan.
**Fig. 536:** *Lymantria* (*Nyctria*) *murzini* **sp.n.** – ♂, N. Myanmar, Holotype.
**Fig. 537:** *Lymantria* (*Nyctria*) *mathura aurora* BUTLER, 1877 – ♂, Japan, Holotype.
**Fig. 538:** *Lymantria* (*Nyctria*) *mathura aurora* BUTLER, 1877 – ♂, f. *fusca,* Japan (Holotype of *Lymantria mathura fusca* LEECH, 1888).
**Fig. 539:** *Lymantria* (*Nyctria*) *mathura aurora* BUTLER, 1877 – ♂, form, Taiwan.
**Fig. 540:** *Lymantria* (*Nyctria*) *murzini* **sp.n.** – ♂, N. Myanmar, Paratype.
**Fig. 541:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♂, S. India (Lectotype of *Lymantria viola* SWINHOE, 1889).
**Fig. 542:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♂, form, S. India.
**Fig. 543:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♂, S. India, Kerala.
**Fig. 544:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♂, Sri Lanka (Holotype of *Lymantria metarhoda* WALKER, 1862).
**Fig. 545:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♂, S. India, Tamil Nadu.
**Fig. 546:** *Lymantria* (*Nyctria*) *meyi* **sp.n.** – ♂, Indonesia, Flores, Holotype.
**Fig. 547:** *Lymantria* (*Nyctria*) *meyi* **sp.n.** – ♂, Indonesia, Flores, Paratype.
**Fig. 548:** *Lymantria* (*Nyctria*) *minora* VAN EECKE, 1928 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 549:** *Lymantria* (*Nyctria*) *minora* VAN EECKE, 1928 – ♂, W. Malaysia (Holotype of *Lymantria pendleburyi* COLLENETTE, 1932).
**Fig. 550:** *Lymantria* (*Nyctria*) *minora* VAN EECKE, 1928 – ♂, Indonesia, S. Kalimantan.
**Fig. 551:** *Lymantria* (*Nyctria*) *minora* VAN EECKE, 1928 – ♂, S. Thailand.
**Fig. 552:** *Lymantria* (*Nyctria*) *capnodes* COLLENETTE, 1932 – ♂, W. Malaysia, Holotype.
**Fig. 553:** *Lymantria* (*Nyctria*) *capnodes* COLLENETTE, 1932 – ♂, S. Myanmar.
**Fig. 554:** *Lymantria* (*Nyctria*) *hausmanni* **sp.n.** – ♂, Indonesia, Sulawesi, Holotype.
**Fig. 555:** *Lymantria* (*Nyctria*) *geoffmartini* **sp.n.** – ♂, Indonesia, Irian Jaya, Holotype.

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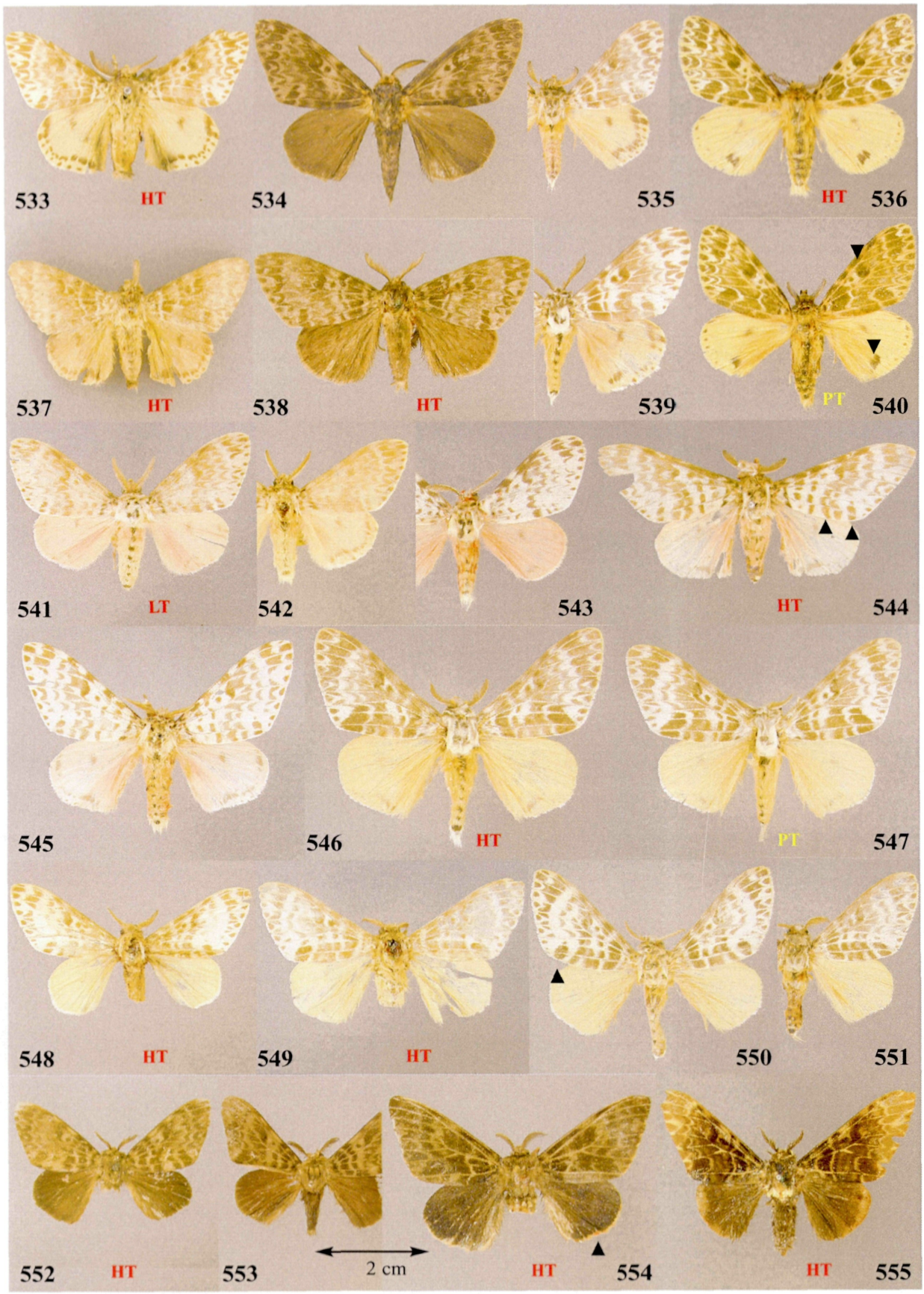

## *Lymantria* (*Nyctria*) *naessigi* sp.n.

(Figs. 530, 556, 557, 572)

**Holotype:** ♂, Philippines, Mindanao, Cotabato (Prov. Sumangani), Mount Busa near Kainba, 700m, xii.1998, leg. Bal – in coll. A. Schintlmeister, Dresden.

**Paratypes** (68♂♂): Mindanao: 9♂♂ Cotabato (Prov. Sumangani), Mount Busa near Kainba, 700m, xii.1998; 7♂♂ ibid but viii.1997 (GU 50-49); 3♂♂, Prov. Davao del Norte, Mt. Caragan, Jan 1998; Negros: 18♂♂ Mt. Canlaon, 600m, Route via Mambucal, 10°22'/123°12', iv. 1998; 12♂♂ ibid. 17.-18.vii.1996, 1010m; 2♂♂ ibid. xii.1996, 600m; 2♂♂ ibid. xii.1997, (GU 50-48); 12♂♂ ibid. 15.vii.1996, 820m; 1♂ ibid. vii.1997, 600m; 1♂ ibid., i.-iv.1995; 1♂, Surigao del Sur, Carmen, 2. Equipment shop km 11 Lanang Line 600-650m, 21.-24.iv.1995; Panay: 1♂ Mt. Baloy, vi.1998; Mindoro: 3♂♂, Mt. Halcon, 21.iv.2001 (Senckenberg Museum, Frankfurt/Main); Samar: 2♂♂, Concord, Cadac-an, 22.-24.iv.1997; 1♂, San Mateo, Borongan, 40m, 26.iv.1997; Leyte: 3♂♂, Lake Danao, 650m, 14.-17.iv.1997; 1♂, Mt. Bolog, 1140m, 10km E of Mahaplag, Juni 1997; 1 ♂, Mt. Balocauc near Mahaplag, 700m, VII.1999; Luzon: 1♂ Mts. Prov., 22km SE Bontoc, Mt. Amuyao, 1900m, 17°00'121°09'E, 25.ix.1988.

**Diagnosis:** Forewing length ♂♂ 20-24 mm. Ground colour of wings and body blackish brown. There is a pink fringe on all wings and the veins of the forewings are also lined in pink. On the underside of the forewings in the post median area, there is a pale yellowish area between the costa and the tornus. This pale area also shines on the upper side and makes the ground colour in this area paler.

**Male genitalia** (Fig. 572): The male genitalia are characterized by a small and slender uncus, the large tegumen processes and the divided shape of the large valves.

**Further remarks:** This species does not fully match the concept of the subgenus *Nyctria* because of the unusual male genitalia. It is placed here because of external similarities.

Restricted to the Philippine Islands but widely distributed.

**Etymology:** Named after Wolfgang A. Nässig, the curator of the Lepidoptera in FNS, Frankfurt/Main, for many fruitful discussions as well as much help in many ways of publishing papers on Lepidoptera.

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**Figs. 556-566:** next page

**Fig. 556:** *Lymantria* (*Nyctria*) *naessigi* **sp.n.** – ♂, Philippines, Mindanao, Holotype.
**Fig. 557:** *Lymantria* (*Nyctria*) *naessigi* **sp.n.** – ♂, Philippines, Leyte, Paratype.
**Fig. 558:** *Lymantria* (*Nyctria*) *maculata* SEMPER, 1896 – ♂, Philippines, Luzon, Sytype.
**Fig. 559:** *Lymantria* (*Nyctria*) *erikae* **sp.n.** – ♂, Indonesia, Flores, Holotype.

**Fig. 560:** *Lymantria* (*Nyctria*) *mathura aurora* BUTLER, 1877 – ♀, Japan, Honshu.
**Fig. 561:** *Lymantria* (*Nyctria*) *mathura mathura* MOORE, 1865 – ♀, NE. India, Darjeeling.
**Fig. 562:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♀, Sri Lanka, Holotype.

**Fig. 563:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♀, S. India (Paralectotype of *Lymantria viola* SWINHOE, 1889).
**Fig. 564:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♀, S.- India, Tamil Nadu.

**Fig. 565:** *Lymantria* (*Nyctria*) *minora* VAN EECKE, 1928 – ♀, Indonesia, Java (Paratype of *Lymantria harimuda* ROEPKE, 1937).
**Fig. 566:** *Lymantria* (*Nyctria*) *minora* VAN EECKE, 1928 – ♀, Indonesia, S. Kalimantan.

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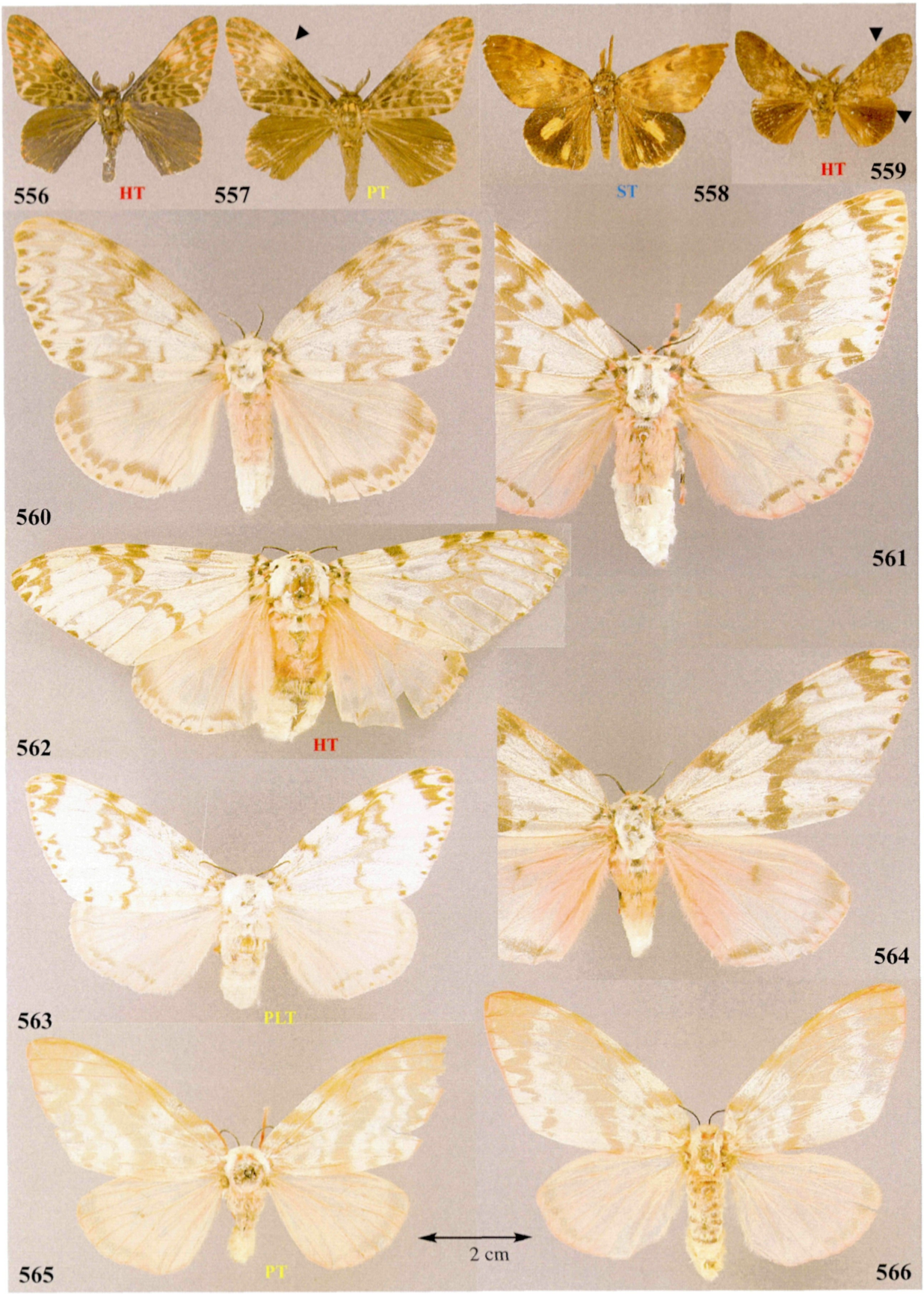


**Figs. 567-575:** next page

**Fig. 567:** *Lymantria* (*Nyctria*) *mathura mathura* MOORE, 1865 – ♂, NE India, Meghalaya, GU 60-56.
**Fig. 568:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♂, S. India, GU 60-92.
**Fig. 569:** *Lymantria* (*Nyctria*) *minora* VAN EECKE, 1928 – ♂, Indonesia, S. Kalimantan, GU 50-46.

**Fig. 570:** *Lymantria* (*Nyctria*) *meyi* **sp.n.** – ♂, Indonesia, Flores, GU 62-76, Paratype.
**Fig. 571:** *Lymantria* (*Nyctria*) *murzini* **sp.n.** – ♂, N. Myanmar, GU 60-41, Paratype.
**Fig. 572:** *Lymantria* (*Nyctria*) *naessigi* **sp.n.** – ♂, Philippines, Negros, GU 50-48, Paratype.

**Fig. 573:** *Lymantria* (*Nyctria*) *capnodes* COLLENETTE, 1932 – ♂, Indonesia, Java, GU 35-100a.
**Fig. 574:** *Lymantria* (*Nyctria*) *geoffmartini* **sp.n.** – ♂, Indonesia, Irian Jaya BM 44/2003, Holotype.
**Fig. 575:** *Lymantria* (*Nyctria*) *hausmanni* **sp.n.** – ♂, Indonesia, Sulawesi, GU 60-59, Holotype.

## The subgenus *Syntria* subgen.n.

### *Lymantria* (*Syntria*) *flavoneura* JOICEY & TALBOT, 1925: 382, pl.61: 12, 13

(Figs. 531, 576-578, 585)

**Holotype:** [Irian Jaya], North W. New Guinea Arfak Mts., Ansi Lakes – BMNH, London [examined].

**Taxonomy:** The species differs from *toxopeusi* externally by a blackish spot in the anal angle of the hindwings. The female is still unknown.

**Further remarks:** The number of known specimens is n<10. Apparently restricted to the Arfak Mts.

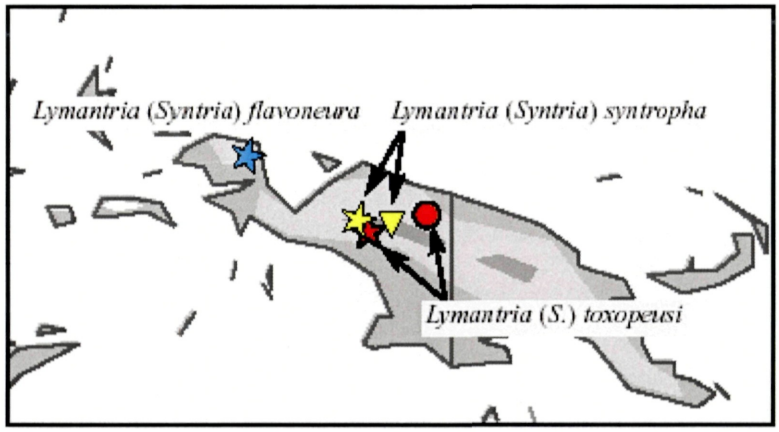
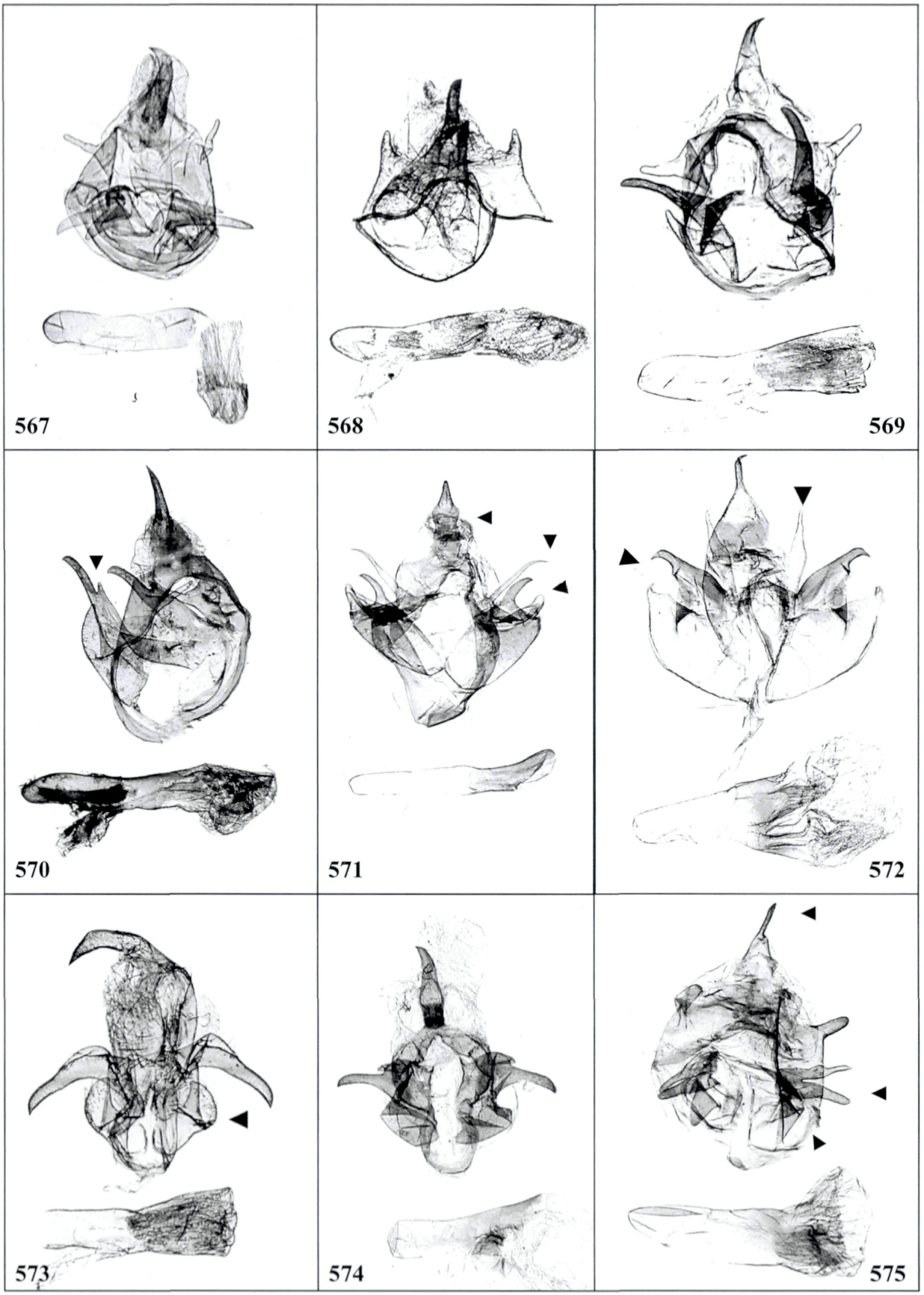



**Fig: 531:** Distribution of the subgenus *Syntria*.



## *Lymantria (Syntria) syntropha* COLLENETTE, 1955: 47, pl. 2: 2

(Figs. 531, 579-581, 586)

**Holotype:** [Irian Jaya], Netherland's New Guinea, Snow Mts., Ibele Camp – NNM, Leiden [examined].

**Taxonomy:** Reddish coloured hindwings characterize this species. The female is unknown.
**Further remarks:** The number of known specimens is n<20 from a few localities. This species and *toxopeusi* occur sympatrically.

## *Lymantria (Syntria) toxopeusi* COLLENETTE, 1955: 47, pl. 2: 1

(Figs. 531, 582-584, 587)

**Holotype:** [Irian Jaya], Netherland's New Guinea, Snow Mts., Moosbosch Camp – NNM, Leiden [examined].

**Taxonomy:** Its pale yellowish coloured hindwings without fuscous markings characterize the species. The general impression of the forewings is darker than in the other two relatives. The female resembles the male and shows only slight sexual dimorphism.
**Further remarks:** The number of known specimens is n<25 from a few localities in West Papua.

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**Figs. 576-589:** next page

**Fig. 576:** *Lymantria* (*Syntria*) *flavoneura* JOICEY & TALBOT, 1925 – ♂, Indonesia, Irian Jaya, Arfak Mts., Holotype.
**Fig. 577:** *Lymantria* (*Syntria*) *flavoneura* JOICEY & TALBOT, 1925 – ♂, Indonesia, Irian Jaya, Arfak Mts., Paratype.
**Fig. 578:** *Lymantria* (*Syntria*) *flavoneura* JOICEY & TALBOT, 1925 – ♂, Indonesia, Irian Jaya, Arfak Mts., Paratype.

**Fig. 579:** *Lymantria* (*Syntria*) *syntropha* COLLENETTE, 1955 – ♂, Indonesia, C. Irian Jaya, Holotype.
**Fig. 580:** *Lymantria* (*Syntria*) *syntropha* COLLENETTE, 1955 – ♂, Indonesia, C. Irian Jaya, Paratype.
**Fig. 581:** *Lymantria* (*Syntria*) *syntropha* COLLENETTE, 1955 – ♂, Indonesia, Irian Jaya, Nabire.

**Fig. 582:** *Lymantria* (*Syntria*) *toxopeusi* COLLENETTE, 1955 – ♂, Indonesia, C. Irian Jaya, Holotype.
**Fig. 583:** *Lymantria* (*Syntria*) *toxopeusi* COLLENETTE, 1955 – ♂, Indonesia, C. Irian Jaya.
**Fig. 584:** *Lymantria* (*Syntria*) *toxopeusi* COLLENETTE, 1955 – ♀, Indonesia, C. Irian Jaya, "Allotype".

**Fig. 585:** *Lymantria* (*Syntria*) *flavoneura* JOICEY & TALBOT, 1925 – ♂, Indonesia, C. Irian Jaya, GU NNM 1/2002.
**Fig. 586:** *Lymantria* (*Syntria*) *syntropha* COLLENETTE, 1955 – ♂, Indonesia, C. Irian Jaya, GU NNM 2/2002, Paratype.

**Fig. 587:** *Lymantria* (*Syntria*) *toxopeusi* COLLENETTE, 1955 – ♂, Indonesia, C. Irian Jaya, GU NNM 3/2002, Paratype.
**Fig. 588:** *Lymantria* (*Nyctria*) *erikae* **sp.n.** – ♂, Indonesia, Flores, GU 24-34, Holotype.
**Fig. 588a:** *Lymantria* (*Nyctria*) *maculata* SEMPER, 1896 – ♂, Philippines, Luzon, GU 62-87.
**Fig. 589:** *Lymantria* (*Nyctria*) *grandis* WALKER, 1855 – ♀, S. India, GU BM 35/2003.

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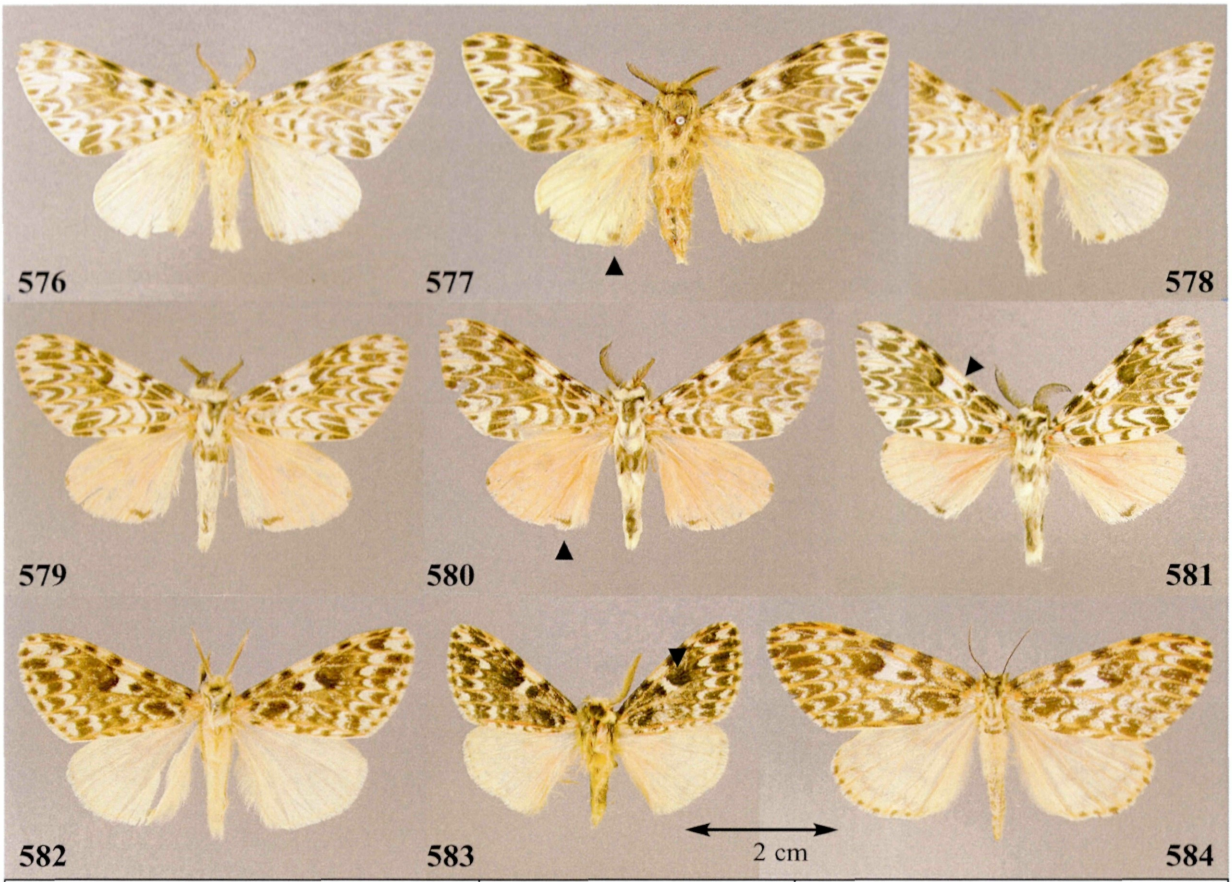


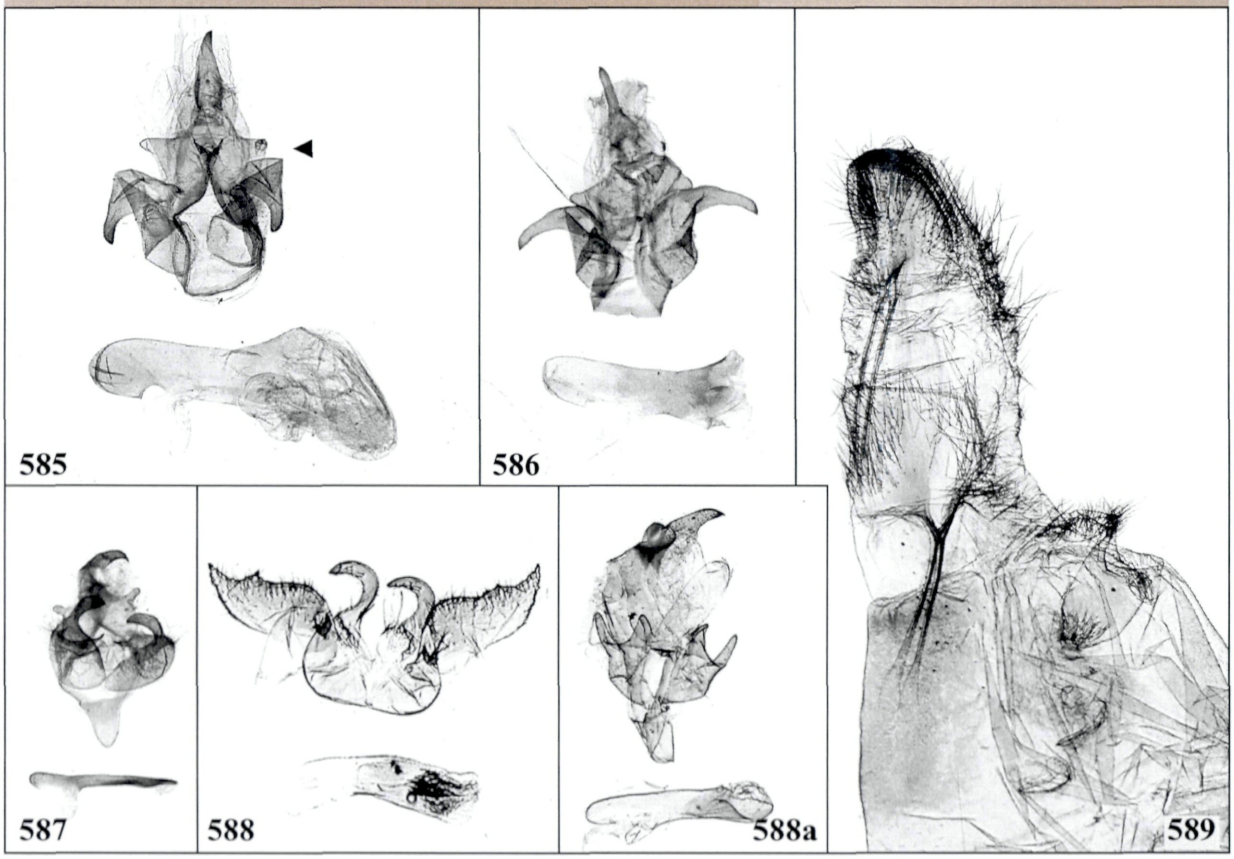

## The subgenus *Pantria* subgen.n.

### *Lymantria* (*Pantria*) *panthera* (VAN EECKE, 1928): 137 (*Dura*)

(Figs. 532, 590-592, 601, 602)

**Holotype:** Sumatra, Boven Palembang – NNM, Leiden [examined].

**Taxonomy:** The species is distinguishable by the characteristic brown pattern and the yellow colour of its wings and body. There is virtually no known individual or geographic variation.

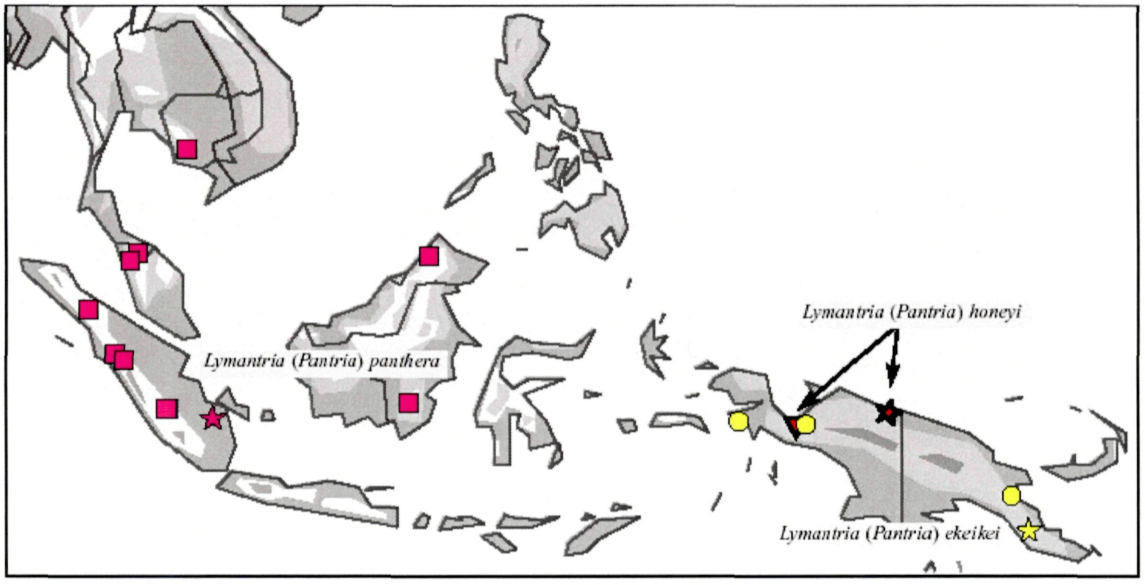


**Fig. 532:** Distribution of the subgenus *Pantria*.

### *Lymantria* (*Pantria*) *ekeikei* (BETHUNE-BAKER, 1904): 408, pl.6: 22

(Figs. 532, 593-599, 603)

**Syntypes:** B.C. [=Papua] New Guinea, Ekeikei – BMNH, London [examined].

**Taxonomy:** The males resemble externally *panthera*, however the ground colour of the forewings is paler yellow. The female shows a similar pattern as the male. The ground colour of the forewings is pale brown and the hindwings, like the abdomen, are pink.

**Male genitalia** (Fig. 603): The male genitalia resemble *panthera* but differ by the shape of the socii and the more curved valves.

**Further remarks:** Restricted to the Island of New Guinea.

### *Lymantria* (*Pantria*) *honeyi* sp.n.

(Figs. 532, 596-598, 600)

**Holotype:** ♂, Dutch New Guinea [= Indonesia, Irian Jaya], Humboldt Bay distr. Wembi, 8.vii.1937 – BMNH, London.
**Paratypes:** (6♂♂, 1♀): Irian Jaya: 1♂, 1♀, Nomnagihé, 25miles south of Wangaar, 2000ft., Jan.-Feb. 1921; 1♂, Cyclops Mts., Sabron, camp 2, 2200ft., vii.1936; 2♂♂, Straße Nabire-Ilaga, km 62, Sowa Camp, 300m, S. 03.53554°/E 135.70442°, 26.ii.1998 (GU 60-39); 1♂, Straße Nabire-Ilaga, km 53, 580m, S. 03.49460°/E 135.72524°, 22.ii.1998; 1♂, Nabire, 700-1000m, vi.1996.

**Diagnosis:** Forewing length ♂♂ 22-22.5 mm, ♀ 35 mm. The imagines of *honeyi* sp.n. are about 3 mm larger than specimens of *ekeikei*. The new species is externally similar to *ekeikei* and differs by the diffuse and paler pattern on the forewings. The colour of the hindwings of the males is warm yellow and not whitish yellow as in *ekeikei*.

**Male genitalia** (Fig. 600): The male genitalia of *honeyi* sp.n. very much resemble *ekeikei* and also *panthera*. Characteristic differences are in the shape of the saccus, the rather pointed than rounded triangular socii and the thicker and shorter aedeagus.

**Further remarks:** Restricted to the Island of New Guinea.

**Etymology:** Named after Martin Honey, London, for his constant help during my visits in BMNH.

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**Figs. 590-603:** next page

**Fig. 590:** *Lymantria* (*Pantria*) *panthera* VAN EECKE, 1928 – ♂, Indonesia, Sumatra.
**Fig. 591:** *Lymantria* (*Pantria*) *panthera* VAN EECKE, 1928 – ♂, SW. Cambodia.
**Fig. 592:** *Lymantria* (*Pantria*) *panthera* VAN EECKE, 1928 – ♀, Indonesia, Sumatra, Holotype.
**Fig. 593:** *Lymantria* (*Pantria*) *ekeikei* BETHUNE-BAKER, 1904 – ♂, SE. Papua New Guinea, Syntype.
**Fig. 594:** *Lymantria* (*Pantria*) *ekeikei* BETHUNE-BAKER, 1904 – ♂, Indonesia, Irian Jaya, Nabire.
**Fig. 595:** *Lymantria* (*Pantria*) *ekeikei* BETHUNE-BAKER, 1904 – ♀, SE. Papua New Guinea, Syntype.

**Fig. 596:** *Lymantria* (*Pantria*) *honeyi* **sp.n.** – ♂, Indonesia, West Papua, Humboldt-Bay, Holotype.
**Fig. 597:** *Lymantria* (*Pantria*) *honeyi* **sp.n.** – ♂, Indonesia, West Papua, Nabire, Paratype.
**Fig. 598:** *Lymantria* (*Pantria*) *honeyi* **sp.n.** – ♀, Indonesia, West Papua, Wangaar, Paratype.

**Fig. 599:** *Lymantria* (*Pantria*) *ekeikei* BETHUNE-BAKER, 1904 – ♂, Indonesia, Irian Jaya, BM 16/2003.
**Fig. 600:** *Lymantria* (*Pantria*) *honeyi* **sp.n.** – ♂, Indonesia, Irian Jaya, Nabire, GU 60-39, Paratype.

**Fig. 601:** *Lymantria* (*Pantria*) *panthera* VAN EECKE, 1928 – ♂, Indonesia, Sumatra, GU 01-93.
**Fig. 602:** *Lymantria* (*Pantria*) *panthera* VAN EECKE, 1928 – ♀, Indonesia, Sumatra, GU 49-17.
**Fig. 603:** *Lymantria* (*Pantria*) *ekeikei* BETHUNE-BAKER, 1904 – ♂, Indonesia, Irian Jaya, GU 49-88.

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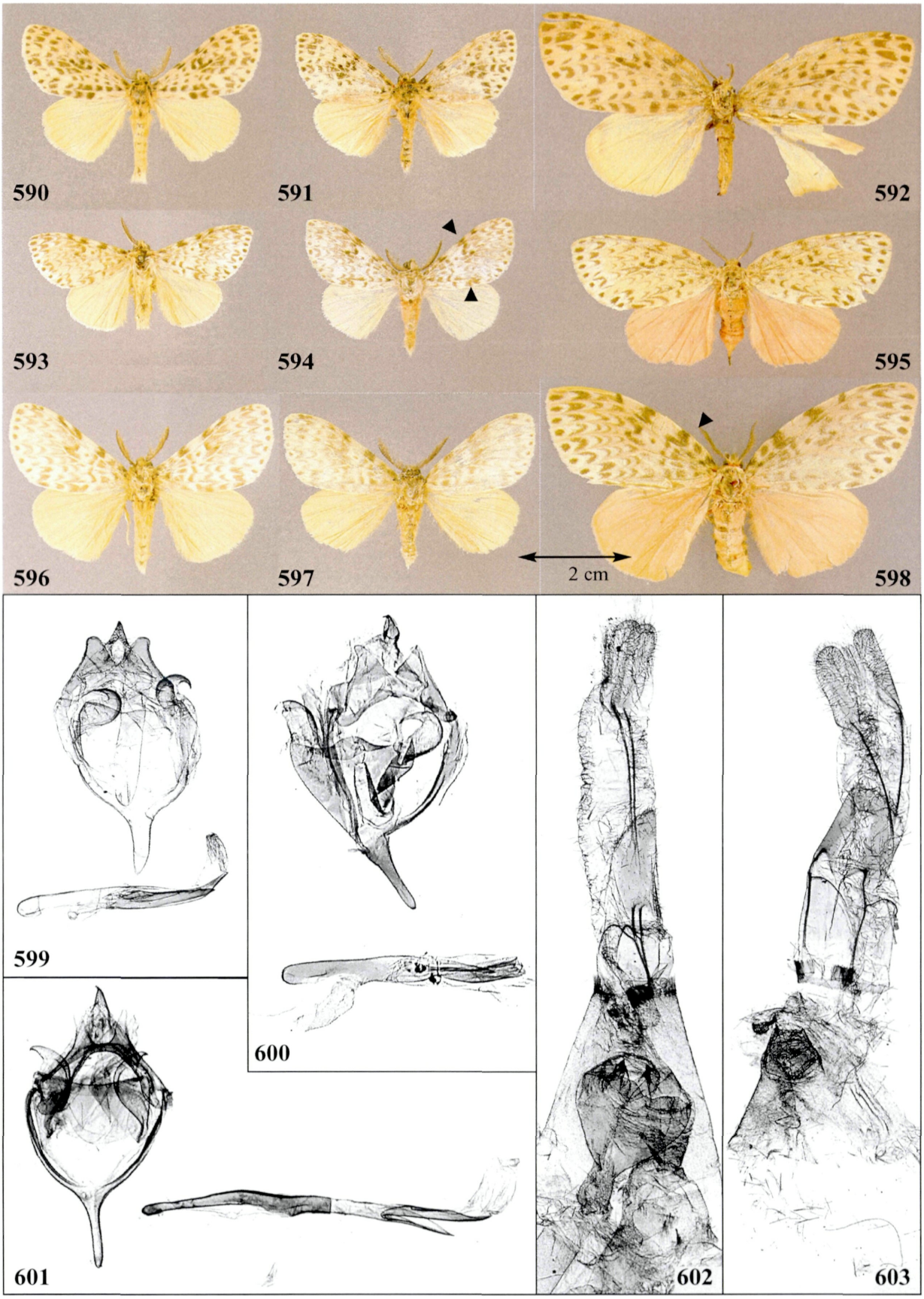

# The subgenus *Collentria* subgen.n.

## *Lymantria* (*Collentria*) *grisea grisea* MOORE, 1879: 55, pl. 3: 5

(Figs. 604-606, 609, 610, 643, 655)

**Syntypes:** [NE India], Darjiling – ZMHU, Berlin and BMNH, London [examined].

**Taxonomic note:** The imago externally resembles *chryptochloea* from the Philippines, though they lack the reddish shine on the wings and pinkish scales on the abdomen.

**Genitalia** (Figs. 643, 655): The male genitalia of *grisea* differ by the longer valve processes with teeth and the rounded sacculus from the other subspecies.

**Further remarks:** MOORE described *grisea* after a pair in which the male was in BMNH and the female was in ZMHU. However, the conspecifity of the syntypes is evident. This subspecies *grisea* occurs in Nepal, NE India and Myanmar. I chose to treat the allopatric mainland populations as a valid species for the same reasons as in *chryptochloea*. However, there is a wide geographical variation in the male genitalia.

## *Lymantria* (*Collentria*) *grisea servula* COLLENETTE, 1936: 344, pl. 7: 8 stat.n. [*Lymantria servula*]

(Figs. 604, 612-615, 644)

**Holotype:** China, Nord-Yuennan, Li-kiang – ZFMK, Bonn [examined].

**Taxonomy:** This subspecies is externally very similar to ssp. *grisea*. The brownish markings on the forewings are somewhat more diffuse.

From N. Thailand there are four specimens, caught at the end of October, which are fuscous, including their hindwings, and weak visible markings on the forewings (GU Hauenstein 06/2004). They may belong to a further subspecies, if more material were available for study.

**Male genitalia** (Fig. 644): The male genitalia differ from ssp. *grisea* by an additional small spine on the valve process. The uncus is somewhat more pointed. The male genitalia of a specimen from Thailand virtually do not differ from Yunnan specimens.

**Further remarks:** Distributed in Yunnan, N. Thailand; not yet found in N.Vietnam.

## *Lymantria* (*Collentria*) *grisea kosemponis* STRAND, 1914: 330 stat.n. [*Lymantria kosemponis*]

(Figs. 604, 607, 608, 611, 645)

**Holotype:** Formosa [= Taiwan], Kosempo – DEI, Eberswalde [not examined].

**Synonym:**
*Lymantria roseola* MATSUMURA, 1931: 715, f. 494.
Holotype: Formosa [=Taiwan], Karenko – HUS, Sapporo [not examined].

**Taxonomy:** This subspecies is externally very similar to ssp. *grisea*. The brownish markings are sharper and more contrasting than in *grisea*.

**Male genitalia** (Fig. 645): The male genitalia differ from ssp. *grisea* by the untoothed valve process. The sacculus is rather triangular shaped compared to ssp. *grisea* or ssp. *servula*.

**Further remarks:** Only a few specimens (n<15) were examined.

## *Lymantria* (*Collentria*) *cryptochloea cryptochloea* COLLENETTE, 1932: 178, pl.1: 6

(Figs. 604, 616, 617, 621, 622, 646)

**Holotype:** Mindanao, Lanao, Kolambugan – BMNH, London [examined].

**Taxonomy:** Characters distinguishing *chryptochloea* are a brownish tornal spot on the submarginal fascia on the forewings, a fuscous basal area and a reddish shine (only in fresh specimens). The abdomen has a prominent reddish to pinkish colour. This distinguishes the complex from the other externally similar species including *barlowi*. The species varies individually in the reddish colour. There are specimens, particularly females, showing intensive reddish coloured hindwings.

**Male genitalia** (Fig. 646): The male genitalia are subject of geographical variation in the length of the valve processes. In the ssp. *cryptochloea* the pair of each valve is short, and the tegumen is not very long. The valve processes do not reach the base of the uncus.

**Further remarks:** The number of investigated specimens from Mindanao was n=6 (2 GU).

The following taxa are treated as subspecies mainly due to zoogeographic reasons (allopatric distribution pattern) rather than morphogical differences in the male genitalia.

## *Lymantria* (*Collentria*) *cryptochloea kinoshitai* ssp.n.

(Figs. 604, 618, 619, 623, 648)

**Holotype:** ♂, Philippinen, Negros, Mt. Kanlaon, 1010m, 17.-18.vii.1996, Prim. forest, leg Dr. R. Brechlin – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (50♂♂, 10♀♀): Negros: 7♂♂, 6♀♀, Mt. Kanlaon, 1010m, 17.-18.vii.1996 (GU 50-63); 14♂♂, 1♀, Mt. Kanlaon, 600m, W. Route via Mambucal, 10°22'N, 123°12', iv.1998 (GU 05-50a); 2♂♂, ibid, 820m vii.1997; 3 ♂♂, ibid, 820m, 15.vii.1996; 3♂♂, 1♀, Mt. Canlaon, x.1995; 15 ♂♂, 1♀, ibid i-iv.1995 (GU 50-65, 62-75); 3♂♂, 1♀, ibid, 600m, i.-ii.1997; 2♂♂, Mt. Mandalagan, 800m, near Don Salvador Bendeicto, May/June 1998; 1♂, Mt. Talinis, 1200m, iii.1998; Leyte: 2♂♂, Mt. Balocaue, near Mahaplag, 700m, vii.1999.

**Diagnosis:** Forewing length ♂♂ 14-16 mm, the ♀♀ span 20-22 mm. Externally very similar to ssp. *cryptochloea* but in general the fuscous pattern is somewhat more developed. The hindwings are darker than in the other subspecies.

**Male genitalia** (Fig. 648): The male genitalia possess very long valve processes, which can be found over the base of the uncus near the tip.

**Further remarks:** Known from Negros and Leyte.

**Etymology:** Named after Soichiro Kinoshita, Ibaraki/Osaka, to acknowledge his generosity for sending me Japanese material of excellent quality over many years.

## *Lymantria* (*Collentria*) *cryptochloea cernyi* ssp.n.

(Figs. 604, 620, 624, 647)

**Holotype:** ♂, Philippinen, Z. Luzon, Quezon, Quezon Forest Nat. Park, 250m, 14°01'N. Breite, 122°11'E Länge, Primärurwald, 8.-10.x.1988, leg. Cerny & Schintlmeister – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (12♂♂, 5♀♀): Luzon: 6♂♂, 1♀, Quezon Forest Nat. Park, 250m, 14°01'N. Breite, 122°11'E Länge, Primärurwald, 8.-10.x.1988 (GU 05-55a, 50-67); 2♂♂, ibid. 19.vii.1993; 1♀, Ifugao, 14km SE Lagawe, Bolog, 16°41'N, 121°10'E, 500m, 7.ii.1988; 3♀♀, Zambales, Mt. Colo, 110-250m, 5.-7.v.1999; 1♀, Mt. Makling, 400m, 14.-16.iii.2000; Mindoro: 2♂♂, Mt. Halcon 1000m, 6.-7.iii.2000; 1♂, ibid, iv.2001; 1♂♀, 20km NE Sablayan, Amnay, 13°00'N, 12°55'E, 150m, 27.i.1988 (GU 05-23a). Samar: 1♀, Concord, Cadac-an, 22.-24.iv.1997.

**Diagnosis:** Forewing length ♂♂ 14-16 mm, the ♀♀ span 20-22 mm. Externally not distinguishable from ssp. *cryptochloea*.

**Male genitalia** (Fig. 647): The male genitalia have longer valve processes than ssp. *chryptochloea* reaching the base of the uncus.

**Etymology:** Named after Karel Cerny, Zirl/Austria, who accompanied me during two successful expeditions through the Philippines in 1988. We collected the holotype of this interesting species together in S. Luzon under difficult circumstances.

