

Edited by Toshiro Haruta

MOTHS OF NEPAL

Part 2



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Moths of Nepal, Part 2

Tinea Vol. 13 (Supplement 3)

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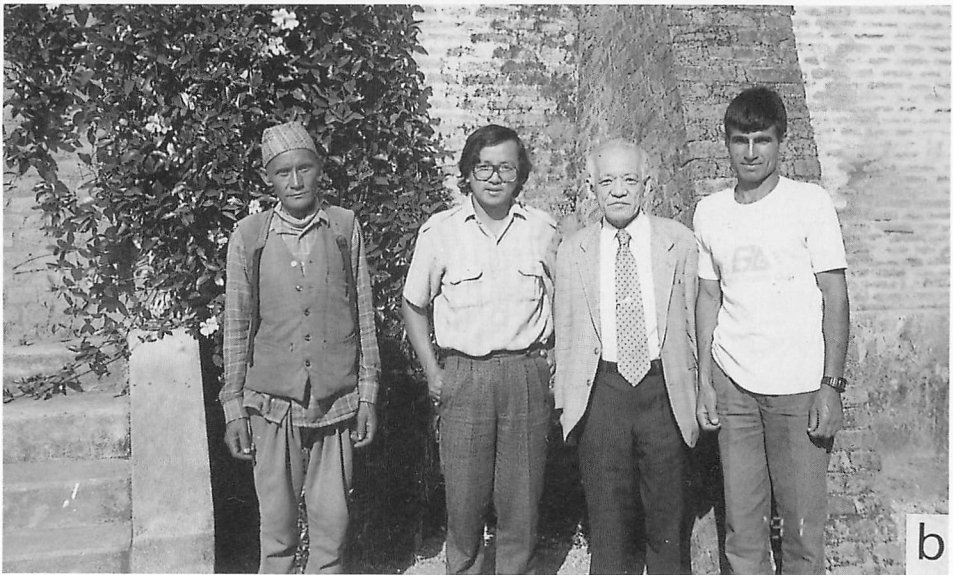


Fig. a. The forest fire on Mt. Phulchouki.
山火事による白煙を上げているプルチョーキ山。

Fig. b. The moths-catching team in Godavari: Messrs K. Tamang, M. S. Limbu,
T. Haruta and B. K. Silwal (left to right).
ゴダバリの採集チームのメンバー。左から、タマン氏、リンブー氏、編者、シルワール氏。

『第2集・ゴダバリ (Godavari) の蛾 (2)』の刊行にあたって

1992年2月に“ネパールの蛾・第1集”として『ゴダバリの蛾 (1)』を発刊した。ネパールの首都カトマンズ郊外のゴダバリ及びその後背にあるプルチョーキ峰において、主として1989年後半から1991年夏までの約2年間にわたり、集中的に採集した蛾のデータと全種類のカラー写真を表示したものである。その2年間に私は6回ネパールに赴き、延べ80日ほど夜間採集を試み、また私が日本にいる間はゴダバリ在住のネパール人の友人や協力者が継続して採集してくれるので、1カ所だけの蛾の目録としてはかなり充実したものになったと確信している。ネパールの蛾の図譜としては世界最初のものであり、インド北辺の蛾を扱った専門書としてもHampson以降100年ぶりのものであり、全種類をカラーで図示したのはもちろん初めてである。

ゴダバリ付近にはまだ多くの原生林が残っており蛾の種類も非常に多いので、『ゴダバリの蛾 (1)』に掲載できたのは、同地に産すると思われる大蛾類20数科のうち12科だけであり、そのうちでも特に種類数の多い次の3科に所属する蛾については本書(2)にまわさざるを得なかった。(1)では、ヒトリガ科ではヒトリガ亜科のみを取扱い、シャクガ科ではエダシャク亜科の一部が掲載、図示できなかった。またヤガ科においては、ウスベリケンモンからカラスヨトウまでのいわゆるTrifidaeの8亜科とヒトリモドキガ亜科を収録しただけで、Quadrifidaeの9亜科は本書(2)に記録、図示することになった。

それでも前書(1)では625種を記録、図示し、これらの種類と関係の深い、ゴダバリ以外のネパール産の2種、ネパール国外の9種を加え、合計636種を採録することができた。その中には25の新種と2つの新亜種が含まれている。前書(1)が発刊されると、国内の蛾の研究者、愛好者の間にかかなりの反響を呼び、また海外の専門家の間でも高く評価され、多くの讃辞をいただき、続編の発刊を待望される結果となった。そこで、資料の調査、研究の時間は決して十分なものではなかったが、ここに本書『ゴダバリの蛾 (2)』を刊行することにした次第である。