**Further remarks:** Distributed in Luzon and Mindoro up to 1200 m altitude.

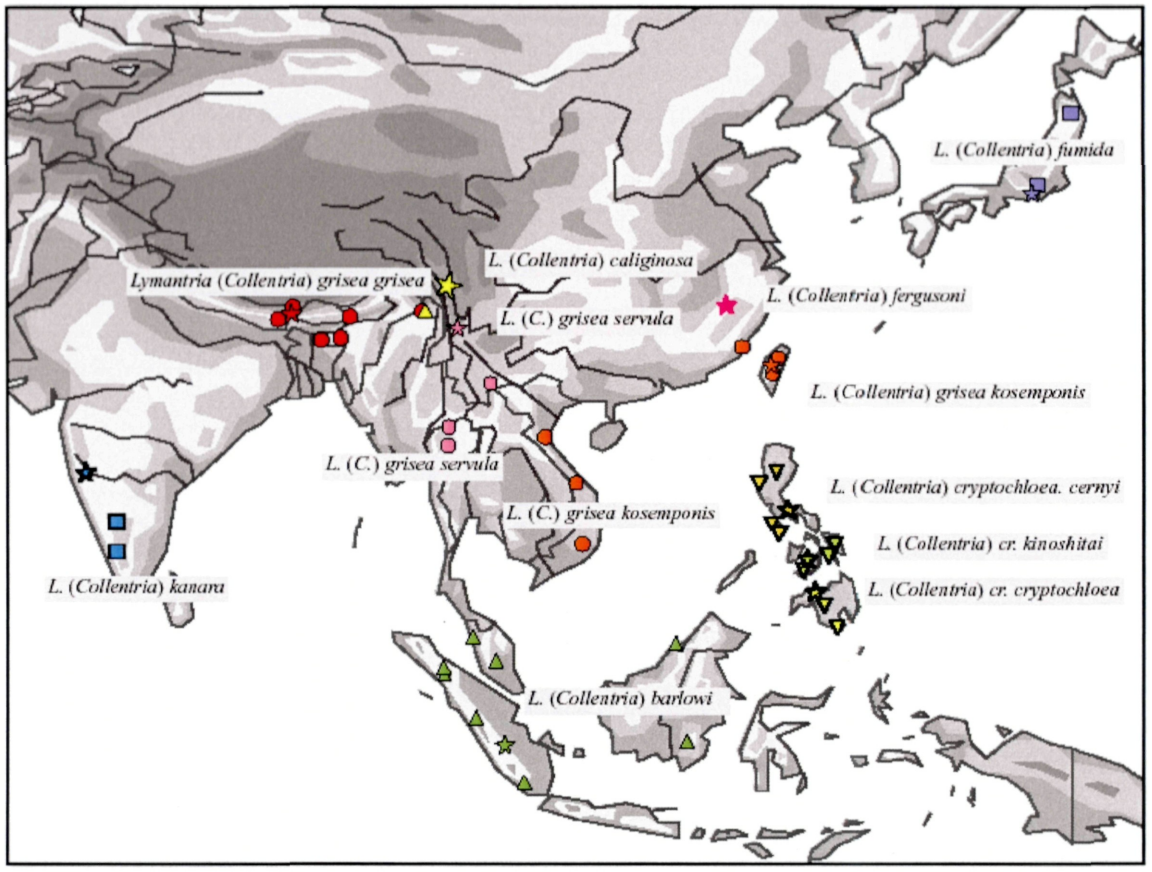


**Fig. 604:** Distribution of the subgenus *Collentria.*

## *Lymantria* (*Collentria*) *barlowi* SCHINTLMEISTER, 1994: 125, pl. 2: 5, 6 fig. 17

(Figs. 604, 625-628, 649)

**Holotype:** Sumatra, Jambi 28km SW Sarolangun – BMNH, London [examined].

**Taxonomy:** This is a small species with a violet-reddish shine on the wings of fresh specimens. The sexual dimorphism and the individual variability are minimal.

**Male genitalia** (Fig. 649): The pair of processes on each valve is shorter, compared to *chryptochloea.*

**Further remarks:** The number of specimens examined was n<15.

## *Lymantria* (*Collentria*) *fumida* BUTLER, 1877: 402

(Figs. 604, 633-635, 639, 652)

**Holotype:** [Japan, Honshu] Yokohama – BMNH, London [examined].

**Taxonomy:** *Lymantria fumida* is characterized by a brownish ground colour of the forewings with a V-shaped blackish discal spot and diffuse pattern. The postmedian fascia of the forewings is filled with a white colour. The pale brownish hindwings show a broad fuscous submarginal band, which is less prominently developed in the females of *lucescens*. Furthermore, the female of *lucescens* shows the postmedian band fuscous grey filled instead of whitish-grey in *fumida*.

**Further remarks:** The holotype is a female, externally very similar to females of *L. lucescens*. However, the males and the caterpillars (pers. communication P. Schaefer 2004) of both species are very different. The conspecifity of both sexes illustrated here as *fumida* was confirmed by successful breeding on *Larix* by Paul Schaefer.

Endemic to Japan. Only a few specimens are known in European collections (n<20).

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**Figs. 605-632:** next page

**Fig. 605:** *Lymantria* (*Collentria*) *grisea grisea* MOORE, 1879 – ♂, NE India, Meghalaya.
**Fig. 606:** *Lymantria* (*Collentria*) *grisea grisea* MOORE, 1879 – ♂, NE India, Meghalaya.
**Fig. 607:** *Lymantria* (*Collentria*) *grisea kosemponis* STRAND, 1914 – ♂, Taiwan.
**Fig. 608:** *Lymantria* (*Collentria*) *grisea kosemponis* STRAND, 1914 – ♀, Taiwan.

**Fig. 609:** *Lymantria* (*Collentria*) *grisea grisea* MOORE, 1879 – ♀, NE India, Darjeeling, Syntype.
**Fig. 610:** *Lymantria* (*Collentria*) *grisea grisea* MOORE, 1879 – ♀, NE India, Meghalaya.
**Fig. 611:** *Lymantria* (*Collentria*) *grisea kosemponis* STRAND, 1914 – ♀, S. Vietnam.
**Fig. 612:** *Lymantria* (*Collentria*) *grisea servula* COLLENETTE, 1936 – ♂, China, Yunnan, Holotype.

**Fig. 613:** *Lymantria* (*Collentria*) *grisea servula* COLLENETTE, 1936 – ♂, China, Yunnan.
**Fig. 614:** *Lymantria* (*Collentria*) *grisea servula* COLLENETTE, 1936 – ♂, NW. Thailand.
**Fig. 615:** *Lymantria* (*Collentria*) *grisea servula* COLLENETTE, 1936 – ♀, NW. Thailand.
**Fig. 616:** *Lymantria* (*Collentria*) *cryptochloea cryptochloea* COLLENETTE, 1932 – ♂, Philippines, Mindanao, Holotype.
**Fig. 617:** *Lymantria* (*Collentria*) *cryptochloea cryptochloea* COLLENETTE, 1932 – ♂, Philippines, Mindanao.
**Fig. 618:** *Lymantria* (*Collentria*) *cryptochloea kinoshitai* **ssp.n.** – ♂, Philippines, Negros, Holotype.
**Fig. 619:** *Lymantria* (*Collentria*) *cryptochloea kinoshitai* **ssp.n.** – ♂, Philippines, Leyte, Paratype.
**Fig. 620:** *Lymantria* (*Collentria*) *cryptochloea cernyi* **ssp.n.** – ♂, Philippines, Luzon, Holotype.
**Fig. 621:** *Lymantria* (*Collentria*) *cryptochloea cryptochloea* COLLENETTE, 1932 – ♀, Philippines, Mindanao, "Neallotype".
**Fig. 622:** *Lymantria* (*Collentria*) *cryptochloea cryptochloea* COLLENETTE, 1932 – ♀, Philippines, Mindanao.
**Fig. 623:** *Lymantria* (*Collentria*) *cryptochloea kinoshitai* **ssp.n.** – ♀, Philippines, Negros, Paratype.
**Fig. 624:** *Lymantria* (*Collentria*) *cryptochloea cernyi* **ssp.n.** – ♀, Philippines, Luzon, Paratype.

**Fig. 625:** *Lymantria* (*Collentria*) *barlowi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 626:** *Lymantria* (*Collentria*) *barlowi* SCHINTLMEISTER, 1994 – ♂, Indonesia, S. Kalimantan.
**Fig. 627:** *Lymantria* (*Collentria*) *barlowi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 628:** *Lymantria* (*Collentria*) *barlowi* SCHINTLMEISTER, 1994 – ♂, W. Malaysia, Paratype.

**Fig. 629:** *Lymantria* (*Collentria*) *caliginosa* COLLENETTE, 1933 – ♂, China, Tibet, "Allotype".
**Fig. 630:** *Lymantria* (*Collentria*) *caliginosa* COLLENETTE, 1933 – ♂, N. Myanmar.
**Fig. 631:** *Lymantria* (*Collentria*) *caliginosa* COLLENETTE, 1933 – ♀, China, Tibet, Holotype.
**Fig. 632:** *Lymantria* (*Collentria*) *caliginosa* COLLENETTE, 1933 – ♀, N. Myanmar.

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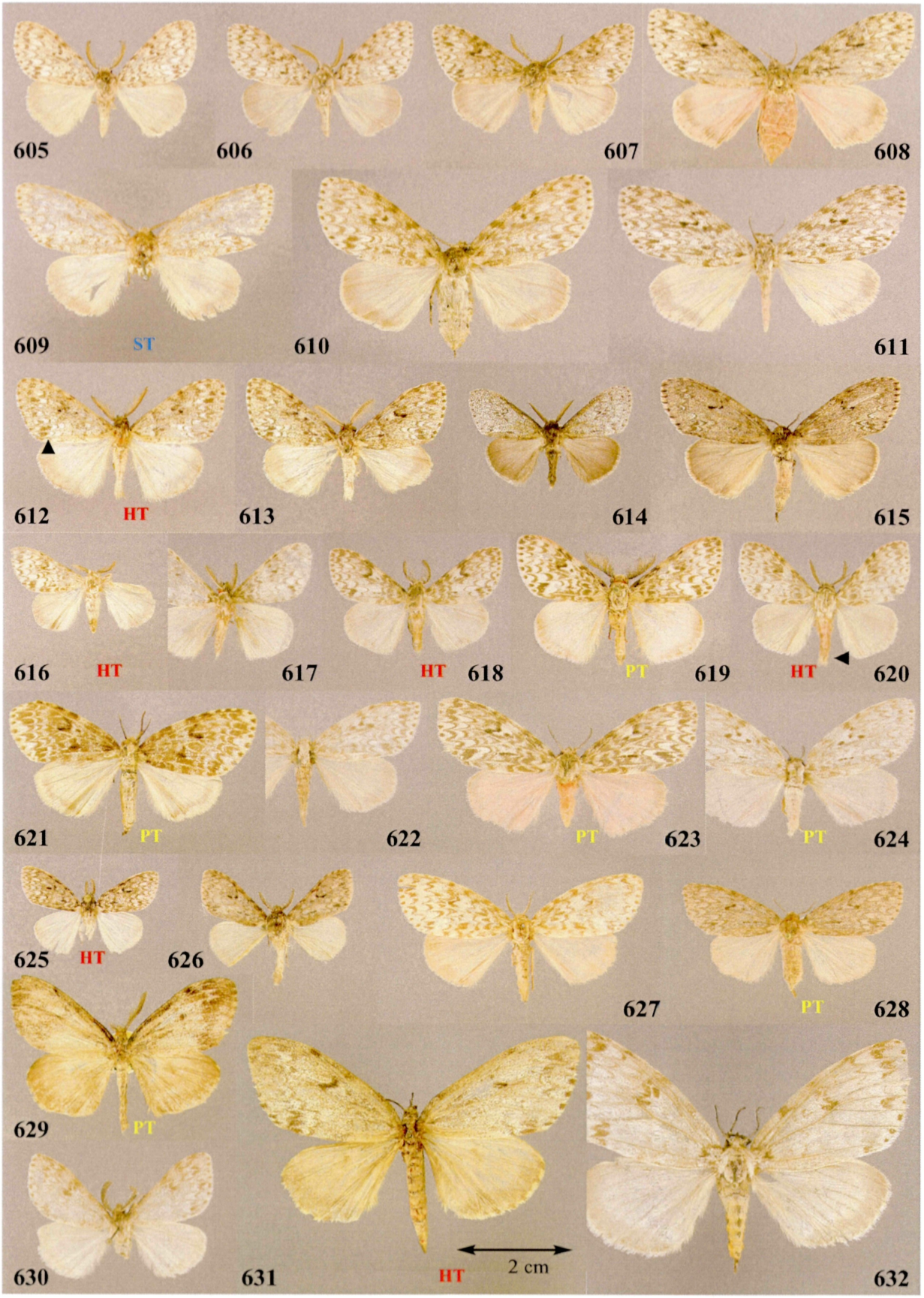

## *Lymantria* (*Collentria*) *fergusoni* sp.n.

(Figs. 604, 636-638)

**Holotype:** ♂, China, NE Jiangxi,Wuyi shan, 50km SE Yingtan, 1600m, 27°56'N, 117°25'E, Mai 2002, leg. local collectors – in coll. A. Schintlmeister, Dresden.
**Paratypes** (20♂♂, 1♀): Jiangxi: 18♂♂, Wuyi shan, 50km SE Yingtan, 1600m, 27°56'N, 117°25'E, Mai 2002 (GU 62-15, 62-42); 1♂, ibid, July 2003; 1♀, ibid. June 2002.

**Diagnosis:** Forewing length ♂♂ 21-22 mm, ♀ 30 mm. The species resembles *fumida* and is probably the sister species. The ground colour of the wings is brown with a fuscous brown pattern. The postmedian area of the forewings is whitish filled. The discal spot on the forewings is weakly developed. The hindwings are of a uniform brown without a separate postmedian area. The whole body, except the upper side, is covered with pinkish hairs. The female shows an intensive assortment of pinkish hairs.

**Male genitalia** (Fig. 653): The male genitalia are characterized by the shape of the valves, which show three processes. The aedeagus is long and slender, slightly curved. The male genitalia are easily distinguishable from *fumida* by the shape of the tegumen and the shape of the aedeagus, which is in *fumida* short, straight and thick.

**Etymology:** Dedicated to the late Douglas Ferguson, who began studies on the Palaearctic *Lymantria* in 1996 but was unable to finish this work before his passing in 2002.

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**Figs. 633-648:** next page

**Fig. 633:** *Lymantria* (*Collentria*) *fumida* BUTLER, 1877 – ♂, Japan, Honshu.
**Fig. 634:** *Lymantria* (*Collentria*) *fumida* BUTLER, 1877 – ♀, Japan, Honshu.
**Fig. 635:** *Lymantria* (*Collentria*) *fumida* BUTLER, 1877 – ♀, Japan, Honshu, Holotype.

**Fig. 636:** *Lymantria* (*Collentria*) *fergusoni* **sp.n.** – ♂, China, Jiangxi, Holotype.
**Fig. 637:** *Lymantria* (*Collentria*) *fergusoni* **sp.n.** – ♂, China, Jiangxi, Paratype.
**Fig. 638:** *Lymantria* (*Collentria*) *fergusoni* **sp.n.** – ♀, China, Jiangxi, Paratype.

**Fig. 639:** *Lymantria* (*Collentria*) *fumida* BUTLER, 1877 – ♂, Japan, Honshu.
**Fig. 640:** *Lymantria* (*Collentria*) *kanara* COLLENETTE, 1951 – ♂, S. India, Tamil Nadu.
**Fig. 641:** *Lymantria* (*Collentria*) *kanara* COLLENETTE, 1951 – ♂, S. India, Kanara, Holotype.
**Fig. 642:** *Lymantria* (*Collentria*) *kanara* COLLENETTE, 1951 – ♀, S. India, Kanara, Paratype.

**Fig. 643:** *Lymantria* (*Collentria*) *grisea grisea* MOORE, 1879 – ♂, NE India, Meghalaya, GU 49-91.
**Fig. 644:** *Lymantria* (*Collentria*) *grisea servula* COLLENETTE, 1936 – ♂, NW. Thailand, GU Hauenstein 06/2004.
**Fig. 645:** *Lymantria* (*Collentria*) *grisea kosemponis* STRAND, 1914 – ♂, Taiwan, GU 49-94.

**Fig. 646:** *Lymantria* (*Collentria*) *cryptochloea cryptochloea* COLLENETTE, 1932– ♂, Philippines, Mindanao, GU 05-58a.
**Fig. 647:** *Lymantria* (*Collentria*) *cryptochloea cernyi* **ssp.n.** – ♂, Philippines, Luzon, GU 05-55a, Paratype.
**Fig. 648:** *Lymantria* (*Collentria*) *cryptochloea kinoshitai* **ssp.n.** – ♂, Philippines, Negros, GU 62-75, Paratype.

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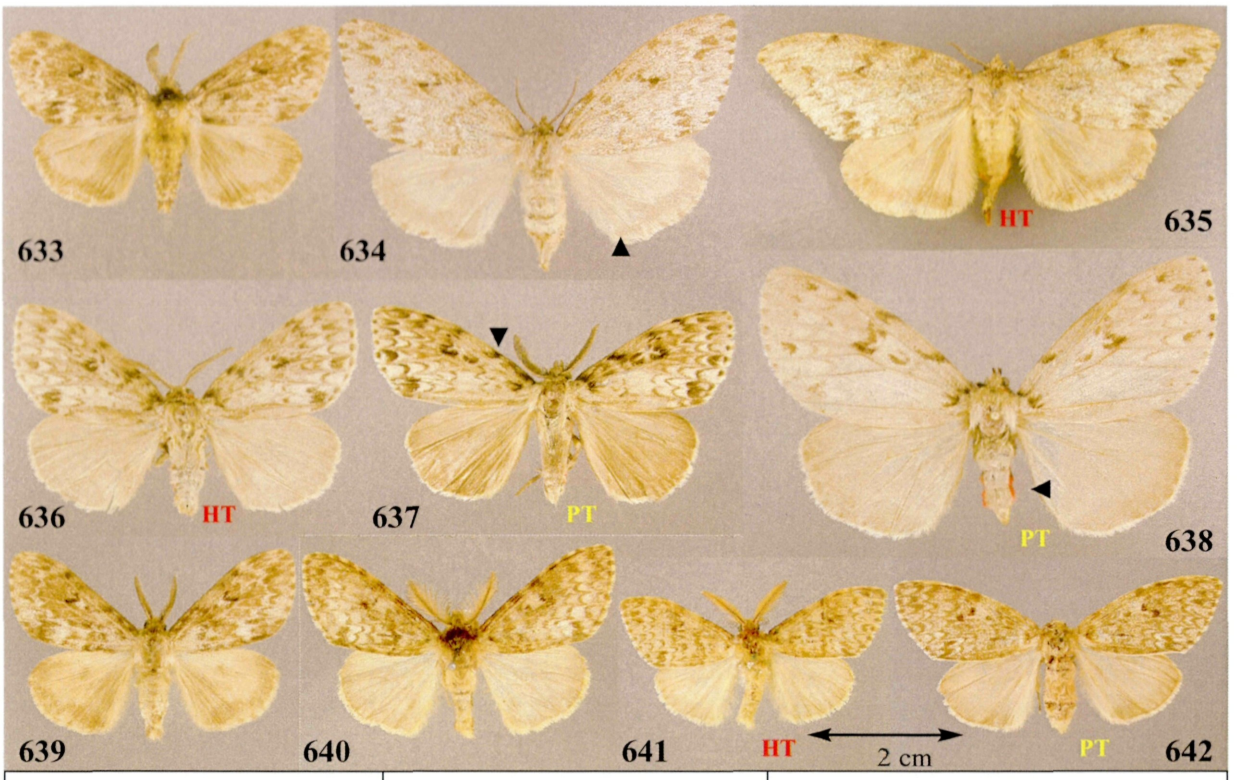


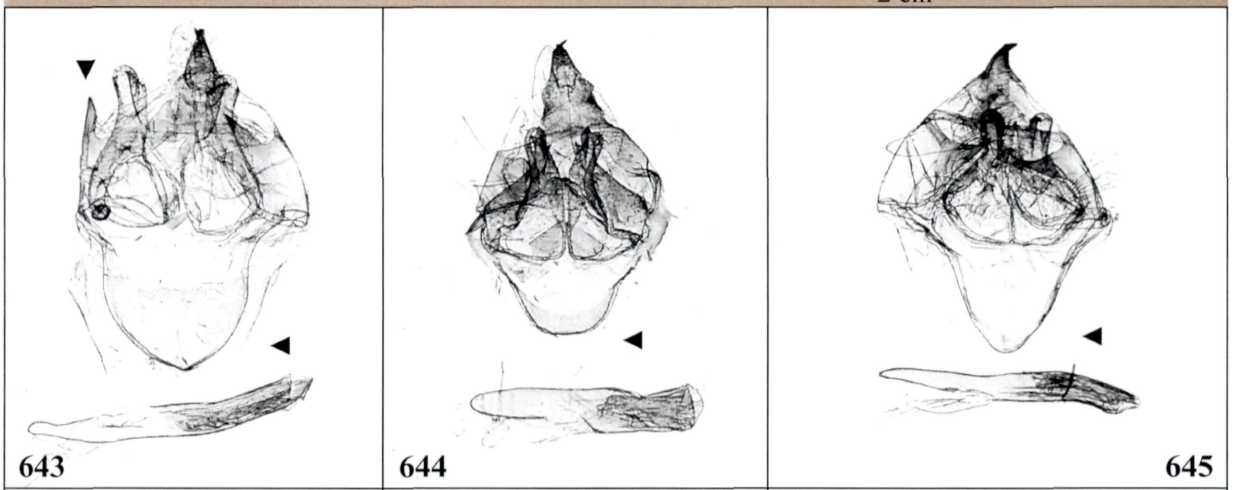


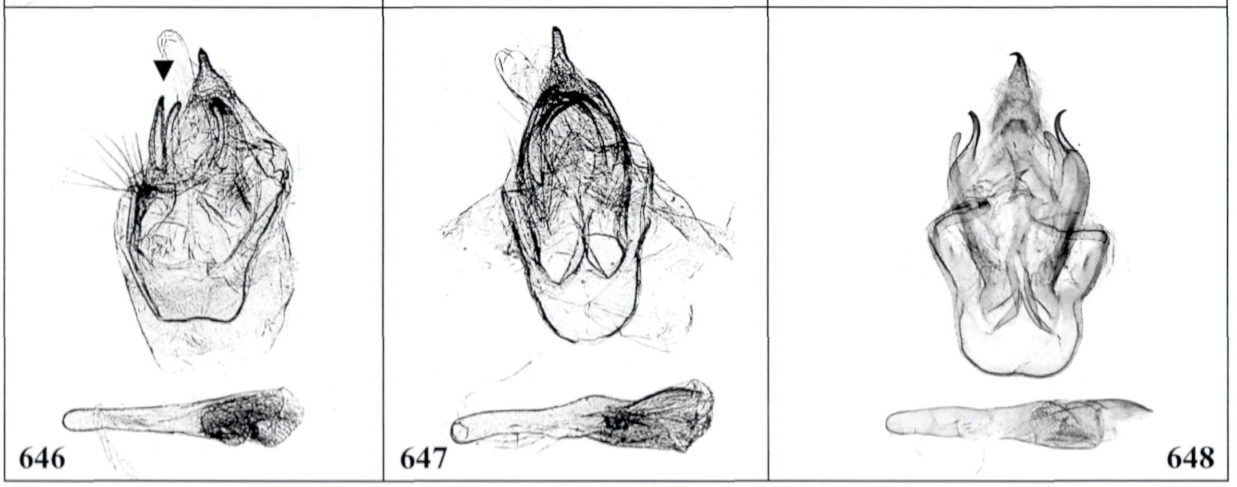

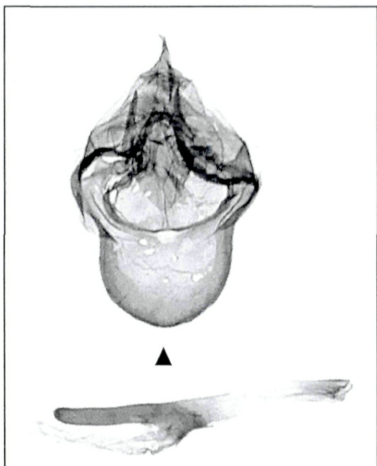
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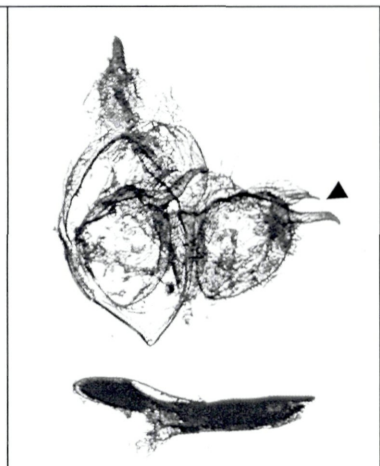
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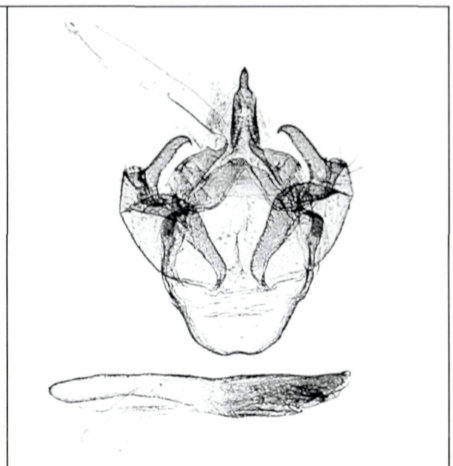
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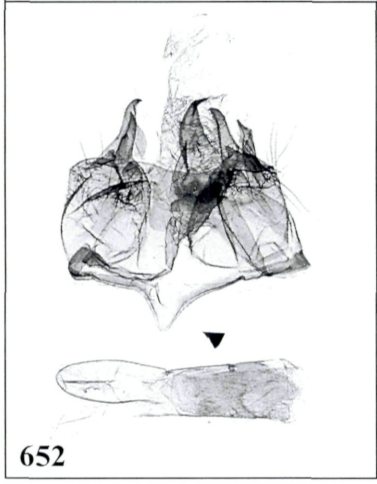
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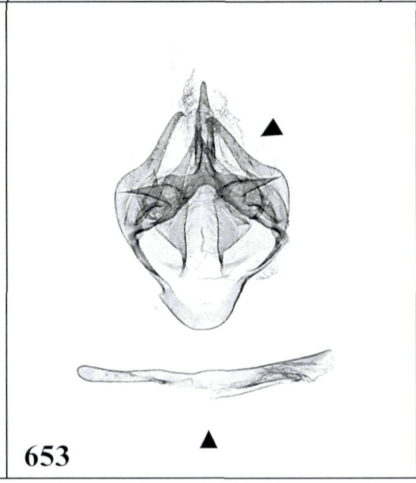
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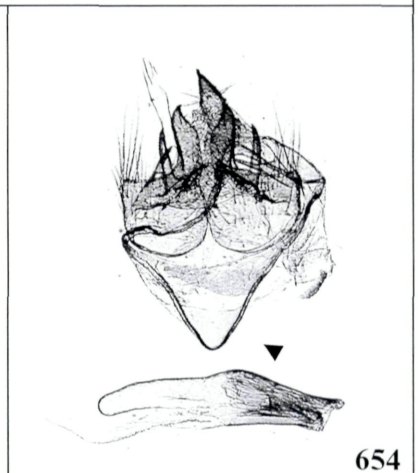
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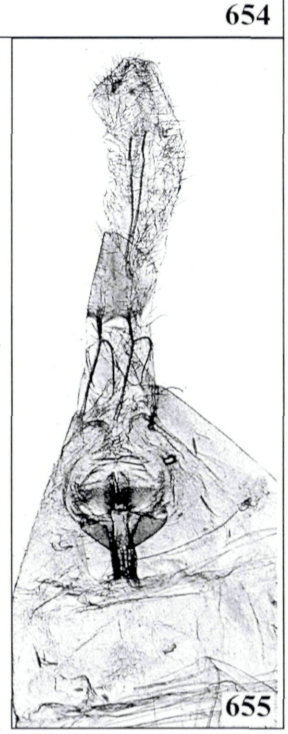
655

**Fig. 649:** *Lymantria* (*Collentria*) *barlowi* – ♂, Indonesia, Kalimantan, GU 50-68;
**Fig. 650:** *Lymantria* (*Collentria*) *caliginosa* – ♂, China, Tibet, GU BM8/2003, Paratype;
**Fig. 651:** *Lymantria* (*Collentria*) *caliginosa* – ♂, Myanmar, GU 04-11a;

**Fig. 652:** *Lymantria* (*Collentria*) *fumida* – ♂, Japan, Honshu, GU ZFMK 11/2003;
**Fig. 653:** *Lymantria* (*Collentria*) *fergusoni* – ♂, China, Jiangxi, GU 62-15, Paratype;
**Fig. 654:** *Lymantria* (*Collentria*) *kanara* – ♂, S. India, GU 04-27a;

**Fig. 655:** *Lymantria* (*Collentria*) *grisea grisea* – ♀, NE. India, Meghalaya, GU 49-92.

### *Lymantria* (*Collentria*) *caliginosa* COLLENETTE, 1933: 25 stat.n. [*Lymantria fumida caliginosa*]

(Figs. 604, 629-632, 650, 651)

**Holotype:** [China], Thibet, Vrianotong – BMNH, London [examined].

**Taxonomy:** This is a less known species. The holotype female resembles the female of *fumida*, though lacking the whitish filled post median area of the forewings; the fuscous submarginal band of the hindwings less prominently developed.

**Further remarks:** There are 1♂ and 6♀♀ from N. Myanmar, where the male genitalia match the genitalia of a "Allotype" (=paratype) male of *caliginosa*. However, this series is somewhat more whitish in the ground colour than the two type specimens of *caliginosa*. Due to the few specimens available, I actually cannot decide, if the series from Myanmar belongs to a distinct subspecies.

### *Lymantria* (*Collentria*) *kanara* COLLENETTE, 1951: 1035, pl. 19: 15

(Figs. 604, 640-642, 654)

**Holotype:** S.Indien, Kanara – in BMNH, London [examined].

**Taxonomy:** The brown antennae of the males have long bipectinations, which is a good feature for identification. The abdomen has a faint pinkish tinge. The circular discal spot on the forewings is marked with fuscous grey.

**Further remarks:** This rare species (n= 5) occurs exclusively in S. India.

## The subgenus *Spinotria* subgen.n.

### *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793: 474) (*Bombyx*)

(Figs. 655, 664-670, 861-863, 918)

**Holotype:** "India orientali" – UZM, Copenhagen [colour slide examined].

**Taxonomy:** The males are externally of a blackish ground colour. There is a contrasting and prominent white patch in the median area, and furthermore the submarginal fascia is prominently white marked. The upper side of the males is without a pinkish colour, but on the underside there are pinkish hairs on the thorax and on the frons. In most cases the males are only slightly pinkish coloured on the abdomen (in a few cases without pinkish scales). On the other hand, there are some specimens showing an extensive pinkish coloured abdomen and sometimes pinkish hindwings. There is a single male from Bhutan, matching *serva* in its male genitalia but differing externally by a pink abdomen and a pale greyish ground colour of the forewings.

The holotype female shows a brownish ground colour on the forewings with a distinct blackish marked "V". The abdomen is pink. The upper side of the hindwings is slight pinkish mixture. There are some blackish coloured females (as an individual variation). The abdomen of the females is always (n>40) pinkish coloured.

**Male genitalia** (Figs. 861-863, 918): The male genitalia are unmistakable by the very broad valve and long processes. The shape of the processes is subject to individual variation.

**Further remarks:** The female holotype of *serva* is damaged but the identification according to external features (without dissecting the genitalia) is clear. *Lymantria serva* is a common species in the Himalayas spanning from Bhimtal eastwards to Assam and N. Myanmar. The species does not reach Indochina. Under the material I have dissected, there are three times more females than males.

## *Lymantria* (*Spinotria*) *eckweileri* sp.n.

(Figs. 655, 671, 672, 675, 676, 864)

**Holotype:** ♂, Philippines, Mindanao, Prov. Davao del Sur, Mt. Apo, SE-Route via Kapatagan, 2230m, 8.vii.1996, leg. Dr. Ronald Brechlin – in coll. A. Schintlmeister, Dresden.
**Paratypes** (27♂♂, 14♀♀): Mindanao: 2♂♂, 1♀, Mt. Apo, SE-Route via Kapatagan, 2230m, 8.vii.1996; 12♂♂, 11♀♀, ibid, 1570m, 10.-12.vii.1996 (GU 50-70); 2♂♂, Prov. Davao del Norte, Mt. Caragan, vii.1998; 1♀, Prov. Bukidnon, 15km NW Maramag, Mt. Bagongsilan, Mt. Kalatungan, 1450m, 30.xii.1999; 4♂♂, Prov. Bukidnon, 40km NW Maramag, Dalongdong, 800m, 7°53'N, 124°40'E, 1-3.x.1988; 3♂♂, ibid, 1300m, 25.ix.-2.xi.2000; 2♂♂, Prov. Bukidnon, 45km NW Maramag, Mt. Binansilang, 1200m, 7°55'N, 124°40'E, 2.x.1988; 1♂, Prov. Bukidnon, Mt. Kitanglad, S-Seite, Intavas, 1700m, 8°07N, 124°55'E, 15.viii.-18.ix.1993 (GU 60-67).

**Diagnosis:** Forewing length ♂♂ 18-19 mm, ♀♀ 27-30 mm. The species externally resembles *tagalica*, though the general impression is much darker and more contrasting. The abdomen in both sexes is of a prominent pink colour. The ground colour of the forewings is whitish with an extensive fuscous brown pattern. The discal markings and the streak in the median area are black. The hindwings are pale brown with a fuscous discal spot. All discal spots, which are well-developed can also be found on the underside of the wings. The fringe of all wings is a contrasting blackish brown and whitish chequered. The females generally resemble the males, though there are uniform brownish forms nearly without whitish scales.

**Male genitalia** (Fig. 864): The male genitalia are diagnostic by the shape of the valves, which are broadly bilobed with two long processes. The dorsal process is about 75% of the length of the inner, ventral process.

**Further remarks:** The species seems to be endemic in Mindanao. A related species, *tagalica*, occurs in Luzon and Mindoro Isl.

**Etymology:** Dedicated to my friend, Wolfgang Eckweiler, Frankfurt/Main, well known specialist on Lycaenidae and Nymphalidae.

## *Lymantria* (*Spinotria*) *tortivalvula* CHAO, 1984: 96, fig. 3

(Figs. 655, 673, 674, 677, 865)

**Holotype:** China, Hainan, Qionghai – CAS, Beijing [not examined].

**Taxonomy:** The ground colour is a fuscous greyish-brown. The blackish pattern is diffuse. The submarginal area of the forewings is whitish-grey filled. The underside of the thorax has pinkish hairs. The abdomen is only of a pinkish colour in the females.

**Male genitalia** (Fig. 865): The shape of the valves, particularly the longer arm of the valves, is distinct. The aedeagus is straight and of a rhombic shape.

**Further remarks:** Found mostly on Hainan Island. Only one male was found in N. Vietnam (GU 50-87), outside of Hainan.

## *Lymantria* (*Spinotria*) *gaborronkayi* sp.n.

(Figs. 655, 867, 868, 678-681, 687-689)

**Holotype:** ♂, China, Yunnan, Daxing, 120km S Dali, 24°30'N, 100°01'E, 16.iii.-10.iv.2000 leg. Dr. Ronald Brechlin – in coll. A. Schintlmeister, Dresden.
**Paratypes** (51♂♂, 12♀♀): Yunnan: 3♂♂, SW Yunnan, 18km S Simao, Mangxi Ba Mts., 1280m, 27°28'N, 101°01'E 16.iii.-10.iv.2000 (GU 09-20a); 4♂♂, SW Yunnan, 18km S Simao, Mangxi Ba Mts., 1280m, 27°49'N, 101°00'E 20.ii.-20.iii.1999; 15♂♂, 2♀♀, Daxing, 120km S Dali, 24°30'N, 100°01'E, 16.iii.-10.iv.2000 (GU 35-90, 50-88); 8♂♂, 8♀♀, Xishuangbanna, 30km S Simao, Puwen, 900m, 22°30'N, 101°02'E, 16.iii.-10.iv.2000; 4♂♂, 3♀♀, 42km N Fugong, 1390m, Lishadi, 27°15'N, 98°55'E, 14.-24.x.1999; 1♂, Mouding, 25°19'N, 101°32'E, 16.iii.-10.iv.2000; 1♂, Yung Ren county, Baiyunshan, 2800m, vii.2003 (Gu 62-82); 3♂, Weishan county, Weibbashan, 2800m, ix.2002; Sichuan: 1♂, Daheishan, Panzhihua, 2500m, ix.2002; Vietnam: 1♂, Tuan-Giao, 21°35'N, 103°25'E, 1200m, 5.-10.xi.1994 (GU 20-85); 1♂♀, Mt. Fan-si-pan, W-Seite, Cha-pa, 1600-1800m, 22°20'N, 103°40'E ix.1994; 1♀, ibid. 20.-30.x.1995; 2♂♂, Mt. Fan-si-pan, N-Seite, Cha-pa, 1600m, 22°17'N, 103°44'E 20.-30.iv.1995; 1♂, Plato Tay Ngyen, Mt. Ngoc Linh, 15°02'N, 107°59'E, 900-1400m, 10.-25.viii.1996 (GU 09-64a). Thailand: 1♂, Prov. Chiang Mai, 1800m, 4km S of Kop Dong, 99°03'E, 19°52'N, 29.-30.x.2002; 2♂♂, Prov. Chiang Mai, 1600m, between Fang and Nor Lae, 99°06'E, 20°02'N, 12.xi.2002 (GU 50-91); 2♂♂, Prov. Chiang Mai, Chang Wat, 6km SE of Pang Faen, 1100m, 16.ix.1999; 1♂, Prov. Chiang Mai, 1♂♀, Mt. Doi Phahompok, 18km NW Fang, 2100m, 10.-11.ix.1999; 1♂, ibid 6.xi.1999; 2♂♂, Chiang Mai Prov., Doi

Inthanon Nat. Park km 43,5, Chom Thong, 5,5km above check-point 2, 2050m, 15.-19.xi.1998; 1♂, Chaing Mai prov., 4km S Kop Dong, 1800m, 99°03'E, 19°52'E, 29.-30.x.2002.

**Diagnosis:** Forewing length ♂♂ 19-22.5 mm, ♀♀ 26 mm. The species is externally very similar to *serva* and seems to be the eastern sister species of *serva*. There are forms with a blackish ground colour and paler greyish-brown coloured specimens.

*Lymantria gaborronkayi* sp.n. differs externally from *serva* by the prominent white patch in the median area of the forewings which is fuscous and not contrasting whitish as in *serva*. The fringes of all wings are chequered blackish and pale grey. The underside of the thorax is pinkish as in *serva*. This differs significantly from *L. hreblayi* sp.n., which shows no pinkish elements. The females greatly resemble the females of *serva*. The pink abdomen is sometimes accompanied by a pinkish shine on the hindwings.

**Male genitalia** (Figs. 687-689): The male genitalia are characterized by a pair of very long valve processes of equal length. They reach the apex or the half length of the uncus. The shape of the valves is therefore unique and separates this species from all other known species of the *serva*-complex.

**Etymology:** Named after Gabor Ronkay (brother of Laszlo Ronkay), Budapest for his hospitality during my visits in Budapest. He supported me permanently with invaluable material particularly from Indochina and Taiwan.

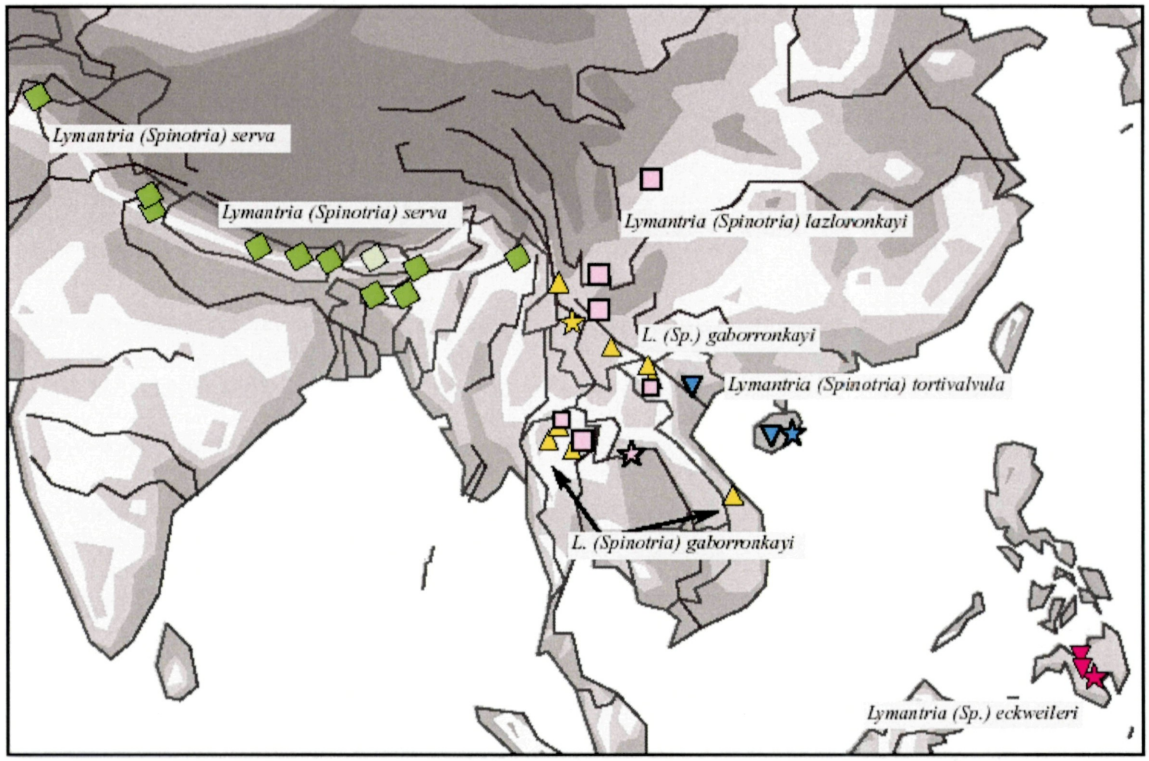


**Fig. 655:** Distribution of the subgenus *Spinotira*.

## *Lymantria* (*Spinotria*) *laszloronkayi* sp.n.

(Figs. 655, 866, 682-686, 697)

**Holotype:** ♂, Laos, Thalat, Viang Khan, 500m, 20.-28.x.2001, leg. Ihle – in coll. A. Schintlmeister, Dresden.
**Paratypes** (9♂♂, 2♀♀): Laos: 1♂♀, Thalat, Viang Khan, 500m, 20.-28.x.2001 (GU 09-44a); 1♂, Phu Soai Dao, 18°30'N, 101°09'E vi.1996 (GU 20-71); Thailand: 1♀, Huai Kha Khaeng, 400m, 18.xi.1985; 1♀, Nan, 20km N, 21.2.1993; 1♂, Prov. Chiang

Mai, 1600m, between Fang and Nor Lae, 99°06'E, 20°02'N, 12.xi.2002 (GU H05/2004); 1♂, Prov. Chiang Mai, Doi saket Distr., OSO-Hang, unterh. Doi San Yao, 1260m, 12.iii.1986 (GU 11-82); 1 ♂, Changwat Phayao, 15km SE Chiang Muan, 640m, 26.XI.1998; 1♂, ibid. 12.VIII.1999; Vietnam: 1♂, Farin Pass, 20km NW Son-la, 21°22'N, 103°52'E, 11.-13.xi.1994; Yunnan: 1♂, Guan Ying Qingshan, Huaping county, 3200m, vii.2003; Sichuan: 1♂, Baoxing, 1600m, 11.vii.2003 (GU 62-45).

**Diagnosis:** Forewing length ♂♂ 14-17 mm, ♀♀ 20-22 mm. This is a relatively small species, which is characterized by a dark greyish colouration of wings and body. The submarginal fascia of the forewings is whitish grey, sometimes prominently white. This individual form resembles *tortivalvula*. There are no pinkish hairs or scales on the imago. The females resemble the males and are also characterized by their fuscous colouration, particularly the hindwings. It seems that there is significant individual variation. Sometimes the species resembles (the form with greyish postmedian area on the forewings) the smaller specimens of *gaborronkayi* sp.n. However, the male genitalia are virtually indistinguishable, there is probably more than one species in this complex.

**Male genitalia** (Fig. 697): The male genitalia are characterized by the shape of the valves. The outer process is relatively short. The aedeagus is straight and slender.

**Etymology:** Named after Laszlo Ronkay (brother of Gabor Ronkay), Budapest for his hospitality during my visits in Budapest. He permanently supported me with invaluable material particularly from Indochina and Taiwan.

## *Lymantria* (*Spinotria*) *gyulaii* sp.n.

(Figs. 656, 869, 870, 690-695)

**Holotype:** ♂, N. Thailand, Prov. Chiang Mai, Doi Suthep, 1440m, 24.vii.1986, leg. M. G. Allen – in coll. A. Schintlmeister, Dresden.

**Paratypes** (12♂♂): Thailand: 2♂♂, Doi Suthep, 1440m, 24.vii.1986 (20-77); 1♂, Doi Suthep, 1440m, 11.vii.1986; 1♂, ibid, 14.v.1986; 1♂, ibid, 24.v.1986; 3♂♂, Prov. Chiang Mai, Doi Suthep, 1350m, Tan Long, 18°48'N, 98°53'E, 2.x.2001, (GU 20-82, 50-95); 1♂, Khao Yai N. P., 1200m, 19.iv.1988; 1♂, Chaing Mai prov., 4km S Kop Dong, 1800m, 99°03'E, 19°52'E, 29.-30.x.2002; 1♂, Prov. Chiang Mai, between Fang and Nor Lae, 1600m, 99°06'E, 20°02'N, 28.x.2002; Laos: 1♂, Phu Soai Dao, 18°30'N, 101°09'E, vi.1996.

**Diagnosis:** Forewing length ♂♂ 15-17 mm. This small species somewhat externally resembles *albolunulata*. However, this new species is generally much darker in the brownish ground colour of the forewings. The fuscous spot near the dorsum in the median area of the forewings is diagnostic. The fringe of all wings is a chequered brown and white.

**Male genitalia** (Figs. 869, 870): The male genitalia are very well characterized by the unique shape of the deeply bilobed valves. The length of the outer part of the valves (which is rather broad and not slender as in *elassa*) is about 50% of the inner process. This part of the valve shows a unique shape, particularly at the base. It reaches the tip or the half length of the uncus. The aedeagus is slender and not curved.

**Etymology:** Named after Peter Gyulai, Miskolc, Hungary, who supported me with material particularly from Iran and Mongolia.

## *Lymantria* (*Spinotria*) *hreblayi* sp.n.

(Figs. 656, 696, 698-701, 909)

**Holotype:** ♂, N. Vietnam, Mt. Fan-si-pan, N-Seite, Cha-pa, 1525m, 22°17'N, 103°44'E, 7.-10.vii.1994; leg. Brechlin & Schintlmeister – in coll. A. Schintlmeister, Dresden.

**Paratypes** (17♂♂, 3♀♀): Vietnam: 1♂, Mt. Fan-si-pan, W-Seite, Cha-pa, 1600-1800m, 22°20'N, 103°40'E 30.vi.-12.vii.1994; 1♂, Mt. Fan-si-pan, N-Seite, Cha-pa, 2200m, 22°15'N, 103°45'E 9.vii.1994; Yunnan: 2♂♂, Li-kiang [=Lijiang], ca. 2000m, 3.vii.1935, 26.vii.1935; 2♂♂, ibid, 4000m, 6.vii.1935 (GU ZFMK 09/2004); 3♂♂, 3♀♀, Li-kiang, 1.-15.vii.1935; 1♂, Guan Ying Qingshan, Huaping county, 3200m, vii.2003; 2♂♂, Xishuangbanna, 50km N Jinhong, Guanping, 900m, 22°10'N, 101°00'E, 9.i.-6.ii.2003; 1♂, Baiyunshan, Yung Ran county; 1♂, Bingshuan, Jijaoshan, 3800m, vii.2003 (GU 62-93); Sichuan: 1♂, Gaomushan, 1900m, Guling (near West Guizhou border), vii.2002 (GU H02/2004); 1♂, Daxue Shan, Gongga Shan, Moxi, 29°41'N, 101°58'E, 1700m, 11.-22.vii.1999 (GU 62-34).

**Diagnosis:** Forewing length ♂♂ 20-22 mm. The species is externally characterized by a pale greyish ground colour of the wings. The diffuse pattern of the forewings is mixed with white scales. The fringe of all wings is chequered fuscous/white.

**Male genitalia** (Fig. 909): The male genitalia are characterized by a pair of very long valve processes of equal length. They reach the tip or the half length of the uncus. The shape of the valves is therefore unique and separates this species from all other known species of the *serva*-complex.

**Etymology:** Named in memory of Marton Hreblay (†), Budapest.

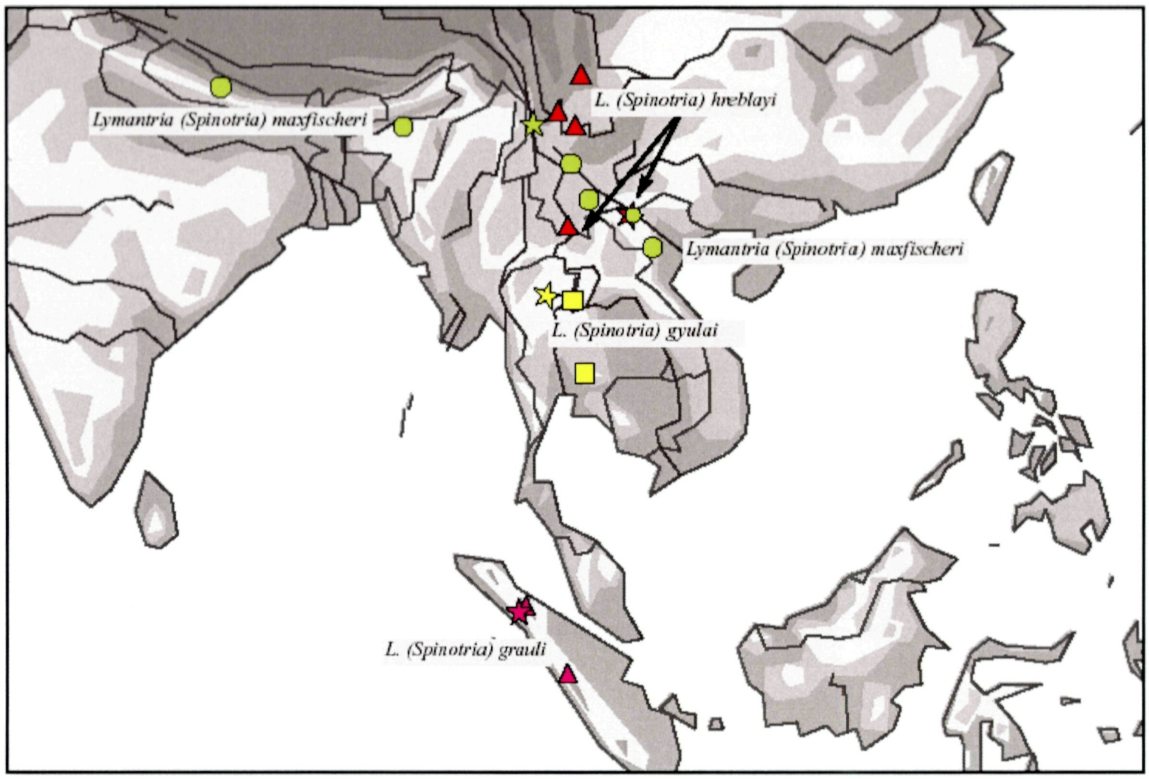


**Fig. 656:** Distribution of the subgenus *Spinotria.*

## *Lymantria* (*Spinotria*) *maxfischeri* sp.n.

(Figs. 656, 702-705, 872, 873)

**Holotype:** ♂, China, Yunnan, 42km N Fugon, Lishadi (Walo), 27°15'N, 98°55'E, 1390m, 12.-16.v.1999 leg. Dr. Ronald Brechlin – in coll. A. Schintlmeister, Dresden.

**Paratypes** (7♂♂, 4♀♀): Yunnan: 4 ♂♂, 2♀♀, 30km S Simao, Puwen, Xishuangbanna, 22°30'N, 101°02'E, 900m, 16.iii.-10.iv.2000 (GU 50-89, 62-50); 1♀, ibid. 11.iv.-11.v.2000; 1♂♀, Yunxiang, Daxing, 120km S Dali, 24°30'N, 100°01'E, 1200m, 16.iii.-10.iv.2000. Assam: 1♂, Nambor Forest, res., Garampari, 100m, 26°30'N, 93°55'E, 21.-29.xi.1997 (GU 50-93); Nepal: 1♂, Pokhara, 28°14', 83°59'E, 1600m (GU 50-84).

**Further material:** N. Vietnam: 1♂, Mt. Fan-si-pan, N. Seite, 1500m, 22°17'N, 103°44'E, 20.-30.vi.1995 (GU 09-65a); 1♂, ibid., 20.-30.x.1995; 1♂, Mai chau, 25km SE moc-chau, 1400m, 20°50'N, 104°40'E, 14.-18.xi.1994.

**Diagnosis:** Forewing length ♂♂ 20-22 mm, ♀♀ 27-28 mm. The colouration of the imago is pale grey. The pattern consists of blackish markings, which are weakly developed. The basal area of the forewings is fuscous greyish. The V-shaped discal spot and the dorsal streak are not prominently (clearly) visible. The fringe of the forewings is grey with black dots. The hindwings are a pale greyish brown with fuscous submarginal fascia and a few blackish fringe-spots. *Lymantria obsoleta* somewhat externally resembles *maxfischeri* sp.n., but the latter is without brownish scales on the wings and usually larger in size. The female of *maxfischeri* sp.n. is larger in size and pale with a diffuse pattern. The abdomen is pinkish coloured.

**Male genitalia** (Fig. 872): The male genitalia show a broad and long ventral arm of the valves, the dorsal part is very broad and rounded having 1/3 of the length of the ventral arm. The male genitalia greatly resemble *obsoleta,* though the ventral arm of the valve is much broader and rather rounded than pointed.

**Further remarks:** There are three further males from N. Vietnam, which externally resemble this species, especially in the male genitalia,. However, the ventral arm of the male genitalia is dorsally curved instead of ventrally as in the Yunnan specimens (Fig. 873). Due to this, these specimens are not included into the type series.

**Etymology:** Named after Markwart ("Max") Fischer, Dresden, for his help with imaging processes for this paper.

## *Lymantria* (*Spinotria*) *grauli* sp.n.

(Figs. 656, 706, 707, 871)

**Holotype:** ♂, Indonesia, N. Sumatra, Dairi Mts., 1600m, 10.x.1980, leg. Dr. E. W. Diehl (GU 03-02) – in coll. A. Schintlmeister, Dresden.
**Paratypes** (3♀♀): Sumatra: 2♀♀, Samosir, Tobasee, Partunghoan, 2°37'N, 98°44'E, 1600m, 20.ix.1991; 1♀, Bukit Subang, 22km E Padang, 1200m, 19.-20.x.1981.

**Diagnosis:** Forewing length ♂ 19.5mm, ♀♀ 29 mm, the female from Bukit Subang spans only 24 mm. *Lymantria grauli* sp.n. somewhat externally resembles *L. inordinata barisana*. However, this new species is generally darker and less reddish in colour. There is a whitish postmedian fascia on the forewings. The females correspond well to the males in their pattern.

**Male genitalia** (Fig. 871): The male genitalia are distinct by the unique shape of the deeply bilobed valves. Both parts of the valves are thick and about equal in length. The aedeagus is straight.

**Etymology:** Named after Mario Graul, Leipzig, who caught together with me the two females in Samosir (under difficult conditions) and supported me with material particularly from Sumatra and the Philippines.

## *Lymantria* (*Spinotria*) *rubea* SCHINTLMEISTER, 1989: 223, pl. 2: 5, fig. 5

(Figs. 657, 708, 709, 712, 713, 874, 919)

**Holotype:** Thailand, Chien Mai Province, Doi Suthep, Pui Nantn. Park, Doi Pui – UZM, Copenhagen.

**Taxonomy:** The species is easily identifiable by its carmine-red hindwings with a broad fuscous submarginal area. The forewings are mixed with whitish scales in the area near the costa between the V-shaped mark and the postbasal fascia.

**Genitalia** (Figs. 874, 919): The male genitalia resemble *maxfischeri* sp.n., but the ventral arm of the male genitalia is dorsally curved.

## *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855: 880

(Figs. 657, 715-718, 723-725, 875, 914)

**Holotype:** North India – BMNH, London [examined].

**Synonym:**
*Lymantria bhascara* MOORE, 1859: 435 **syn.n.**
Lectotype: [NE India], Darjeeling – BMNH, London [examined].

**Taxonomy:** Externally the male resembles *strigata*, though the male genitalia are more similar to *strigatoides*. *Lymantria obsoleta* is externally characterized by a pale brownish ground colour. The hindwings are pale brownish with fuscous submarginal band. In the females there is a very broad submarginal band. The blackish dorsal spot on the forewings in the median area is prominently developed. The abdomen of the males is grey, while the abdomen of the females is yellowish.

**Male genitalia** (Figs. 875, 914): The ventral arm of the bilobed valves is short.

**Further remarks:** At the BMNH there is a female specimen of *bhascara*, labelled as "Type" and "Lectotype". The lectotype designation according to the label was made by S.L. Gupta, however I was not able to find any publication containing this designation. Therefore, and to ensure nomenclatorical stability in this confusing group, I hereby designate and illustrate the lectotype female, which bears the following labels: "Ind. Mus. 79.64", "Schlagintweit" [collection], photo "# 9.459". This female (MOORE mentioned it in his description together 4 females) has a slightly pinkish coloured abdomen. Such specimens sometimes occur, but the majority of the studied females has a yellowish abdomen. This polymorphism was also found in the long series of males (n>300), where I dissected many (n>10) genitalia. It should be noted that in *serva* an intensive pinkish colouration was found exclusively on the abdomen and was never of a yellowish colour. Fortunately there are no further similar species known from Darjeeling, so that this synonymy seems very probable.

In Myanmar, there is a good series (n>100). About 10% of them are very contrasting marked specimens. However, both forms show identical male genitalia.

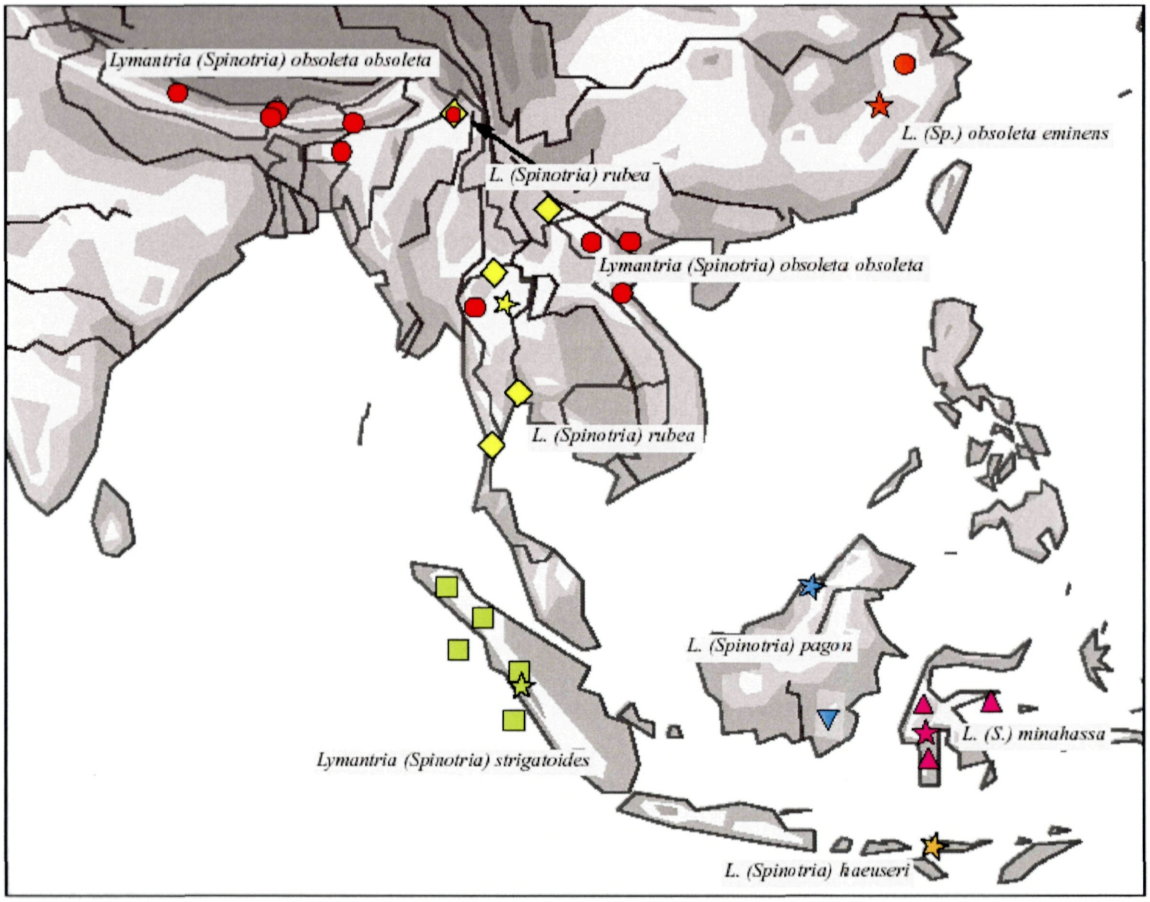


**Fig. 657:** Distribution of the subgenus *Spinotria*.

## *Lymantria* (*Spinotria*) *obsoleta eminens* ssp.n.

(Figs. 657, 719-722, 876)

**Holotype:** ♂, China, NE Jiangxi, Wuyi Shan, 50km SE Yingtan, 27°56'N, 117°25'E, 1600m, Juni 2002 – in coll. A. Schintlmeister, Dresden.
**Paratypes:**(11♂♂): Jiangxi: 2♂♂, Wuyi Shan, Xipaihe, 27°54'N, 117°20'E, 1500m, July 2003 (GU 62-30, 62-35); 1♂, ibid, June 2003; 7♂♂, Wuyi Shan, 50km SE Yingtan, 27°56'N, 117°25'E, 1600m, May 2002 (GU 62-36); Zhejiang: 1♂, West-Tien-Mu-Shan, 1600m, 2.vii.1932.

**Diagnosis:** Forewing length ♂♂ 21-23 mm, in the middle 1 mm larger than ssp. *obsoleta*. The subspecies externally somewhat resembles *bantaizana* rather than *obsoleta*. The ground colour of the forewings is greyish with black scales. There are no brown scales as in ssp. *obsoleta*. The V-shaped discal spot and the median streak are prominently marked with a black colour.

**Male genitalia** (Fig. 876): The male genitalia are virtually identical with *obsoleta*.

**Etymology:** Named after the more eminent impression (eminens = eminent) of this subspecies compared with *obsoleta*.

## *Lymantria* (*Spinotria*) *defreinai* sp.n.

(Figs. 658, 710, 711, 714, 877)

**Holotype:** ♂, China, Yunnan, 18km S Simao, Mangxi Ba Mts., 1280m, 22°49'N, 101°00'E, 26.ii.-20.iii.1999 leg. local collectors – in coll. A. Schintlmeister, Dresden.

**Paratypes** (17♂♂, 6♀♀): Yunnan: 1♂, 18km S Simao, Mangxi Ba Mts., 1280m, 22°49'N, 101°00'E, 26.ii.-20.iii.1999 (GU 60-98); 1♂, Xishuangbanna, 50km N Jinhong, Guanping, 900m, 22°10'N, 101°00'E, 9.i.-6.ii.2003; Vietnam: 1♀, Mt. Fan-si-pan, W-Seite, Cha-pa, 1600-1800m, 22°20'N, 103°40'E, iv.1995; 1♀, Mt. Fan-si-pan, N-Seite, Cha-pa, 1600m, 22°17'N, 103°44'E, 20.-30.iv.1995; Thailand: 1♂, Prov. Chiang Mai, Doi Angkang, 19°54'N, 99°48'E, 1600m, 11.-17.ii.2002; 6♂♂, Changwat Chiang Mai, 20km N of Mae Aj, 1650m, 16.xii.1998; 1♂♀, Changwat Chiang Mai, 4km SE Pang Faen, 1100m, 20.xii.1998; 1 ♀, Changwat Chiang Mai, Mt. Doi Inthanon, 10km E of Mae Chaem, 1160m, 5.II.1998; 1 ♂, Thailand, Changwat Chiang Mai, 15km SW Wiang Haeng, 1400m, 9.II.1998; 1 ♂ Changwat Nan, 25km N of Bo Luang, 1150m, 17.II.1998; 1 ♂, Thailand, Changwat Mae Hong Song, 25km NE of Pai, 1560m, 2.III.1998, 1 ♂, Thailand, Changwat Chiang Mai, 7km W of Pa Pae, 1230m, 27.XI.1998, 1 ♀, Thailand, Changwat Chiang Mai, 15km SW Wiang Haeng, 1400m, 4.XII.1998; 1 ♂, Thailand, Changwat Chiang Mai, Mt. Doi Phahompok, 16km NW of Fang, 200m, 10.I.1999; 1 ♂, Changwat Nan, 25km N of Bo Luang, 1150m, 14.I.1999; 1 ♂, Changwat Chiang Mai, 20km NW of Sop Kha, 2kmS of Kop Dong, 1800m, 27.I.1999; 1 ♂, Thailand, Changwat Chiang Mai, 4 km SE of Pang Faen, 1100m, 6.II.2000; Myanmar: 1♂, Prov. Mandalay, 3km SE of Kyause, 220m, 20.x.1999.

**Diagnosis:** Forewing length ♂♂ 18 mm, ♀♀ 22 mm. The ground colour of the forewings of fresh specimens is pale greenish grey. Sometimes there are more fuscous specimens. The ground colour is mixed with black scales. The pattern is weakly and diffusely developed. The discal spot on the forewings is not clearly and not prominently marked. The hindwings are greyish with fuscous submarginal fascia. The fringe of all wings is whitishly-black chequered. The underside of the wings shows a fuscous postmedian and a submarginal fascia. The underside of the thorax bears a few pinkish hairs in both sexes. The females have a slightly pinkish coloured abdomen.

**Male genitalia** (Fig. 877): The male genitalia are similar to *obsoleta*, though the arms of the valves are shorter and broader. The uncus is rounded and not pointed as in most species of the group, including *obsoleta*.

**Etymology:** Dedicated to Josef J. de Freina, Munich, in appreciation of some long hours of discussions, not limited to Lepidoptera.

## *Lymantria* (*Spinotria*) *strigatoides* SCHINTLMEISTER, 1994: 124, pl. 1: 23, 26, 27; fig. 13

(Figs. 657, 726, 727, 730, 731, 878, 924)

**Holotype:** Indonesia, West Sumatra, 30km SW Solok, Gunung Talang – coll. A. Schintlmeister, Dresden [examined].

**Taxonomy:** The males are externally very similar to *strigata* (which is absolutely different in male genitalia). They differ by a greyish pattern; in most cases there is no tendency towards a yellowish or brownish colouration. Often there is a diagnostic fuscous marked postbasal fascia on the forewings. The hindwings show no fuscous submarginal fascia; in a few cases a very weakly marked fuscous submarginal fascia is visible. The females are characterized by a pinkish abdomen (in *strigata* the females are yellowish coloured).

**Genitalia** (Figs. 878, 924): The male genitalia are with a short outer (more ventral) part of the bilobed valves.

**Further remarks:** The species was successfully reared by Rudolph Lampe, Nürnberg. The carterpillar is polyphagous and was fed mainly with *Quercus* and *Prunus*.

Apparently restricted to Sumatra, where it occurs commonly.

## *Lymantria* (*Spinotria*) *haeuseri* sp.n.

(Figs. 657, 796, 797, 898)

**Holotype:** ♂, Indonesia, Nusa Tenggara Timur, Flores, Gunung Ranaka, 3km S Mano, 18km SE Ruteng, 1270m, 17.-21.iv.1996, leg. Dr. R. Brechlin – in coll. A. Schintlmeister, Dresden.
**Paratypes** (4♂♂): Flores: 1♂, Gunung Ranaka, 3km S Mano, 18km SE Ruteng, 1270m, 17.-21.iv.1996; 3♂♂, Gunung Ranaka, 9km E Ruteng, 1140m, 14.-15.iv.1996 (GU 50-60); 1♂, 15km E Labuhanbajo, 200m, 9.-12./22.iv.1996.

**Diagnosis:** Forewing length ♂♂ 19-20.5 mm. *Lymantria haeuseri* sp.n. externally resembles *strigatoides*. The forewings are whitish grey in ground colour. The pattern is blackish grey without brown scales. The hindwings are whitish grey. The first half of the abdomen is pinkish. The V-shaped discal spot is distinctly marked.

**Male genitalia** (Fig. 898): The male genitalia resemble more *strigata* than *strigatoides*. The ventral arm of the bifid valve is thick at the base; the dorsal arm is only 2/3 of the length of the ventral arm but also thick at the base.

**Further remarks:** Known only from Flores.

**Etymology:** Named after Christian Häuser, curator of the Lepidoptera in the SMNS, Stuttgart.

## *Lymantria* (*Spinotria*) *minahassa* COLLENETTE, [1933]: 50

(Figs. 657, 728, 729, 732, 735, 879, 921)

**Holotype:** [Indonesia], Celebes [= Sulawesi], Tondano-Menado, Tonsea Lama – [not examined].

**Taxonomy:** Characterized by its prominent pink coloured abdomen and the pure white hindwings without reddish scales. I know only of a few females (n = 4), which would match the males. The female shows a prominent fuscous margin on the hindwings.

**Male genitalia** (Figs. 879, 921): The male genitalia are characterized by the very long dorsal valve process as well as the short ventral process.

**Further remarks:** The female illustrated as the female of *inordinata* by COLLENETTE (1933: fig. 3) probably belongs to *minahassa*. The species is endemic to Sulawesi.

## *Lymantria* (*Spinotria*) *pagon* HOLLOWAY, 1999: 19, pl. 1, fig. 28

(Figs. 657, 800-803, 897)

**Holotype:** Brunei, Bukit Pagon – BMNH, London [examined].

**Taxonomy:** The species is easily identifiable by the dirty grey colouration of the forewings and the body. The more prominent fuscous pattern is less contrasting. The probable female (collected together with 15 males) has a slightly pinkish coloured abdomen and a rather brownish ground colour.

**Male genitalia** (Fig. 897): The male genitalia are with a shorter dorsal arm of the valves, which is about 2/3 of the length of the more robust ventral arm. However, the dorsal arm is twice the length of that found in *strigatoides*.

**Further remarks:** Apparently restricted to the island of Borneo.

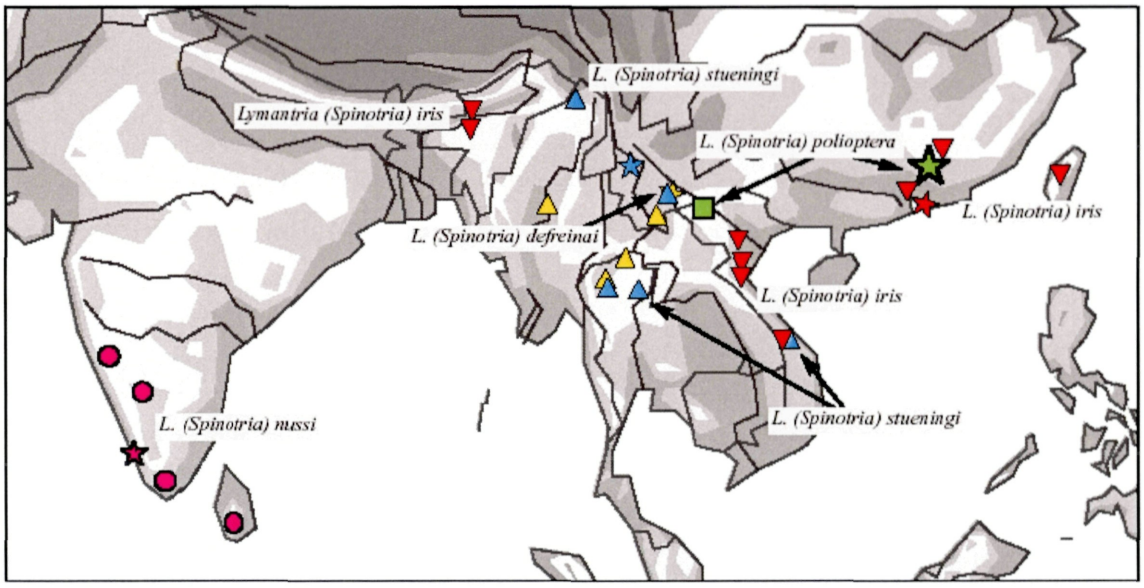


**Fig. 658:** Distribution of the subgenus *Spinotria*.

## *Lymantria* (*Spinotria*) *polioptera* COLLENETTE, 1934: 150, pl. 10: 19

(Figs. 658, 733, 734, 880)

**Holotype:** [SE. China, Guangdong], Lungtaoshan – ZMHB, Berlin [examined].

**Taxonomy:** The ground colour is pale greyish with prominent black V-markings near the cell and conspicuous black streak above the dorsum of the forewings.

**Male genitalia** (Fig. 880): The aedeagus of *polioptera* is straight and very long, longer than in the other known members of *Spinotria*.

**Further remarks:** This species was described from only two females. I have in my collection two males from N.Vietnam matching the holotype externally well. Only 5 specimens were examined.

## *Lymantria* (*Spinotria*) *stueningi* sp.n.

(Figs. 658, 736-738, 883, 920)

**Holotype:** ♂, China, Yunnan, Yunxian-Daxing, 1200m, 120km S Dali, 24°30'N, 100°01'E, 16.iii.-10.iv.2000, leg. local collectors – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (21♂♂, 3♀♀) Yunnan: 4♂♂, 1♀, Yunxian-Daxing, 1200m, 120km S Dali, 24°30'N, 100°01'E, 16.iii.-10.iv.2000 (GU 09-31a); 3♂♂, 18km S Simao, Mangxi Ba Mts., 1280m, 27°49'N, 101°00'E 20.ii.-20.iii.1999; Myanmar: 1♂, 65km NW Putao, Zi Yar Dan, 1250m, 27°50'N, 97°01'E, 18.-21.v.1998 (GU 60-60); Thailand: 3♂♂, Changwat Nan, 5km N of Bo Luang, 1000m, 12.xi.1999, 4♂♂, ibid 10-11..ii.2000; 1♀, Changwat Chiang Mai, 20km N of Mae Aj, 1650m, 25.i.1999; 1♂, ibid., 7.i.1999; 1♀, ibid., 26.i.1999; 2 ♂♂, Changwat Nan, 30km E of Pua, 1700m, 18./20.II.1998; 1 ♂, Changwat Chiang Mai, 6km SW of Pang Faen, 1100m, 29.I.1999, 1♂, ibid, 21.1.2004; S. Vietnam: 1♂, Plateau Tay Nguyen, Mt. Ngoc Linh, 15°02'N, 107°59'E, 1400m, 10.-25.viii.1996.

**Diagnosis:** Forewing length ♂♂ 17-21.5 mm; most males span 19 mm, ♀♀ 26-27 mm. The species externally resembles worn specimens of *polioptera* and is morphologically related to this same species. It differs by the greyish brown coloured wings with a weakly developed pattern (except the postmedian band of the forewings). There are prominent black markings on the forewings as in *polioptera*. The abdomen is slightly pinkish in both sexes. The imagines of *stueningi* sp.n. show virtually no variability, except in size. The female corresponds well the males in its pattern.

**Male genitalia** (883, 920): The male genitalia are similar to *polioptera*. They differ mainly in the much shorter straight aedeagus. There are also smaller differences in the shape of the longer ventral valve processes, which is somewhat thinner at the base than in *polioptera*.

**Etymology:** Named after Dieter Stüning, keeper of the Lepidoptera at ZFMK, Bonn, who curates also the famous Hoene collection, and who supported this work greatly by loans of numerous material and literature.

## *Lymantria* (*Spinotria*) *nussi* sp.n.

(Figs. 658, 739-745, 881, 882)

**Holotype:** ♂, S. India, Kerala, 8km N Rani, Blachery, 30kmW Changamacheri, 150m, 9°28'SN, 76°44'E, 10.iv.1997 leg. A. Schintlmeister & V. Sinjaev – in coll. A. Schintlmeister, Dresden.
**Paratypes** (14♂♂, 2♀♀) S. India: 14♂♂, 1♀, Kerala, 8km N Rani, Blachery, 30kmW Changamacheri, 150m, 9°28'N, 76°44'E, 10.iv.1997 (GU 50-56, 50-99); 1♀, Theimala near Shencottah, 150m, 8°57'N, 77°01'E, 5.iv.1997; Tamil Nadu: 1♀, Nilgiri Hills, Bison Valley road, View point, 1250m, 10.-11.vii.1990.

**Diagnosis:** Forewing length ♂♂ 16-17.5 mm, ♀♀ 22.5 mm and 24 mm. Forewings are a sordid brown with a very diffuse pattern. In the costal area of the forewings there are extensive blackish coloured areas in the post basal and post median region. The hindwings are greyish with a slightly pinkish shine and a broad fuscous margin. The abdomen is pink. The female is almost identical to the male, although they have a more intensive pink colour on the hindwings.

**Male genitalia** (Figs. 881, 882): The male genitalia possess a short dorsal arm of the valve and a long ventral outwards curving process, which reaches the base of the uncus. The aedeagus is long and slender, nearly straight.

**Further remarks:** The species is probably widely distributed from Sri Lanka up to Bombay.

The majority of the type series was taken during one night in a secondary lowland forest in S. India during the pre monsoon-season.

There is further material from Southern India, Kanara in a larger series at the BMNH, which has affinities to this species. However, the series differs by a larger wing span (♂♂ 19 mm, ♀♀ 25-28 mm), a generally paler impression of the ground colour of the wings and a much sharper pattern on the forewings. The blackish pattern on the forewings is replaced by brown colour. There is no pinkish shine in the males on the hindwings and the fuscous margin is also absent. The male genitalia are very similar to the material from Kerala, the long process of the valve is curved inward.

It is likely, that the specimens from Kanara may represent an ecological form than a geographical subspecies or a distinct species. There is a single female from Sri Lanka matching the Kanara material perfectly. The female from Nilgiri Hills (included into the type series) shows intermediate habitus. However, the following material is not included into the type series:

"S. India: >20♂♀, [Karnataka], Kanara 2.vi.1923 (BM01/2003). Sri Lanka: 1♀, Prov. Sabaragamuwa, Ratnapura, Belihul Oya, 1000m, 23.v.1995."

**Etymology:** Named after Matthias Nuss, Dresden, for his constant help with my studies of Lepidoptera.

## *Lymantria* (*Spinotria*) *iris* STRAND, 1911: 130 stat.n.
## [*Lymantria obsoleta iris*]

(Figs. 658, 746-750, 889)

**Syntypes:** [China], Hongkong – FNS, Frankfurt/Main [exmined].

**Taxonomy:** This is a larger species of chocolate brown ground colour (more warmly coloured than *rhabdota*). The black pattern on the forewings is weakly developed.

**Further remarks:** The species rarely occurs in Taiwan. *Lymantria iris* flies in NE India (Assam, Meghalaya) sympatrically with *obsoleta*. Therefore there is no doubt, that both taxa belong to different species.

## *Lymantria* (*Spinotria*) *inordinata inordinata* (WALKER, 1865): 368

(Figs. 659, 759-761, 884)

**Holotype:** [Halmahera], Makian Isl. [but probably SW Sulawesi]– Hope Department, Oxford [examined].

**Taxonomy:** This is a quite variable species, characterized by its pinkish abdomen and wings. The nominotypical populations from Sulawesi are rather brownish coloured in the forewings. The hind wings are pale brown and show only a few pinkish scales. A specimen from Peleng Isl. does not differ from Sulawesian populations.

**Male genitalia** (Fig. 884): The male genitalia are as illustrated. Characteristic is the shape of the dorsal valve arm, compared with the other subspecies of *inordinata*.

**Further remarks:** COLLENETTE (1947: 2) noticed: "Walker described a number of Lymantriidae from specimens collected by Wallace, giving the locality of origin as 'Makian, Celebes' The insects bear a small circular label with the letters "MAK" in Wallace's handwriting. ... Makian is a small island ... south of ternate, and Wallace spent one night there after a hard day at sea. These six species [of Lymantriidae] have all been collected more recently in the Celebes, but not in the Moluccas, and I have no doubt, at all, that "MAK" indicates Macassar in S.W. Celebes."

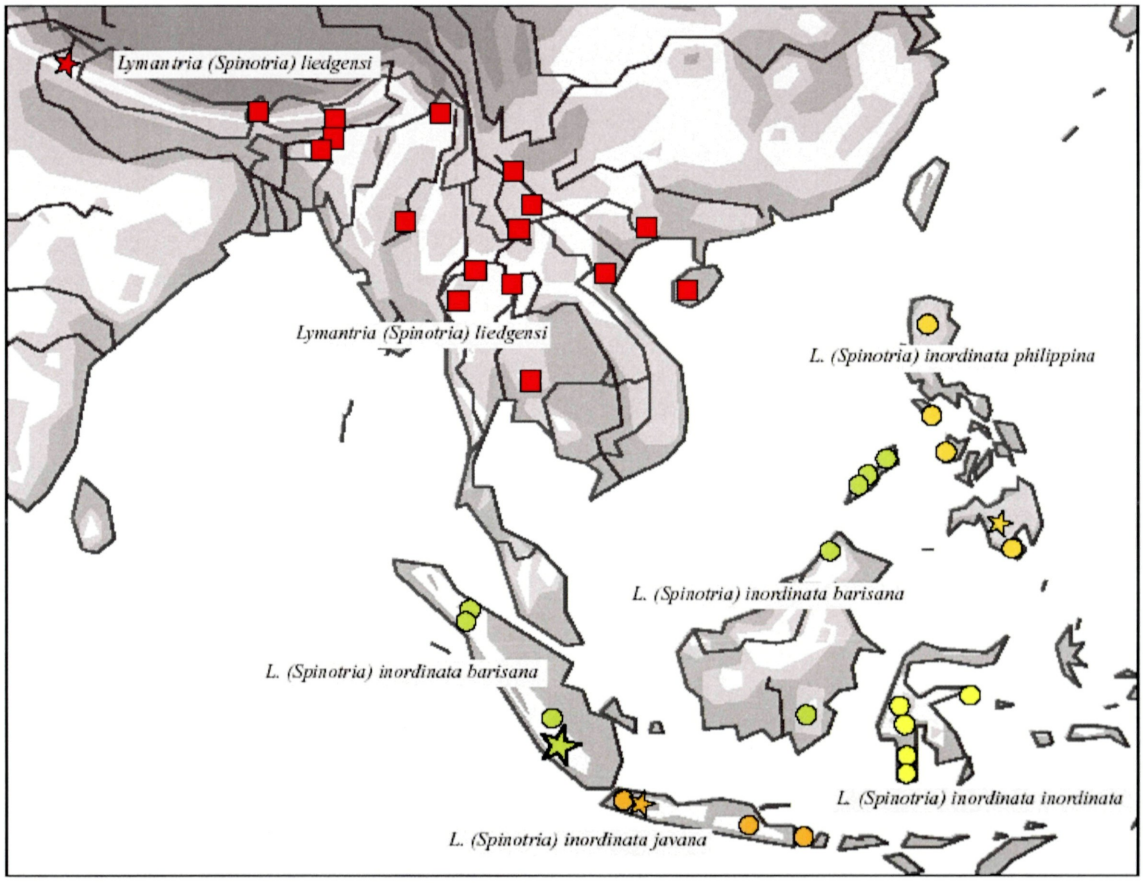


**Fig. 659:** Distribution of the subgenus *Spinotria*.

## *Lymantria* (*Spinotria*) *inordinata javana* ssp.n.

(Figs. 659, 762-764, 887)

**Holotpe:** ♂, Indonesia, W. Java, Mt. Gede, Pagrango Nat. Park, 1250m, 6°47'S, 107°00'E, iv.-vii.1996 leg. St. Jakl – in coll. A. Schintlmeister, Dresden.
**Paratypes** (42♂♂, 7♀♀): Java: 1♂, W. Java, Mt. Salak, 1000-1500m, 6°42'S, 106°44'E, vii.1996; 1♂, E. Java, Slopes of Mt. Argopuro, 100-1200m, iv.-vii.1994; 1♂, 3♀♀, Tengger, iv.-vi.1934; 4♂♂, Tengger, 4500-6000', Kletak, v.1934; 26♂♂, 3♀♀, E. Java, Nongkodjadjar, 4000' ii.1934; 3♂♂, 1♀, E. Java, Ardjoeno, 4500' vi.1934; 1♂, Mt. Gede, 4-5000', x.1937; 1♂, ibid, viii.1926; 3♂♂, Mt. Gede, Terbawattee, 4500' x.1937; 1♂, Magelang, 1870.

**Diagnosis:** Forewing length ♂♂ 24-26 mm, ♀♀ 35-38 mm. This is the largest subspecies of *inordinata*, about 2-3 mm larger than any other known subspecies. The fringe of all wings bears an intensive pink colour. The forewings are a fuscous chocolate brown with a diffuse pattern. The postbasal patch on the forewings is modified into a short interneural streak. The colouration of the hindwings resembles ssp. *inordinata*.

**Male genitalia** (Fig. 887): The genitalia differ from ssp. *barisana* in the slightly shorter ventral arm of the valve, which is approximately of equal length as the dorsal process.

**Further remarks:** COLLENETTE (1948: 729) mentioned these different populations, although in the end he concluded that: "does not merit a name".

**Etymology:** The new subspecies is named *javana* after the area of distribution, Java.

## *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933: 31, pl. 3: 17

(Figs. 659, 765-768, 773, 774, 885, 886, 922)

**Holotype:** [Indonesia], S.W. Sumatra, Barisan Range, Western slopes – BMNH, London [examined].

**Taxonomic note:** This subspecies is characterized by its paler and pinkish habitus (less pinkish coloured than *philippina* ssp.n.). The forewing possesses in the median area a prominent brown interneural spot near the dorsum.

**Genitalia** (Figs. 885, 886, 922): The differences in length of the valve arms are probably subject of individual variation.

**Further remarks:** The subspecies *barisana* is widely distributed in Sumatra and Borneo. Not found yet in the Malayan Peninsula. There is a single dark male nearly without pinkish colouration from N. Myanmar, which would match in the genitalia (GU 20-80) *inordinata*. From Palawan I have 3♂♂ in my collection. They differ slightly externally by the red colouration of the hindwings from Sumatran or Borneo populations. Apart from this they possess a better developed fuscous margin on the hindwings, while the interneural spot in the median area is absent. It is most likely that the populations from Palawan are a distinct subspecies if more material is available to confirm this features.

## *Lymantria* (*Spinotria*) *inordinata philippina* ssp.n.

(Figs. 659, 769-772, 781, 888)

**Holotype:** ♂, Philippines, Mindanao, Bukidnon, 40km NW Maramag, Dalongdong, 800m, Talakag, Waldrand, 7°53'N, 124°40'E, 1.-3.x.1988 leg. K. Cerny & A. Schintlmeister– in coll. A. Schintlmeister, Dresden.
**Paratypes** (20♂♂, 1♀): Mindanao: 8♂♂, 40km NW Maramag, Dalongdong, 800m, Talakag, 7°53'N, 124°40'E, 1.-3.x.1988 (GU 50-54), 1♂, Bukidnon, 45km NW Maramag, Mt. Binansilang, 1200m, Waldrand, 7°55'N, 124°40'E, 2.x.1988; 3♂, Cotabato del sur, Mt. Busa, 700m, viii.1997, 6°08'N, 124°39'E; 1♂, ibid, xii.1998; Panay: 1♂, Sibalom, Bontol, 50m, 9.-10.xii.1991; Mindoro: 1♀, 10km E san Jose, Paciolo, 12°22'N, 121°08'E, 100m, 28.i.-4.ii.1988. N. Luzon: 2♂♂, Mts. Prov., Chatol, 15km SE Bontoc, 1600m, 17°02N, 121°03'E 24.ix., 14.x.1988; 1♂, ibid, 2100m,16.-18.xi.1997; 1♂, Ifugao, Banaue, 20km N Lagawe, 16°54'N, 121°06'E, 1200m, 22.ix.-16.x.1988; 2♂♂, Mts. Prov., Barlig, 1650m, 14.-15.xi.1997.

**Diagnosis:** Forewing length ♂♂ 21-22 mm, the ♀ spans 32 mm. This subspecies is more related to ssp. *barisana* than to ssp. *inordinata*. This are the most pinkish coloured populations I know of. In Mindanao some specimens occur in melanistic forms, where the forewings are blackish coloured in the median area.

**Male genitalia** (Fig. 888): The male genitalia are virtually indistinguishable from ssp. *barisana.*
**Further remarks:** Restricted to the Philippines.
**Etymology:** The new subspecies is named *philippina* after the area of distribution, the Philippines.

## *Lymantria* (*Spinotria*) *liedgensi* sp.n.

(Figs. 659, 752-758, 890, 923)

**Holotype:** ♂, N. Indien, Bhimtal, 1500m, 20.vi.-13.vii.1981 leg. Dr. H. Liedgens – in coll. A. Schintlmeister, Dresden.
**Paratypes** (118♂♂, 12♀♀): NW India: 1♂, Bhimtal, 1500m, 20.vi.-13.vii.1981; 3♂♂, ibid 20.vi. - 29.vi.1975; 6♂♂ibid, 16.v.-7.vii.1971; 1♂, ibid. 7.vii.1978; 2♂♂, 1♀, ibid, 29.vi.-4.vii.1979; NE India, Assam: 7♂♂, Kaziranga Wild Life res., Pan Bari, 100m, 26°45'N, 93°10'E, 12.-21.xi.1997; 1♂, Nameri Na. Park, 150m, 60km N Tezpur, 27°20'N, 93°15'E, 24.vii.-2.viii.1997; 2 ♂♂, Nambor Forest res. Garampani, 100m, 26°30''N 93°55''E, 21.-29.XI. 1997; NE India, Meghalaya: 9♂♂, Umran, 33km N Shillong, 25°45'N, 91°53'E, 800m, 8.-11.xi.1997; NE India, Sikkim: 1♀, Darjeeling, Manjitar, 650m, 19.-21.vii.1989; 1♀, Darjeeling, Subrat, Mangpu Road, 31.v.1988; 1 ♂, Darjeeling, 5km N Rambi, 900m, 20.-30.VII.1990; Nepal: 4 ♂♂, Annapurna Himal, 1000m, 1km S of Bahundanda, 84°25"E 28°20"N, 06.VI.1996; 2 ♂♂, Nepal, Annapurna Himal, 1200m, 1km Nof Syange, 84°25"E 28°24"N, 07.VI.1996; 1 ♂, Nepal, Annapurna Himal, 1700m, 1km N of Tal, 84°23"E 28°28"N, 08.VI.1996; 2 ♂♂, Nepal, Tanahoun distr. Baisakhe Ghat, 10km W Dulegounda, 630m, 10.X.1994; 4 ♂♂, Annapurna Himal, Getrigan village, 1340m, 83°45''E 28°20''N, 31.V.1996/25.VI.1996; 1 ♀, Annapurna Himal, 1700m, 1km N of Tal, 84°23"E 28°28"N, 08.VI.1996; 2 ♂♂, Annapurna Himal, 850m, 1km N of Besisahar, 84°23"E 28°14"N, 05.VI.1996; Myanmar: 2♂♂, Putao, 800m, 27°21'N, 92°24'E 27.iv.1998; 1♂, Nan Sa Bon, 25km E Putao, 800m, 27°21'N, 92°40'E 6.-9.iv.1998; 2♀♀, Mandalay, 23.iv.1998, 200m; China, Yunnan: 4♂♂, Yunxian, Daxing, 120km S Dali, 1200m, 24°30'N, 100°01'E, 16.iii.-10.iv.2000 (GU 20-70); 3♀♀, 30km W Simao, Puwen, Xishuangbanna, 900m, 22°30'N, 101°02'E, 11.iv.-11.v.2000; 1♂, 130km SW Kunming, Lincang, 430m, 25.xi.-5.xii.1998; 5♂♂, Xishuangbanna, 60km N Jinghong, Guanping, 1000m, 28.-30.iv.2003 (GU 62-27, 62-66, 62-67); 1 ♀, Mow Ding county, 1300m, 25°19"N 100°32"E, 16.3.-10.4.2000; 1 ♂, Xishwangbanna Dai auton. pref., Puwen, 30km SSW Simao, 900m, 22°30"N 100°02"E, 16.3.-10.4.2000; 1 ♂, Mangxi Ba Mts., Simao-dist., 18km S of Simao city, 16.03.-10.04.2000, 22°28''N 101°01''E, 1280m; Hainan: 15♂♂, Wuzhi Shan, 1500m, 18°57'N, 109°43'E, 20.ii.-10.iv.2001; Guangxi: 5♂♂, Shiwan Dashan, 30km SW Nanan, 21°43'N, 107°32'E, 900m, 1.-14.iv.2003 (GU 62-23); Thailand: 4♂♂, Chiang Mai prov., Doi Inthanon, National Park, checkpoint 2, 1730m, 12.-22.xi.1998; 2♂♂, Kanchanabury Distr., Sai Yok, 400m, 18.i.1988, 1♀, Khao Yai, 1200m, 1.ix.1986; 1♂, Pak Chong, Khao Yai Nationalpark, 4.-22.ix.1998; 1♂, Khao Nang Rum, 400m, 18.i.1986; 1 ♂, Uthai Thani Khao Nang Rum, 400m, 1.iii.1986; 1 ♂, Changwat Nan, 25km N of Bo Luang, 1150m, 17.II.1998; 1 ♂, Changwat Nan, 30km E of Pua, 1700m, 1.III.1998; 1 ♂, Changwat Chiang Mai, Mt. Doi Phahompok, 19km NW of Fang, 1900m, 26.III.1998; 1 ♂, Changwat Chiang Mai, 1km E of Kop Dong, 1650m, 13.XI.1998, 2 ♂♂, Changwat Chiang Rai, 1km SE of Khun-Kon, 600m, 15.XI.1998; 1 ♂, Changwat Nan, 30km E of Pua, 1700m, 24.XI.1998; 2 ♂♂, Changwat Chiang Mai, 4km W of Pa Pae, 1050m, 28.XI. 1998; 1 ♂, Changwat Chiang Mai, 15km SW Wiang Haeng, 1400m, 4.XII.1998; 1 ♂, Changwat Nan, 25km N of Bo Luang, 1150m, 11.XII.1998, 1 ♂, Changwat Chiang Mai, 6km SE of Pang Faen, 1200m, 20.XII.1998; 2 ♂♂, Changwat Chiang Mai, 6km SE of Pang Faen, 1100m, 29.I.1999; 2 ♂♂, Changwat Chiang Mai, 6km SE of Pang Faen, 1100m, 21.VIII.1999; N. Vietnam: 3♂♂, Cuc Phuong, 400m, 60km SW Hanoi, 20°15'N, 105°20'E, 18.xi.-3.xii.1992 (GU 50-53); 1♀, ibid, 18.xi.-3.xii.1992; 1 ♂, Ben En Nat. Park, 200m, 40km SW Than Hoa, 18°40''N 105°40''E, 22.-30.XI.1994.

**Diagnosis:** Forewing length ♂♂ 19-25 mm, ♀♀ 29-37 mm. Externally similar to *inordinata barisana* but larger in size. The ground colour of the forewings (mixed with reddish scales) is a warm brown, much more fuscous than in *inordinata barisana.* The new species can be identified according to the fuscous marginal area of the prominent red hindwings. The fringe of the wings is chequered.

**Genitalia** (Figs. 890, 923): The male genitalia resemble *inordinata.* The two valve arms are of equal length; in *inordinata* the ventral is longer than the dorsal arm. The ventral arm of the valves is broader than in *inordinata.*

**Further remarks:** The new species is widely distributed in Mainland Asia from the Himalayas toward SE China. In Yunnan there occurs an individual form without reddish scales on the wings (n=4, 3GU), together with reddish specimens. Only the abdomen is slightly pinkish in this individual form.

**Etymology:** The species is dedicated to the late Dr. Liedgens, the collector of the holotype, who repeatedly collected specimens in the Nainital-district in NW India.

## *Lymantria* (*Spinotria*) *loedli* sp.n.

(Figs. 660, 779, 780, 891)

**Holotype:** ♂, Indonesia, Prov. NTT, Isl. of Timor, Kapan, SE slope Gg. Mutis, 1320m, 19.iv.-24.iv.1993, leg. U. Paukstadt – in coll. A. Schintlmeister, Dresden.
**Paratypes** (2♂♂): 1♂, Prov. NTT, Isl. of Timor, Fatumnasi, SE slope Gg. Mutis, 1720m, 24.iv.-27.iv.1993 (GU 20-40); 1♂, Prov. Nusa Tenggara Timur, Gunung Mutis, (S) 1460m, Fatumnasi, 21.-23.iii.1996 (GU 62-48).

**Diagnosis:** Forewing length 19-21 mm. The species externally resembles *inordinata* from Java. The ground colour of the forewings is fuscous brown with a diffuse pattern. The blackish interneural streak of the forewings is longer than in *inordinata*. The female is unknown.

**Male genitalia** (Fig. 891): The male genitalia are distinguished through the shape of the valve and the large developed saccus. The outer valve process is much shorter than the other part of the valve.

**Etymology:** Named after Martin Lödl, Vienna, for his constant help in Notodontidae and Lymantriidae and with respect to his studies of the difficult Hypeninae (Noctuidae).

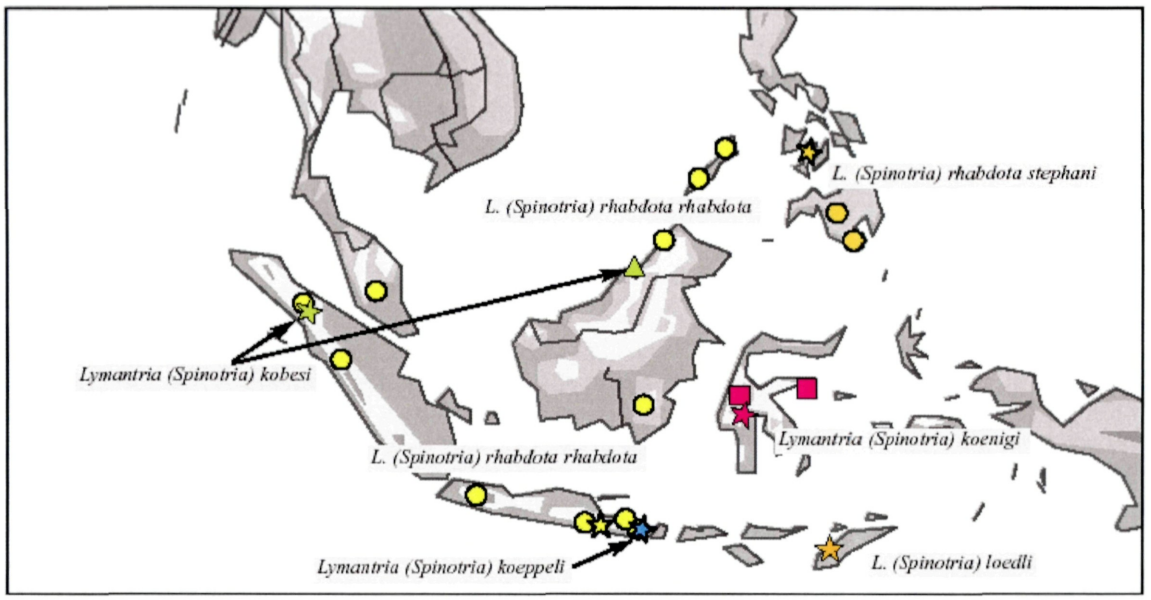


**Fig. 660:** Distribution of the subgenus *Spinotria*.

## *Lymantria* (*Spinotria*) *koeppeli* sp.n.

(Figs. 660, 775-778, 892)

**Holotype:** ♂, Indonesia, Central-Bali, Bedugul district, Tamblingan Nat. Park, 1200m, 8°14'S, 115°08'E, i.-ii. 2004 leg. St. Jakl – in coll. A. Schintlmeister, Dresden.
**Paratypes** (3♂♂, 1♀)**:** Bali: Bedugul district, Tamblingan Nat. Park, 1200m, 8°14'S, 115°08'E, i.-ii. 2004 (GU 62-33, 62-73).

**Diagnosis:** Forewing length ♂♂ 18 mm, the ♀ spans 26 mm. The best characteristic for identification purposes is the prominent pink coloured abdomen in both sexes. The ground colour of the forewings is pale brownish grey. The V-shaped discal spot is a well marked blackish colour, the streak in the median area is nearly invisible. The hindwings are yellowish brown with fuscous discal spot and a fuscous margin. The female is more fuscous than the male.

**Male genitalia** (Fig. 892): The male genitalia resemble those of *loedli* sp.n., but the tegumen is smaller. Both valve arms are relatively short.

**Further remarks:** The discovery in Bali and Java is somewhat surprising as this species is rather unmistakable and the fauna of Bali is rather well known (including collections by the author).

**Etymology:** Dedicated to Christian Köppel, Gaggenau.

## *Lymantria* (*Spinotria*) *sexspinae* HOLLOWAY, 1976: 50

(Figs. 661, 782-785, 912)

**Holotype:** Borneo, Sabah, Mt. Kinabalu, Mesilau – BMNH, London [examined].

**Taxonomy:** The species is easily recognizable by the ash-grey colour of wings (nearly without any pattern) and the elongated shape of the forewings.

**Male genitalia** (Fig. 912): The male genitalia are unique in that there are 3 straight arms on each valve.

**Further material:** The number of specimens studied from Sundaland was n<30.

## *Lymantria* (*Spinotria*) *koenigi* sp.n.

(Figs. 660, 786-788, 893)

**Holotype:** ♂, Indonesia, S. Sulawesi, Palopo-Puncak, 3°00'S, 120°09'E, xii. 1998, leg. local collectors – in coll. A. Schintlmeister, Dresden.
**Paratypes** (64♂♂, 3♀): Sulawesi: 15 ♂♂, Palopo-Puncak, 3°00'S, 120°09'E, xii. 1998; 6♂♂, ibid., iii.1997 (GU 50-55); 2♂♂, ibid., x.1995; 10♂♂, 1♀, ibid., xi.1997; 1♂, ibid, 25.xii.-3.i.1995, 1000m (GU 60-70); 5♂♂, ibid, 900-1300m, iii.-v.1998; 17♂♂, 1♀, ibid, vi.1998; 1♂♀, Quarles Mts., N. Rantepao, 2200m, 26.-28.ix.1995; 1♂, Mt. Sampuraga, 1400m, 2°10'N, 123°45'E, 11.-12.2.1995 (GU 60-69).

**Diagnosis:** Forewing length ♂♂ 19-21 mm, ♀♀ 32 mm. The species is characterized by blackish brown forewings and carminered hindwings. The pattern of forewings is similar to *inordinata inordinata,* but the new species is much smaller, and the white ground colour of the forewings is contrasting to the fuscous pattern. The hindwings have a broad and blackish submarginal area. There is a diffuse fuscous streak instead of the discal spot (also in the female). This streak is not present in all other species of this subgenus.

**Male genitalia** (Fig. 893): The male genitalia somewhat resemble *strigata*; both valve processes are slender and approximately of equal length.

**Further remarks:** A male from Peleng Isl., 2km W Sambiut, 150m, vii.1998, spans 23 mm and does not show the streak on the hindwings. The fuscous submarginal band is paler. This specimen is not included in the type-series.

**Etymology:** This species is dedicated to Stefan König, Berlin, for troubleshooting. (Because he did not want to give his name to an "ugly" species, I named this beautiful species after him.)