本書に収録したのは、マダラガ、イラガ、アゲハモドキ、イカリモンガ、ドクガ、トラガの6科と、前書に掲載できなかったシャクガ科のエダシャク亜科の残り、ヒトリガ科のコケガ亜科とカノコガ亜科、およびヤガ科のフサヤガ、ホソヤガ、キノカワガ、リング、コヤガ、キンウワバ、シタバ、クチバの8亜科である。

前書(1)の編集終了後においても、私は1992年2~3月、及び6~7月の2回、それぞれ2週間内外ゴダバリで採集を行い、ゴダバリ在住のネパール人の友人、協力者も引き続き採集してくれたので、前書(1)に記録・図示した各科、各亜科の追加種もかなり多くなった。特に2月末から3月初旬のこれまでの空白期の採集によって、年1回、早春羽化性の蛾も追加されることになり、前書と本書の2冊によって、ゴダバリ付近の蛾の目録

については次第に完成に近づいており、今後はそれほど多くの追加種は発見できないと思われる。

しかも不幸なことに、1992年の3、4月は数十年ぶりの異常乾燥がネパールを掩い、その間一滴の雨も降らず、その結果各地で山火事が発生した。山火事はネパール全土14県のうち8県で被害が多く、プルチャーキ峰の二地点の好採集地も火焰に包まれてしまった。高木は幹の表面を焦がしただけで枯死は免れているが、下草は灰燼に帰し、数多くの蛾の卵、幼虫、蛹が死滅したと思われる。そして植生が元に戻るには数十年の歳月を要するものと思われる。そうすると、前書(1)及び本書(2)に記録した蛾は極めて貴重な資料となり、今後永遠に得られない種類があるかもしれない。しかし私は今後もプルチャーキ峰で蛾の採集を継続する予定で、数年後には山火事の前後との蛾相の変化についての新しい研究を発表できるかもしれない。

1992年6月28日、一晩だけではあるが、ゴダバリから直線距離で約30kmほど離れたダマン峠で私は灯火採集を試みた。ダマン峠自体は標高2,330mであるが、実際には午後7時から10時頃までダマン峠のやや上方のシン・バンヤン(バンヤンもネパール語で峠の意味)2,420m付近で採集し、午前4時頃ダマン峠の展望塔にセットしておいた水銀灯に集まった蛾を採集し、ラベルはともにダマン峠と表示した。ダマン峠の採集品を「ゴダバリの蛾」に含ませるには多少の躊躇はあるが、たった一晩の採集で別個のリストを作る必要はないと判断し、本書に付け加えることにした。

各採集地の表示は前書(1)と同様である。

Godavari: 1,600m, カトマンズ南東, プルチャーキ峰の北麓

Mt. Phulchouki: 2,075mと2,275mの2地点(頂上は標高2,770m)

Daman pass: 2,420mと2,330mの2地点(プルチャーキ峰の西, 約30km)

本書『ゴダバリの蛾(2)』を発刊するについて、採集及び持ち出しの許可等に尽力されたネパール政府環境省、国立公園及び野生生物保護局のS. K. Dhungel 局長に謝意を表するとともに、現地の採集チームのリーダー、Mahendra S. Limbu 氏をはじめ、採集、保存に常々協力していただいているAugustine Thapa, Babu K. Silwal, Surya Bahadur及びKancha Tamang の各氏に深く感謝したい。

なお、前書(1)において各分野を執筆された岸田泰則、杉 繁郎、矢崎克己、吉本浩の各氏には本書(2)においても引き続き追加種を担当され、本書の執筆担当は、マダラガ科(堀江清史氏)、イラガ科及びヤガ科の大部分(吉本 浩氏)、ヒトリガ科コケガ亜科、ドクガ科の大部分(岸田泰則氏)、トラガ科及びドクガ科の一部(杉 繁郎氏)、シャクガ科エダシャク亜科の一部(佐藤力夫博士)をお願いしたことを明記して深謝したい。なお、アゲハモドキガ科、イカリモンガ科、ヒトリガ科カノコガ亜科、ヤガ科シタバガ亜科、クチバ亜科の一部は私が執筆した。

前書（１）と同様に、文献などの面で日頃からお世話になり、かつ多くの助言をいただいている井上 寛、大和田 守両博士に対して厚く感謝する。また、カラー図版の写真を撮影をして頂いた山口 茂氏、表紙をデザインして頂いた鈴木亨二氏、出版に関してお世話になった猪又敏男氏の御尽力を多とするものである。