## *Lymantria* (*Spinotria*) *rhabdota rhabdota* COLLENETTE, [1949]: 728, pl. 14: 17

(Figs. 660, 789, 790, 793, 794, 894)

**Holotype:** [Indonesia], E. Java, Nongkodjadjar – BMNH, London [examined].

**Taxonomy:** The species is characterized by its chocolate, warm brown colour. The post median area of the forewings is greyish filled.

**Male genitalia** (Fig. 894): The male genitalia are distinctive by the long and curved dorsal valve arm. The ventral valve arms are very short.

## *Lymantria* (*Spinotria*) *rhabdota stephani* ssp.n.

(Figs. 660, 791, 792, 795, 895)

**Holotype:** ♂, Philippines, Mindanao, Prov.Bukidnon, Mt. Kitanglad, 8°07'N, 24°55'E, iv. 1997 – in coll. A. Schintlmeister, Dresden.
**Paratypes** (15♂♂, 2♀♀): Negros: 3♂♂, Mt. Canlaon, 600m, W. Route via Mambucal, 10°22'/123°12', April 1998; 3♂♂, 2♀♀, ibid but 1010m, 7.-18.vii.1996 (GU 50-73); 2♂♂, ibid. vi.1998; Mindanao: 2♂♂, Cotabato del sur, Mt. Busa, 700m, 6°08'N, 124°39'E, August 1997; 2♂♂, Prov. Davao del Norte, Mt. Caragan, i.1998; 1♂, Bukidnon, 45km NW Maramag, Mt. Binansilang, 7°55'N, 124°40'E, 1200m, 2.x.1988.

**Diagnosis:** Forewing length ♂♂ 18-22 mm, ♀♀ 29 mm. The new subspecies differs from the populations from Sundaland by the rather violet-brown ground colour and particularly the contrasting white (instead of greyish as in ssp. *rhabdota*) pattern in the post median area of the forewings. The hindwings are whitish instead of brownish in ssp. *rhabdota.*

**Male genitalia** (Fig. 895): The male genitalia are virtually identical to specimens from Sundaland, including Palawan.

**Etymology:** I dedicate this beautiful subspecies to Michael Stephan, Dresden, for his help in difficult situations.

## *Lymantria* (*Spinotria*) *kobesi* SCHINTLMEISTER, 1994: 125, pl. 1: 25, fig. 14

(Figs. 660, 798, 799, 896)

**Holotype:** North Sumatra, Aek Tarum, Gunung Malayu – BMNH, London [examined].

**Taxonomy:** The species is externally easily distinguishable by the pure grey colour of the forewings. I do not know of any geographical or individual noticeable variation. The species is rare in collections (n= 6); the female is still unknown.

## *Lymantria* (*Spinotria*) *grisescens grisescens* (STAUDINGER, 1887: 209, pl. 12: 4 ["*Ocneria albescens* MOORE? (*grisescens* STGR.)"]

(Figs. 661, 811, 815, 818, 900)

**Syntypes:** Russia [Primorye], Askold – ZMHU, Berlin [examined].

**Taxonomy:** This subspecies is externally recognizable by the uniform pale brownish-grey ground colour without black scales of the forewings. The blackish pattern, i.e. the discal and the interneural streaks, of the forewings is very weakly developed.

**Male genitalia** (Fig. 900): The male genitalia are characterized by the long dorsal arm of the valves, which is thinner and longer than in ssp. *bantaizana.*

## *Lymantria* (*Spinotria*) *grisescens goergneri* ssp.n.

(Figs. 661, 812-814, 817, 901)

**Holotype:** ♂, China, Shaanxi, Central Tsinling Mts., 50km N Ningshan, city, 33°44'N, 108°26'E, 1500m, June 2000, leg. Plutenko & local collectors – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (13 ♂♂, 3♀♀): Shaanxi: 4♂♂, 50km N Ningshan, city, 33°44'N, 108°26'E, 1500m, June 2000 (GU 60-99); 5♂♂, S. Taibaishan, Houzhenzi, 33°53'N, 107°49'E, 1900m, 1.-12.viii.1999 (GU 10-95a, 62-41); 1♂, ibid, June 1999; 2♂♂, Dabashan, Shou Man, 1000-1700m, 32°14'N, 108°34'E, 15.vi.-15.vii. 2000; Beijing: 1♂♀, 110km NW Mentougou, Xiaolongmen, 39°56'N, 116°05'E, Forest stat., 1100m, 1.viii.2000 (GU 20-75).

**Diagnosis:** Forewing length ♂♂ 22-25 mm, ♀♀ 28-31 mm. This subspecies externally somewhat resembles ssp. *bantaizana*, though the general impression is more fuscous. It differs from ssp. *grisescens* by the more fuscous greyish ground colour of the forewings, which is mixed with black scales. The basal area of the forewings is often blackish filled.

**Male genitalia** (Fig. 901): The genitalia are characterized by a longer dorsal arm of the valves, compared to the other subspecies. There is a second externally very similar species in N. China, *juglandis*, which is smaller in size (forewing length about 18-19 mm, see below).

**Etymology:** Named after Ernst Görgner, Dessau, for his help with valuable material of Notodontidae and Lymantriidae collected on his travels, particularly to Northern Malaysia and Southern Thailand.

## *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933: 134, pl. 3: 8, 9 stat.n. [*Lymantria bantaizana*]

(Figs. 661, 808-810, 816, 899)

**Syntypes:** Japan, Honshu, Fukushima, Mt. Bantaizan, Kibune and Chichibu – HUS, Sapporo [not examined].

**Taxonomy:** The ground colour of the forewings is whitish-grey, mixed with black scales. The black pattern is weakly developed except the V-shaped discal spot and the median streak. The submarginal area of the forewings is paler greyish filled compared with *goergneri* ssp.n. The basal area of the forewings is never blackish filled.

**Male genitalia** (Fig. 899): The male genitalia have the shortest dorsal arm of the valves, compared with the other subspecies of *grisescens.*

**Further remarks:** The combination as a subspecies of *grisescens* was made because of the very similar male genitalia. However, ssp. *bantaizana* is externally more closely related to *goergneri* ssp.n. than ssp. *grisescens. Lymantria grisescens bantaizana* is restricted to Japan including Hokkaido (pers. comm. P. Schaefer). The life cycle of ssp. *bantaizana* was reported by GOTOH, SCHAEFER & DOI (2004).

## *Lymantria* (*Spinotria*) *juglandis* CHAO, 1984: 95, fig. 1

(Figs. 661, 804-807, 902)

**Holotype:** China, Beijing, Changping – CAS, Beijing [not examined].

**Taxonomy:** *Lymantria juglandis* is 10% smaller in size than *bantaizana.* The forewings bear a very weakly developed blackish pattern. The ground colour is less mixed with blackish scales, compared to *bantaizana.*

**Male genitalia** (Fig. 902): The male genitalia differ from *bantaizana* by the longer dorsal arm of the valves. The valve is less broadly bilobed than in *bantaizana.*

**Further remarks:** Only a few specimens are known to me (n= 6).

## *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894: 172, fig. 6 [as *strigosa*]

(Figs. 662, 819-825, 903)

**Holotype:** Java – NMS, Stockholm [Paratype examined].

**Taxonomy:** This species is of a pale grey ground colour which is rather more brownish than greyish. The markings on the forewings are of a blackish brown. The abdomen is yellowish as in *microstrigata.*

**Male genitalia** (Fig. 903): The male genitalia are larger when compared to *microstrigata.* HOLLOWAY (1999: 19) mentioned the individual and geographical variation of the male genitalia (thickness of the valve arms, curvature of the dorsal arm of the valves).

**Further remarks:** I was able to examine a paratype male. The species is uncommon, distributed in Sundaland including Java (n<30). A single female from Thailand probably belongs to *strigata.*

## *Lymantria* (*Spinotria*) *microstrigata* HOLLOWAY, 1999: 19, fig. 23

(Figs. 662, 828, 829, 832, 905, 906)

**Holotype:** Brunei, Ulu Temburong, Base Camp – BMNH, London [examined].

**Taxonomy:** This is a smaller species which is rather more brownish than greyish coloured. The abdomen is yellowish as in *strigata.*

**Male genitalia** (Figs. 905, 906): The male genitalia are small compared to *strigata.* The curvature of the dorsal arm of the valve is greater, and the ventral arm tapers less and is more rounded apically.

**Further remarks:** I studied only the type series (n= 9).

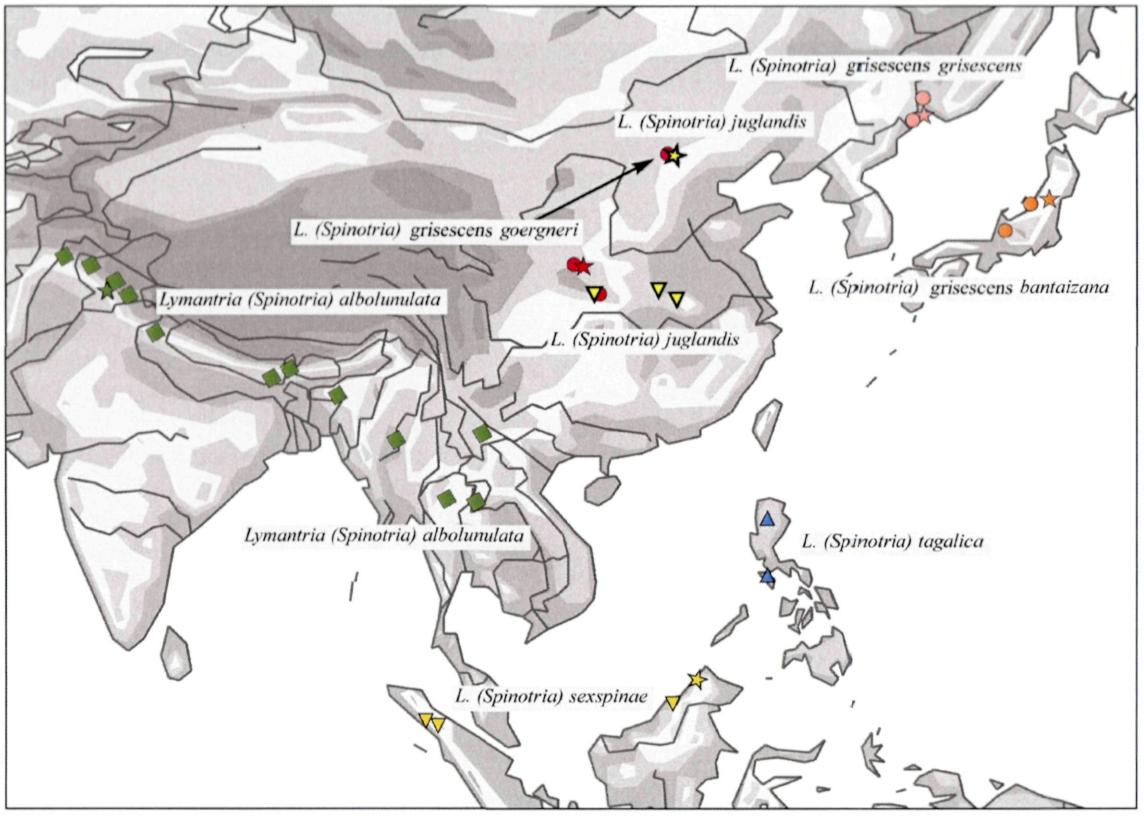


**Fig. 661:** Distribution of the subgenus *Spinotria.*

## *Lymantria* (*Spinotria*) *tagalica* (AURIVILLIUS, 1894: 173)

(Figs. 661, 826, 827, 830, 831, 904)

**Holotype:** Philippinen [?Luzon] – NMS, Stockholm [Paratype examined].

**Taxonomy:** The species is distinguished by greyish-white ground colour of forewings and - in contrast - the yellowish hindwings possess a well developed fuscous submarginal band. The females are similar, but the hindwings are less intensively yellowish. The abdomen is pinkish and differs from the yellowish abdomen in *microstrigata.*

**Male genitalia** (Fig. 904): The males are very similar to *microstrigata.* They differ slightly by the broader bilobed valves and the shape of the aedeagus.

**Further remarks:** I was able to examine a paratype. AURIVILLIUS described this species from material obtained from Semper, as the labels on the insects indicate. SEMPER (1898: 463, pl. 54: 2) mentioned under *Lymantria obsoleta:* "42 Exemplare von Luzon". It is therefore probable that the type material comes from Luzon. As far as known only a few species of *Spinotria* inhabit the Philippines, namely *tagalica, eckweileri* and *inordinata.*

## *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879: 403 stat.rev.

(Figs. 661, 833-840, 848, 849, 858, 859, 907, 908, 925)

**Lectotype:** NW. Himalaya, Dharmsala – BMNH, London [examined].

**Synonym:**
*Lymantria elassa* COLLENETTE, 1938: 381, pl. 14: 26 **syn.n.**
Holotype: China, Ya-chiao-ling – BMNH, London [examined].

**Taxonomy:** The imago externally resembles *obsoleta* and in most cases can only be separated by dissection of the genitalia. The ground colour of *albolunulata* is a bit more bluish-brown rather than yellowish-brown in *obsoleta.* The post median area of the forewings is more contrasting whitish than in *obsoleta.*

**Male genitalia** (Figs. 907, 908, 925): The male genitalia are easily distinguishable from the other species by the shape of the bilobed valve with two pointed processes of nearly equal length.

**Further remarks:** The lectotype male of *albolunulata* was designated by GUPTA et al. (1984: 23). The large and homogenous type series of *elassa* (n=31), caught (or reared?) in 1922 from Ya-chiao-ling, consists of rather small specimens. While dissecting two paratype males of *elassa* I found that the genitalia are virtually not different. Therefore both taxa can be brought into synonymy. Unfortunately, I have no further material of *elassa* from China and cannot actually decide if *elassa* could be applied as name for an eastern small and pale subspecies of *albolunulata.*

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**Fig. 664-689:** next page

**Fig. 664:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♂, NW. India, Bhimtal.
**Fig. 665:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♂, Nepal.
**Fig. 666:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♂, Nepal.
**Fig. 667:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♂, Bhutan.
**Fig. 668:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♀, NW. India, Bhimtal.
**Fig. 669:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♀, India, Holotype.
**Fig. 670:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♀, Nepal.
**Fig. 671:** *Lymantria* (*Spinotria*) *eckweileri* **sp.n.** – ♂, Philippines, Mindanao, Holotype.
**Fig. 672:** *Lymantria* (*Spinotria*) *eckweileri* **sp.n.** – ♂, Philippines, Mindanao, Paratype.
**Fig. 673:** *Lymantria* (*Spinotria*) *tortivalvula* CHAO, 1984 – ♂, pl. 1: 2, from CHAO 1994.
**Fig. 674:** *Lymantria* (*Spinotria*) *tortivalvula* CHAO, 1984 – ♂, China, Hainan.
**Fig. 675:** *Lymantria* (*Spinotria*) *eckweileri* **sp.n.** – ♀, Philippines, Mindanao, Paratype.
**Fig. 676:** *Lymantria* (*Spinotria*) *eckweileri* **sp.n.** – ♀, Philippines, Mindanao, Paratype.
**Fig. 677:** *Lymantria* (*Spinotria*) *tortivalvula* CHAO, 1984 – ♀, China, Hainan.
**Fig. 678:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♂, China, Yunnan, Holotype.
**Fig. 679:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♂, NW. Thailand, Paratype.
**Fig. 680:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♂, NW. Thailand, Paratype.
**Fig. 681:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♂, N. Vietnam, Paratype.
**Fig. 682:** *Lymantria* (*Spinotria*) *laszloronkayi* **sp.n.** – ♂, Laos, Holotype.
**Fig. 683:** *Lymantria* (*Spinotria*) *laszloronkayi* **sp.n.** – ♂, NW. Thailand, Paratype.
**Fig. 684:** *Lymantria* (*Spinotria*) *laszloronkayi* **sp.n.** – ♂, China, Yunnan, Paratype.
**Fig. 685:** *Lymantria* (*Spinotria*) *laszloronkayi* **sp.n.** – ♂, NW. Thailand, Paratype.
**Fig. 686:** *Lymantria* (*Spinotria*) *laszloronkayi* **sp.n.** – ♀, NW. Thailand, Paratype.
**Fig. 687:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♀, NW. Thailand, Paratype.
**Fig. 688:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♀, NW. Thailand, Paratype.
**Fig. 689:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♀, NW. Thailand, Paratype.

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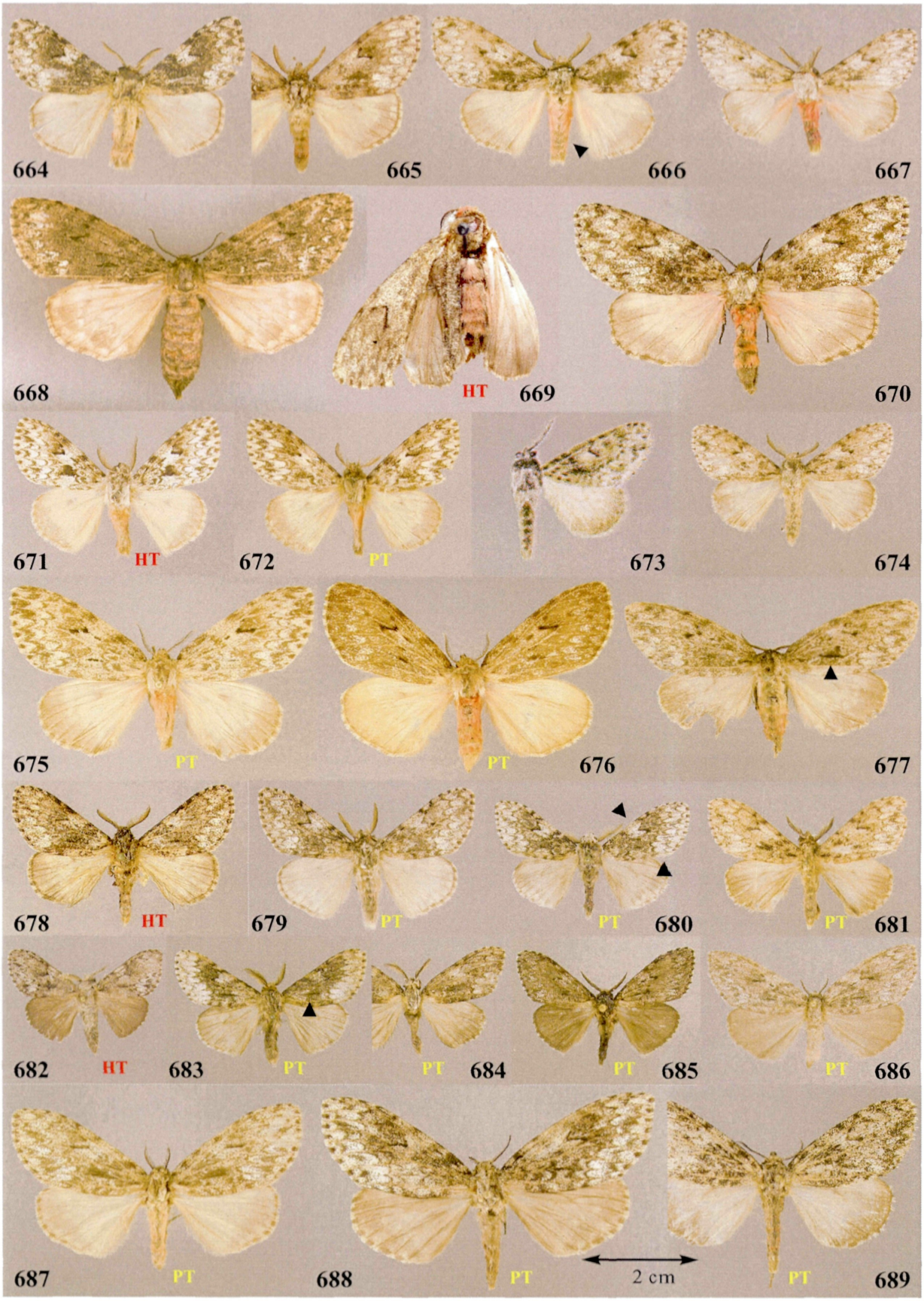

## *Lymantria* (*Spinotria*) *punicea* CHAO, 1984: 97, figs. 4a,b

(Figs. 849, 912a)

**Holotype:** China, Yunnan, Yingjiang – CAS, Bejing [not examined].

**Taxonomy:** According to the very short original description and the colour illustration in CHAO 1994 (pl. 1: 3), *punicea* is closely related to *hreblayi* sp.n. However, *hreblayi* sp.n. displays never a pinkish abdomen and white hindwings.

**Male genitalia** (Fig. 912a): The male genitalia are illustrated in CHAO (1984), CHAO (1994: fig. 4) and CHAO (2003: fig. 133). The shape of the valves places the species near to *albolunulata.*

**Further remarks:** The imago (probably the holotype) was figured in CHAO (1994: pl. 1: 3) but not photographed in CHAO (2003). Unfortunately I did not see any specimens of *punicea.* The original illustrations by CHAO (1994) were used to figure the species here.

## *Lymantria* (*Spinotria*) *tricolor* CHAO, 1984: 96, figs. 2a, b

(Figs. 662, 850-853, 915)

**Holotype:** China, Hainan, Tianchi – CAS, Beijing [not examined].

**Taxonomy:** The species somewhat resembles *strigata*, though the forewings are more elongated. On the upperside of body and wings there are no pinkish scales, but the underside of the thorax bears reddish hairs.

**Male genitalia** (Fig. 915): Although the male genitalia are similar to *albolunulata*, the arms of the valves are curved, not straight as in *albolunulata.*

**Further remarks:** Known from SE China (Hainan, Guangxi); a single female probably belonging to *tricolor* comes from N. Vietnam. The number of examined specimens was n= 18.

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**Figs. 690-714:** next page
**Fig. 690:** *Lymantria* (*Spinotria*) *gyulai* **sp.n.** – ♂, NW. Thailand, Holotype;
**Fig. 691:** *Lymantria* (*Spinotria*) *gyulai* **sp.n.** – ♂, NW. Thailand, Paratype;
**Fig. 692:** *Lymantria* (*Spinotria*) *gyulai* **sp.n.** – ♂, NW. Thailand, Paratype;
**Fig. 693:** *Lymantria* (*Spinotria*) *gyulai* **sp.n.** – ♂, NW. Thailand, Paratype;
**Fig. 694:** *Lymantria* (*Spinotria*) *gyulai* **sp.n.** – ♂, NW. Thailand, Paratype;
**Fig. 695:** *Lymantria* (*Spinotria*) *gyulai* **sp.n.** – ♀, NW. Thailand, Paratype;
**Fig. 696:** *Lymantria* (*Spinotria*) *hreblayi* **sp.n.** – ♀, China, Yunnan, Paratype;
**Fig. 697:** *Lymantria* (*Spinotria*) *laszloronkayi* **sp.n.** – ♀, Laos, Paratype;
**Fig. 698:** *Lymantria* (*Spinotria*) *hreblayi* **sp.n.** – ♂, China, Yunnan, Holotype;
**Fig. 699:** *Lymantria* (*Spinotria*) *hreblayi* **sp.n.** – ♂, China, Yunnan, Paratype;
**Fig. 700:** *Lymantria* (*Spinotria*) *hreblayi* **sp.n.** – ♂, China, Yunnan, Paratype.
**Fig. 701:** *Lymantria* (*Spinotria*) *hreblayi* **sp.n.** – ♂, China, Sichuan, Paratype.
**Fig. 702:** *Lymantria* (*Spinotria*) *maxfischeri* **sp.n.** – ♂, China, Yunnan, Holotype.
**Fig. 703:** *Lymantria* (*Spinotria*) *maxfischeri* **sp.n.** – ♂, China, Vietnam, Paratype.
**Fig. 704:** *Lymantria* (*Spinotria*) *maxfischeri* **sp.n.** – ♀, China, Yunnan, Paratype.
**Fig. 705:** *Lymantria* (*Spinotria*) *maxfischeri* **sp.n.** – ♀, China, Yunnan, Paratype.
**Fig. 706:** *Lymantria* (*Spinotria*) *grauli* **sp.n.** – ♀, Indonesia, Sumatra, Paratype.
**Fig. 707:** *Lymantria* (*Spinotria*) *grauli* **sp.n.** – ♂, Indonesia, Sumatra, Holotype.
**Fig. 708:** *Lymantria* (*Spinotria*) *rubea* SCHINTLMEISTER, 1989 – ♂, N. Myanmar.
**Fig. 709:** *Lymantria* (*Spinotria*) *rubea* SCHINTLMEISTER, 1989 – ♂, China, Yunnan.
**Fig. 710:** *Lymantria* (*Spinotria*) *defreinai* **sp.n.** – ♂, China, Yunnan, Holotype.
**Fig. 711:** *Lymantria* (*Spinotria*) *defreinai* **sp.n.** – ♂, China, Yunnan, Paratype.
**Fig. 712:** *Lymantria* (*Spinotria*) *rubea* SCHINTLMEISTER, 1989 – ♀, N. Myanmar.
**Fig. 713:** *Lymantria* (*Spinotria*) *rubea* SCHINTLMEISTER, 1989 – ♀, N. Myanmar.
**Fig. 714:** *Lymantria* (*Spinotria*) *defreinai* **sp.n.** – ♀, N. Vietnam, Paratype.

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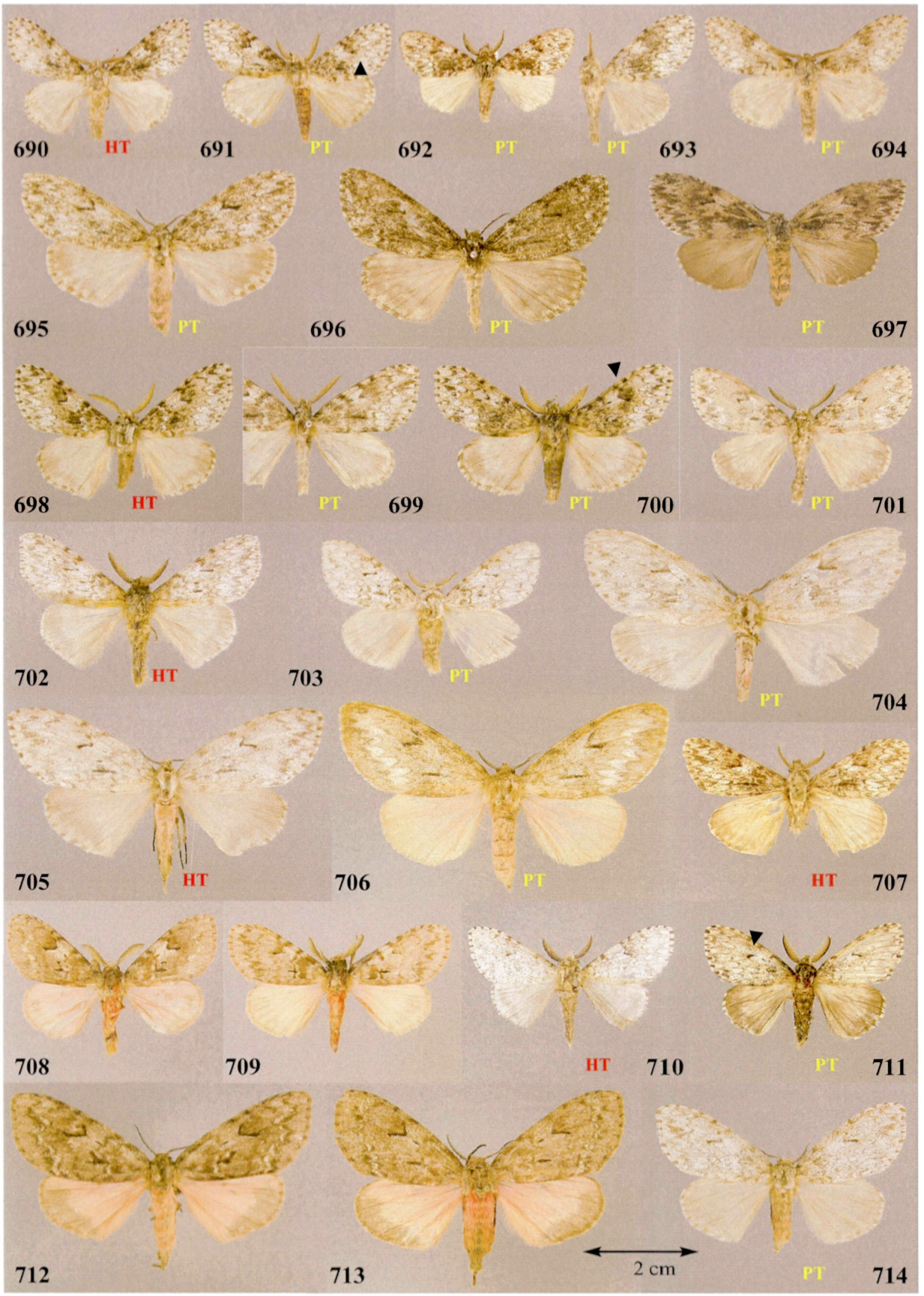

## *Lymantria* (*Spinotria*) *ihlei* sp.n.

(Figs. 662, 841, 842, 910)

**Holotype:** ♂, S. Vietnam, Plato Tay Nguyen, Mt. Ngoc Linh, 15°02'N, 107°59'E, 900-1400m, 10.-25.viii.1996 leg. Siniaev & Afonin (GU 62-44) – in coll. A. Schintlmeister, Dresden.
**Paratype:** 1♂, S. Vietnam, Plato Tay Nguyen, Mt. Ngoc Linh, 15°02'N, 107°59'E, 900-1400m, 10.-25.viii.1996 (GU 50-57).

**Diagnosis:** Forewing length 19 mm. The imago externally resembles *strigatoides*. The ground colour of the forewings is grey. The basal area is a darker grey. The V-shaped discal spot is diffusely blackish marked. The pattern in general is very diffuse. The hindwings are a pale brownish. The fringe of all wings is chequered grey/greyish-white. The underside of the thorax is pinkish.

**Male genitalia** (Fig. 910): The male genitalia are very similar to *albolunulata*. However, the ventral arm of the valve is distinctively uncurved and tapered. This arm is also shorter compared to *albolunulata*. The aedeagus is short.

**Etymology:** Named after Siegfried Ihle, Filderstadt/Stuttgart, for hospitality and thanks for permission to study and use his collection.

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**Figs. 715-738:** next page

**Fig. 715:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♂, N. India, Holotype.
**Fig. 716:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♂, N. Myanmar.
**Fig. 717:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♂, N. Myanmar.
**Fig. 718:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♂, N. Myanmar.

**Fig. 719:** *Lymantria* (*Spinotria*) *obsoleta eminens* **ssp.n.** – ♂, China, Jiangxi, Holotype.
**Fig. 720:** *Lymantria* (*Spinotria*) *obsoleta eminens* **ssp.n.** – ♂, China, Jiangxi, Paratype.
**Fig. 721:** *Lymantria* (*Spinotria*) *obsoleta eminens* **ssp.n.** – ♂, China, Jiangxi, Paratype.
**Fig. 722:** *Lymantria* (*Spinotria*) *obsoleta eminens* **ssp.n.** – ♂, China, Jiangxi, Paratype.

**Fig. 723:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♀, N. Myanmar.
**Fig. 724:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♀, N. Myanmar.
**Fig. 725:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♀, NE. India, Darjeeling (Lectotype of *Lymantria bhascara* MOORE, 1859).

**Fig. 726:** *Lymantria* (*Spinotria*) *strigatoides* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 727:** *Lymantria* (*Spinotria*) *strigatoides* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Paratype.
**Fig. 728:** *Lymantria* (*Spinotria*) *minahassa* COLLENETTE, 1933 – ♂, Indonesia, Sulawesi.
**Fig. 729:** *Lymantria* (*Spinotria*) *minahassa* COLLENETTE, 1933 – ♂, Indonesia, Sulawesi.

**Fig. 730:** *Lymantria* (*Spinotria*) *strigatoides* SCHINTLMEISTER, 1994 – ♀, Indonesia, Sumatra.
**Fig. 731:** *Lymantria* (*Spinotria*) *strigatoides* SCHINTLMEISTER, 1994 – ♀, Indonesia, Sumatra, Paratype.
**Fig. 732:** *Lymantria* (*Spinotria*) *minahassa* COLLENETTE, 1933 – ♀, Indonesia, Sulawesi.

**Fig. 733:** *Lymantria* (*Spinotria*) *polioptera* COLLENETTE, 1934 – ♂, N. Vietnam.
**Fig. 734:** *Lymantria* (*Spinotria*) *polioptera* COLLENETTE, 1934 – ♀, China, Guangdong, Holotype.
**Fig. 735:** *Lymantria* (*Spinotria*) *minahassa* COLLENETTE, 1933 – ♀, Indonesia, Sulawesi, "Neallotype".

**Fig. 736:** *Lymantria* (*Spinotria*) *stueningi* **sp.n.** – ♂, China, Yunnan, Holotype.
**Fig. 737:** *Lymantria* (*Spinotria*) *stueningi* **sp.n.** – ♀, China, Yunnan, Paratype.
**Fig. 738:** *Lymantria* (*Spinotria*) *stueningi* **sp.n.** – ♂, China, Thailand, Paratype.

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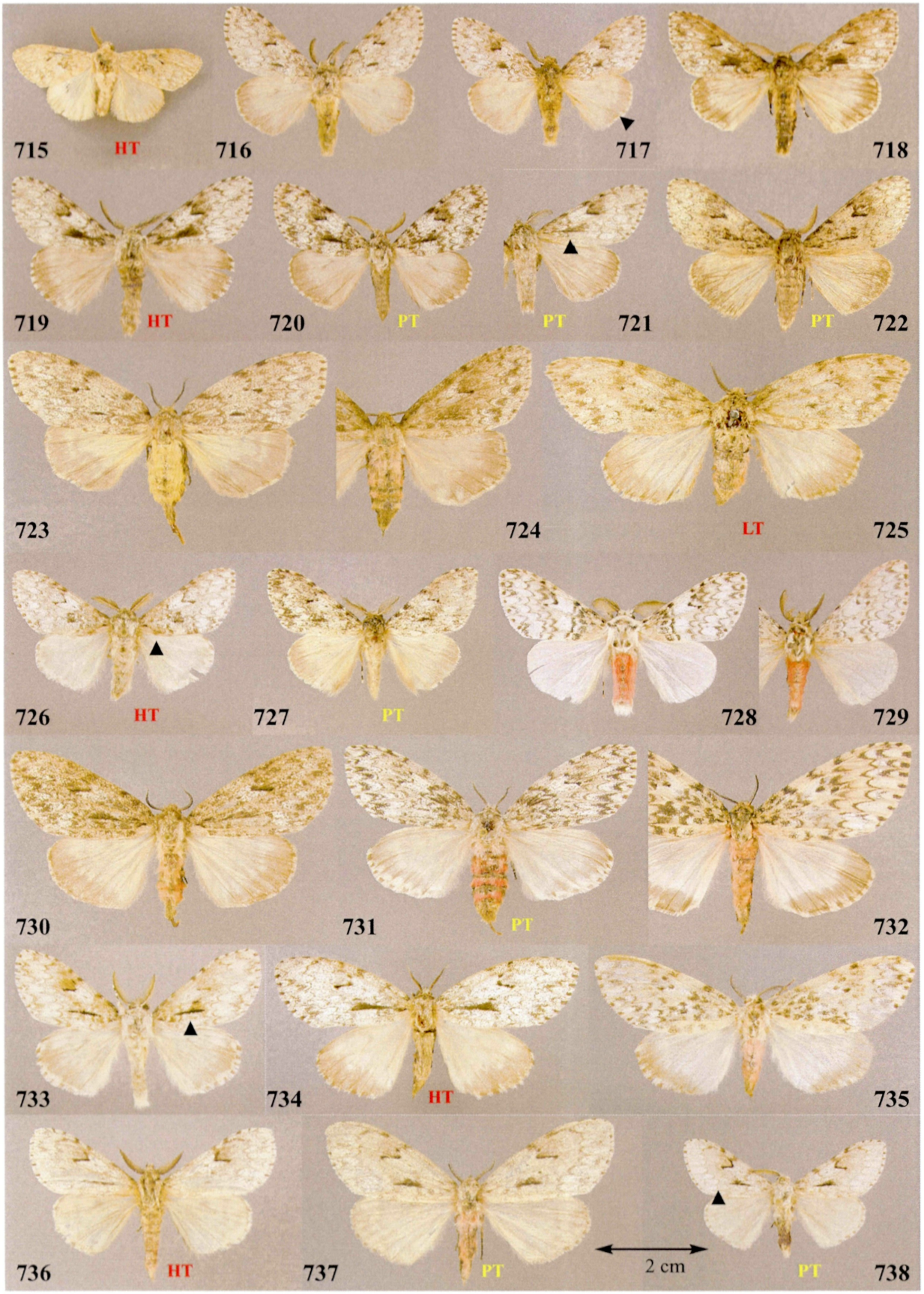

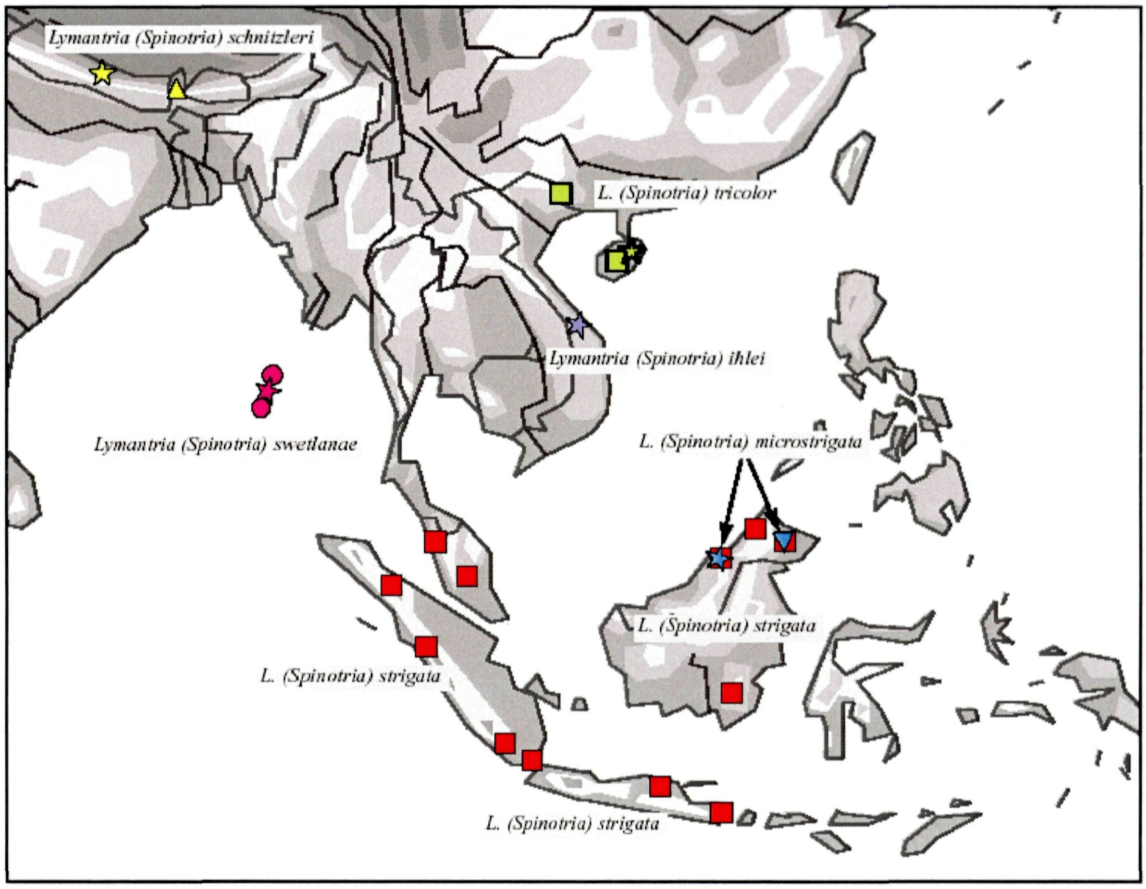


**Fig. 662:** Distribution of the subgenus *Spinotria*.

## *Lymantria* (*Spinotria*) *schnitzleri* sp.n.

(Figs. 662, 843, 844, 911)

**Holotype:** ♂, Nepal, Godavari, Mt. Phulchoki, ca. 30km S Kathmandu, March-April 1991, 2000m, leg. local collectors – in coll. A. Schintlmeister, Dresden.
**Paratypes** (4♂♂): Nepal: 1♂, Godavari, Mt. Phulchoki, ca. 30km S Kathmandu, 13.vi. 1991, 1850m (GU 62-69); NE India: 2♂♂, Darjeeling, WB, Mangpu 1300m, 2.iv.1986 (GU 50-92).

**Diagnosis:** Forewing length ♂♂ 22 mm. The ground colour of the forewings is blackish-grey. The species externally resembles *maxfischeri* sp.n., but is more fuscous coloured. The V-shaped discal spot is black. The area around discal spot on the forewings and the post median area are pale greyish filled. The fringe of all wings is greyish-whitish chequered. *Lymantria schnitzleri* sp.n. differs from *serva* by lacking any pinkish colour on the abdomen. The female is unknown.

**Male genitalia** (Fig. 911): The male genitalia are very similar to *albolunulata*, though the dorsal arm of the valve is distinctively longer and curved instead of straight. The aedeagus is longer and more curved than *albolunulata*.

**Etymology:** Named after Hermann Schnitzler, Cologne, for his continual assistance in providing me with interesting material from Asia including the holotype of this new species.

## *Lymantria* (*Spinotria*) *temburong* HOLLOWAY, 1999: 20, pl. 1: 24

(Figs. 663, 845-847, 913)

**Holotype:** Brunei, Ulu Temburong – BMNH, London [examined].

**Taxonomy:** The greyish ground colour of the forewings is diagnostic instead of brown as in *ihlei* sp.n. and *schnitzleri* sp.n. The markings somewhat resemble *sarantuja*.

**Male genitalia** (Fig. 913): *Lymantria temburong* belongs to its own section, characterized by the dorsal arm of the valves, which is long and distinctively evenly curved. The ventral arm is straight and short.

## *Lymantria* (*Spinotria*) *swetlanae* sp.n.

(Figs. 662, 856, 857, 860, 916)

**Holotype:** ♂, India, Andaman Isl., Middle Andaman, Tagapura, 12°50'72"N, 92°49'29"E, 22.-26.xi.2000 leg. J.-P. Rudloff – in coll. A. Schintlmeister, Dresden.

**Paratypes** (13♂♂, 1♀): Andaman Isl.: 3♂♂, Middle Andaman, Tagapura, 12°50'72"N, 92°49'29"E, 22.-26.xi.2000 (GU 50-94); 1♂, ibid, 14.-16.viii.2001; 1♂, Middle Andaman, Rangat, 100m, 22.-25.iii.1996 (GU 50-62); 1♂♀, ibid, 12.-13.viii.2001 (GU 35-96); 1 ♂, Middle, Andaman, Karmatang 1,5km E, 12,5072°N / 92,5610°E, 17.-22. August 2001; 3♂♂, North Andaman, Mayabunder, 6kms, Kamatany, 12°50'61"N, 92°56'06"E, 17.-21.xi.2000; 1♂, S. Andaman, Port Blair, Mt. Harriet, 11°43'21"N, 92°44'03"E, 23.-24.viii.2001; 1♂, Little Andaman, Huck Bay, Quarry Hilus, 10°35'52"N, 92°30'16"N, 26.-27.viii.2001.

**Diagnosis:** Forewing length ♂♂ 17-18 mm, the ♀ spans 23.5 mm. The ground colour of the forewings is greyish with a violet shine. The pattern is weakly developed. There is a V-shaped black marking near the cell and two black dots in the median area. The hindwings are greyish with a diffuse blackish discal spot. The female resembles the male but is larger in size.

**Male genitalia** (Fig. 916): The male genitalia resemble *temburong*. They show a characteristic curved dorsal process, where the ventral arm of the valve is relatively long.

**Further remarks:** Restricted to the Andaman Isl.

**Etymology:** Dedicated to Swetlana Siniaeva, the wife of Victor Siniaev, Moscow.

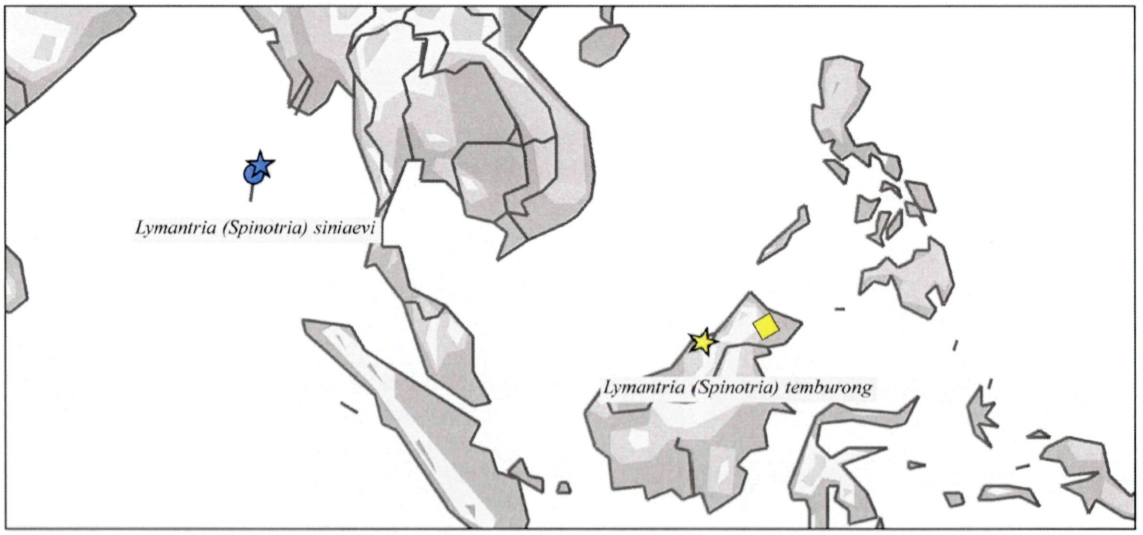


**Fig. 663:** Distribution of the subgenus *Spinotria*.

## *Lymantria* (*Spinotria*) *siniaevi* sp.n.

(Figs. 663, 854, 855, 917)

**Holotype:** ♂, India, Andaman Isl., North Andaman, Mayabunder, 6kms, Kamatany, 12°50'61"N, 92°56'06"E, 17.-21.xi.2000; leg. J.-P. Rudloff – in coll. A. Schintlmeister, Dresden.
**Paratypes** (5♂♂): Andaman Isl.: 2♂♂, Mayabunder, 6kms, Kamatany, 12°50'61"N, 92°56'06"E, 17.-21.xi.2000 (GU 09-02a); 3♂♂, Middle Andaman, Tagapure, 12°50'72"N, 92°49'29"E, 22.-26.xi.2000 (GU 05-29a).

**Diagnosis:** Forewing length ♂♂ 18-19 mm. The ground colour of the forewings is pale brown. The shape of the wings and the dark brown pattern resemble *tricolor,* but the imago is generally paler in habitus. The hindwings are pale brownish without a discal spot.

**Male genitalia** (Fig. 917): The male genitalia are similar to *swetlanae* but the dorsal arm is shorter than the ventral arm of the valves. The aedeagus is shorter and thicker than in *swetlanae* and the vinculum is longer.

**Further remarks:** Restricted to the Andaman Isl.

**Etymology:** Dedicated to my friend Victor Siniaev, Moscow, the great field collector, who collected invaluable material under very difficult and dangerous conditions in various parts of Asia, including the Andaman Islands.

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**Figs. 739-758:** next page

**Fig. 739:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♂, S. India, Kerala, Holotype.
**Fig. 740:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♂, S. India, Kerala, Paratype.
**Fig. 741:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♂, S. India, Kanara.
**Fig. 742:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♀, S. India, Kerala, Paratype.

**Fig. 743:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♀, Sri Lanka.
**Fig. 744:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♀, S. India, Kanara.
**Fig. 745:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♀, S. India, Tamil Nadu, Paratype.

**Fig. 746:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911 – ♂, China, Hongkong, Syntype.
**Fig. 747:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911 – ♂, N. Vietnam.
**Fig. 748:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911 – ♀, Taiwan.

**Fig. 749:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911 – ♀, China, Hongkong, Syntype.
**Fig. 750:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911 – ♂, N. Vietnam.
**Fig. 751:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, China, Yunnan, Paratype.

**Fig. 752:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, NW. India, Bhimtal, Holotype.
**Fig. 753:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, N. Myanmar, Paratype.
**Fig. 754:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, China, Yunnan, Paratype.
**Fig. 755:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, form, China, Yunnan, Paratype.

**Fig. 756:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, China, Guangxi, Paratype.
**Fig. 757:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♀, Nepal, Paratype.
**Fig. 758:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, China, Hainan, Paratype.

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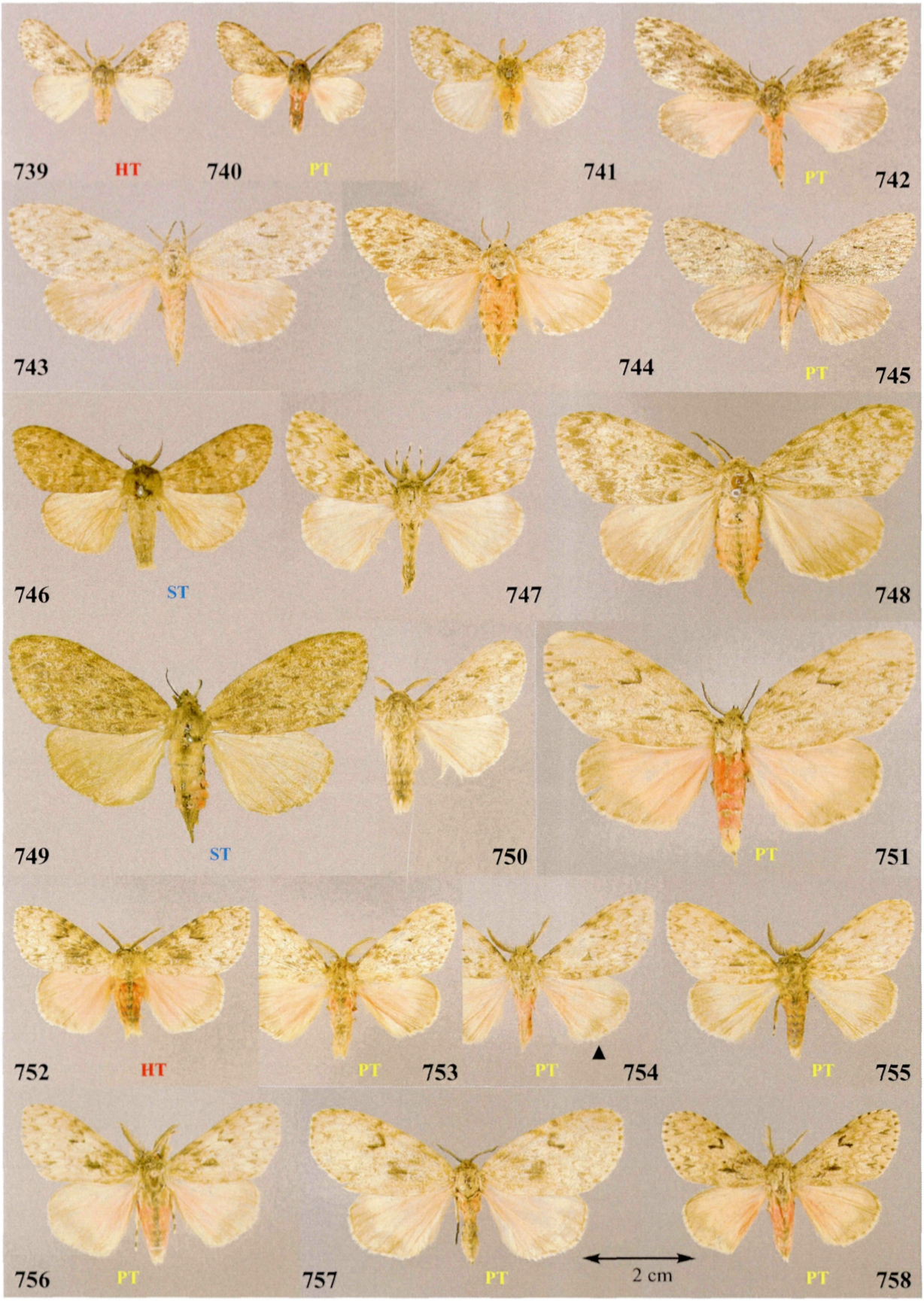


**Figs. 759-781:** next page

**Fig. 759:** *Lymantria* (*Spinotria*) *inordinata inordinata* WALKER, 1865 – ♂, Indonesia, Sulawesi, Holotype.
**Fig. 760:** *Lymantria* (*Spinotria*) *inordinata inordinata* WALKER, 1865 – ♂, Indonesia, Sulawesi.
**Fig. 761:** *Lymantria* (*Spinotria*) *inordinata inordinata* WALKER, 1865 – ♂, Indonesia, Sulawesi.

**Fig. 762:** *Lymantria* (*Spinotria*) *inordinata javana* **ssp.n.** – ♂, Indonesia, Java, Holotype.
**Fig. 763:** *Lymantria* (*Spinotria*) *inordinata javana* **ssp.n.** – ♂, Indonesia, Java, Paratype.
**Fig. 764:** *Lymantria* (*Spinotria*) *inordinata javana* **ssp.n.** – ♀, Indonesia, Java, Paratype.

**Fig. 765:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 766:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♂, Indonesia, Sumatra.
**Fig. 767:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♂, Indonesia, Sumatra.
**Fig. 768:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♂, Philippines, Palawan.

**Fig. 769:** *Lymantria* (*Spinotria*) *inordinata philippina* **ssp.n.** – ♂, Philippines, Mindanao, Holotype.
**Fig. 770:** *Lymantria* (*Spinotria*) *inordinata philippina* **ssp.n.** – ♂, form, Philippines, Mindanao, Paratype.
**Fig. 771:** *Lymantria* (*Spinotria*) *inordinata philippina* **ssp.n.** – ♂, Philippines, Luzon, Paratype.
**Fig. 772:** *Lymantria* (*Spinotria*) *inordinata philippina* **ssp.n.** – ♂, Philippines, Luzon, Paratype.

**Fig. 773:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♀, Indonesia, Sumatra, "Allotype".
**Fig. 774:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♀, Indonesia, S. Kalimantan.
**Fig. 775:** *Lymantria* (*Spinotria*) *koeppeli* **sp.n.** – ♂, Indonesia, Bali, Paratype.
**Fig. 776:** *Lymantria* (*Spinotria*) *koeppeli* **sp.n.** – ♂, Indonesia, Bali, Paratype.

**Fig. 777:** *Lymantria* (*Spinotria*) *koeppeli* **sp.n.** – ♂, Indonesia, Bali, Holotype.
**Fig. 778:** *Lymantria* (*Spinotria*) *koeppeli* **sp.n.** – ♀, Indonesia, Bali, Paratype.

**Fig. 779:** *Lymantria* (*Spinotria*) *loedli* **sp.n.** – ♂, Indonesia, Timor, Holotype.
**Fig. 780:** *Lymantria* (*Spinotria*) *loedli* **sp.n.** – ♂, Indonesia, Timor, Paratype.
**Fig. 781:** *Lymantria* (*Spinotria*) *inordinata philippina* **ssp.n.** – ♀, Philippines, Mindoro, Paratype.

**Figs. 782-807:** next page

**Fig. 782:** *Lymantria* (*Spinotria*) *sexspinae* HOLLOWAY, 1976 – ♂, Malaysia, Borneo, Sabah, Holotype.
**Fig. 783:** *Lymantria* (*Spinotria*) *sexspinae* HOLLOWAY, 1976 – ♂, Indonesia, Sumatra.
**Fig. 784:** *Lymantria* (*Spinotria*) *sexspinae* HOLLOWAY, 1976 – ♀, Borneo, Brunei.
**Fig. 785:** *Lymantria* (*Spinotria*) *sexspinae* HOLLOWAY, 1976 – ♀, Indonesia, Sumatra.

**Fig. 786:** *Lymantria* (*Spinotria*) *koenigi* **sp.n.** – ♂, Indonesia, Sulawesi, Holotype.
**Fig. 787:** *Lymantria* (*Spinotria*) *koenigi* **sp.n.** – ♂, Indonesia, Peleng Isl.
**Fig. 788:** *Lymantria* (*Spinotria*) *koenigi* **sp.n.** – ♀, Indonesia, Sulawesi, Paratype.

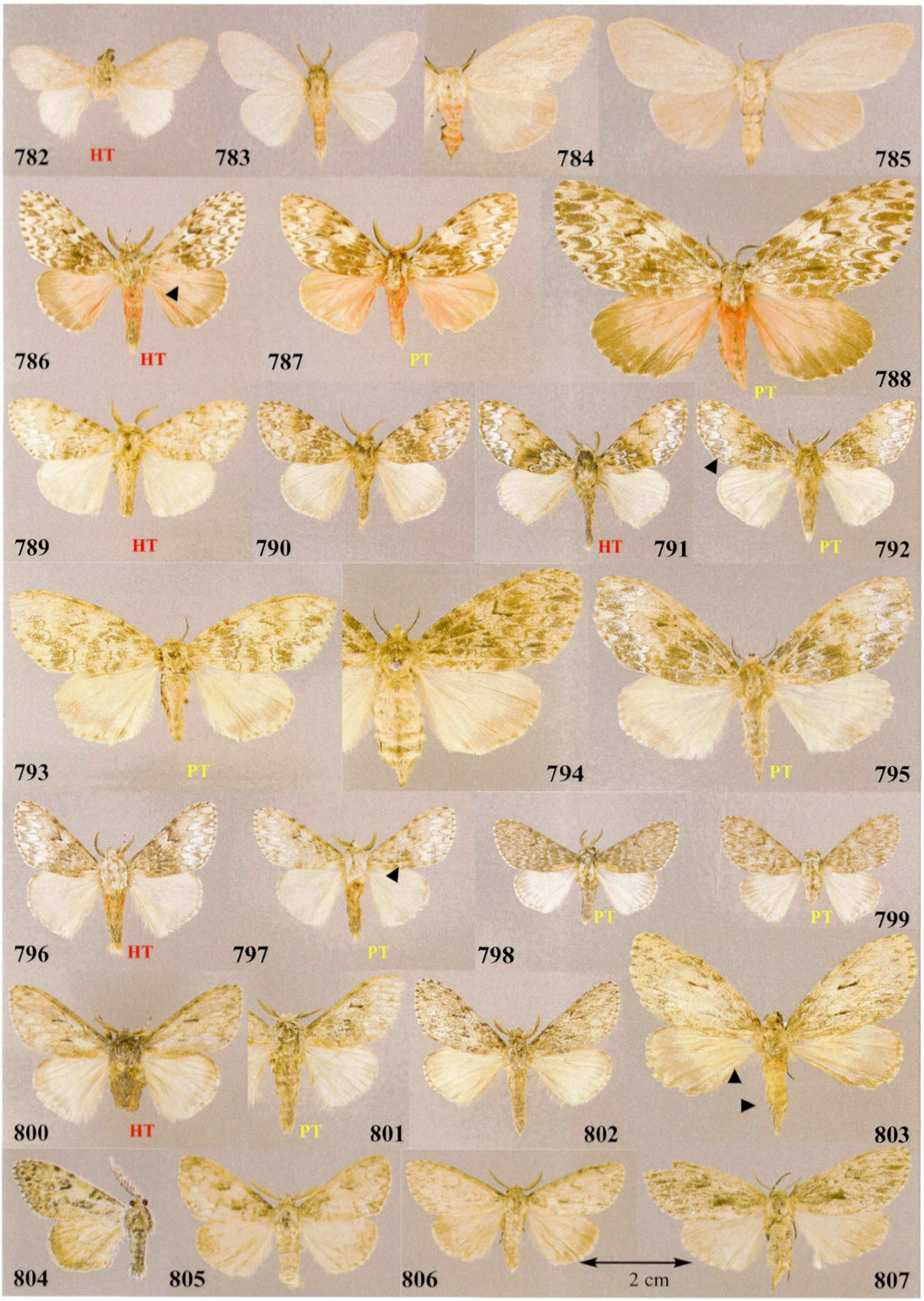
**Fig. 789:** *Lymantria* (*Spinotria*) *rhabdota rhabdota* COLLENETTE, 1949 – ♂, Indonesia, Java, Holotype.
**Fig. 790:** *Lymantria* (*Spinotria*) *rhabdota rhabdota* COLLENETTE, 1949 – ♂, Indonesia, Bali.
**Fig. 791:** *Lymantria* (*Spinotria*) *rhabdota stephani* **ssp.n.** – ♂, Philippines, Mindanao, Holotype.
**Fig. 792:** *Lymantria* (*Spinotria*) *rhabdota stephani* **ssp.n.** – ♂, Philippines, Negros, Paratype.

**Fig. 793:** *Lymantria* (*Spinotria*) *rhabdota rhabdota* COLLENETTE, 1949 – ♀, Indonesia, Java, "Allotype".
**Fig. 794:** *Lymantria* (*Spinotria*) *rhabdota rhabdota* COLLENETTE, 1949 – ♀, W. Malaysia.
**Fig. 795:** *Lymantria* (*Spinotria*) *rhabdota stephani* **ssp.n.** – ♀, Philippines, Negros, Paratype.

**Fig. 796:** *Lymantria* (*Spinotria*) *haeuseri* **sp.n.** – ♂, Indonesia, Flores, Holotype.
**Fig. 797:** *Lymantria* (*Spinotria*) *haeuseri* **sp.n.** – ♂, Indonesia, Flores, Paratype.
**Fig. 798:** *Lymantria* (*Spinotria*) *kobesi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 799:** *Lymantria* (*Spinotria*) *kobesi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Paratype.

**Fig. 800:** *Lymantria* (*Spinotria*) *pagon* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Holotype.
**Fig. 801:** *Lymantria* (*Spinotria*) *pagon* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Paratype.
**Fig. 802:** *Lymantria* (*Spinotria*) *pagon* HOLLOWAY, 1999 – ♂, Indonesia, S. Kalimantan.
**Fig. 803:** *Lymantria* (*Spinotria*) *pagon* HOLLOWAY, 1999 – ♀, Indonesia, S. Kalimantan.

**Fig. 804:** *Lymantria* (*Spinotria*) *juglandis* CHAO, 1984 – ♂, pl. 1: 7, from CHAO 1994.
**Fig. 805:** *Lymantria* (*Spinotria*) *juglandis* CHAO, 1984 – ♂, China, Shaanxi.
**Fig. 806:** *Lymantria* (*Spinotria*) *juglandis* CHAO, 1984 – ♂, China, Hubei.
**Fig. 807:** *Lymantria* (*Spinotria*) *juglandis* CHAO, 1984 – ♀, China, Shaanxi.



**Figs. 808-832:** next page

**Fig. 808:** *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933 – ♂, Japan, Honshu.
**Fig. 809:** *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933 – ♂, Japan, Honshu.
**Fig. 810:** *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933 – ♂, Japan, Honshu.
**Fig. 811:** *Lymantria* (*Spinotria*) *grisescens grisescens* (STAUDINGER, 1887) – ♂, Russia, Primorye, Syntype.

**Fig. 812:** *Lymantria* (*Spinotria*) *grisescens goergneri* **ssp.n.** – ♂, China, Shaanxi, Holotype.
**Fig. 813:** *Lymantria* (*Spinotria*) *grisescens goergneri* **ssp.n.** – ♂, China, Shaanxi, Paratype.
**Fig. 814:** *Lymantria* (*Spinotria*) *grisescens goergneri* **ssp.n.** – ♂, China, Shaanxi, Paratype.
**Fig. 815:** *Lymantria* (*Spinotria*) *grisescens grisescens* (STAUDINGER, 1887) – ♂, Russia, Primorye.

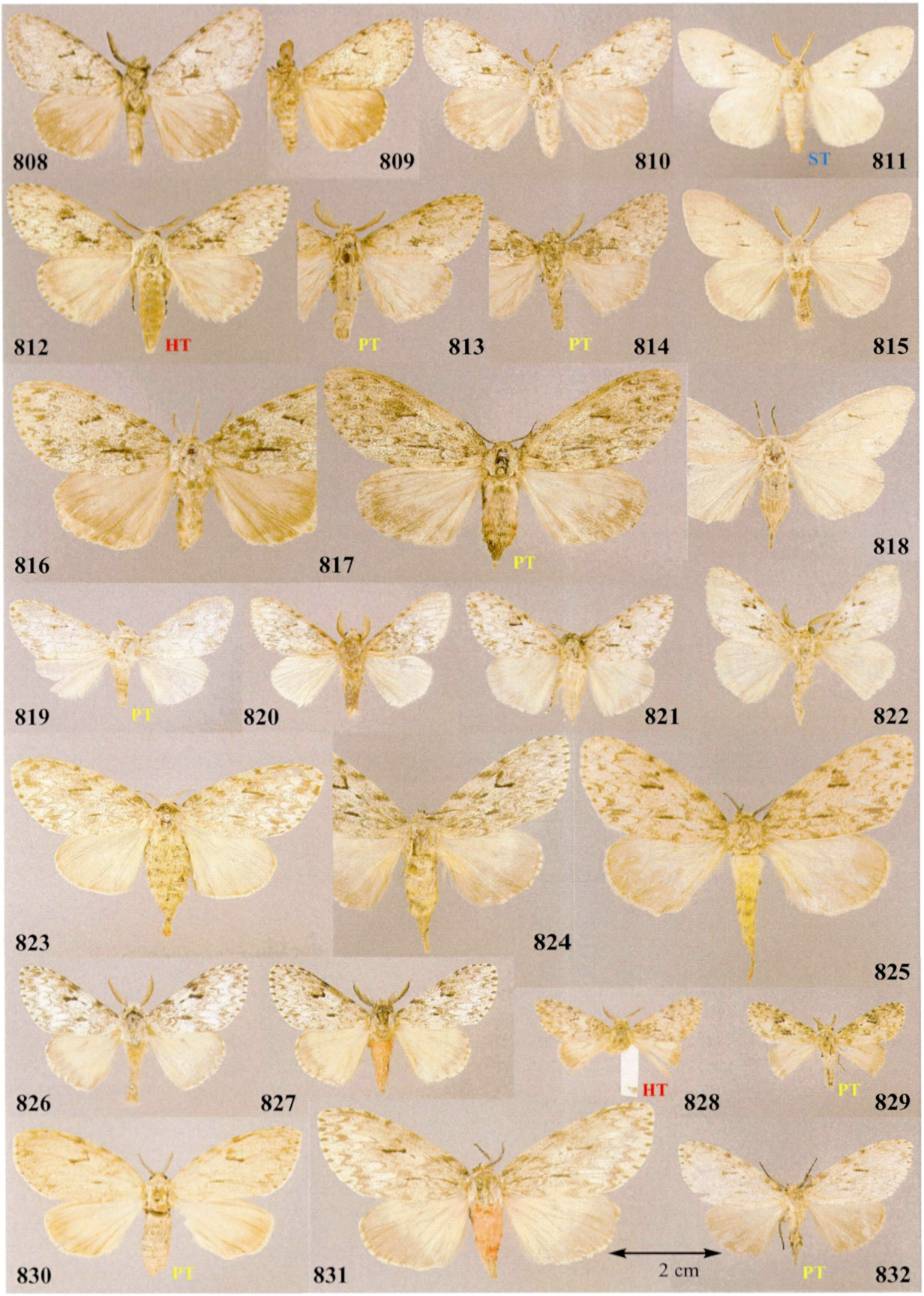
**Fig. 816:** *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933 – ♀, Japan, Honshu.
**Fig. 817:** *Lymantria* (*Spinotria*) *grisescens goergneri* **ssp.n.** – ♀, China, Shaanxi, Paratype.
**Fig. 818:** *Lymantria* (*Spinotria*) *grisescens grisescens* (STAUDINGER, 1887) – ♀, Russia, Primorye.

**Fig. 819:** *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894 – ♂, Indonesia, Java, Paratype.
**Fig. 820:** *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894 – ♂, Indonesia, Bali.
**Fig. 821:** *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894 – ♂, Indonesia, Sumatra.
**Fig. 822:** *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894 – ♂, Indonesia, S. Kalimantan.

**Fig. 823:** *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894 – ♀, Indonesia, Java.
**Fig. 824:** *Lymantria* (*Spinotria*) ? *strigata* AURIVILLIUS, 1894 – ♀, Thailand.
**Fig. 825:** *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894 – ♀, W. Malaysia.

**Fig. 826:** *Lymantria* (*Spinotria*) *tagalica* AURIVILLIUS, 1894 – ♂, Philippines, Luzon.
**Fig. 827:** *Lymantria* (*Spinotria*) *tagalica* AURIVILLIUS, 1894 – ♂, Philippines, Mindoro.
**Fig. 828:** *Lymantria* (*Spinotria*) *microstrigata* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Holotype.
**Fig. 829:** *Lymantria* (*Spinotria*) *microstrigata* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Paratype.

**Fig. 830:** *Lymantria* (*Spinotria*) *tagalica* AURIVILLIUS, 1894 – ♀, Philippines, Paratype.
**Fig. 831:** *Lymantria* (*Spinotria*) *tagalica* AURIVILLIUS, 1894 – ♀, Philippines, Mindoro.
**Fig. 832:** *Lymantria* (*Spinotria*) *microstrigata* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Paratype.



**Figs. 833-860:** next page

**Fig. 833:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, NW. India, Dharmsala, Lectotype.
**Fig. 834:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, NW. India.
**Fig. 835:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, NE. India, Assam.
**Fig. 836:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, NW. India, Bhimtal.
**Fig. 837:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, SE. China (Holotype of *Lymantria elassa* (COLLENETTE, 1938).

**Fig. 838:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♀, NW. India, Paralectotype.
**Fig. 839:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♀, NE. Pakistan.
**Fig. 840:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♀, SE. China ("Allotype" of *Lymantria elassa* (COLLENETTE, 1938).

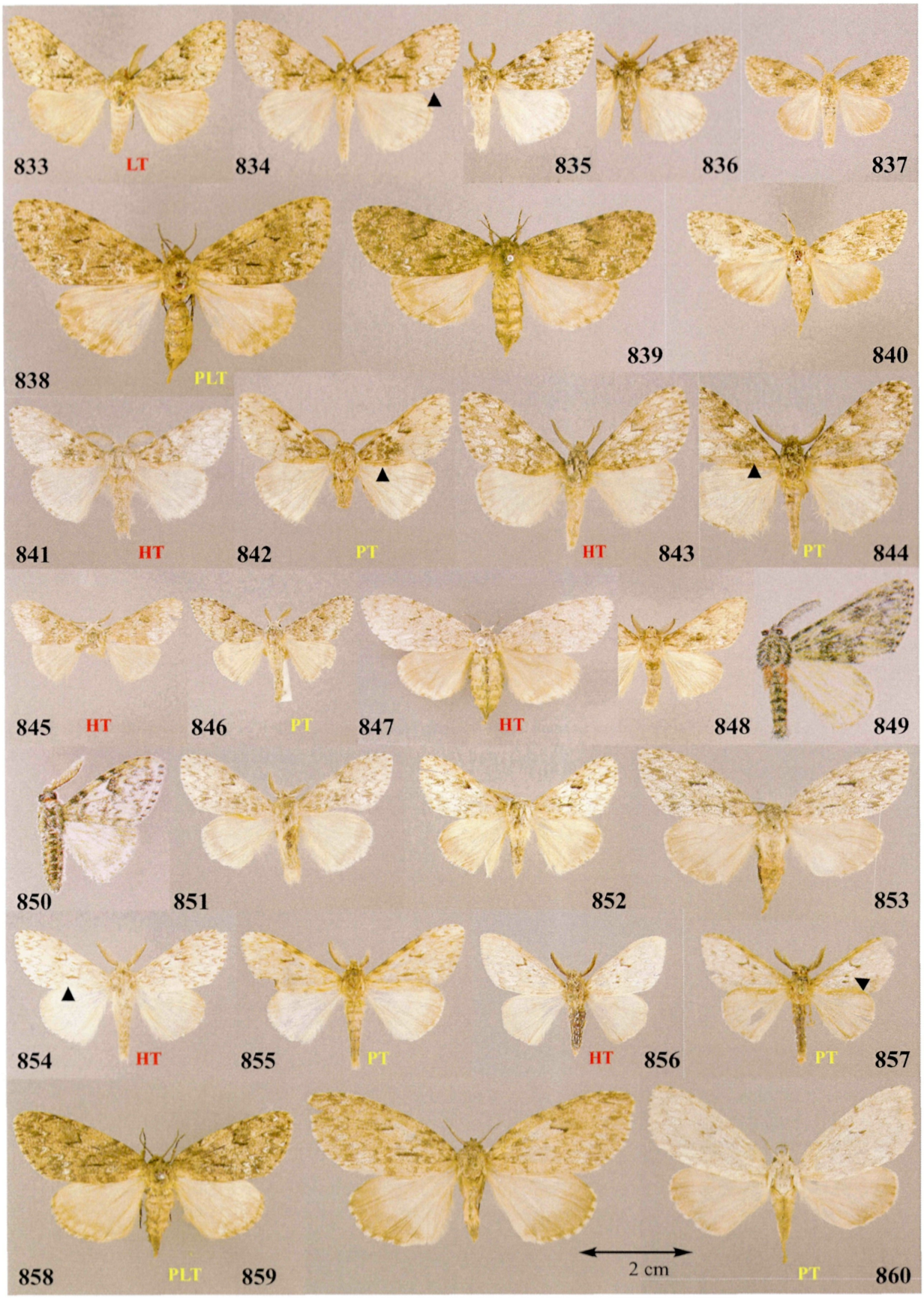
**Fig. 841:** *Lymantria* (*Spinotria*) *ihlei* **sp.n.**– ♂, Vietnam, Holotype.
**Fig. 842:** *Lymantria* (*Spinotria*) *ihlei* **sp.n.**– ♂, Vietnam, Paratype.
**Fig. 843:** *Lymantria* (*Spinotria*) *schnitzleri* **sp.n.**– ♂, Nepal, Holotype.
**Fig. 844:** *Lymantria* (*Spinotria*) *schnitzleri* **sp.n.**– ♂, Nepal, Paratype.

**Fig. 845:** *Lymantria* (*Spinotria*) *temburong* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Holotype.
**Fig. 846:** *Lymantria* (*Spinotria*) *temburong* HOLLOWAY, 1999 – ♂, Malaysia, Borneo, Paratype.
**Fig. 847:** *Lymantria* (*Spinotria*) *temburong* HOLLOWAY, 1999 – ♀, Borneo, Brunei, Paratype.
**Fig. 848:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, Nepal.
**Fig. 849:** *Lymantria* (*Spinotria*) *punicea* CHAO, 1984 – ♂, pl. 1: 1, from CHAO (1994).

**Fig. 850:** *Lymantria* (*Spinotria*) *tricolor* CHAO, 1984 – ♂, pl. 1: 1, from CHAO (1994).
**Fig. 851:** *Lymantria* (*Spinotria*) *tricolor* CHAO, 1984 – ♂, China, Hainan.
**Fig. 852:** *Lymantria* (*Spinotria*) *tricolor* CHAO, 1984 – ♂, China, Hainan.
**Fig. 853:** *Lymantria* (*Spinotria*) *tricolor* CHAO, 1984 – ♀, Vietnam.

**Fig. 854:** *Lymantria* (*Spinotria*) *siniaevi* **sp.n.** – ♂, India, Andaman Isls., Holotype.
**Fig. 855:** *Lymantria* (*Spinotria*) *siniaevi* **sp.n.** – ♂, India, Andaman Isls., Paratype.
**Fig. 856:** *Lymantria* (*Spinotria*) *swetlanae* **sp.n.**– ♂, India, Andaman Isls., Holotype.
**Fig. 857:** *Lymantria* (*Spinotria*) *swetlanae* **sp.n.**– ♂, India, Andaman Isls., Paratype.

**Fig. 858:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♀, NW. India, Simla, Paralectotype.
**Fig. 859:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♀, NE. India, Darjeeling.
**Fig. 860:** *Lymantria* (*Spinotria*) *swetlanae* **sp.n.**– ♀, India, Andaman Isls., Paratype.



## Species incertae sedis

### *Lymantria vastatrix* TOXOPEUS, 1948: 432, figs. 3, 6

**Holotype:** [Indonesia], W. Java Tjinjiruan, S. of Bandung – West Java Experiment Station, Buitenzorg [not examined].

**Taxonomy:** The original illustrations and the description indicate that *vastatrix* is a bona species belonging to *Spinotria* and probably related to *inordinata*. Unfortunately I was not able to see any material of this species during my visit to the Zoological Museum, Bogor.

### *Lymantria simplex* PAGENSTECHER, 1886: 31

**Holotype:** [Indonesia], Aru-Inseln, Ureiuning [not examined].

**Taxonomy:** The very poor description without illustration mentioned a similarity to *Acronycta* (Noctuidae). This could indicate that *simplex* resembles *Spinotria* (if not a Noctuid moth). However, *Spinotria* is unknown from the New Guinea region. The most eastern species is *loedli* sp.n. from Timor.

I was not able to locate a type specimen in the Pagenstecher collection in the Museum Wiesbaden (Naturwissenschaftliche Sammlungen).

### *Lymantria vinacea* MOORE, 1879: 402

**Holotype:** S. India, Canara [not examined].

**Further remarks:** According to the original description, MOORE described a relatively small female without pinkish colour. The short description (4 lines only) gives no hints to which group this species could belong. However, the number of species in S. India is limited.

The holotype specimen was in the F. Moore collection as stated in the original description. I was not able to locate it in the collections of BMNH, London, or ZMHU in Berlin.

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**Figs. 861-869:** next page

**Fig. 861:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♂, NE India, Meghalaya, GU 09-54a.
**Fig. 862:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♂, Nepal, GU 62-20.
**Fig. 863:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♂, Bhutan, GU H-07/2004.

**Fig. 864:** *Lymantria* (*Spinotria*) *eckweileri* **sp.n.**– ♂ Mindanao, GU 60-67, Paratype.
**Fig. 865:** *Lymantria* (*Spinotria*) *tortivalvula* CHAO, 1984 – ♂, China, Hainan, GU 34-23a.
**Fig. 866:** *Lymantria* (*Spinotria*) *laszloronkayi* **sp.n.** – ♂, Laos, GU 20-71, Paratype.

**Fig. 867:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.** – ♂ China, Yunnan, GU 35-90, Paratype.
**Fig. 868:** *Lymantria* (*Spinotria*) *gaborronkayi* **sp.n.**– ♂, China, Yunnan, GU 09-20a, Paratype.
**Fig. 869:** *Lymantria* (*Spinotria*) *gyulaii* **sp.n.** – ♂, Thailand, GU 20-82, Paratype.

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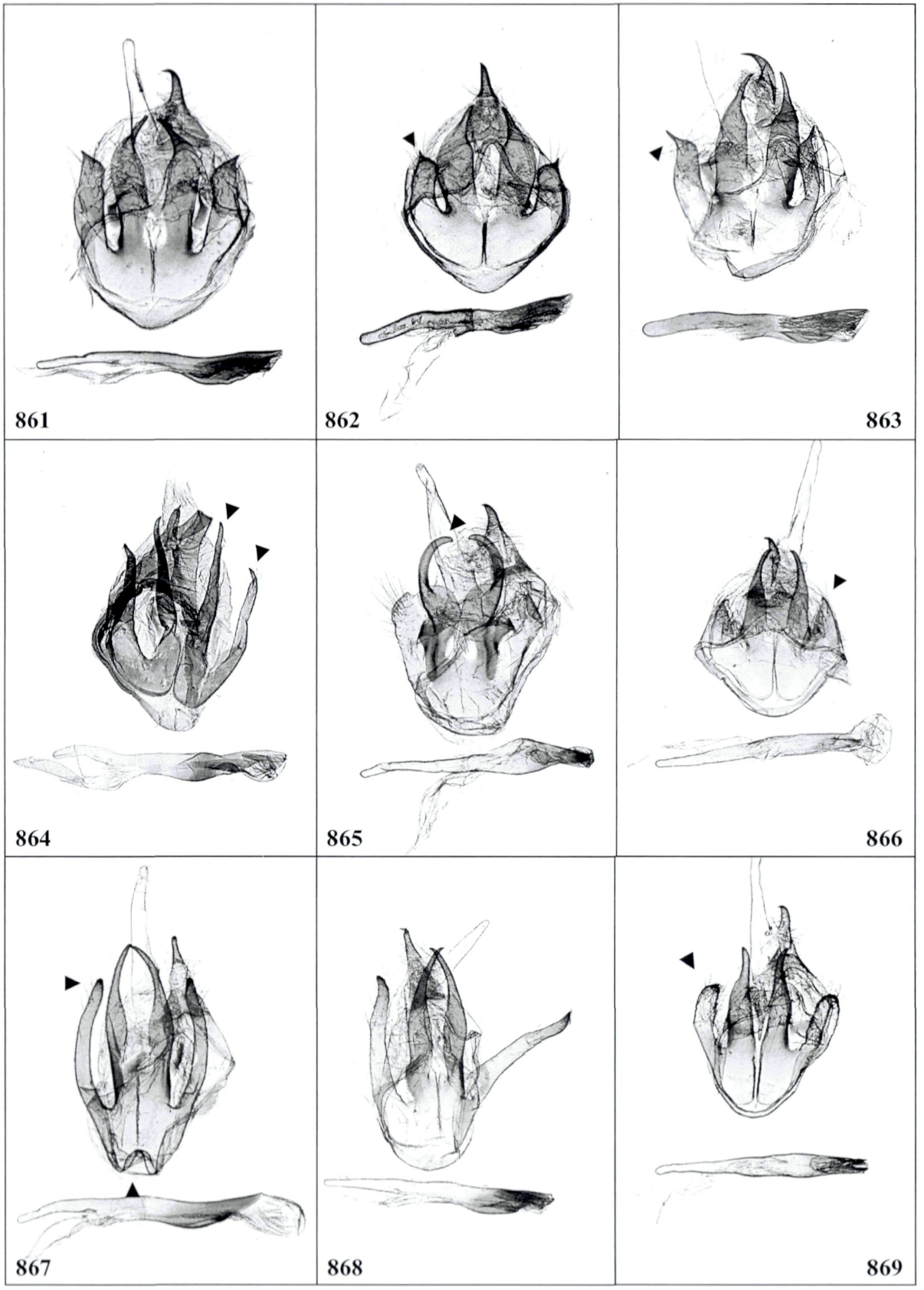
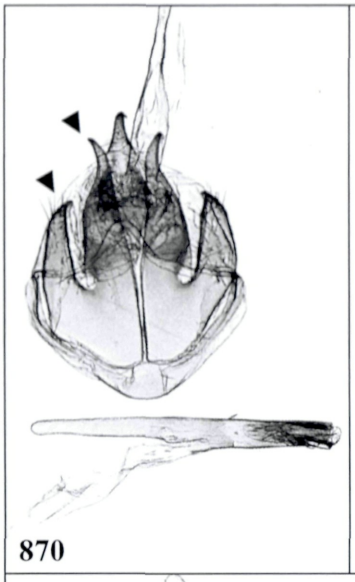


**Figs. 870-879:** next page

**Fig. 870:** *Lymantria* (*Spinotria*) *gyulaii* **sp.n.** – ♂, Thailand, GU 20-77, Paratype.
**Fig. 871:** *Lymantria* (*Spinotria*) *grauli* **sp.n.** – ♂, China, Yunnan, GU 35-90, Paratype.
**Fig. 872:** *Lymantria* (*Spinotria*) *maxfischeri* **sp.n.**– ♂, NE India, Assam, GU 50-93, Paratype.
**Fig. 873:** *Lymantria* (*Spinotria*) *maxfischeri* **sp.n.**– ♂, Vietnam, GU 09-65.

**Fig. 874:** *Lymantria* (*Spinotria*) *rubea* SCHINTLMEISTER, 1989 – ♂, Myanmar, GU 09-20a, Paratype.
**Fig. 875:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♂, Nepal, GU 09-49a.
**Fig. 876:** *Lymantria* (*Spinotria*) *obsoleta eminens* **ssp.n.** – ♂, China, Jiangxi, GU 62-36, Paratype.

**Fig. 877:** *Lymantria* (*Spinotria*) *defreinai* **sp.n.** – ♂, China, Yunnan, GU 60-98, Paratype.
**Fig. 878:** *Lymantria* (*Spinotria*) *strigatoides* SCHINTLMEISTER, 1994 – Sumatra, GU 09-15, Paratype.
**Fig. 879:** *Lymantria* (*Spinotria*) *minahassa* COLLENETTE,1933 – ♂, Sulawesi, GU 20-72a.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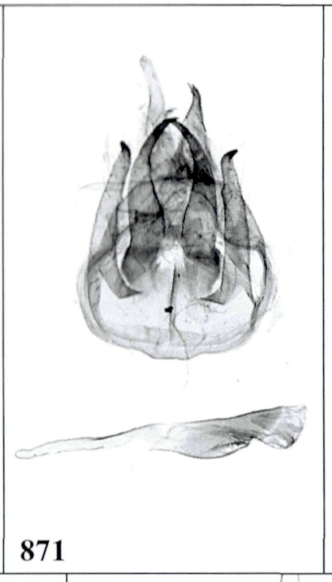
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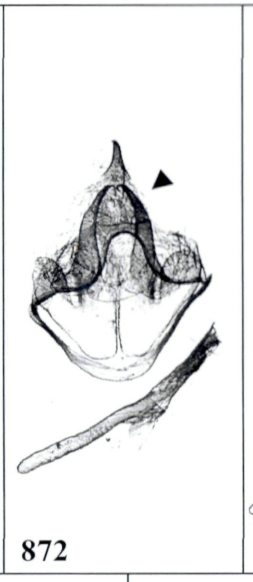
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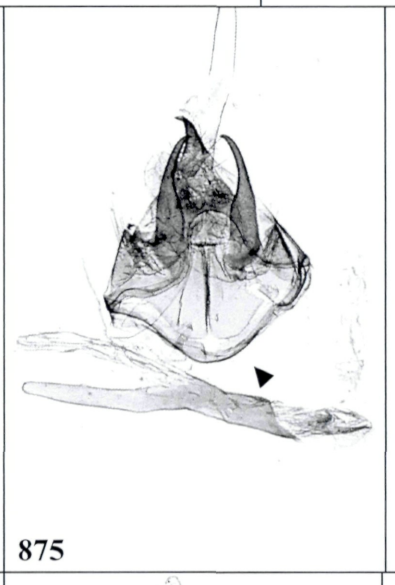
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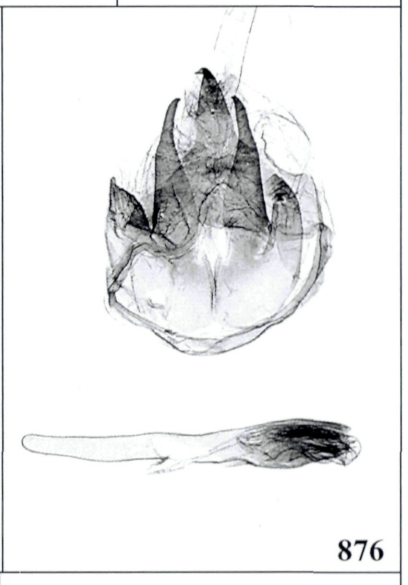
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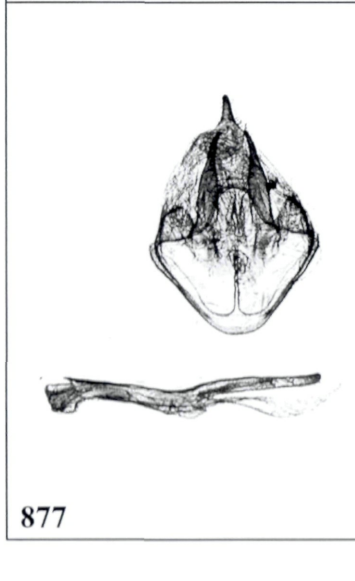
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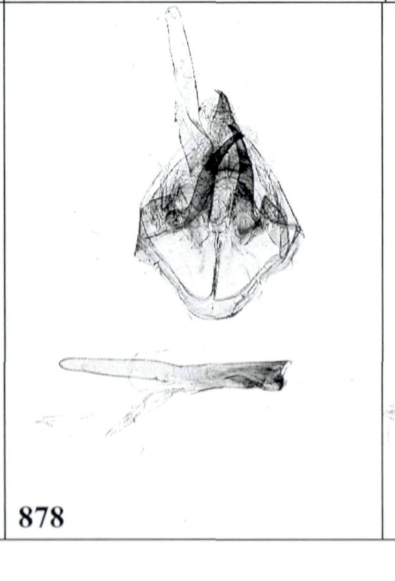
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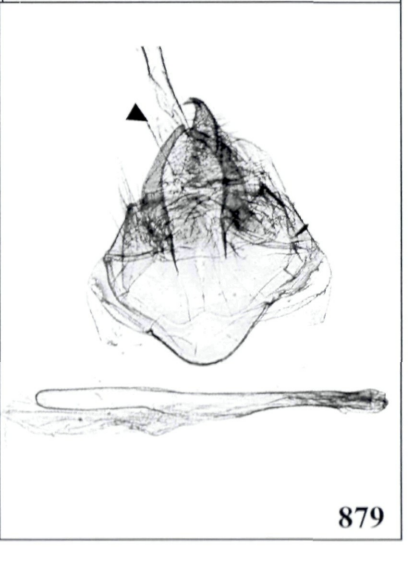
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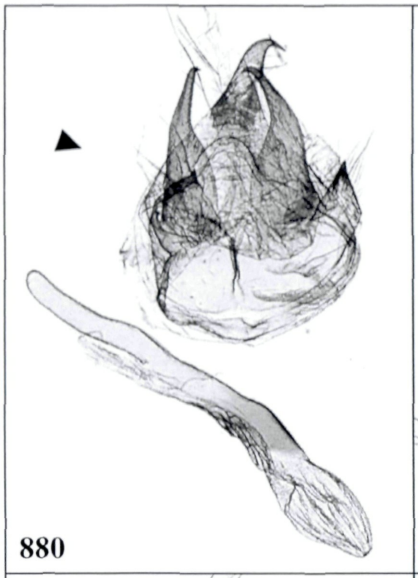
**Figs. 880-888:** next page

**Fig. 880:** *Lymantria* (*Spinotria*) *polioptera* COLLENETTE, 1934 – ♂, Vietnam, GU 34-98a.
**Fig. 881:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♂, S. India, GU 50-99, Paratype.
**Fig. 882:** *Lymantria* (*Spinotria*) *nussi* **sp.n.** – ♂, S. India, BM1/2003.

**Fig. 883:** *Lymantria* (*Spinotria*) *stueningi* **sp.n.** – ♂, China, Yunnan, GU 09-31a, Paratype.
**Fig. 884:** *Lymantria* (*Spinotria*) *inordinata inordinata* WALKER, 1865 – ♂, Indonesia, Sulawesi, GU 62-64.
**Fig. 885:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♂, Indonesia, Sumatra, GU 09-21.

**Fig. 886:** *Lymantria* (*Spinotria*) *inordinata barisana* COLLENETTE, 1933 – ♂, Indonesia, Sumatra, GU 62-49.
**Fig. 887:** *Lymantria* (*Spinotria*) *inordinata javana* **ssp.n.** – ♂, Indonesia, Java, GU 20-83, Paratype.
**Fig. 888:** *Lymantria* (*Spinotria*) *inordinata philippina* **ssp.n.** – ♂, Philipines, Panay, GU 62-68, Paratype.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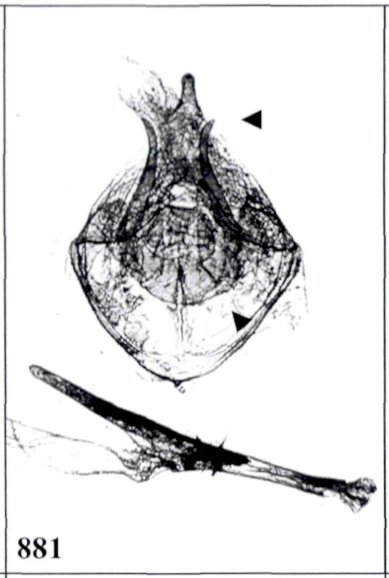
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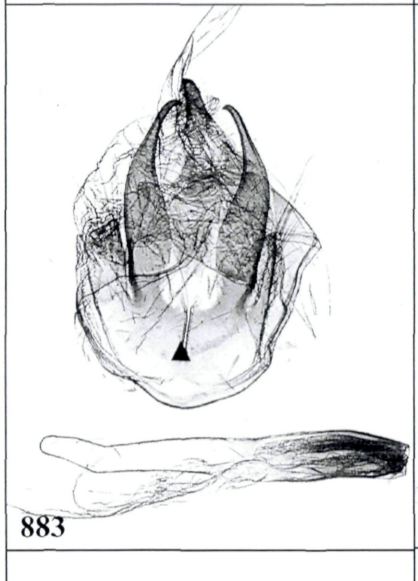
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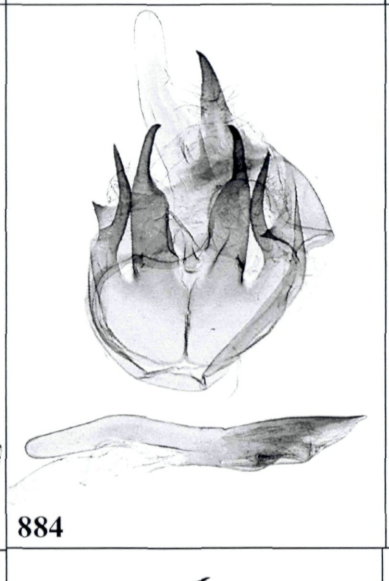
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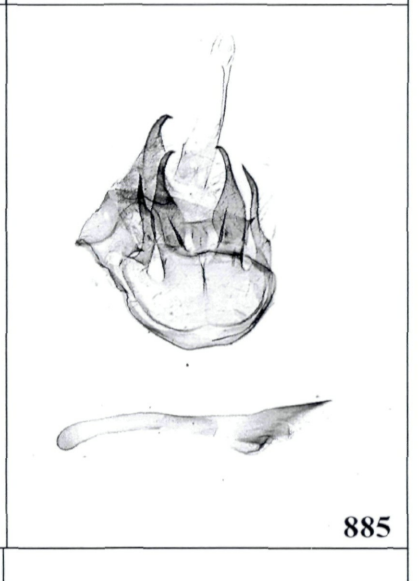
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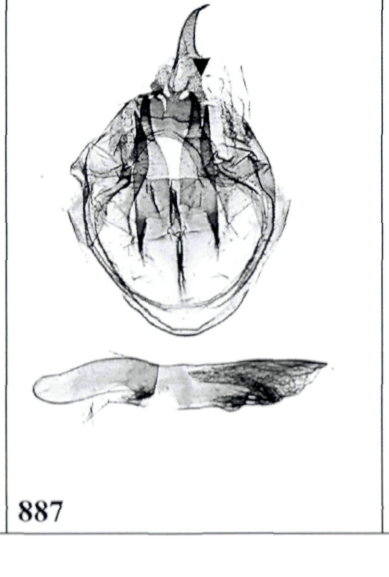
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**Figs. 889-897:** next page

**Fig. 889:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911– ♂, NE. India, Assam, GU 11-60.
**Fig. 890:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♂, China, Yunnan, GU 62-66, Paratype.
**Fig. 891:** *Lymantria* (*Spinotria*) *loedli* **sp.n.** – ♂, Indonesia, Timor isl., GU 62-48, Paratype.

**Fig. 892:** *Lymantria* (*Spinotria*) *koeppeli* **sp.n.** – ♂, Indonesia, Bali, GU 62-73, Paratype.
**Fig. 893:** *Lymantria* (*Spinotria*) *koenigi* **sp.n.** – ♂, Indonesia, Sulawesi, GU 62-61, Paratype.
**Fig. 894:** *Lymantria* (*Spinotria*) *rhabdota rhabdota* COLLENETTE, 1949 – ♂, Indonesia, Sumatra, GU 09-03.

**Fig. 895:** *Lymantria* (*Spinotria*) *rhabdota stephani* **ssp.n.** – ♂, Philippines, Mindanao, GU 62-63, Paratype.
**Fig. 896:** *Lymantria* (*Spinotria*) *kobesi* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, GU 05-95, Paratype.
**Fig. 897:** *Lymantria* (*Spinotria*) *pagon* HOLLOWAY, 1999 – ♂, Borneo, Brunei, BM # 2328, Holotype.

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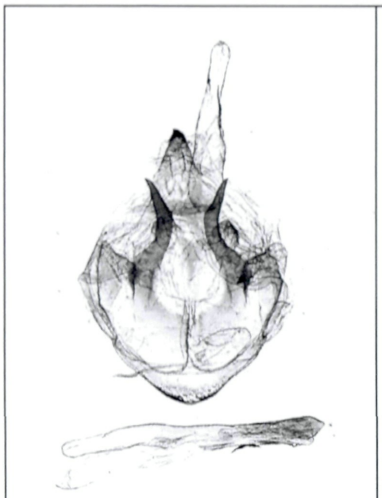

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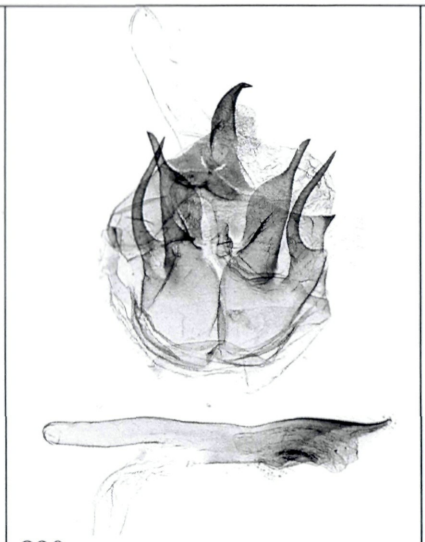

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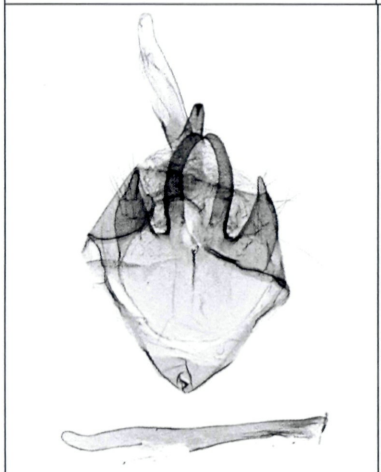

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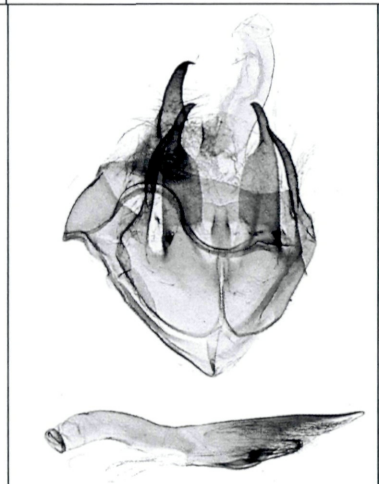

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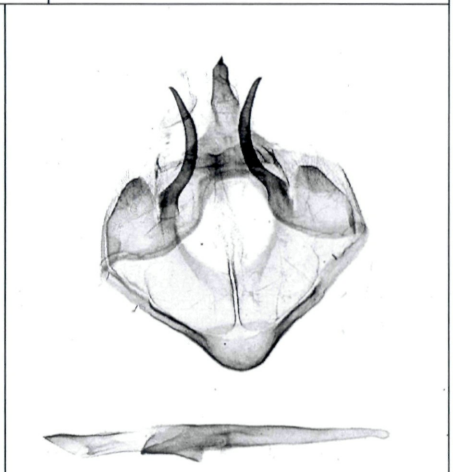

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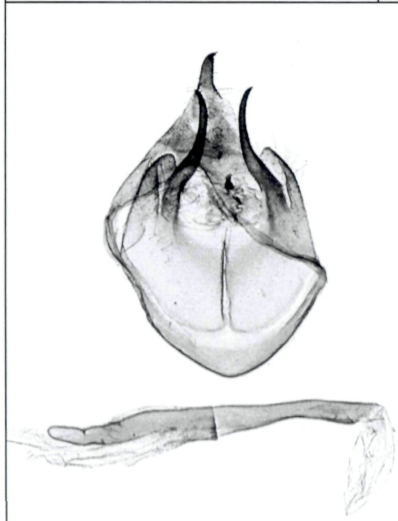

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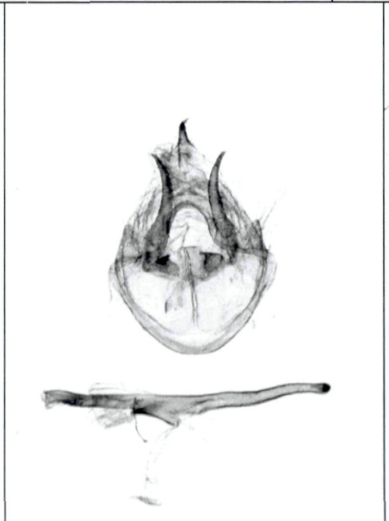

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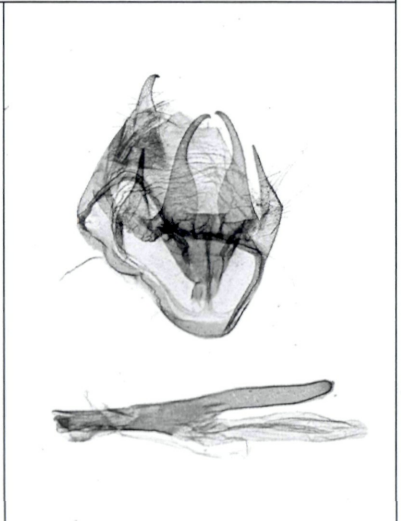

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**Figs. 898-907:** next page

**Fig. 898:** *Lymantria* (*Spinotria*) *haeuseri* **sp.n.**– ♂, Indonesia, Flores, GU 50-60, Paratype.
**Fig. 899:** *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933 – ♂, Japan, Honshu, GU 62-29.
**Fig. 900:** *Lymantria* (*Spinotria*) *grisescens grisescens* (STAUDINGER, 1887) – ♂, Russia, Primorye, GU 62-62.

**Fig. 901:** *Lymantria* (*Spinotria*) *grisescens goergneri* **ssp.n.** – ♂, China, Beijing, GU 20-75a, Paratype.
**Fig. 902:** *Lymantria* (*Spinotria*) *juglandis* CHAO, 1984 – ♂, China, Shaanxi, GU 09-19a.
**Fig. 903:** *Lymantria* (*Spinotria*) *strigata* AURIVILLIUS, 1894 – ♂, Indonesia, Sumatra, GU 09-01.

**Fig. 904:** *Lymantria* (*Spinotria*) *tagalica* AURIVILLIUS, 1894 – ♂, Philippinen, Luzon, GU 04-07a.
**Fig. 905:** *Lymantria* (*Spinotria*) *microstrigata* HOLLOWAY, 1999 – ♂, Borneo, GU BM # 2346, Paratype.
**Fig. 906:** *Lymantria* (*Spinotria*) *microstrigata* HOLLOWAY, 1999 – ♂, Indonesia, Sumatra, GU 05-100.
**Fig. 907:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, NW. India, Bhimtal, GU 11-73.

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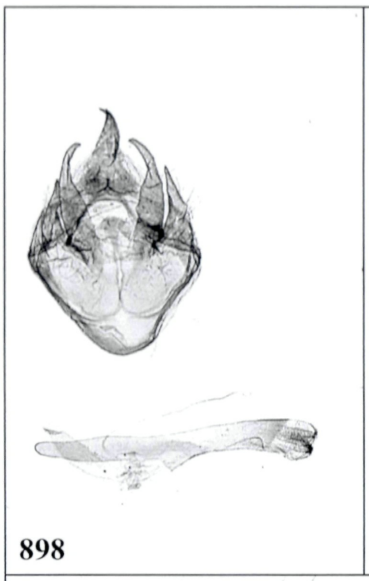

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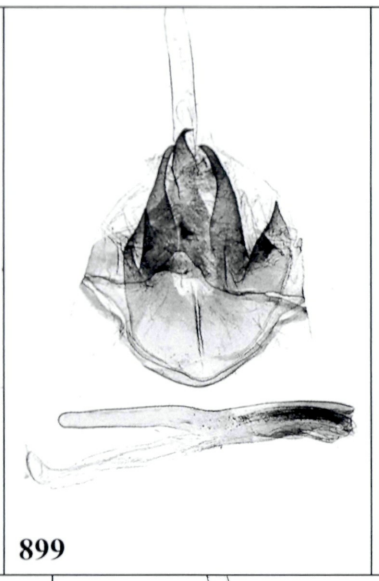

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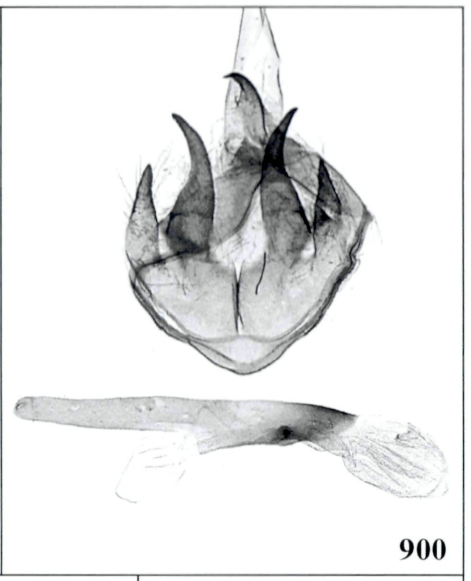

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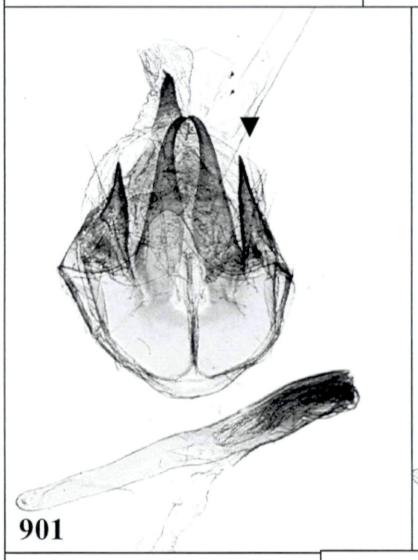

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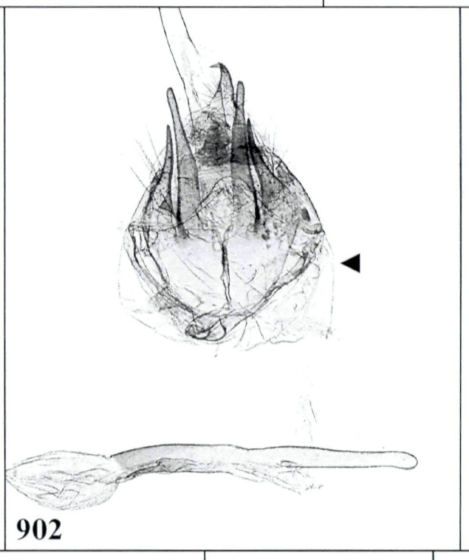

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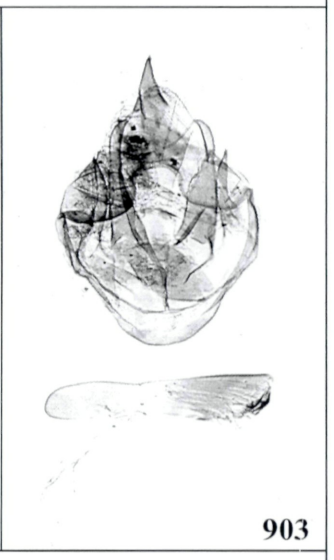

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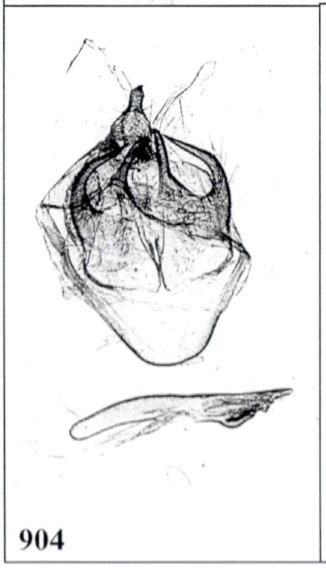

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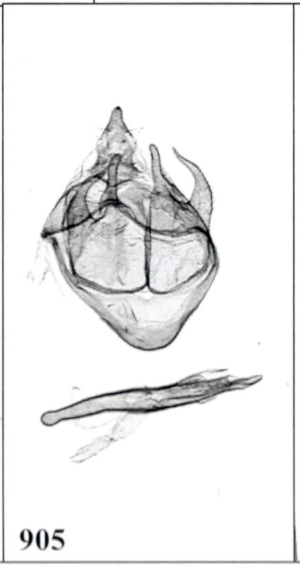

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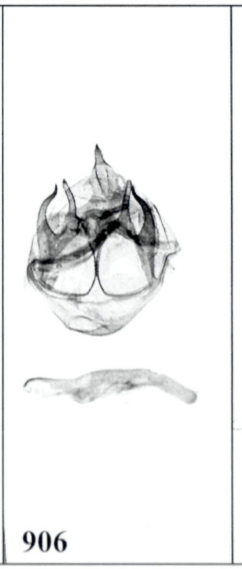

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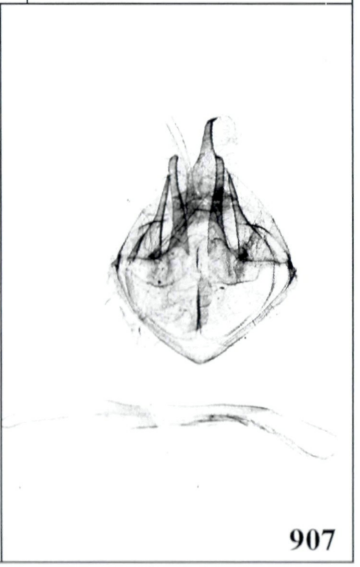

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**Figs. 908-917:** next page

**Fig. 908:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♂, S. China, 62-54 (Paratype of *Lymantria elassa* COLLENETTE, 1938).
**Fig. 909:** *Lymantria* (*Spinotria*) *hreblayi* **sp.n.** – ♂, N. Vietnam, GU 62-51, Paratype.
**Fig. 910:** *Lymantria* (*Spinotria*) *ihlei* **sp.n.** – ♂, N. Vietnam, GU 62-44, Holotype.

**Fig. 911:** *Lymantria* (*Spinotria*) *schnitzleri* **sp.n.** – ♂, Nepal, GU 62-69, Paratype.
**Fig. 912:** *Lymantria* (*Spinotria*) *sexspinae* HOLLOWAY, 1976 – ♂, Indonesia, Sumatra, GU 62-60.
**Fig. 912a:** *Lymantria* (*Spinotria*) *punicea* CHAO, 1984 – ♂, fig. 4 from CHAO (1994).
**Fig. 913:** *Lymantria* (*Spinotria*) *temburong* HOLLOWAY, 1999 – ♂, Brunei, BM # 2329, Holotype.

**Fig. 914:** *Lymantria* (*Spinotria*) *obsoleta obsoleta* WALKER, 1855 – ♀, Vietnam, W 9170.
**Fig. 915:** *Lymantria* (*Spinotria*) *tricolor* CHAO, 1984 – ♂, China, Hainan, GU 62-32.
**Fig. 916:** *Lymantria* (*Spinotria*) *swetlanae* **sp.n.**– ♂, India, Andaman Isl., GU 50-62, Paratype.
**Fig. 917:** *Lymantria* (*Spinotria*) *siniaevi* **sp.n.** – ♂, India, Andaman Isl., GU 09-02a, Paratype.


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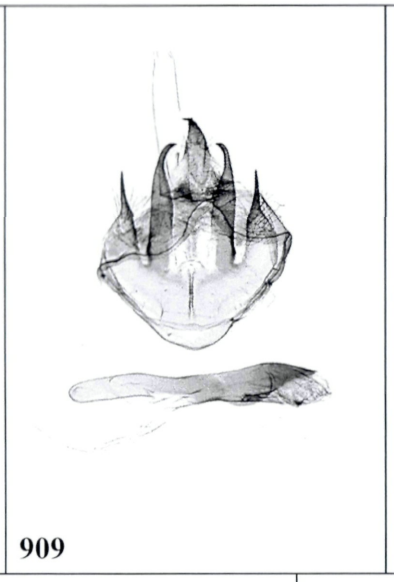
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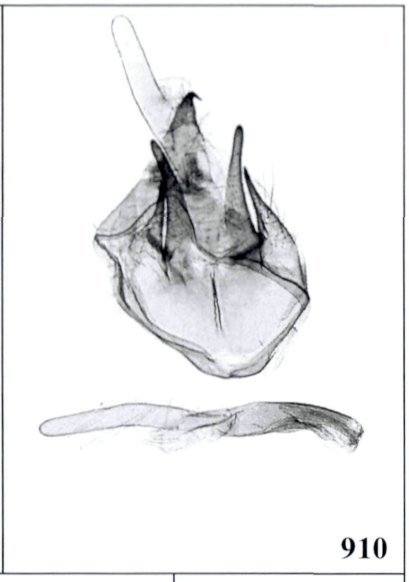
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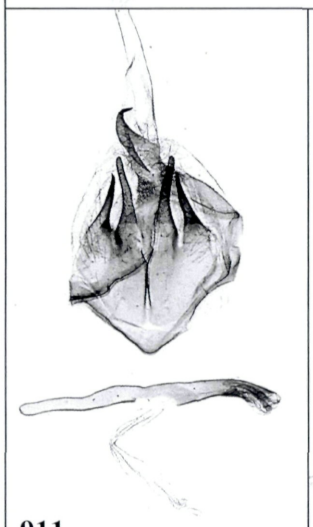
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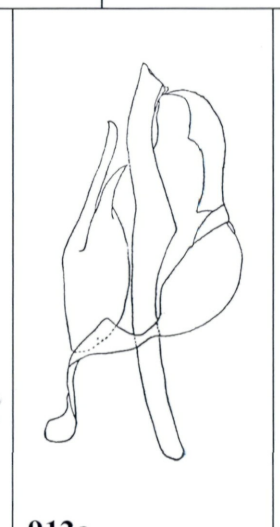
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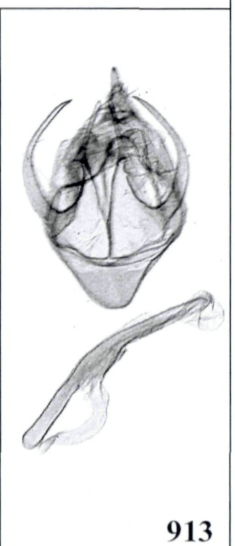
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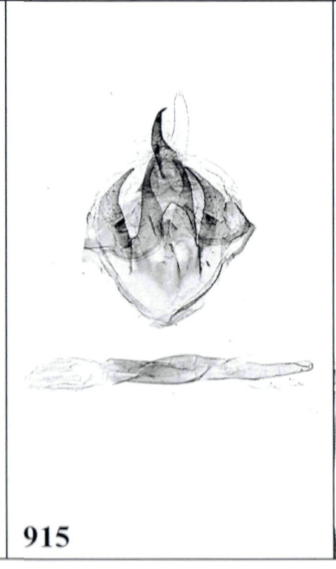
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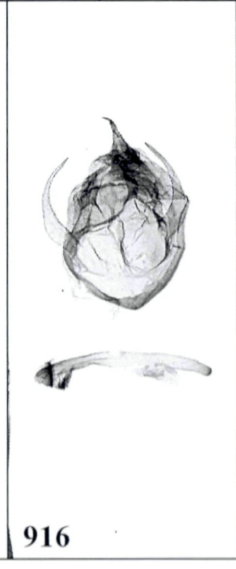
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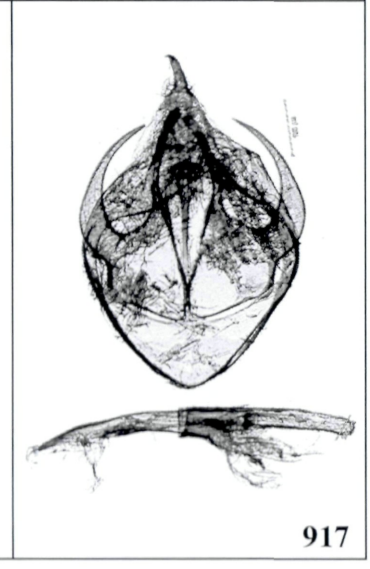
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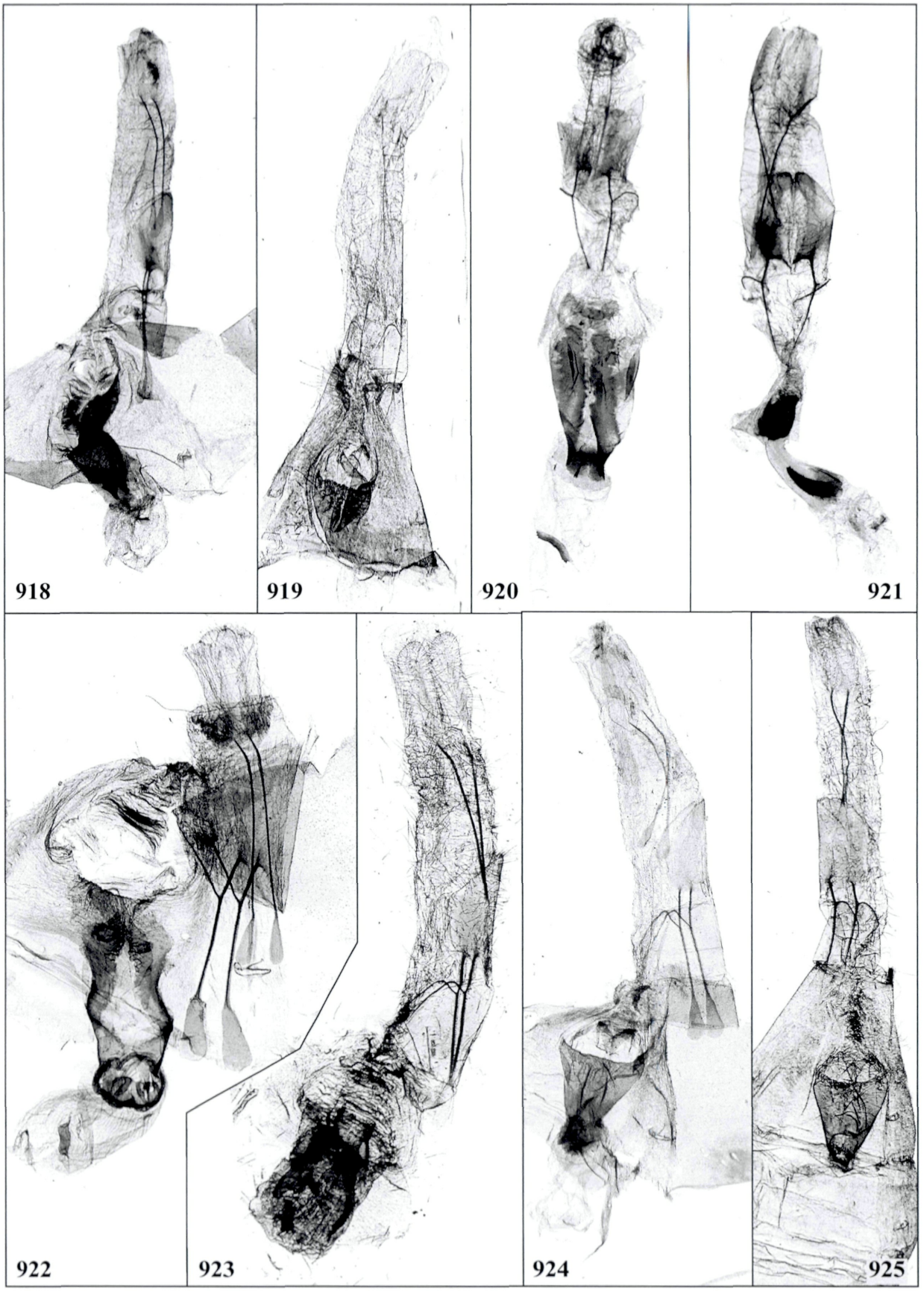
**Figs. 918-925:** next page

**Fig. 918:** *Lymantria* (*Spinotria*) *serva* (FABRICIUS, 1793) – ♀, NE. India, Darjeeling, GU 50-83.
**Fig. 919:** *Lymantria* (*Spinotria*) *rubea* SCHINTLMEISTER, 1989 – ♀, N. Myanmar, GU 60-24.
**Fig. 920:** *Lymantria* (*Spinotria*) *stueningi* **sp.n.** – ♀, NW Thailand, W 9165, Paratype.
**Fig. 921:** *Lymantria* (*Spinotria*) *minahassa* COLLENETTE, 1933 – ♀, Indonesia, Sulawesi, W 9159.

**Fig. 922:** *Lymantria* (*Spinotria*) *inordinata barisana* MOORE, 1879 – ♀, Indonesia, S. Kalimantan, GU 50-52.
**Fig. 923:** *Lymantria* (*Spinotria*) *liedgensi* **sp.n.** – ♀, China, Yunnan, GU 49-89, Paratype.
**Fig. 924:** *Lymantria* (*Spinotria*) *strigatoides* SCHINTLMEISTER, 1994 – ♀, Indonesia, Sumatra, GU 50-86, Paratype.
**Fig. 925:** *Lymantria* (*Spinotria*) *albolunulata* MOORE, 1879 – ♀, S. China, GU BM 36/2003 (Paratype of *Lymantria elassa* COLLENETTE, 1938).



## The subgenus *Sarantria* subgen.n.

### *Lymantria* (*Sarantria*) *sarantuja* SCHINTLMEISTER, 1994: 125, pl. 2: 7, 8 fig. 18

(Figs. 925a, 927, 928, 932, 960)

**Holotype:** Indonesia, North Sumatra, Sindar Raya – BMNH, London [examined].

**Taxonomy:** The species is characterized by the sharp black V-shaped discal and a more diffuse but prominent tornal spot on the forewings. There is also a fine basal streak. The females resemble the males except in size. The number of investigated specimens was n<25.

**Male genitalia** (Fig. 960): There is a long and straight process on the valve. The aedeagus shows a distinct shape. The uncus is longer than in *sublunata*.

**Distribution:** Restricted to Sumatra.

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**Figs. 927-955:** next page

**Fig. 927:** *Lymantria* (*Sarantria*) *sarantuja* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Holotype.
**Fig. 928:** *Lymantria* (*Sarantria*) *sarantuja* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, Paratype.
**Fig. 929:** *Lymantria* (*Sarantria*) *faircloughi* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Holotype.
**Fig. 930:** *Lymantria* (*Sarantria*) *faircloughi* HOLLOWAY, 1999 – ♂, Borneo, Brunei, Paratype.
**Fig. 931:** *Lymantria* (*Sarantria*) *faircloughi* HOLLOWAY, 1999 – ♂, Indonesia, Sumatra.
**Fig. 932:** *Lymantria* (*Sarantria*) *sarantuja* SCHINTLMEISTER, 1994 – ♀, Indonesia, Sumatra, Paratype.
**Fig. 933:** *Lymantria* (*Sarantria*) *faircloughi* HOLLOWAY, 1999 – ♀, Indonesia, Sumatra.
**Fig. 934:** *Lymantria* (*Sarantria*) *faircloughi* HOLLOWAY, 1999 – ♀, Borneo, Brunei, Paratype.
**Fig. 935:** *Lymantria* (*Sarantria*) *sublunata sublunata* (ROTHSCHILD, 1920) – ♂, Indonesia, Sumatra, Holotype.
**Fig. 936:** *Lymantria* (*Sarantria*) *sublunata sublunata* (ROTHSCHILD, 1920) – ♂, Indonesia, Sumatra.
**Fig. 937:** *Lymantria* (*Sarantria*) *sublunata thomasi* **ssp.n.** – ♂, NE. India, Sikkim, Holotype.
**Fig. 938:** *Lymantria* (*Sarantria*) *sublunata thomasi* **ssp.n.** – India, Andaman Isl., Paratype.
**Fig. 939:** *Lymantria* (*Sarantria*) *sublunata* (ROTHSCHILD, 1920) – ♂, Philippines, Palawan.
**Fig. 940:** *Lymantria* (*Sarantria*) *sublunata sublunata* (ROTHSCHILD, 1920) – ♀, Indonesia, Sumatra.
**Fig. 941:** *Lymantria* (*Sarantria*) *sublunata sublunata* (ROTHSCHILD, 1920) – ♀, Borneo, Brunei.
**Fig. 942:** *Lymantria* (*Sarantria*) *sublunata thomasi* **ssp.n.** – ♀, NE. India, Sikkim, Paratype.
**Fig. 943:** *Lymantria* (*Sarantria*) *sublunata* (ROTHSCHILD, 1920) – ♀, Philippines, Palawan.
**Fig. 944:** *Lymantria* (*Sarantria*) *kinta* COLLENETTE, 1932 – ♂, W. Malaysia, Holotype.
**Fig. 945:** *Lymantria* (*Sarantria*) *kinta* COLLENETTE, 1932 – ♂, Indonesia, Sumatra.
**Fig. 946:** *Lymantria* (*Sarantria*) *kinta* COLLENETTE, 1932 – ♂, Indonesia, Sumatra.
**Fig. 947** *Lymantria* (*Sarantria*) *mikkolai* **sp.n.** – ♂, Philippines, Mindanao, Holotype.
**Fig. 948:** *Lymantria* (*Sarantria*) *mikkolai* **sp.n.** – ♂, Philippines, Mindanao, Paratype.
**Fig. 949:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♂, Philippines, Luzon, Holotype.
**Fig. 950:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♂, Philippines, Luzon, Paratype.
**Fig. 951:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♂, Philippines, Negros, Paratype.
**Fig. 952:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♂, Philippines, Mindanao, Paratype.
**Fig. 953:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♀, Philippines, Mindoro, Paratype.
**Fig. 954:** *Lymantria* (*Sarantria*) *kinta* COLLENETTE, 1932 – ♀, Indonesia, Sumatra.
**Fig. 955:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♀, Philippines, Mindanao, Paratype.

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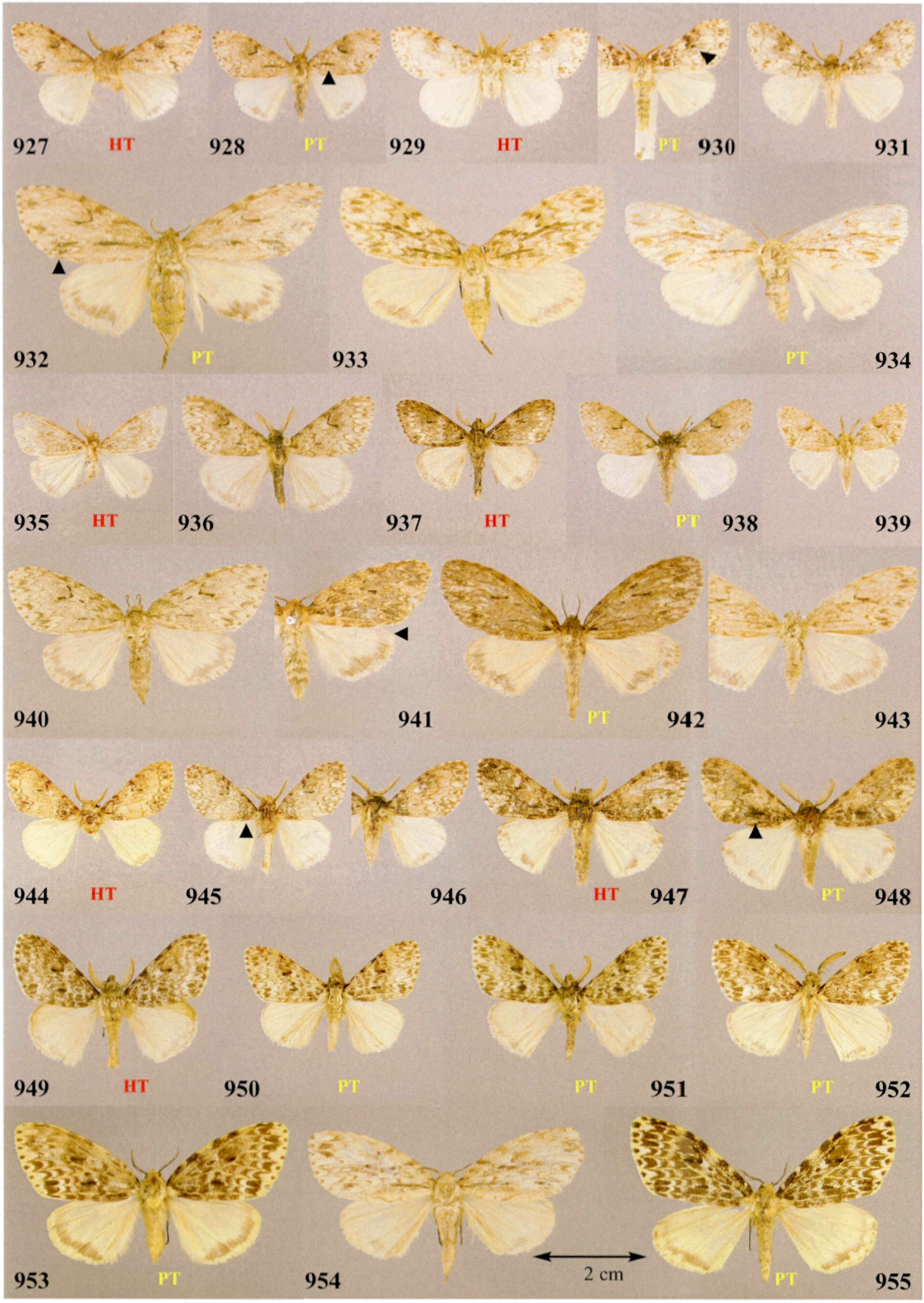


## *Lymantria* (*Sarantria*) *faircloughi* HOLLOWAY, 1999: 21, pl. 1, fig. 31

(Figs. 926, 929-931, 933, 934, 959)

**Holotype:** Brunei, Labi, (GU BM #2336) – BMNH, London [examined].

**Taxonomy:** The species is externally distinguishable by a paler and more yellowish ground colour. There is a whitish area near the V-shaped discal spot in the median and in the tornal area of the forewings. Only a few specimens (n=10) were studied.

**Male genitalia** (Fig. 959): The male genitalia are nearly identical with *sarantuja.* There are only slight differences to the male genitalia of *sarantuja,* e.g. a somewhat shorter uncus and rather straight valve processes.

## *Lymantria* (*Sarantria*) *sublunata* (ROTHSCHILD, 1920): 132 (*Dasychira*)

(Figs. 926, 935, 936, 939-941, 943, 958)

**Holotype:** [Indonesia] W. Sumatra, [Mt.] Korinchi, Sandaran Agong (GU BM #1975) – BMNH, London [examined].

**Taxonomy:** The following taxa are externally very similar. On the forewings characteristic are a brownish tornal spot on the submarginal fascia, a fuscous basal area and a reddish shine in fresh specimens. The abdomen is pinkish coloured. This distinguishes this complex from the other externally similar species including *barlowi.* The species individually varies in the reddish colour. There are specimens, particularly females, showing intensive reddish coloured hindwings.

**Male genitalia** (Fig. 958)**:** The male genitalia resemble those of *sarantuja.* The uncus and the valve process are shorter and the valves are somewhat incurved. The aedeagus is less curved at the tip than in *sarantuja.* A different subspecies occurs in Continental Asia:

## *Lymantria* (*Sarantria*) *sublunata thomasi* ssp.n.

(Figs. 926, 937, 938, 942, 957, 963)

**Holotype:** ♂, [NE India], Sikkim, Legship, 500m, 14.-28.vii.1990, leg. W. Thomas – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (17♂♂, 5♀♀): NE India: 1♀, Legship, 500m, 14.-28.vii.1990 (GU 11-94a); 1♀, ibid, 600m, 26.-31.vii.1989; 1♂, WB, Darjeeling, Pashok, 4.vii.1986 (GU 05-08a); 1♀, Darjeeling, Manjitar, 650m, 30.vi.1987; 2♀♀, Sukna, 300m, 2.viii.1990; 1♂, W. Meghalaya, Umran, 33km N Shillong, 800m, 26°05'N, 92°23'E, 14.-23.vii.1997; Thailand: 2♂♂, Uthai Thani, Khan Nong, 18.i.1986; 1♂, Prov. Chiang Rai, Doi Tung, 1233m, 20°20'N, 99°48'E, 4.x.2001 (GU 62-52); 2♂♂, Prov. Chiang Mai, Between Chiang Dao and Karlang, 900m, 98°48'E, 19°25'N, 26.x.2002; 1 ♂♀, Changwat Nan, 5km E of Bo Luang, 610m, 23.XI.1998; 1 ♂, Thailand, Changwat Chiang Mai, 4km W of Pa Pae, 1050m, 28.XI.1998; Andaman Isl.: 4♂♂, North Andaman, Mayabunder 6km S Karmatang, 12°50'61"N, 92°56'06"E, 17.-21.xi.2000 (GU 05-43a); 1♂, 1,5km E Karmatang, 12°50'72"N, 92°56'10"E, 17.-22. viii.2001; 1♂, Baratang Isl., 21.-22.iii.1998; 1♂, Little Andaman, Huck Bay, Quarry Hilus, 10°35'52"N, 93°30'16"N, 26.-27.viii.2001; 1♂, South Andaman, Wandoor, Port Blair, 1.-2.iii.1998.

**Diagnosis:** Forewing length ♂♂ 14-16 mm, ♀♀ 23-24 mm. This subspecies is externally very similar to the nominotypical form from Sundaland. However, it seems that generally *thomasi* ssp.n. is somewhat more fuscous and shows less developed pattern on the forewings. The main differences are in the male genitalia.

**Male genitalia** (Fig. 963): The male genitalia differ from ssp. *sublunata* by having broader valve processes. The tegumen is generally shorter and also the valve processes are shorter compared to *sublunata.*

**Further remarks:** There are a few specimens (n=6) from Palawan, which are smaller and paler in ground colour, compared to specimens from Sundaland. The male genitalia are with much shorter processes than in *sublunata.* This population should be described, if more material in a better condition will be available.

*Lymantria sublunata thomasi* ssp.n. was found hitherto only in Thailand, Sikkim, Meghalaya and the Andaman Isl.

**Etymology:** Named after the collector of the holotype specimen, the late Werner Thomas, who supported me for many years with valuable material particularly originating from Sikkim and Ladakh.

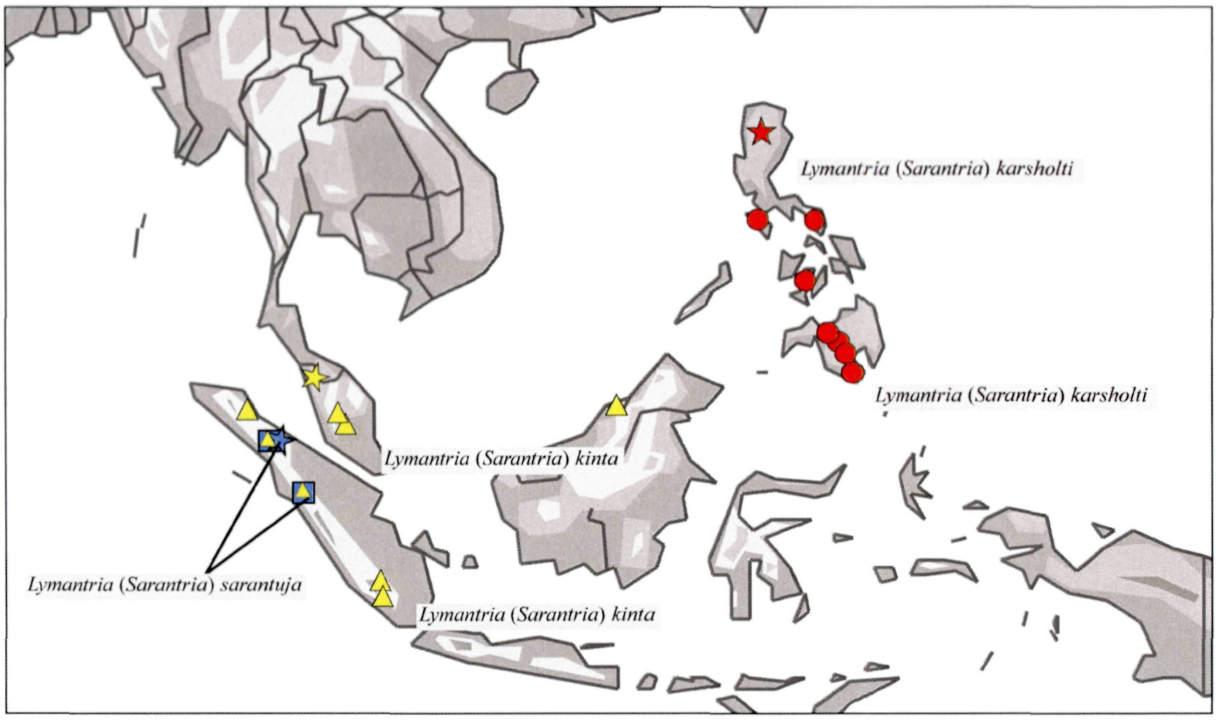



**Fig. 925a:** Distribution of the subgenus *Sarantria*.

## *Lymantria* (*Sarantria*) *kinta* COLLENETTE, 1932: 97, pl. 1: 7

(Figs. 925a, 944-946, 954, 966)

**Holotype:** [W. Malaysia], S. Perak, Kinta valley, (GU BM #2339) – BMNH, London [examined].

**Taxonomy:** The well marked blackish basal area on the forewings is characteristic for *kinta*. The hindwings are pale brownish with weakly developed fuscous submarginal band.

**Male genitalia** (Fig. 966): The male genitalia are very similar to *sublunata* but the valve process is thicker and shorter, the tegumen broader and shorter. Due to this, the valve process nearly reaches the tip of the uncus. The aedeagus rather resembles *sarantuja* than *sublunata*.

## *Lymantria* (*Sarantria*) *mikkolai* sp.n.

(Figs. 926, 947, 948, 965)

**Holotype:** ♂, Philippine, Mindanao, Bukidnon, 40km NW Maramag, Dalongdong, 800m, Talakag, 7°53'N, 124°40'E, 1.-3.x.1988, leg. Cerny & Schintlmeister – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (6♂♂): Mindanao: 5♂♂, 40km NW Maramag, Dalongdong, 800m, Talakag, 7°53'N, 124°40'E, 1.-3.x.1988 (GU 20-76); 1♂, ibid, 40km NW Maramag, mt. Binansilang, 1200m, 7°55'N, 124°40'E, 2.x.1988 (GU 62-72).

**Diagnosis**: Forewing length ♂♂ 18-19 mm. Larger than the other similar species of this group. The ground colour of the forewings is a blackish brown with black pattern. The discal spot is weakly developed. There is a larger blackish spot in the median area near the dorsum. The postmedian area near the tornus of the forewings is filled with a pale brownish colour. The underside of all wings is pale brownish.

**Male genitalia** (Fig. 965): The male genitalia are distinct by the shape of the valve processes, which is unique in this group. The aedeagus is thick and relatively short.

**Etymology:** Dedicated to Kauri Mikkola, Helsinki.

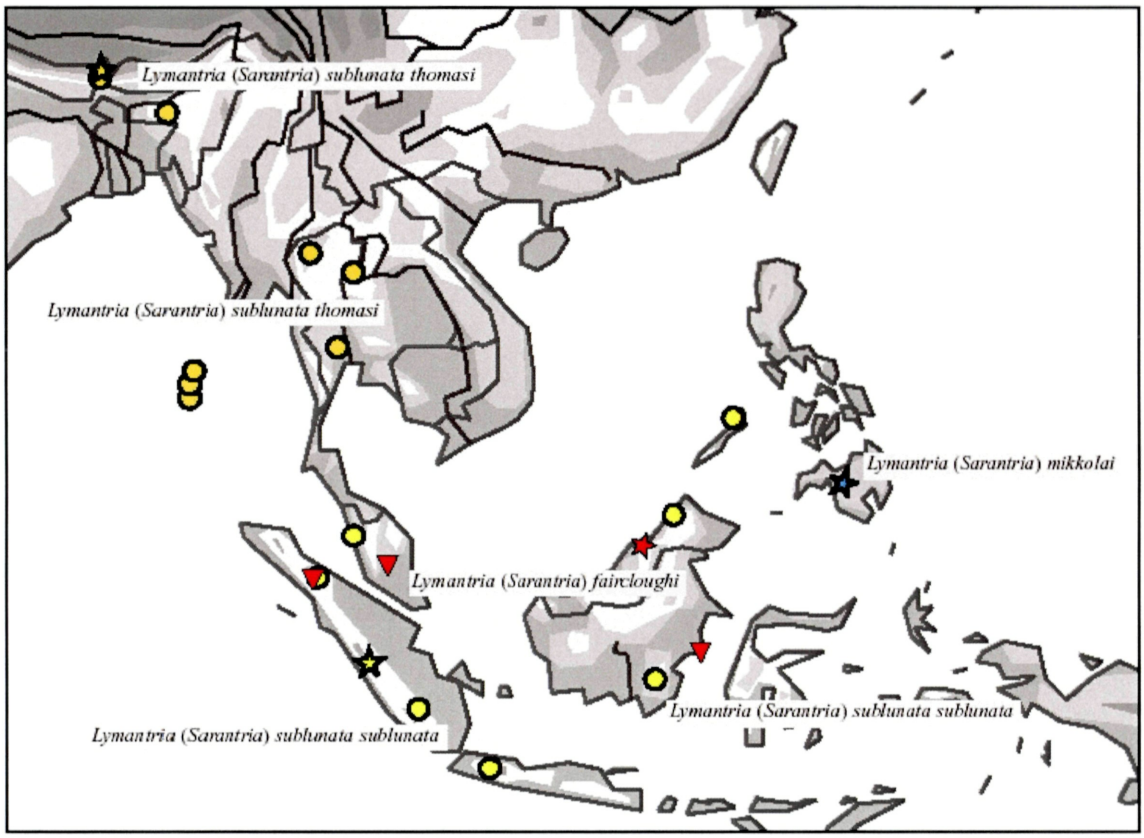


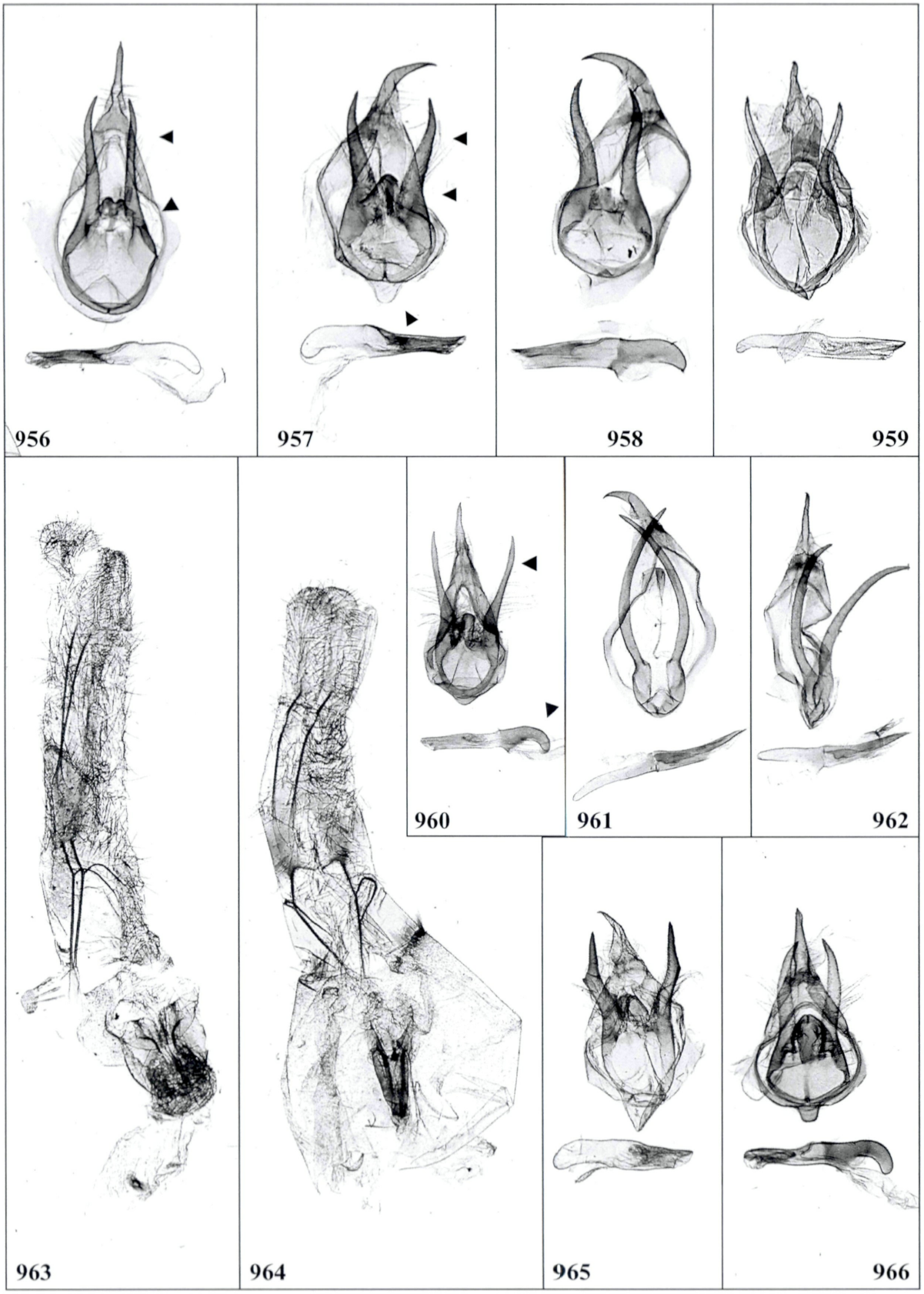

**Fig. 926:** Distribution of the subgenus *Sarantria.*

**Figs. 956-966:** next page

**Fig. 956:** *Lymantria* (*Sarantria*) *sublunata sublunata* (ROTHSCHILD, 1920) – ♂, Indonesia, Sumatra, GU BM #1936, Holotype.
**Fig. 957:** *Lymantria* (*Sarantria*) *sublunata thomasi* **ssp.n.** – ♂, Thailand, GU 60-52, Paratype.
**Fig. 958:** *Lymantria* (*Sarantria*) *sublunata* (ROTHSCHILD, 1920) – ♂, Philippines, Palawan, GU 62-57.
**Fig. 959:** *Lymantria* (*Sarantria*) *faircloughi* HOLLOWAY, 1999– ♂, Indonesia, Sumatra, GU 60-63.

**Fig. 960:** *Lymantria* (*Sarantria*) *sarantuja* SCHINTLMEISTER, 1994 – ♂, Indonesia, Sumatra, GU BM #2340, Holotype.
**Fig. 961:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♂, Philippines, Luzon, GU 62-55, Paratype.
**Fig. 962:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♂, Philippines, Mindanao, GU 62-74, Paratype.

**Fig. 963:** *Lymantria* (*Sarantria*) *sublunata thomasi* **ssp.n.** – ♀, NE India, Sikkim, GU 11-94a, Paratype.
**Fig. 964:** *Lymantria* (*Sarantria*) *karsholti* **sp.n.** – ♀, Philippines, Mindoro, GU 49-93, Paratype.
**Fig. 965:** *Lymantria* (*Sarantria*) *mikkolai* **sp.n.** – ♂, Philippines, Mindanao, GU 20-76a, Paratype.
**Fig. 966:** *Lymantria* (*Sarantria*) *kinta* COLLENETTE, 1932 – ♂, W. Malaysia, GU BM # 2239, Holotype.



### *Lymantria* (*Sarantria*) *karsholti* sp.n.

(Figs. 925a, 949-953, 955, 961, 962, 964)

**Holotype:** ♂, Philippines, Luzon, Ifugao Prov., Banaue, 1200m, 20km N Lagawe, 16°54'N, 121°05'E, 8.-11.ii.1988, leg. Cerny & Schintlmeister – in coll. A. Schintlmeister, Dresden.
**Paratypes:** (57♂♂, 19♀♀): Luzon: 7♂♂, Banaue, 1200m, 20km N Lagawe, 16°54'N, 121°05'E, 8.-11.ii.1988 (GU 50-78); 1♂, S. Luzon, Mt. Banoy, ix.2001; Mindoro: 3♀♀, Mt. Halcon, 1000m, iv. 2001; Leyte: 2♂♂, 1♀, Mt. Balocaue near Mahaplag, 700m, vii.1999; Negros: 1♂, 2♀♀, Mt. Kanlaon, W. Route via Mabucal, 1010m, 17.-18.vii.1996 (GU 62-56); 1♂, ibid, 600m, i.1997; Mindanao: 10♂♂, 2♀♀, 40km NW Maramag, Dalongdong, 800m, Talakag, 7°53'N, 124°40'E, 1.-3.x.1988 (GU 50-77, 50-80, 62-58, 62-74); 9♂♂, 1♀, 40km NW Maramag, Mt. Binansilang, 1200m, 7°55'N, 124°40'E, 2.x.1988 (GU 50-81); 1♂, ibid, Dalongdong, iv.2000.; 5♂♂, ibid, Mt. Dalongdong,Talakag, 1200m, 1.-21.v.1999; 4♂♂, 1♀, ibid, 25.ix.-5.x.2000; 2♂♂, 2♀♀, Bukidnon, Mt. Kitanglad, S. Seite, Intava, 700m, 15.viii.-15.ix.1993, 8°07N, 124°55'E; 3♂♂, ibid, 2400m, 4.viii.1993; 6♂♂, 3♀♀, Davao del Sur, Mt. Apo, SE Route via Kapatagan, 1570m, 10.-12.vii.1996; 2♂♂, 1♀, Mt. Apo, W-Flanke, 1200m, 6°57'N, 125°16'E, 28.-30.vii.1993; 2♀♀, Davao del Norte, Mt. Caragan, vii.1998; 1♀, Prov. Sumangani, Mt. Busa, near Kainba, 700m, xii.1998.

**Diagnosis:** Forewing length ♂♂ 13-20 mm, Ø 18-20 mm, ♀♀ 25-29 mm. The ground colour of the forewings is a violet-brown with diffuse yellow markings, which are in the females prominent and contrasting. The underside of all wings is pale brownish.

**Male genitalia** (Figs. 962, 964): The male genitalia are unique by the shape of the valves, which are shaped like a very long tapered spine.

**Further remarks:** There are a few smaller specimens from Mindanao (n=3, 2GU), which show a less developed brown pattern. The male genitalia are virtually identical compared to the other dissected genitalia (6 GU) except in their size which is approximately 10-20% smaller (in proportion). Such differences in the size of the male genitalia are as far as I know hitherto unknown in Lymantriidae.

**Etymology:** Named after Ole Karsholt, Copenhagen, who gave me access to the material in the collection he curates, including the important Fabricius type-specimen of *Bombyx serva* for this paper.

## The subgenus *Griveaudtria* subgen.n.

### *Lymantria* (*Griveaudtria*) *polycyma* COLLENETTE, 1936: 167, pl. 12: 41

(Figs. 967, 968, 1012)

**Holotype:** Madagascar, Perinet [149km E Tananarivo] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 154).
**Distribution:** Restricted to Madagascar.

### *Lymantria* (*Griveaudtria*) *castanea* (KENRICK, 1914): 593, pl. 32: 30 (*Dasychira*)

(Figs. 969, 970, 1013, 1014)

**Holotype:** Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 120).
**Distribution:** Restricted to Madagascar.

### *Lymantria* (*Griveaudtria*) *oinoa* COLLENETTE, 1956: 172, pl. 3: 10

(Figs. 971, 1015)

**Holotype:** E. Madagascar, Perinet – MNHN, Paris [examined].

**Literature:** GRIVEAUD (1977: 140).
**Distribution:** Restricted to Madagascar.

## *Lymantria* (*Griveaudtria*) *lamda* COLLENETTE, 1936: 167, pl. 12: 33

(Figs. 972, 1016, 1017)

**Holotype:** Madagascar, Perinet [149km E Tananarivo] – BMNH, London [not examined].

**Literature:** GRIVEAUD (1977: 140).
**Distribution:** Restricted to Madagascar.

## *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914): 597, pl. 32: 21 (*Dasychira*)

(Figs. 973-976, 1019-1021)

**Lectotype:** Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 156).
**Taxonomic note:** A lectotype was designated by GRIVEAUD (1977: 156). I do not know any further type-specimens of *malgassica* and the designation of a lectotype by GRIVEAUD (1977) might be therefore not valid.
**Distribution:** Restricted to Madagascar.

## *Lymantria* (*Griveaudtria*) *brunneata* (KENRICK, 1914): 594, pl. 32: 25 (*Dasychira*)

(Figs. 977, 978, 1018)

**Holotype:** Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 113).
**Distribution:** Restricted to Madagascar.

## *Lymantria* (*Griveaudtria*) *binotata* (MABILLE, 1880): p. CVII (*Liparis*)

(Figs. 981, 982)

**Holotype:** Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Synonym:** *Liparis atala* SWINHOE, 1923: 425 (unnecessary replacement name for *Liparis binotata* MABILLE, 1880 nec BUTLER, 1886).

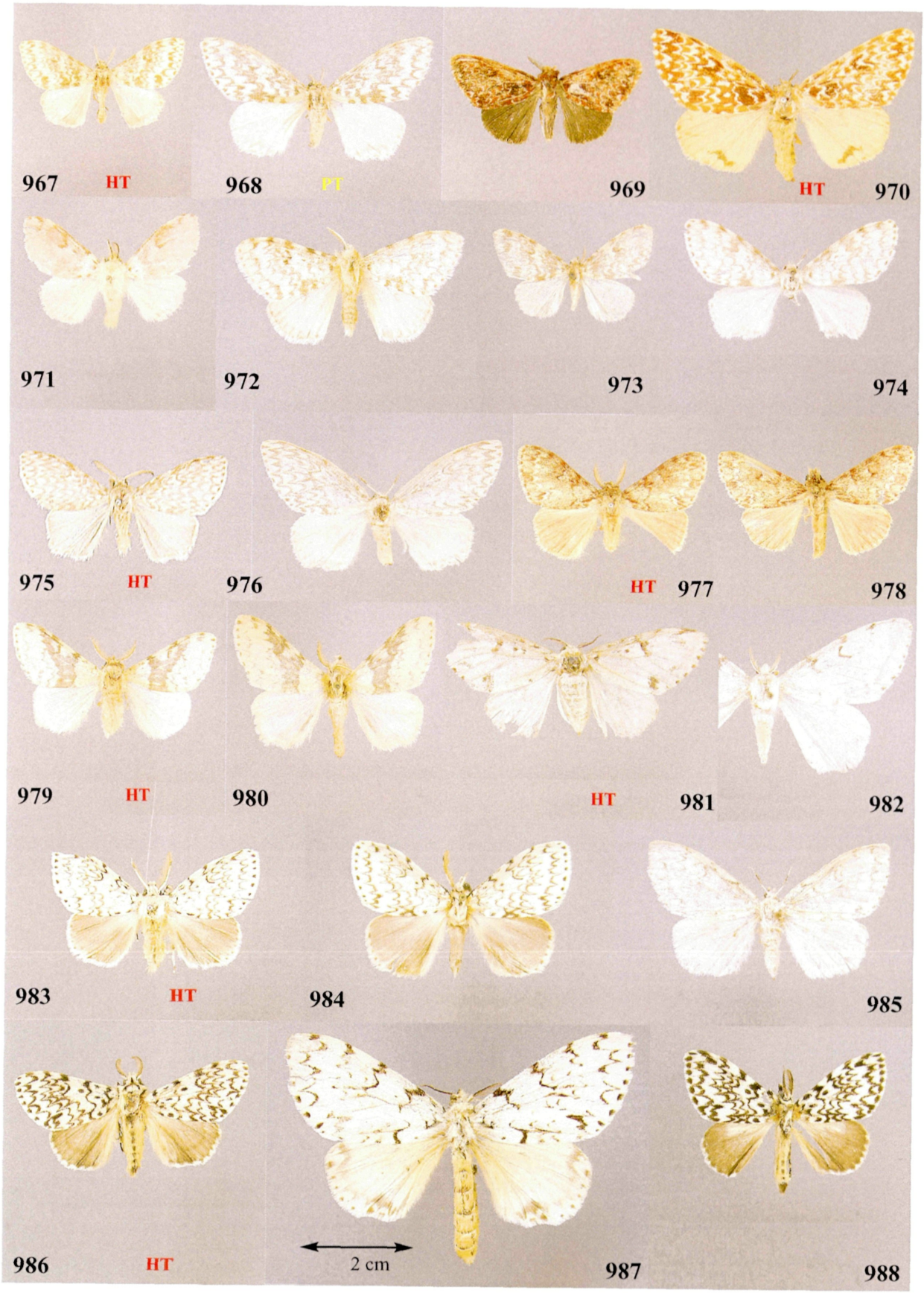
**Literature:** GRIVEAUD (1977: 111).
**Distribution:** Restricted to Madagascar.

## *Lymantria* (*Griveaudtria*) *griseostriata* (KENRICK, 1914): 599, pl. 32: 25 (*Euproctis*) stat.rev.

(Figs. 979, 980)

**Holotype:** Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 111) (as synonym of *Liparis binotata*).
**Taxonomic note:** GRIVEAUD (1977: 111) brought *L. binotata* (holotype female) and *griseostriata* (holotype male) into synonymy. I examined both types and found, that both are not belonging to the same species. The probable male of *binotata* (illustrated here as Fig. 982) resembles much more the holotype female than *griseostriata*.
**Distribution:** Restricted to Madagascar.



### *Lymantria* (*Griveaudtria*) *rusticana* HERING, 1927: 193, pl. 25e

(Fig. 993)

**Holotype:** Madagascar Diego Suarez – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 144).
**Distribution:** Restricted to Madagascar.

### *Lymantria* (*Griveaudtria*) *dubia* (KENRICK, 1914): 595, pl. 32: 23 (*Dasychira*)

(Figs. 983-985, 1022)

**Holotype:** Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 146).
**Distribution:** Restricted to Madagascar.

### *Lymantria* (*Griveaudtria*) *lineata* (GRIVEAUD, 1977): 134, figs. 168, 169 (*Lymantica*) comb.n.

**Holotype:** Madagascar Sambirano, massiif du Tsaratanana (versant Sud), Andohanaambatoafo – MNHN, Paris [examined].

**Taxonomic note:** Known only from the holotype female.
**Distribution:** Restricted to Madagascar.

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**Figs. 967-988:** previous page

**Fig. 967:** *Lymantria* (*Griveaudtria*) *polycyma* COLLENETTE, 1936 – ♂, Madagascar, Holotype.
**Fig. 968:** *Lymantria* (*Griveaudtria*) *polycyma* COLLENETTE, 1936 – ♀, Madagascar, Paratype.
**Fig. 969:***Lymantria* (*Griveaudtria*) *castanea* (KENRICK, 1914) – ♂, Madagascar.
**Fig. 970:** *Lymantria* (*Griveaudtria*) *castanea* (KENRICK, 1914) – ♀, Madagascar, Holotype.
**Fig. 971:** *Lymantria* (*Griveaudtria*) *oinoa* COLLENETTE, 1956 – ♂, Madagascar.
**Fig. 972:** *Lymantria* (*Griveaudtria*) *lamda* COLLENETTE, 1936 – ♂, Madagascar.
**Fig. 973:** *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914) – ♂, Madagascar.
**Fig. 974:** *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914) – ♀, Madagascar.
**Fig. 975:** *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914) – ♂, Madagascar, Holotype.
**Fig. 976:** *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914) – ♀, Madagascar, "Neallotype".
**Fig. 977:** *Lymantria* (*Griveaudtria*) *brunneata* (KENRICK, 1914) – ♂, Madagascar, Holotype.
**Fig. 978:** *Lymantria* (*Griveaudtria*) *brunneata* (KENRICK, 1914) – ♂, Madagascar.
**Fig. 979:** *Lymantria* (*Griveaudtria*) *griseostriata* (KENRICK, 1914) – ♂, Madagascar, Holotype.
**Fig. 980:** *Lymantria* (*Griveaudtria*) *griseostriata* (KENRICK, 1914) – ♂, Madagascar.
**Fig. 981:** *Lymantria* (*Griveaudtria*) *binotata* (MABILLE, 1880) – ♀, Madagascar, Holotype.
**Fig. 982:** *Lymantria* (*Griveaudtria*) *binotata* (MABILLE, 1880) – ♂, Madagascar.
**Fig. 983:** *Lymantria* (*Griveaudtria*) *dubia* (KENRICK, 1914) – ♂, Madagascar, Holotype.
**Fig. 984:** *Lymantria* (*Griveaudtria*) *dubia* (KENRICK, 1914) – ♂, Madagascar.
**Fig. 985:** *Lymantria* (*Griveaudtria*) *dubia* (KENRICK, 1914) – ♀, Madagascar.
**Fig. 986:** *Lymantria* (*Griveaudtria*) *polysticta* COLLENETTE, 1929 – ♂, Madagascar, Holotype.
**Fig. 987:** *Lymantria* (*Griveaudtria*) *polysticta* COLLENETTE, 1929 – ♀, Madagascar, "Neallotype".
**Fig. 988:** *Lymantria* (*Griveaudtria*) *polysticta* COLLENETTE, 1929 – ♂, Madagascar.

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## *Lymantria (Griveaudtria) polysticta* COLLENETTE, 1929: 278

(Figs. 986-988, 1023, 1026)

**Holotype:** Central Madagascar, [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 149).
**Distribution:** Restricted to Madagascar.

## *Lymantria (Griveaudtria) dulcinea* BUTLER, 1882: 12

(Figs. 995, 996, 1024)

**Holotype:** Central Madagascar, [Perinet, d'Analamazaotra] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 152).
**Synonym:**
*Dasychira didymata* KENRICK, 1914: 593, pl. 32: 24.
Holotype: Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London.

**Taxonomic note:** GRIVEAUD (1977: 152) designated for *Lymantria dulcinea* and *Dasychira didymata* lectotypes. According to the original descriptions and the material examined in BMNH both taxa are basing on single types, which become automatically holotypes. The designation of lectotypes is therefore not valid in this case.
**Distribution:** Restricted to Madagascar.

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**Figs. 989-1006:** next page

**Fig. 989:** *Lymantria* (*Griveaudtria*) *rosea* BUTLER, 1879 – ♂, Madagascar, Holotype.
**Fig. 990:** *Lymantria* (*Griveaudtria*) *rosea* BUTLER, 1879 – ♂, Madagascar (Holotype of *Dasychira rufotincta* KENRICK, 1914).
**Fig. 991:** *Lymantria* (*Griveaudtria*) *rosea* BUTLER, 1879 – ♀, Madagascar.
**Fig. 992:** *Lymantria* (*Griveaudtria*) *rosea* BUTLER, 1879 – ♂, Madagascar.

**Fig. 993:** *Lymantria* (*Griveaudtria*) *rusticana* HERING, 1927 – ♂, Madagascar, Holotype.
**Fig. 994:** *Lymantria* (*Griveaudtria*) *vacillans* WALKER, 1855 – ♂, Congo, Holotype.
**Fig. 995:** *Lymantria* (*Griveaudtria*) *dulcinea* BUTLER, 1882 – ♂, Madagascar (Holotype of *Dasychira didymata* KENRICK, 1914).
**Fig. 996:** *Lymantria* (*Griveaudtria*) *dulcinea* BUTLER, 1882 – ♀, Madagascar, Holotype.

**Fig. 997:** *Lymantria* (*Griveaudtria*) *leucerythra,* COLLENETTE, 1930 – ♀, Malawi, Paratype.
**Fig. 998:** *Lymantria* (*Griveaudtria*) *rubroviridis* HERING, 1927 – ♀, Zaire.
**Fig. 999:** *Lymantria* (*Griveaudtria*) *microcyma* COLLENETTE, 1937 – ♂, Congo.

**Fig. 1000:** *Lymantria* (*Griveaudtria*) *microcyma* COLLENETTE, 1937 – ♂, Kenya, Holotype.
**Fig. 1001:** *Lymantria* (*Griveaudtria*) *leucerythra* COLLENETTE, 1930 – ♂, Malawi, Holotype.
**Fig. 1002:** *Lymantria* (*Griveaudtria*) *vacillans* WALKER, 1855 – ♀, Cameroon.
**Fig. 1003:** *Lymantria* (*Griveaudtria*) *vacillans* WALKER, 1855 – ♂, Cameroon.

**Fig. 1004:** *Lymantria* (*Griveaudtria*) *rubroviridis* HERING, 1927 – ♂, Congo.
**Fig. 1005:** *Lymantria* (*Griveaudtria*) *joannisi* LE CERF, 1921 – ♂, Madagascar.
**Fig. 1006:** *Lymantria* (*Griveaudtria*) *joannisi* LE CERF, 1921 – ♀, Madagascar.

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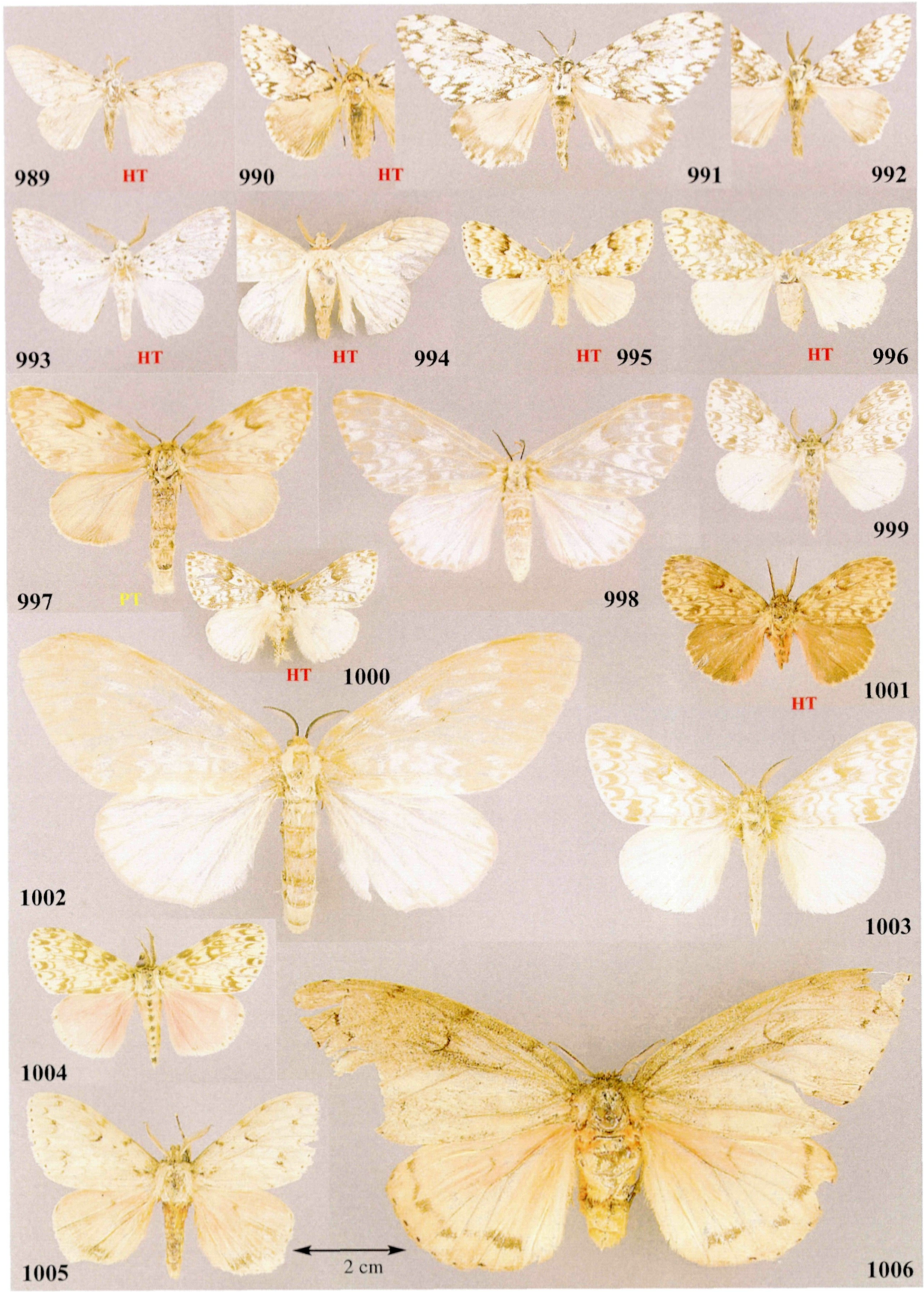

## *Lymantria* (*Griveaudtria*) *rosea* BUTLER, 1879: 239

(Figs. 989-992, 1025)

**Holotype:** Madag[ascar, Fianarantsoa] – BMNH, London [examined].

**Literature:** GRIVEAUD (1977: 136).
**Synonym:**
*Dasychira rufotincta* KENRICK, 1914: 593, pl. 32: 33.
Holotype: Central Madagascar [Perinet, d'Analamazaotra] – BMNH, London.

**Taxonomic note:** GRIVEAUD (1977: 152) designated for *Lymantria rosea* and *Dasychira rufotincta* lectotypes. According to the original descriptions and the material examined in BMNH both taxa are basing on single types, which become automatically holotypes. The designation of lectotypes is therefore not valid in this case.
**Distribution:** Restricted to Madagascar.

## *Lymantria* (*Griveaudtria*) *russula* COLLENETTE, 1933: 23, pl. 3: 14

(Fig. 1027)

**Holotype:** Madagascar, Diego-Suarez – BMNH, London [not examined].

**Literature:** GRIVEAUD (1977: 158).
**Distribution:** Restricted to Madagascar.

## *Lymantria* (*Griveaudtria*) *joannisi* LE CERF, 1921: 423

(Figs. 1005, 1006, 1028, 1031)

**Holotype:** Madagascar – MNHN, Paris [not examined].

**Literature:** GRIVEAUD (1977: 106).
**Distribution:** Restricted to Madagascar.

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**Figs. 1007-1014:** next page

**Fig. 1007:** *Lymantria* (*Pyramocera*) *barica* (MABILLE, 1879) – ♂, Madagascar (Holotype of *Pyramocera fuliginea* BUTLER, 1880).
**Fig. 1008:** *Lymantria flavicilia* HAMPSON, 1910 – ♂, Congo.
**Fig. 1009:** *Lymantria flavicilia* HAMPSON, 1910 – ♀, Congo.

**Fig. 1010:** *Lymantria* (*Pyramocera*) *barica* (MABILLE, 1879) – ♂, Madagascar (Lectotype of *Lymantria fumosa* SAALMÜLLER, 1884).
**Fig. 1011:** *Lymantria* (*Pyramocera*) *barica* (MABILLE, 1879) – ♀, Madagascar.

**Fig. 1012:** *Lymantria* (*Griveaudtria*) *polycyma* COLLENETTE, 1936 – ♂, Genitalia from GRIVEAUD (1977: fig. 201) Madagascar.
**Fig. 1013:** *Lymantria* (*Griveaudtria*) *castanea* (KENRICK, 1914) – ♂, Genitalia from GRIVEAUD (1977: fig. 150) Madagascar.
**Fig. 1014:** *Lymantria* (*Griveaudtria*) *castanea* (KENRICK, 1914) – ♀, Genitalia from GRIVEAUD (1977: fig. 179) Madagascar.

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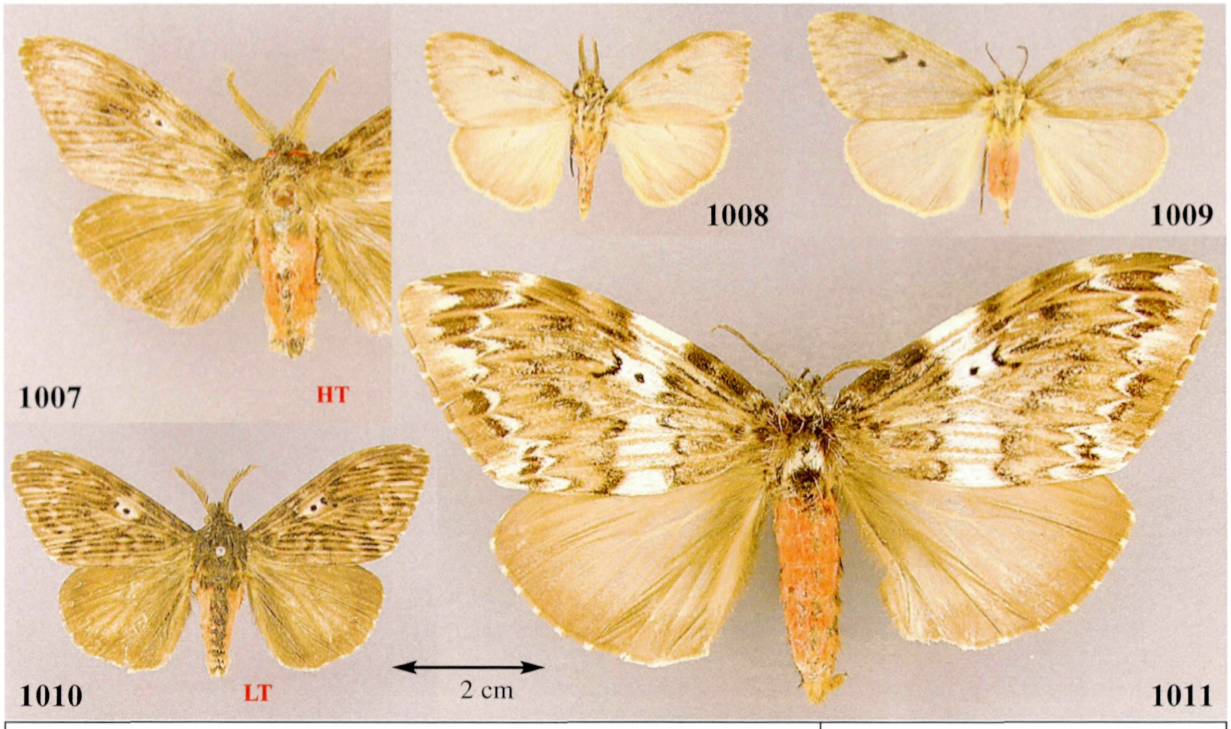


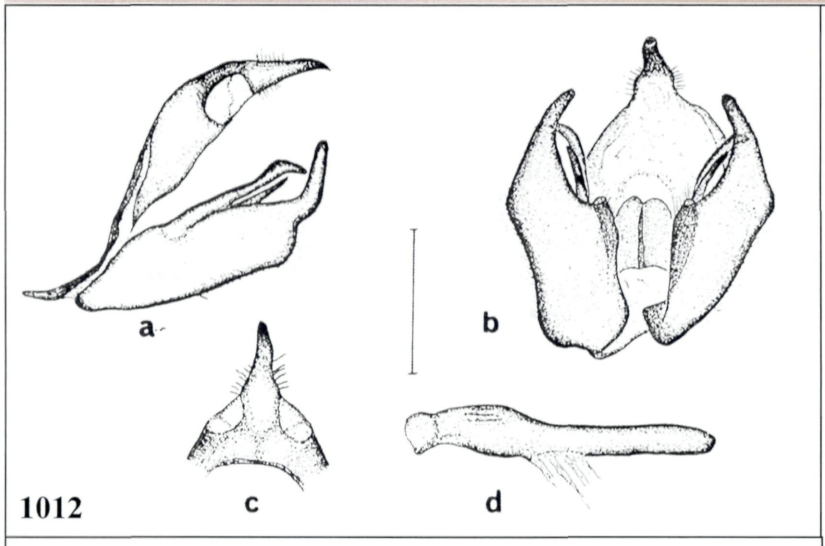


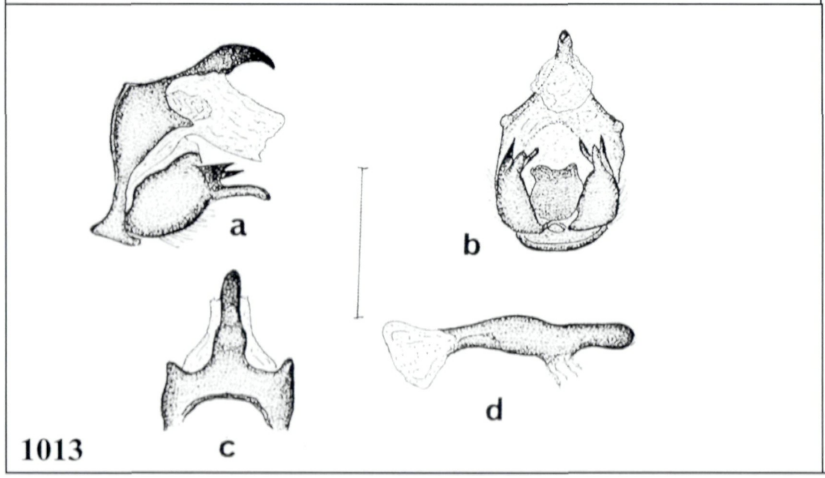


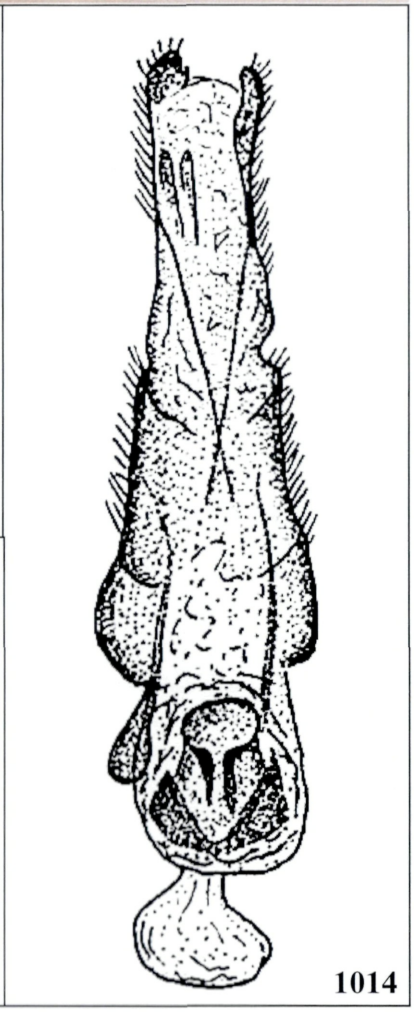

### *Lymantria* (*Griveaudtria*) *leucerythra* COLLENETTE, 1930: 83, pl. 6: 13

(Fig. 997)

**Holotype:** Nyssaland [= Malawi], Zomba – BMNH, London [examined].

**Taxonomy:** The species resembles somewhat *Pyramocera barica* in the forewing pattern but is much smaller in size. The male genitalia were not examined (the holotype lacks the abdomen).
**Distribution:** Known only from SE Malawi.

### *Lymantria* (*Griveaudtria*) *vacillans* WALKER, 1855: 873

(Figs. 994, 1002, 1003, 1029)

**Holotype:** Congo – BMNH, London [examined].

**Taxonomy:** The species is identifiable by its size and the absence of any pinkish colours in the males.
**Distribution:** Known only from SE Malawi.

### *Lymantria* (*Griveaudtria*) *rubroviridis* HERING, 1927: 196, pl. 25h

(Figs. 998, 1004, 1030)

**Holotype:** Cameroon, Bipindi [not examined].

**Taxonomy:** The prominent pink coloured hindwings characterize this species.
**Distribution:** Known from Congo and Zaire.

### *Lymantria* (*Griveaudtria*) *microcyma* COLLENETTE, 1937: 616

(Figs. 999, 1000, 1032)

**Holotype:** Kenya, Kitali– BMNH, London [examined].

**Taxonomy:** The species resembles greatly *L. vacillans*. However, the size of the imagines is much smaller.
**Distribution:** Known from Kenya.

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**Figs. 1015-1018:** next page

**Fig. 1015:** *Lymantria* (*Griveaudtria*) *oinoa* COLLENETTE, 1956 – ♂, Genitalia from GRIVEAUD (1977: fig. 151) Madagascar;
**Fig. 1016:** *Lymantria* (*Griveaudtria*) *lamda* COLLENETTE, 1936 – ♂, Genitalia from GRIVEAUD (1977: fig. 181) Madagascar;
**Fig. 1017:** *Lymantria* (*Griveaudtria*) *lamda* COLLENETTE, 1936 – ♀, Genitalia from GRIVEAUD (1977: fig. 182) Madagascar;

**Fig. 1018:** *Lymantria* (*Griveaudtria*) *brunneata* (KENRICK, 1914) – ♂, Genitalia from GRIVEAUD (1977: fig. 138) Madagascar.

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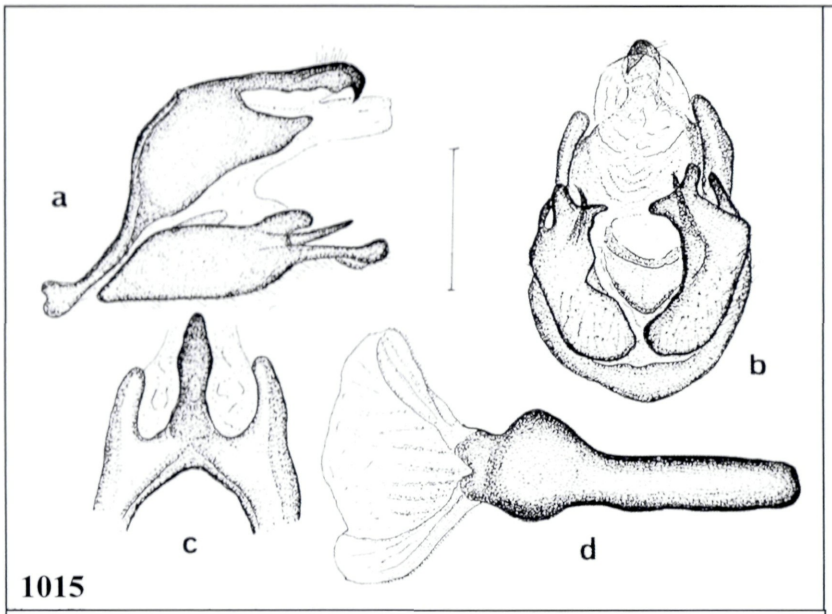


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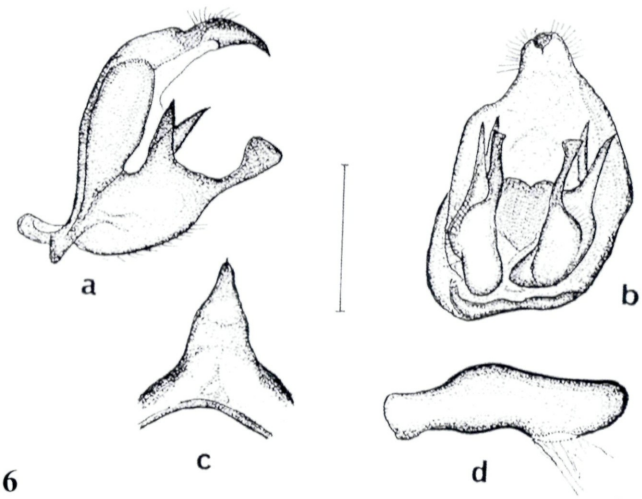


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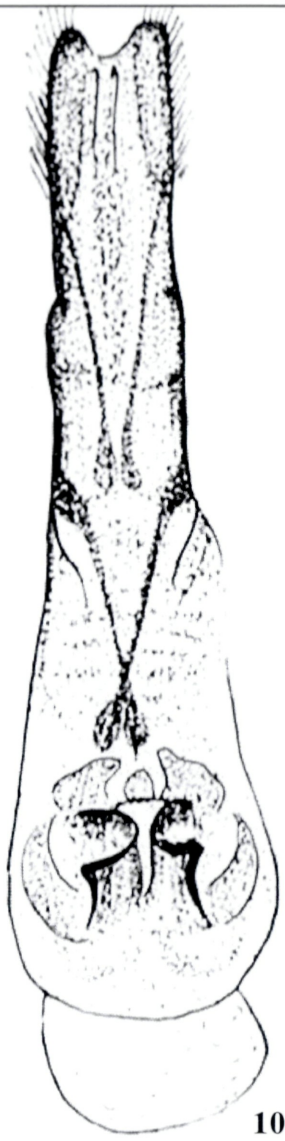

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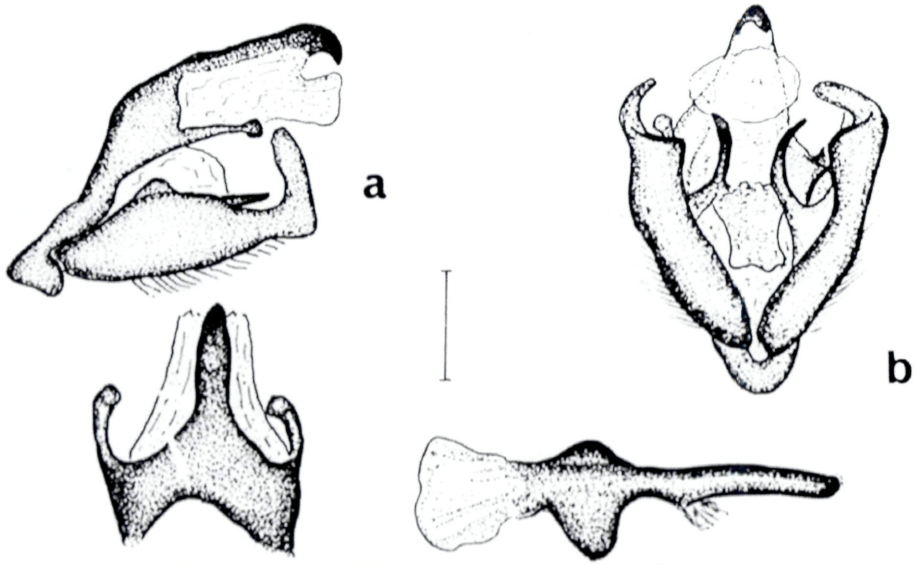



1018

**Figs. 1019-1022:** next page

**Fig. 1019:** *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914) – ♂, Genitalia from GRIVEAUD (1977: fig. 204) Madagascar.
**Fig. 1020:** *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914) – ♂, Genitalia from GRIVEAUD (1977: fig. 186) Madagascar.

**Fig. 1021:** *Lymantria* (*Griveaudtria*) *malgassica* (KENRICK, 1914) – ♀, Genitalia from GRIVEAUD (1977: fig. 205) Madagascar.
**Fig. 1022:** *Lymantria* (*Griveaudtria*) *dubia* (KENRICK, 1914) – ♂, Genitalia from GRIVEAUD (1977: fig. 189) Madagascar.

### *Lymantria flavicilia* HAMPSON, 1910: 458, pl. 38: 14

(Figs. 1008, 1009, 1033, 1035)

**Holotype:** N.E. Rhodesia [=Simbabwe], Petauke distr., E. Luangwa – BMNH, London [not examined].

**Taxonomy:** The species is characterized by its yellow coloured fringe of all wings and the pinkish abdomen. The sexual dimorphism is minimal. From external appearance and the male genitalia, this species does not belong to the subgenus *Griveaudtria*.
**Distribution:** Distributed in SE Africa up to Congo.

## The subgenus *Pyramocera* BUTLER, 1880

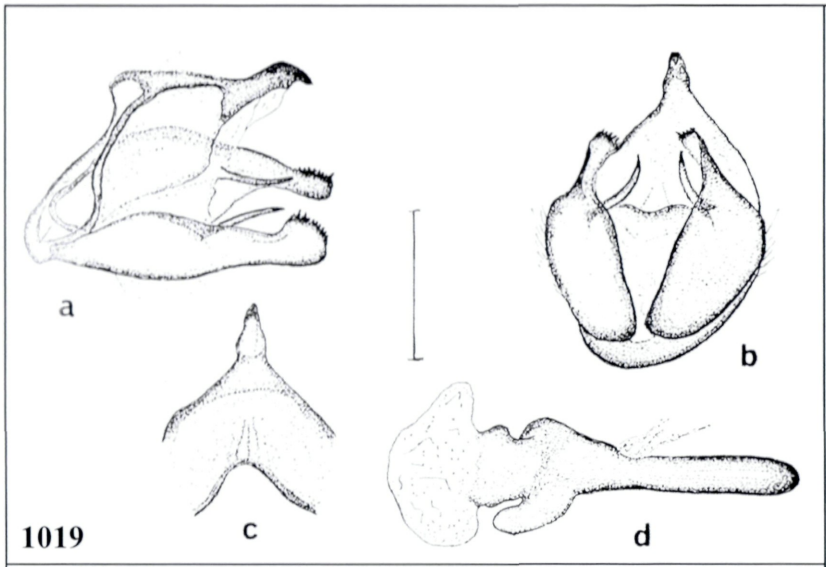
### *Lymantria* (*Pyramocera*) *barica* (MABILLE, 1879): 90 (*Liparis*)

(Figs. 1007, 1010, 1011, 1034, 1036)

**Holotype:** Madagascar, Saint-Augustin à Tuléar [not examined].

**Synonyms:**
*Pyramocera fuliginea* BUTLER, 1880: 85, fig.
Holotype: Madag[ascar, Fianarantsoa] – BMNH, London [examined].
*Lymantria fumosa* SAALMÜLLER, 1884: 188, pl. 6: 79, 79a.
Lectotype: Madagscar, Nossi-Bé, [Sambirano], Loucoubé – FNS, Frankfurt/Main [examined].
*Lymantria uxor* SAALMÜLLER, 1884: 190.
Holotype: Madagscar, Nossi-Bé, [Sambirano], Loucoubé – FNS, Frankfurt/Main [examined].

**Literature:** GRIVEAUD (1977: 161).
**Distribution:** Restricted to Madagascar.
**Taxonomic note:** GRIVEAUD (1977: 162) designated for *Lymantria fuliginea* a lectotype. According to the original description and the material examined in BMNH this taxon is basing on a single type specimen, which becomes automatically the holotype. The designation of a lectotype is therefore not valid in this case.

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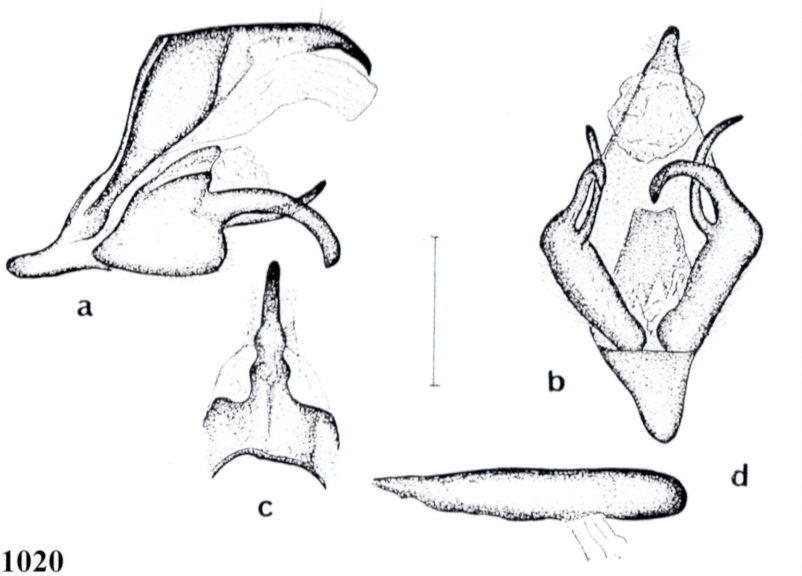


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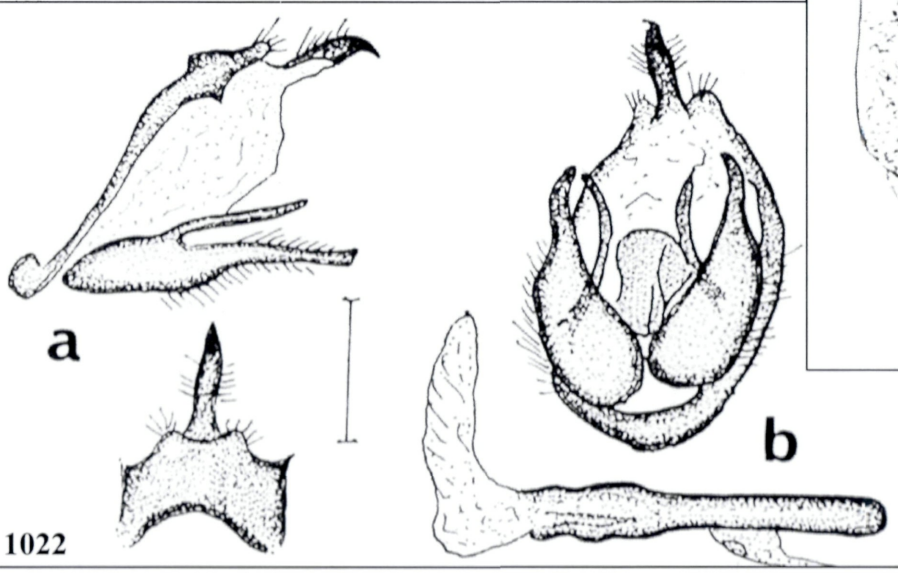


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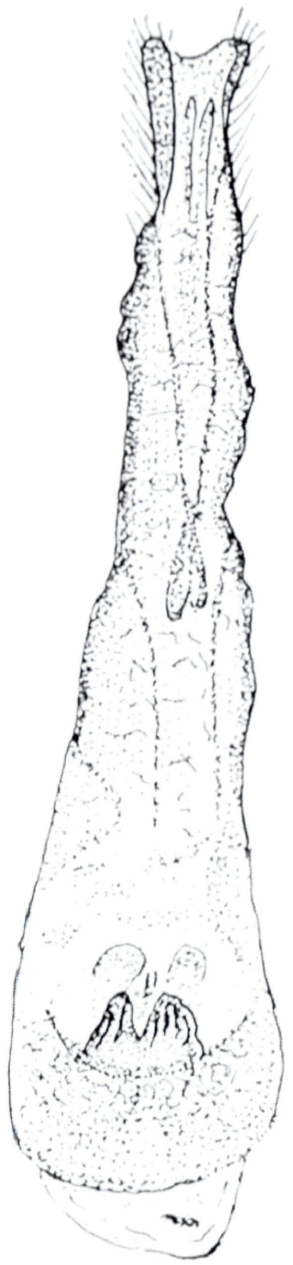

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**Figs. 1023-1026:** next page

**Fig. 1023:** *Lymantria* (*Griveaudtria*) *polysticta* COLLENETTE, 1929 – ♂, Genitalia from GRIVEAUD (1977: fig. 194) Madagascar.
**Fig. 1024:** *Lymantria* (*Griveaudtria*) *dulcinea* BUTLER, 1882 – ♂, Genitalia from GRIVEAUD (1977: fig. 198) Madagascar.

**Fig. 1025:** *Lymantria* (*Griveaudtria*) *rosea* BUTLER, 1879 – ♂, Genitalia from GRIVEAUD (1977: fig. 172) Madagascar.
**Fig. 1026:** *Lymantria* (*Griveaudtria*) *polysticta* COLLENETTE, 1929 – ♀, Genitalia from GRIVEAUD (1977: fig. 195) Madagascar.

## Species misplaced in *Lymantria*

GAEDE (1932) described *Lymantria nigriplagiata* from China (Figs. 1037, 1038, 1070) which is the same as *Parocneria orienta* CHAO, 1978 **syn.n.** However the species belongs to the genus *Parocneria* DYAR, 1879 (**comb.n.**).

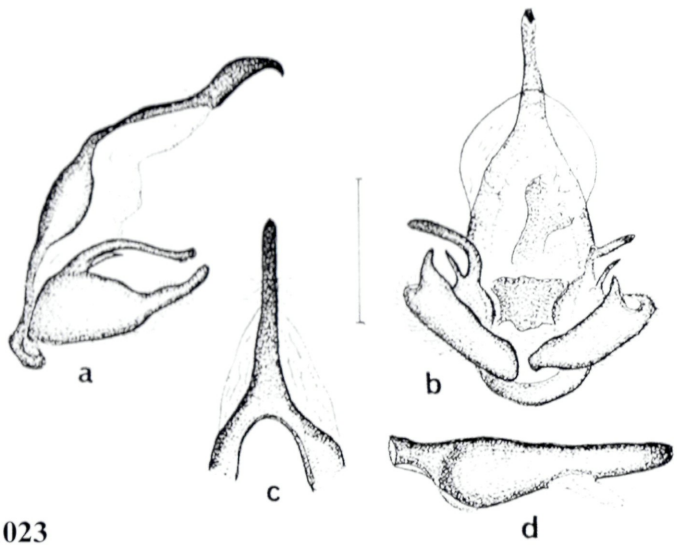
*Lymantria cerebosa* SWINHOE, 1903 described from NW Himalaya must be transferred to *Callitaera* BUTLER, 1881 (**comb.n.**).

*Lymantria nudala* STRAND, 1915, which was described without type-locality and illustrated in SEITZ (1915: pl. 39g) might be related to *Cispia* WALKER, 1855 or *Pantana* WALKER, 1855 if not an African species. *L. nudala* is not congeneric with *Lymantria.*

*Lymantria silca* SWINHOE, 1903 described from New Guinea, Fergusson Islands, should be placed provisionally in *Dura* MOORE, 1879 (**comb.n.**); I dissected the male genitalia of an external similar species from West Papua and found them different in many ways from *Dura alba* MOORE, 1879 (the type species of *Dura*).There might be the need to erect a new genus, when the group is better known.

*Darala reducta* WALKER, 1855 (= *Anthelymantria bistigmalis* STRAND, 1925 = *Anthela curanda* STRAND, 1929 = *Lymantria aurivilii* BRYK, 1934 = *Leptocneria binotata* BUTLER, 1886) described from Australia is the type-species of *Leptocneria* BUTLER, 1886 (Figs. 1039, 1042). To the same genus belongs *Lymantria dubiosa* AURIVILLIUS, 1914 from Java and Bali (Figs. 1040, 1043, 1071).

A group of West palaearctic species (Asia minor), including *Liparis atlantica* RAMBUR, 1837, are not congeneric with *Lymantria.* The female genitalia of *Liparis atlantica* particularly lack the spoon-shaped apophyses. The genitalia of *L. atlantica* (male and female) resemble greatly the African species *Polymona rufifemur* WALKER, 1855, which is the type species of *Polymona* WALKER, 1855 (Figs. 1041, 1044, 1045, 1072, 1075). The external appearance, which is not characteristic for *Lymantria,* suggests also a relationship to *Polymona.* This genus is widely distributed in Africa and Asia minor (including Saudi Arabia, Oman). The following species are therefore transferred to this genus. The validity of the listed taxa below was not proofed.

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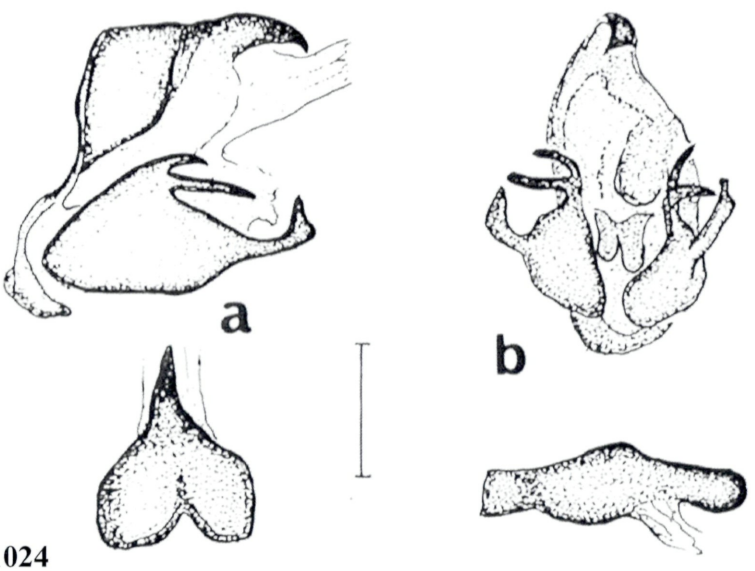


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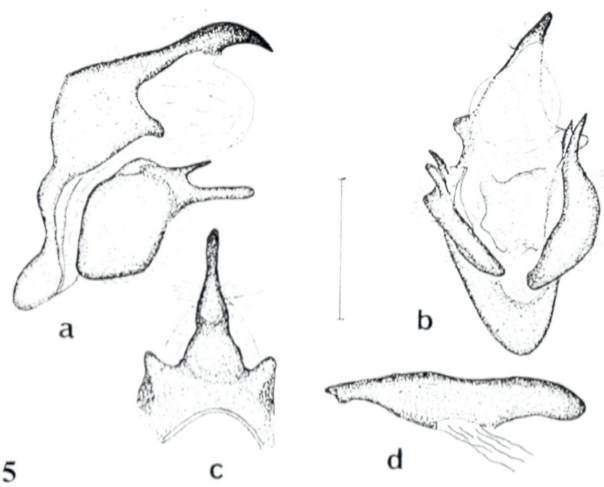


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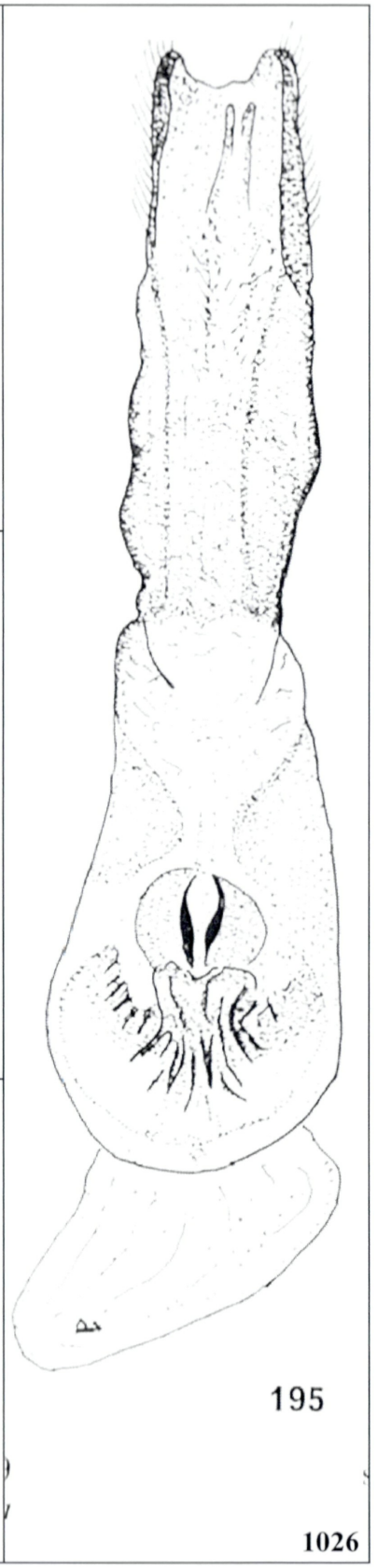


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**Figs. 1027-1031:** next page

**Fig. 1027:** *Lymantria* (*Griveaudtria*) *russula* COLLENETTE, 1933 – ♂, Genitalia from GRIVEAUD (1977: fig. 208) Madagascar.
**Fig. 1028:** *Lymantria* (*Griveaudtria*) *joannisi* LE CERF, 1921 – ♂, Genitalia from GRIVEAUD (1977: fig. 129) Madagascar.

**Fig. 1029:** *Lymantria* (*Griveaudtria*) *vacillans* WALKER, 1855 – ♂, Congo, GU RMCA 6/2004.
**Fig. 1030:** *Lymantria* (*Griveaudtria*) *rubroviridis* HERING, 1927 – ♂, Congo, GU BM46/2003.
**Fig. 1031:** *Lymantria* (*Griveaudtria*) *joannisi* LE CERF, 1921 – ♀, Genitalia from GRIVEAUD (1977: fig. 123) Madagascar.

## *Polymona* WALKER, 1855

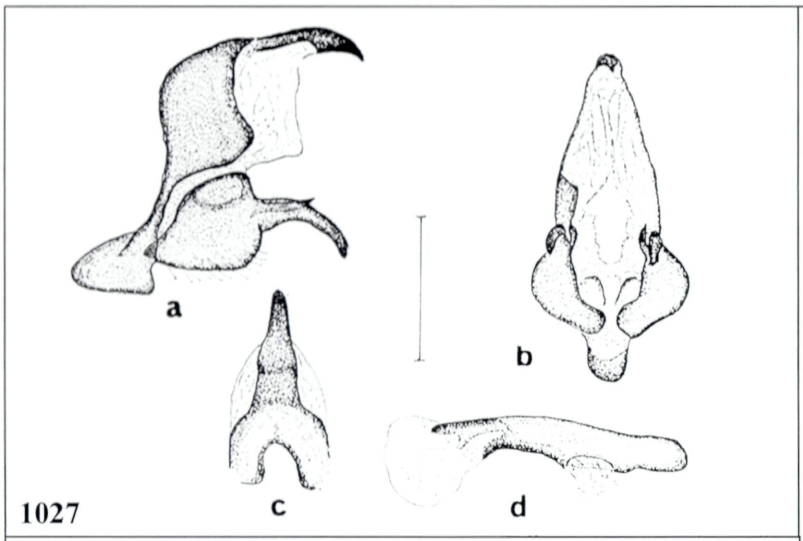
**Type-species:** *Polymona rufifemur* WALKER, 1855, by monotypy.

*finitorum* (COLLENETTE, 1931) **comb.n.** (*Lymantria*) (Fig. 1046)
*aboleta* (STAUDINGER, 1895) **comb.n.** (*Ocneria*) (Figs. 1049, 1050, 1076)
*atlantica atlantica* (RAMBUR, 1837) **comb.n.** (*Liparis*) (Figs. 1073, 1074)
*atlantica maura* (OBERTHÜR, 1916) **comb.n.** (*Lymantria*) (Fig. 1048)
*atlantica mus* (OBERTHÜR, 1916) **comb.n.** (*Lymantria*) (Fig. 1047)
*oberthueri* (LUCAS, 1906) **comb.n.** (*Lymantria*)
f. *belvalettei* (DUMONT, 1928) **comb.n.** (*Lymantria*)
*lapidicola lapidicola* (HERRICH-SCHAEFFER, 1851) **comb.n.** (*Leucoma*)
*lapidicola phoenissa* (ROGENHOFER, 1891) **comb.n.** (*Ocneria*)
*lapidicola mardina* (STAUDINGER, 1892) **comb.n.** (*Ocneria*) (Fig. 1052)
*lapidicola urbicola* (STAUDINGER, 1861) **comb.n.** (*Ocneria*)
*lapidicola libanicola* (STAUDINGER, 1899) **comb.n.** (*Ocneria*)
*lapidicola kruegeri* (TURATI, 1912) **comb.n.** (*Lymantria*) (Fig. 1051)
*destituta destituta* (STAUDINGER, 1892) **comb.n.** (*Ocneria*) (Figs. 1053, 1054, 1077)
*destituta maraschi* (DANIEL, 1932) **comb.n.** (*Ocneria*)
*komarovi* (CHRISTOPH, 1882) **comb.n.** (*Ocneria*)

The following African species might be associated with *Polymona*, but they probably belong to a distinct genus:
*gondona* (SWINHOE, 1903) **comb.n.** (*Lymantria*) (= *Lymantria melete* FAWCETT, 1915 sensu BRYK, 1934), *taurina* (HERING, 1927) **comb.n.** (*Lymantria*) (probably a junior synonym of *gondona*) and *hemipyra* COLLENETTE, 1932 (*Lymantria*) **comb.n.** (Figs. 1055-1057, 1078).

Further related to *Polymona* is a group of African species, which is belonging to *Moresa* WALKER, 1855 with *Moresa modesta* WALKER, 1855 (=*Sarothropyga rhodopepla* C. & R. FELDER, 1874) as type-species. BRYK (1934) placed *modesta* wrongly in *Lymantria* (Figs. 1058, 1061).

In his catalogue BRYK (1934) synonymized *Palasea* WALLENGREEN, 1863 (type-species: *Palasea albimacula* WALLENGREEN, 1863 by monotypy) with *Lymantria*. This is not correct. *Palasea marwitzi* GRÜNBERG, 1907 and *Palasea miniata* GRÜNBERG, 1907 are not members of *Lymantria* (Figs. 1062, 1063).

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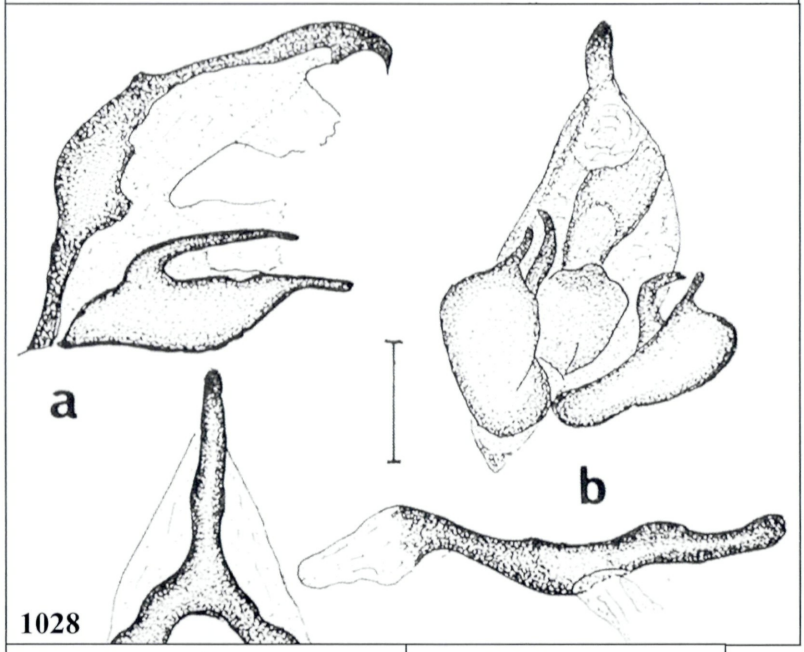


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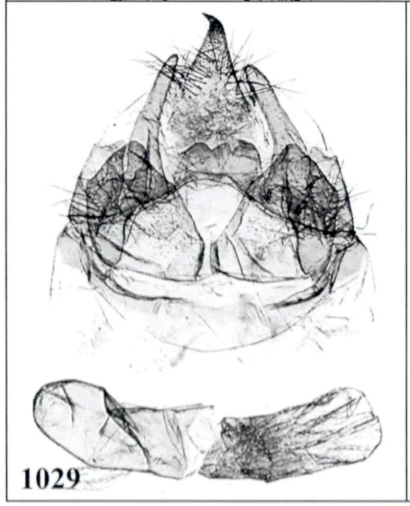

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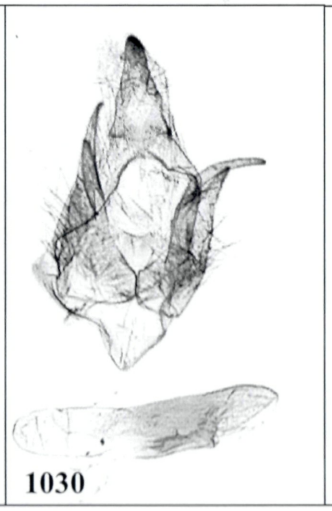

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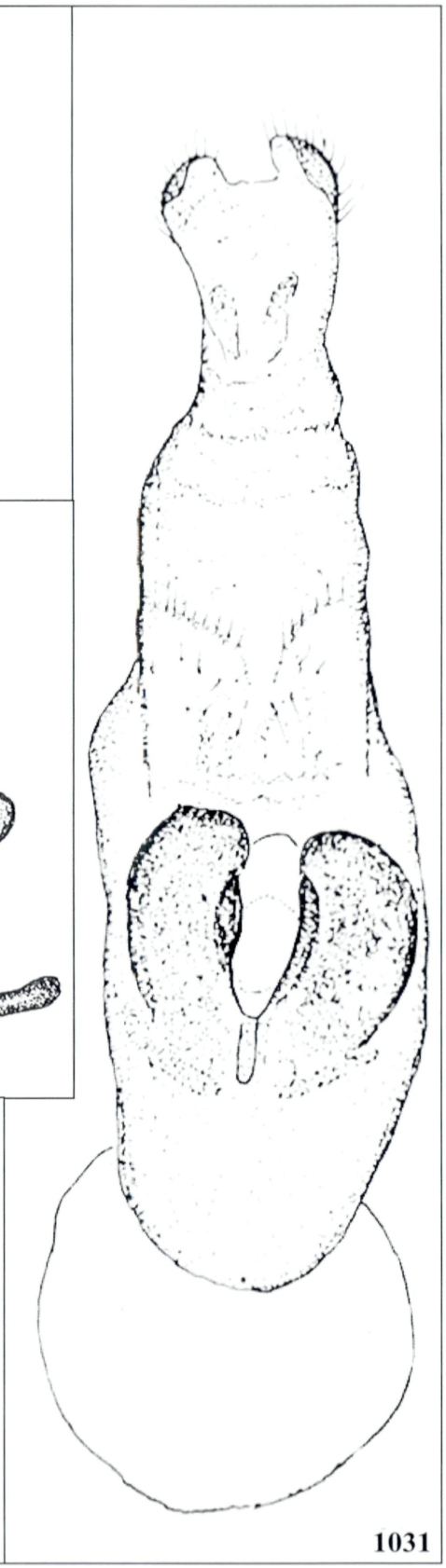

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**Figs. 1032-1036:** next page

**Fig. 1032:** *Lymantria* (*Griveaudtria*) *microcyma* COLLENETTE, 1937 – ♂, Congo, GU RMCA 3/2004.
**Fig. 1033:** *Lymantria flavicilia* HAMPSON, 1910 – ♂, Congo, GU BM26/2003.

**Fig. 1034:** *Lymantria* (*Pyramocera*) *barica* (MABILLE, 1879) – ♀, Genitalia from GRIVEAUD (1977: fig. 206) Madagascar.
**Fig. 1035:** *Lymantria flavicilia* HAMPSON, 1910 – ♀, Congo, GU BM34/2003.
**Fig. 1036:** *Lymantria* (*Pyramocera*) *barica* (MABILLE, 1879) – ♂, Genitalia from GRIVEAUD (1977: fig. 210) Madagascar.

*Lymantria carriala* SWINHOE, 1903 belongs to *Palasea* (**comb.n.**), *Lymantria melia* FAWCETT, 1915, *Lymantria metella* FAWCETT, 1915 and probably also *Lymantria menecles* FAWCETT, 1915 as well as *Lymantria arete* FAWCETT, 1915 belong to *Palasea* (**comb.n.**) according to their external appeareance.

*Lymantria pruinosa* HERING, 1927 was described from East Africa. The species belongs also to *Palasea* (**comb.n.**). Apart from this, *Leucoma pruinosa* BUTLER, 1879 (= *Caviria roseicoxa* KENRICK, 1914), described from Madagascar, was transferred by COLLENETTE (1956: 171) to *Lymantria* (a case of secondary homonymy).

*Lymantria dictyodigma* COLLENETTE, 1930 and a group of externally similar but probably undescribed species from tropical Africa, should be placed provisionally in *Palasea* (**comb.n.**) (Figs. 1059, 1060, 1079).

A number of species described originally as *Lymantria* or by KENRICK (1914) as *Dasychira* species, respectively from Madagascar, were placed by GRIVEAUD (1977) in *Lymantica* COLLENETTE, 1936. The type-species of *Lymantica* is *Lymantica epelytes* COLLENETTE, 1936, which was synonymized by GRIVEAUD with *Lymantria rufofusca* MABILLE, 1900 (Figs. 1066, 1082, 1083).

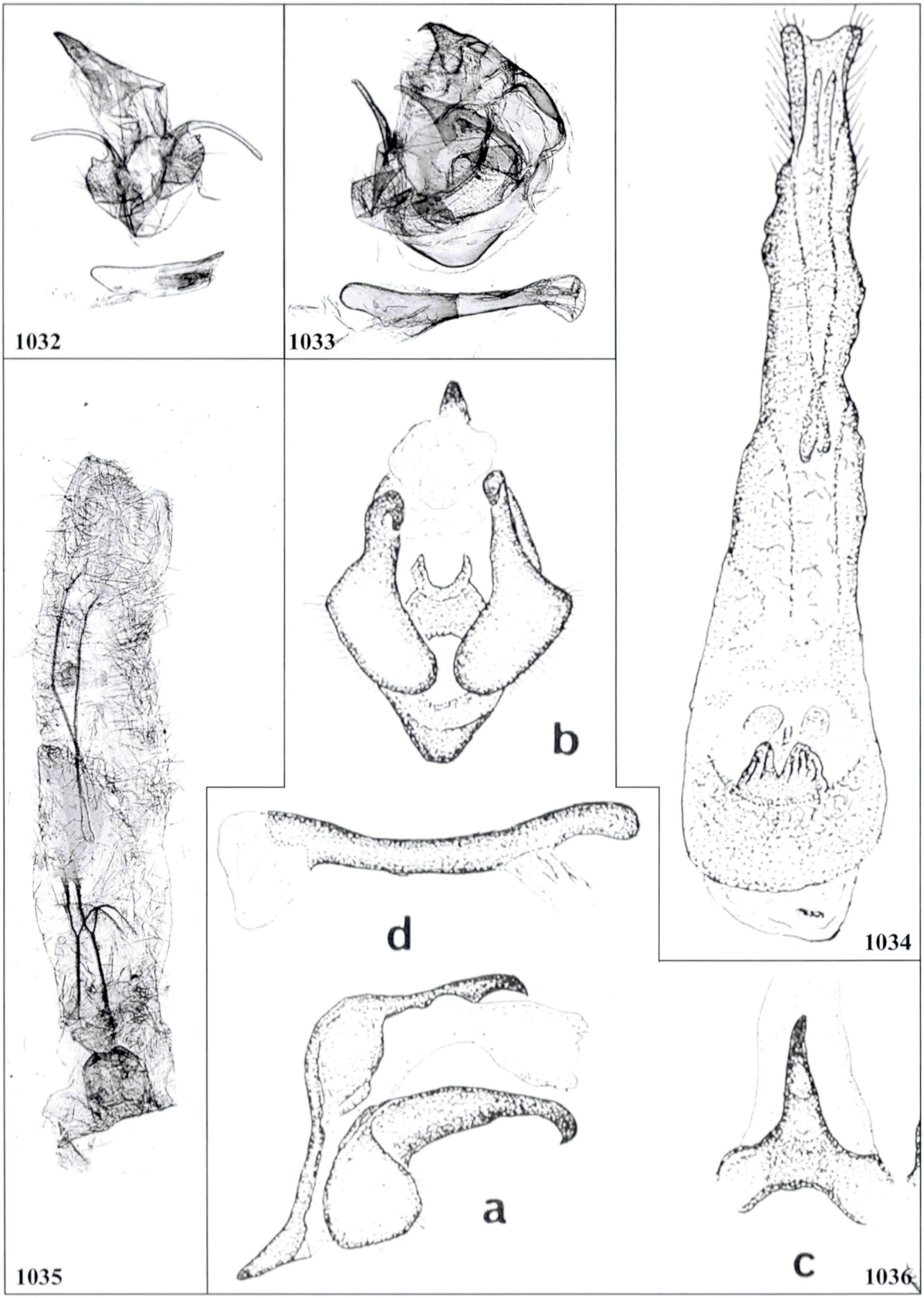
However, the species grouped by GRIVEAUD in *Lymantica* are doubtless not a monophyletic unit. A part of the species is retransferred back to *Lymantria* in this paper. The species left belong to several genera. Due to the fact, that the problem will not be solved here, they might be left in *Lymantica*.

COLLENETTE (1930) allied *Lymantria tottea* SWINHOE, 1903, described from "Old Calabar" (=Cameroon), with *Stracena* SWINHOE, 1903.

*Lymantria eddela* SWINHOE, 1903 described from Tanganijka (Fig. 1067), is actually arranged in the BMNH collections under *Dasychira* (by COLLENETTE). Due to my facts this systematic position in *Dasychira* is also wrong.

*Lymantria tacita* HERING, 1927 described from Kenya (Figs. 1064, 1081) and *Lymantria kettlewelli* COLLENETTE, 1953 described from S. Africa (Fig. 1078), are probably linked with the genus *Rhypopteryx* AURIVILLIUS, 1879 (type-species: *Rhypopteryx sordida* AURIVILLIUS, 1879).

*Lymantria melissa* FAWCETT, 1915 and *Lymantria conspersa* HERING, 1927 are rather linked to the Nygmiini than Lymantriini (Figs. 1068, 1069).



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**Figs. 1037-1061:** next page

**Fig. 1037:** *Parocneria nigriplagiata* (GAEDE, 1932) – ♂, China, Shanghai, Holotype.
**Fig. 1038:** *Parocneria nigriplagiata* (GAEDE, 1932) – ♀, China, Shanghai.
**Fig. 1039:** *Leptocneria reducta* (WALKER, 1855) – ♂, Australia (Holotype of *Leptocneria binotata* BUTLER, 1886).
**Fig. 1040:** *Leptocneria dubiosa* (AURIVILLIUS, 1914) – ♂, Indonesia, Java, Paratype.

**Fig. 1041:** *Polymona rufifemur rufifemur* WALKER, 1855 – ♂, S. Africa, Holotype.
**Fig. 1042:** *Leptocneria reducta* (WALKER, 1855) – ♀, Australia, Queensland.
**Fig. 1043:** *Leptocneria dubiosa* (AURIVILLIUS, 1914) – ♀, Indonesia, Java, Paratype.

**Fig. 1044:** *Polymona rufifemur rufifemur* WALKER, 1855 – ♀, S. Africa, Natal.
**Fig. 1045:** *Polymona rufifemur ellisoni* COLLENETTE, 1938 – ♀, Africa, Abyssinia, Holotype.
**Fig. 1046:** *Polymona finitorum* (COLLENETTE, 1931) – ♀, Africa, Somalia, Holotype.

**Fig. 1047:** *Polymona atlantica mus* (OBERTHÜR, 1916) – ♂, N. Africa, Algeria, Holotype.
**Fig. 1048:** *Polymona atlantica maura* (OBERTHÜR, 1916) – ♂, N. Africa, Algeria, Holotype.
**Fig. 1049:** *Polymona aboleta* (STAUDINGER, 1895) – ♂, Palaestina, Jerusalem, Syntype.
**Fig. 1050:** *Polymona aboleta* (STAUDINGER, 1895) – ♀, Palaestina, Jordanthal, Syntype.

**Fig. 1051:** *Polymona lapidicola kruegeri* (TURATI, 1912) – ♂, Italia, Sardinia.
**Fig. 1052:** *Polymona lapidicola mardina* (STAUDINGER, 1892) – ♂, SE. Turkey, Syntype.
**Fig. 1053:** *Polymona destituta* (STAUDINGER, 1892) – ♂, Armenia.
**Fig. 1054:** *Polymona destituta* (STAUDINGER, 1892) – ♀, Turkey.

**Fig. 1055:** *Polymona gondona* (SWINHOE, 1903) – ♂, British East Africa, Holotype.
**Fig. 1056:** *Polymona gondona* (SWINHOE, 1903) – ♂, British East Africa (Holotype of *Lymantria taurina*).
**Fig. 1057:** *Polymona gondona* (SWINHOE, 1903) – ♀, Africa, Kenya.
**Fig. 1058:** *Moresa modesta* WALKER, 1855 – ♂, Africa, Zaire.

**Fig. 1059:** *Palasea dictyodigma* (COLLENETTE, 1930) – ♂, Africa, Zaire, Holotype.
**Fig. 1060:** *Palasea dictyodigma* (COLLENETTE, 1930) – ♀, Africa, Congo.
**Fig. 1061:** *Moresa modesta* WALKER, 1855 – ♀, S. Africa, Natal, Holotype.

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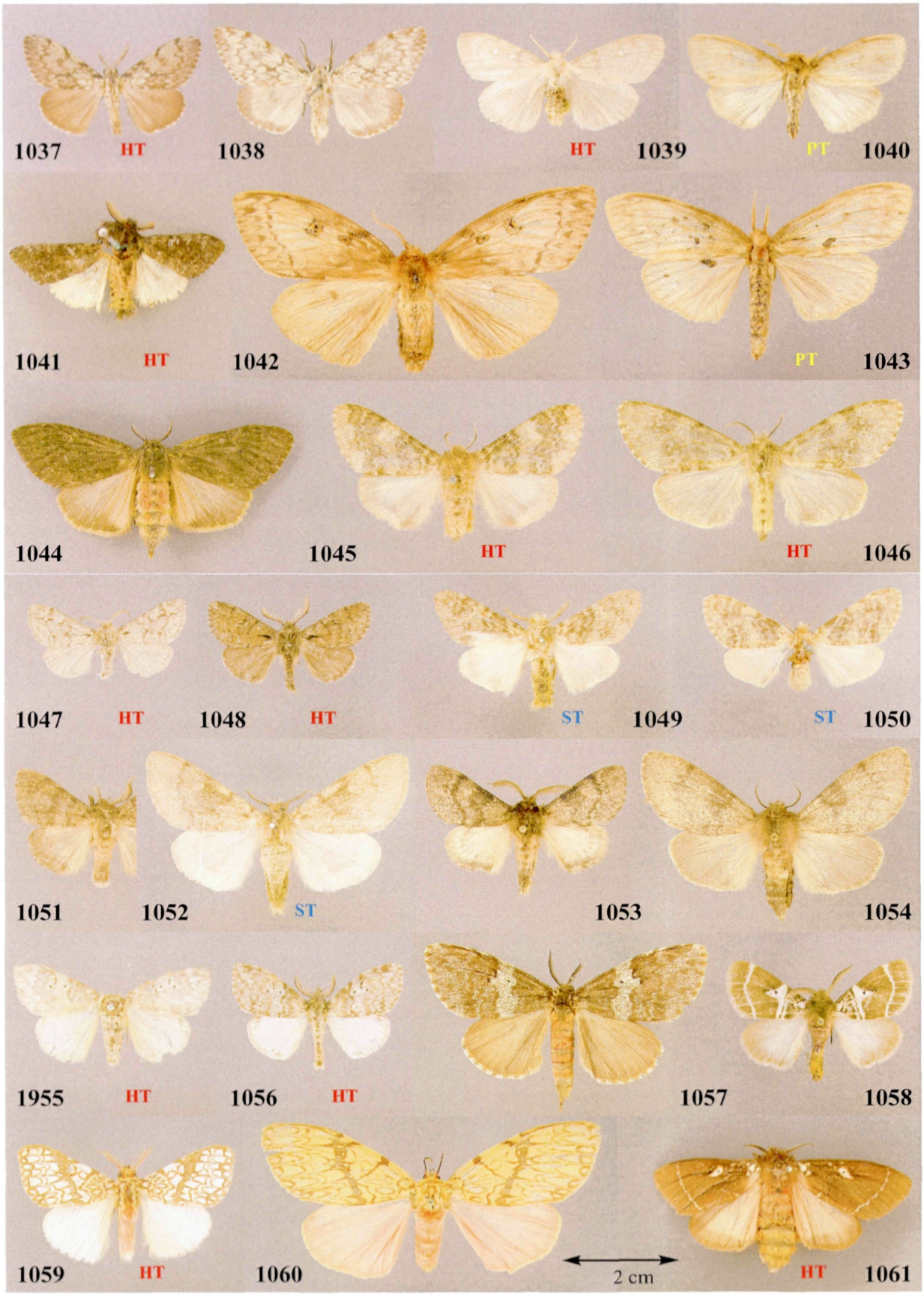

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**Figs. 1062-1075:** next page

**Fig. 1062:** *Palasea marwitzi* GRÜNBERG, 1907 – ♀, Deutsch Ost-Africa, Holotype.
**Fig. 1063:** *Palasea miniata* GRÜNBERG, 1907 – ♀, Deutsch Ost-Africa, Holotype.
**Fig. 1064:** *Rhypopteryx tacita* (HERING, 1927) – ♂, Africa, Kenya, Holotype.
**Fig. 1065:** *Lymantica canariensis* (KENRICK, 1914) – ♂, Madagascar, Holotype.

**Fig. 1066:** *Lymantica rufofusca* (MABILLE, 1900) – ♂, Madagascar, (Holotype of *Lymantica epelytes* COLLENETTE, 1936).
**Fig. 1067:** *Lymantria eddela* SWINHOE, 1903 – ♂, Africa, Tansania.
**Fig. 1068:** *Lymantria melissa* FAWCETT, 1915 – ♀, British East Africa, Holotype.
**Fig. 1069:** *Lymantria conspersa* HERING, 1927 – ♀, Africa, Guaso Nyiora, Holotype.

**Fig. 1070:** *Parocneria nigriplagiata* (GAEDE, 1932) – ♂, China, Shanghai, GU 20-89.
**Fig. 1071:** *Leptocneria dubiosa* (AURIVILLIUS, 1914) – ♂, Indonesia, Bali, GU BM 27/2003.
**Fig. 1072:** *Polymona rufifemur rufifemur* WALKER, 1855 – ♂, S. Africa, GU BM 28/2003.

**Fig. 1073:** *Polymona atlantica atlantica* (RAMBUR, 1837) – ♂, N. Africa, Marokko, GU 49-83.
**Fig. 1074:** *Polymona atlantica atlantica* (RAMBUR, 1837) – ♀, N. Africa, Marokko, GU 49-95.
**Fig. 1075:** *Polymona rufifemur rufifemur* WALKER, 1855 – ♀, S. Africa, GU BM.

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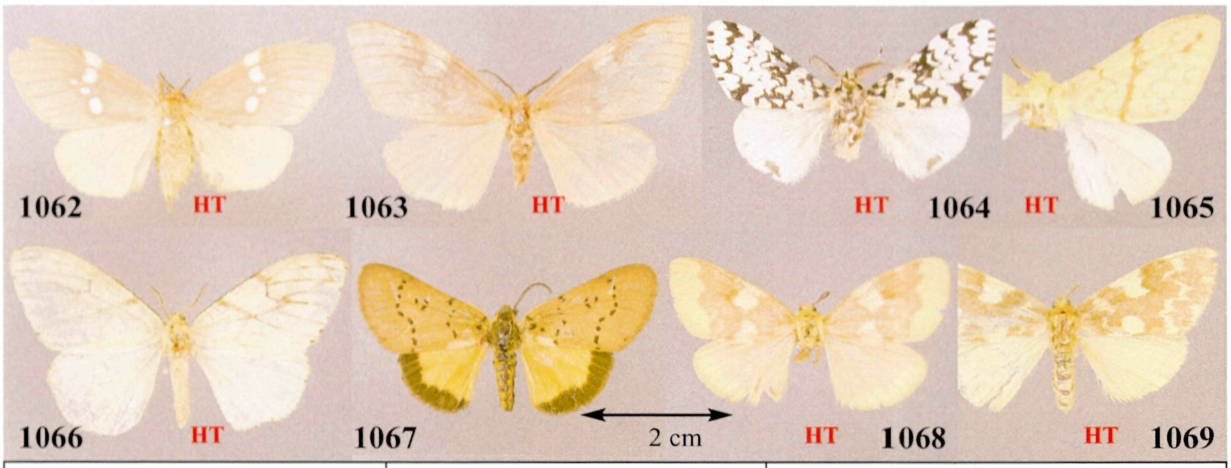


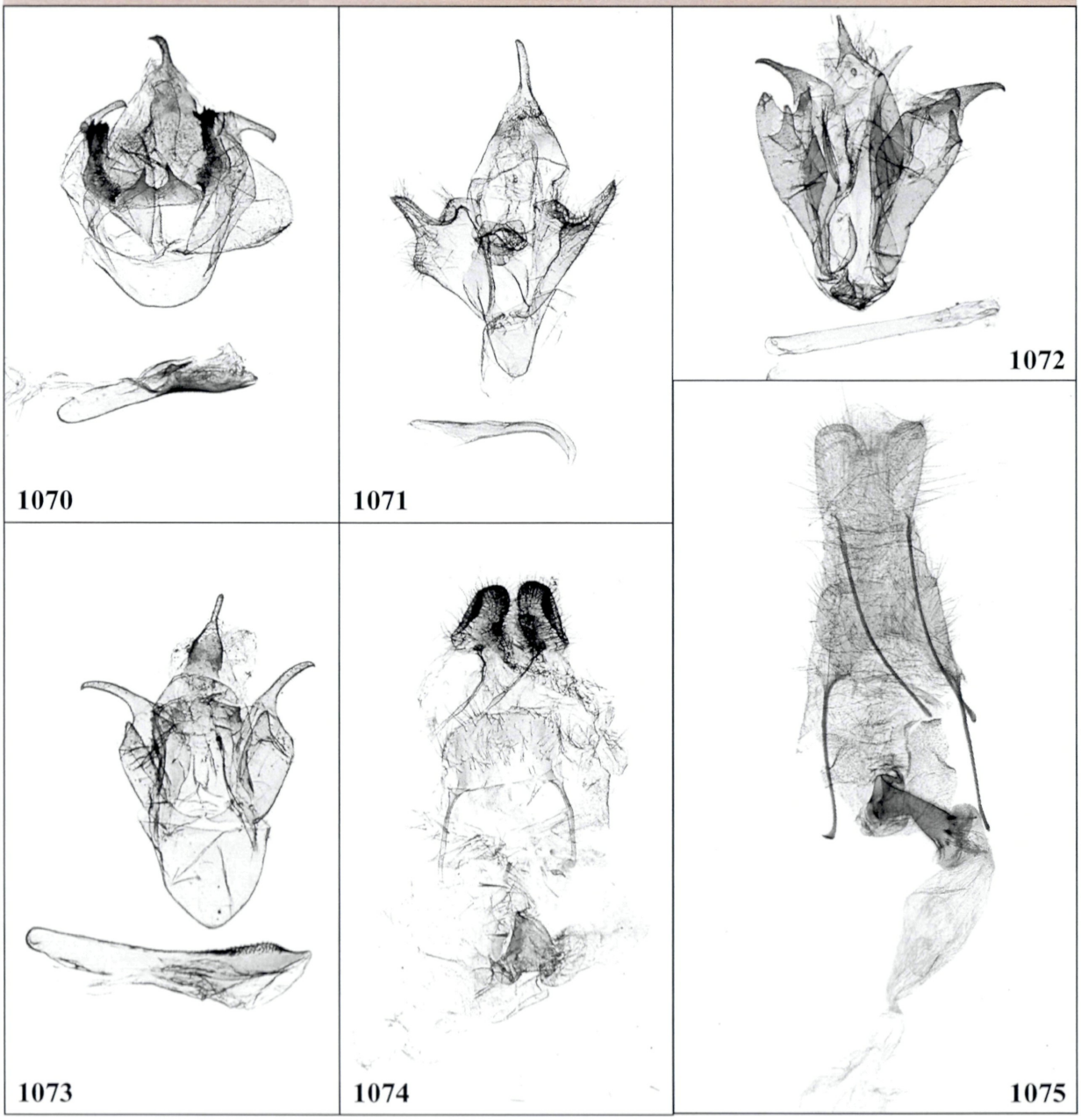

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**Figs. 1076-1083:** next page

**Fig. 1076:** *Polymona aboleta* (STAUDINGER, 1895) – ♂, Palaestina, GU BM 33/2003.
**Fig. 1077:** *Polymona destituta* (STAUDINGER, 1892) – ♂, Turkey, GU 49-84.
**Fig. 1078:** *Polymona gondona* (SWINHOE, 1903) – ♂, Africa, Kenya, GU BM31/2003.

**Fig. 1079:** *Palasea dictyodigma* (COLLENETTE, 1930) – ♂, Africa, Liberia, GU BM37/2003.
**Fig. 1080:** *Rhypopteryx kettlewelli* (COLLENETTE, 1953) – ♂, S. Africa, GU BM45/2003.
**Fig. 1081:** *Rhypopteryx tacita* (HERING, 1927) – ♂, Africa, Uganda, GU BM30/2003.

**Fig. 1082:** *Lymantica rufofusca* (MABILLE, 1900) – ♂, Genitalia from GRIVEAUD (1977: fig. 147) Madagascar.
**Fig. 1083:** *Lymantica rufofusca* (MABILLE, 1900) – ♀, Genitalia from GRIVEAUD (1977: fig. 143) Madagascar.

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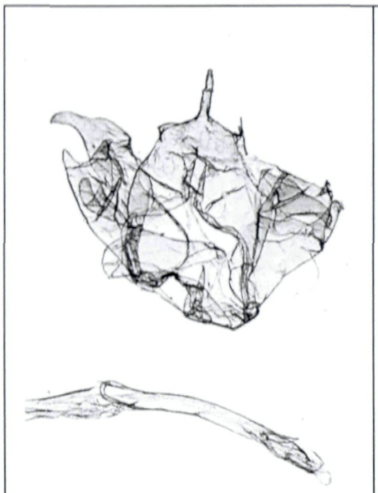

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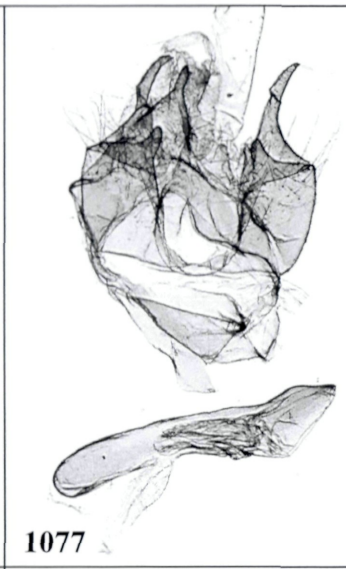

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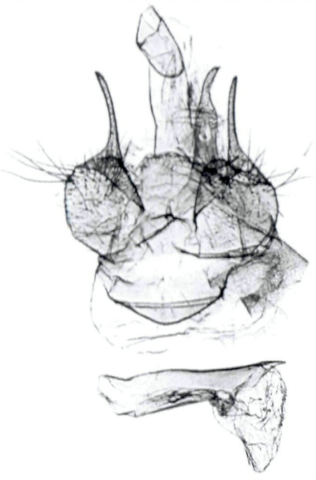

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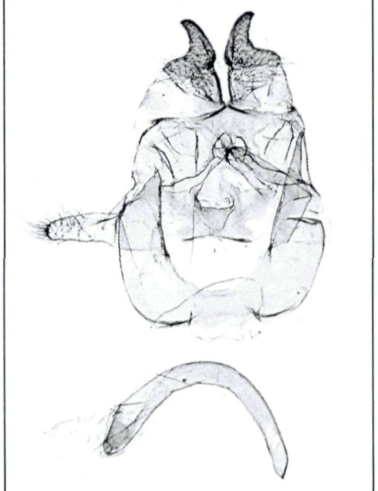

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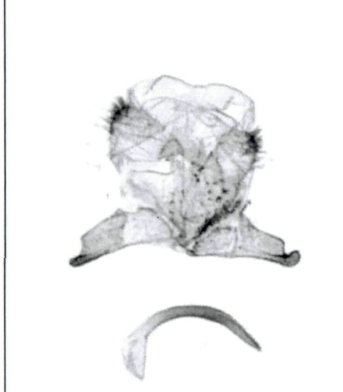

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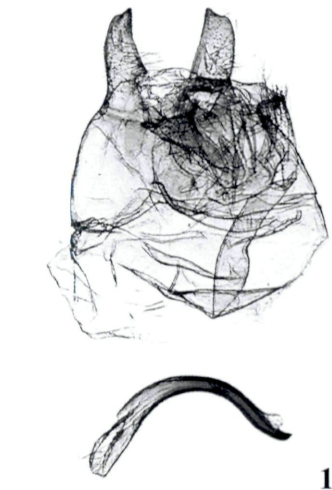

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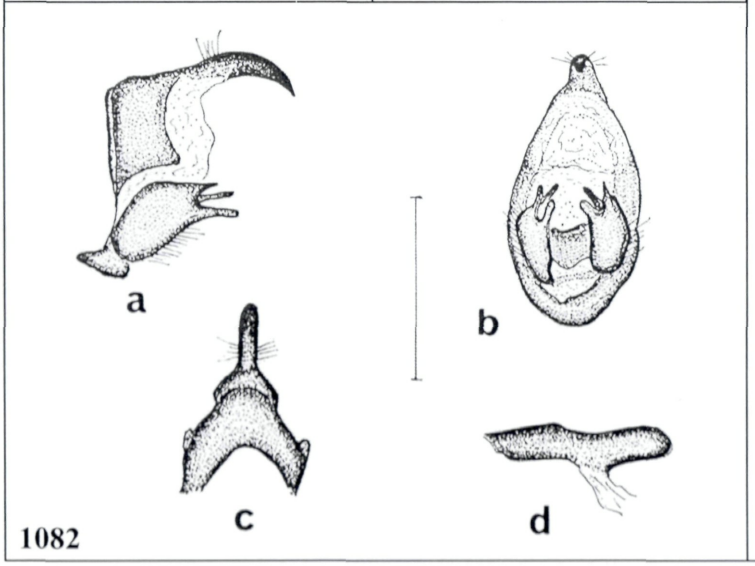


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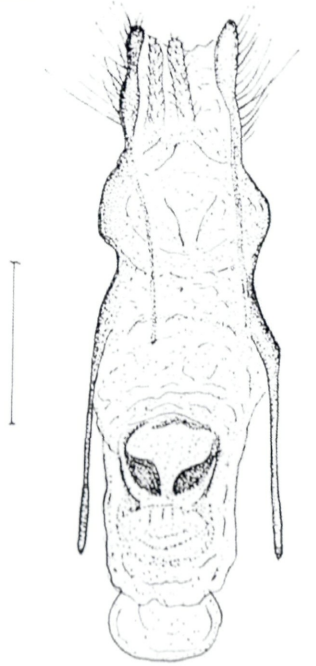

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## Appendix – Early Stages

After finishing the manuscript of this work, I received through the courtesy of Paul W. Schaefer, U.S. Dept. Agric., Beneficial Insects Introduction Research Unit (BIIR), Newark, Delaware a number of slides illustrating the early stages of some species. Nearly nothing is known of the early stages of the majority of the *Lymantria*-species. Due to this I mounted four additional plates presenting them as an appendix. All illustrations on these plates were taken by Paul W. Schaefer, who kindly allowed me to use them here.

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**Figs. 1084-1091:** next page

**Fig. 1084:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – Caterpillar, e.o. ex Mongolia, Ulaanbaatar reared at BIIR on *Larix* 2003 (Photo: Paul Schaefer).
**Fig. 1085:** *Lymantria* (*Porthetria*) *albescens albescens* HORI & UEMO, 1930 – Caterpillar, 4th instar, Japan, Okinawa, reared at BIIR 1999 (Photo: Paul Schaefer).
**Fig. 1086:** *Lymantria* (*Porthetria*) *albescens albescens* HORI & UEMO, 1930 – Caterpillar, 6th instar (representing a rare black-blacked mutant phenotype), Japan, Okinawa, reared at BIIR 1999 (Photo: Paul Schaefer).
**Fig. 1087:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – Caterpillar, e.o. ex India, Himachal Pradesh, Kulu Valley, reared at BIIR 2003 (Photo: Paul Schaefer).
**Fig. 1088:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – Caterpillar, Taiwan, Kuanyin, v. 2003 (Photo: Paul Schaefer).
**Fig. 1089:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – Caterpillar, Taiwan, Kuanyin, v. 2003 (Photo: Paul Schaefer).
**Fig. 1090:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – Egg masses on twigs, Taiwan, Kuanyin, vi. 2003 (Photo: Paul Schaefer).
**Fig. 1091:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – Pupa, Taiwan, Kuanyin, v. 2003 (Photo: Paul Schaefer).

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**Figs. 1092-1095:** page 234

**Fig. 1092:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – Caterpillar, Thailand, Pakchong, reared on *Casuarina* sp., iii. 2001 (Photo: Paul Schaefer).
**Fig. 1093:** *Lymantria* (*Lymantria*) *monacha* LINNAEUS, 1758 – Caterpillar, Japan, Hokkaido, Sapporo, on *Salix* sp., vii.1996 (Photo: Paul Schaefer).
**Fig. 1094:** *Lymantria* (*Lymantria*) *minomonis okinawaensis* KISHIDA, 1987 – Caterpillar, e.o. ex Japan, Okinawa; reared at BIIR on *Quercus* 2000 (Photo: Paul Schaefer).
**Fig. 1095:** *Lymantria* (*Lymantria*) *lucescens* (BUTLER, 1881) (left) and *Lymantria* (*Porthetria*) *dispar japonica* (MOTSCHULSKY, [1861] (right) – Caterpillars, Japan, Honshu, Toyota v. 2002 (Photo: Paul Schaefer).

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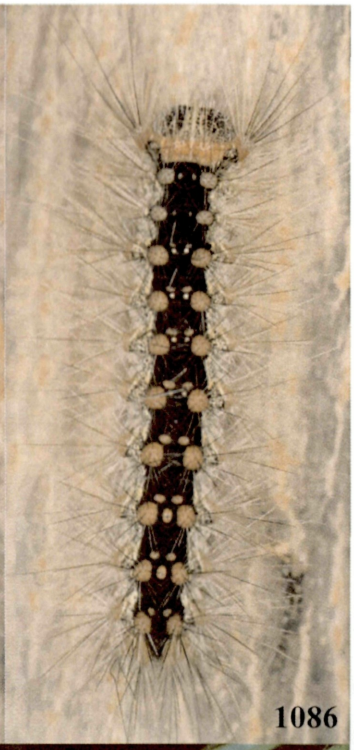
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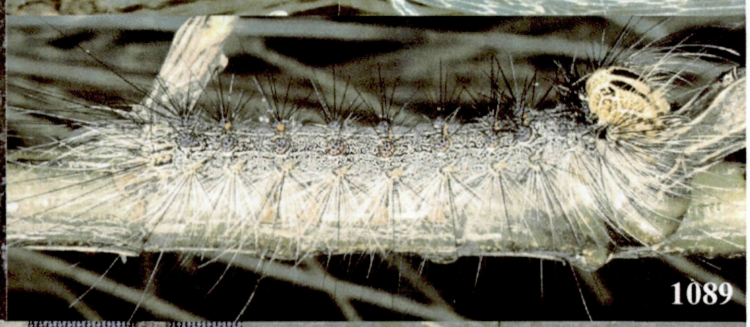
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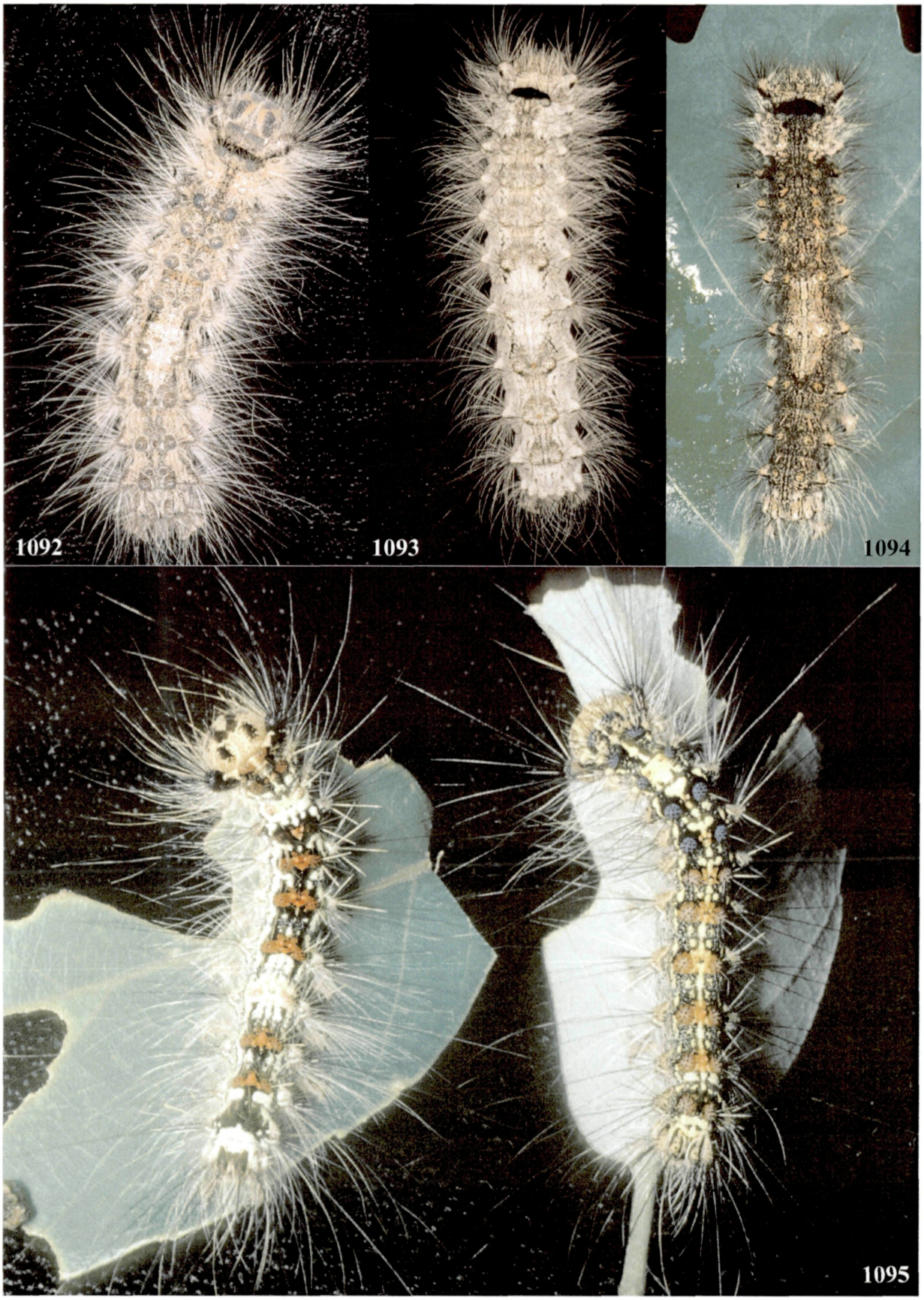


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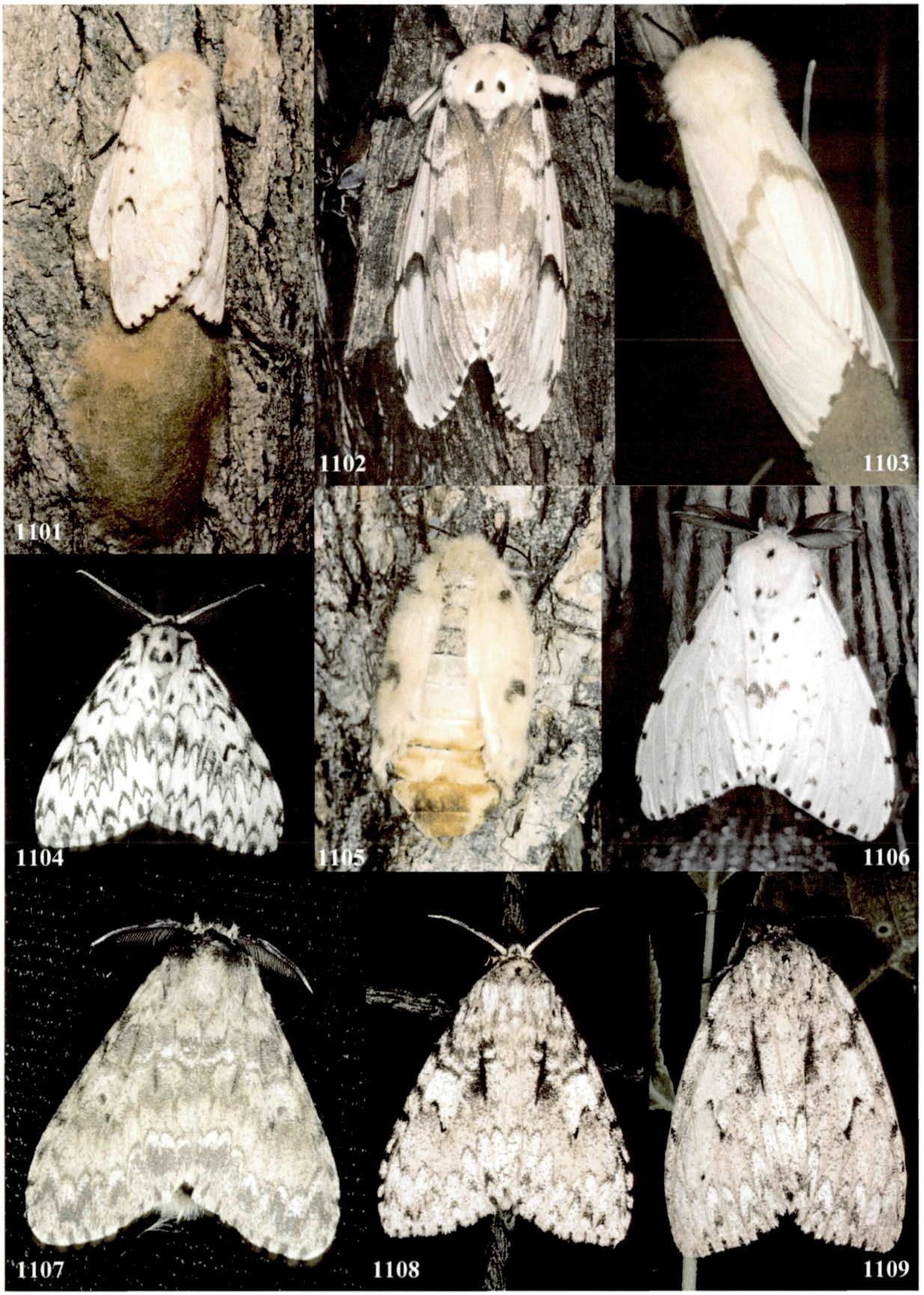

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**Figs. 1096-1100:** page 235

**Fig. 1096:** *Lymantria* (*Beatria*) *atemeles* COLLENETTE, 1932 – Caterpillar, e. o. ex Thailand, Kampaeng Saen, reared at BIIR on Mango, 2003 (Photo: Paul Schaefer).
**Fig. 1097:** *Lymantria* (*Nyctria*) *mathura aurora* BUTLER, 1877 – female pupa (left) and male pupa (right) e.o. ex Japan, Okinawa, Ishikawa, reared at BIIR, 1999 (Photo: Paul Schaefer).
**Fig. 1098:** *Lymantria* (*Nyctria*) *mathura aurora* BUTLER, 1877 – Caterpillar, Japan, Okinawa, Ishikawa, vi.1999. Larva resting on tree trunk in frequently used "C" or "J" shaped position (Photo: Paul Schaefer).
**Fig. 1099:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911 – Caterpillar, e.l. ex Taiwan, Taipai, reared on *Ficus* sp. at BIIR, 1999 (Photo: Paul Schaefer).
**Fig. 1100:** *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933 – Caterpillar, e.o. ex Japan, Honshu, Morioka, reared on *Juglans nigra* at BIIR, 2001 (Photo: Paul Schaefer).

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**Figs. 1101-1109:** previous page

**Fig. 1101:** *Lymantria* (*Porthetria*) *dispar dispar* LINNAEUS, 1758 – Female ovipositing, USA, Maryland, Sudlersville vii.1995 (Photo: Paul Schaefer).
**Fig. 1102:** *Lymantria* (*Porthetria*) *plumbalis* HAMPSON, 1895 – ♀, Thailand, Pakchong, reared on *Casuarina* sp., iii. 2001 (Photo: Paul Schaefer).
**Fig. 1103:** *Lymantria* (*Porthetria*) *xylina xylina* SWINHOE, 1903 – Female ovipositing, Taiwan, Tayuan, iii.1996 (Photo: Paul Schaefer).
**Fig. 1104:** *Lymantria* (*Lymantria*) *monacha* LINNAEUS, 1758 – ♂, S. Korea, Wontong, vii.2001 (Photo: Paul Schaefer).
**Fig. 1105:** *Lymantria* (*Porthetria*) *obfuscata* WALKER, 1865 – ♀, e.o. ex India, Himachal Pradesh, Kulu Valley, reared at BIIR 2003 (Photo: Paul Schaefer).
**Fig. 1106:** *Lymantria* (*Porthetria*) *bivittata bivittata* (MOORE, 1879) – ♂, Thailand, Khua Yai National Park, iii.2003 (Photo: Paul Schaefer).
**Fig. 1107:** *Lymantria* (*Spinotria*) *iris* STRAND, 1911 – ♂, e.l. ex Taiwan, Taipai, reared on *Ficus* sp. at BIIR, 1999 (Photo: Paul Schaefer).
**Fig. 1108:** *Lymantria* (*Spinotria*) *grisescens bantaizana* MATSUMURA, 1933 – ♂, Caterpillar, Japan, Honshu, Naganohara, vii.2001 (Photo: Paul Schaefer).
**Fig. 1109:** *Lymantria* (*Spinotria*) *grisescens* ssp. – ♀, S. Korea, Sorakasan National Park, viii.2000 (Photo: Paul Schaefer).

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# Taxonomic changes

## Newly described taxa

### New subgenera



### New species

**New subspecies**



## New combinations / The original combination is given in brackets

**Species**

**Subspecies**



## New synonymy / The genus of original description is given

**Species**



**Subspecies**

## Status changes

### Species



### Subspecies