本書（２）においても前書（１）と同様に、各種ごとに学名、原記載出典、採集データを記録し、各種について少なくとも１個体はカラー写真で図示した。本書で命名された新種、新亜種の完模式標本は東京の国立科学博物館に保管され、それ以外の標本の一部は各執筆者が所有するほか、残余の大部分は千葉県立中央博物館及びネパールのトリブバン大学付属科学博物館に保管される予定である。

本書の第３集は『東ネパールの蛾』として、東部ネパールのジリ（Jiri, ジャナカプール県）、オカルドゥンガ（Okhaldhunga, サガルマータ県）、ペクシンダ（Pheksinda, コシ県）、バサントプル（Basantpur, コシ県）で採集された蛾を中心に、1963年の日本鱗翅学会隊の採集品を加えて、1993年半ばに発刊の予定であり、第４集は『ネパールの高山蛾』として、ネパールで最も魅力のあるヒマラヤ山脈のカンチェンジュンガ、エベレスト、ランタン、アンナプルナなどの各高峰の高山地帯の蛾を収録し、1994年初頭に発刊する計画である。

Fauna of British India の蛾の第一巻がHampson によって書かれたのが1892年であり、その序文の日付は1892年11月27日となっているが、そのちょうど100 年目の記念日にこの序文を記すことに限らない喜びと光栄を感じている。

1992年11月27日

春田俊郎

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Fig. c. Vegetation around Godavari.

ゴダバリ周辺の植生。

Introduction to Part 2 “ Moths of Godavari (2) ”

In February 1992, I published “ Moths of Godavari (1)” as “ Moths of Nepal, Part 1” . In the book 625 species of moths caught at Godavari and Mt. Phulchouki in Kathmandu valley for two years from June 1989 to August 1991 were recorded. In those two years I visited Nepal six times and concentrated on catching moths for at least two weeks each time. Fortunately, while I was absent my Nepalese friends and helpers took moths continuously at both Godavari and Mt. Phulchouki. As a result, for a list of moths at only one place, the book would be satisfactory to some extent. At any rate the book was the first publication on Nepalese moths, and as for a special book on moths in the northern area of the Indian subcontinent, the book has been published after an interval of 100 years since Hampson (1892). And also it was the first book showing all the species in color pictures.

There are so many moth-species in Godavari and Mt. Phulchouki because primitive forests remain in many places. Although in the previous part of this series only 12 families of the 20 or more families which may live there were able to be treated, 636 species including 25 new species and 2 new subspecies were recorded (625 species of Godavari moths, two Nepalese moths outside of Kathmandu valley and nine species related to Godavari moths from the neighboring countries and areas).

When the book “ Moths of Godavari (1)” was published, it was appreciated by investigators and lovers of moths and got some admiration both in Japan and in foreign countries as an excellent publication. Then, as I had not enough time to proceed to the next book, I made up my mind to publish the second publication “ Moths of Godavari (2)” as part of the series of “ Moths of Nepal” . In this part, the species of moths which belong to the following families and subfamilies are recorded with their collecting data and color pictures: Zygaenidae, Limacodidae, Epicopeiidae, Callidulidae, Lymantriidae, Agaristidae, the remaining species of Ennominae in Geometridae, Lithosiinae and Ctenuchinae in Arctiidae, and the so called “ Quadrifidae” namely the subfamilies Euteliinae, Stictopterinae, Sarrothripinae, Chloephorinae, Acontiinae, Plusiinae, Catocalinae and Ophiderinae in Noctuidae.

After publishing the previous part “ Moths of Godavari (1)” , I visited Nepal and tried to take moths from February to March in 1992 and again from June to July in the same year. On each case I stayed and caught moths for about two weeks. And as the Nepalese helpers in Godavari had still continued the catching as before, I was able to take many specimens of moths to Japan with me in 1992. Then in this part (2) many species were added to the families treated in the previous part. Particularly, in this part (2) some strange species appearing in early spring from the end of February were able to be added. The list of moths in Godavari is approaching completeness in these two publications (1) and (2). I presume that not so many additional species will be found hereafter in Godavari.

Unfortunately in March and April in 1992, a forest fire occurred in many places in Nepal aided by a dryness which had never happened in 50 years. The forest fire broke out in 8 zones of the 14 zones in Nepal and my collecting points on Mt. Phulchouki were also covered by fire. The large trees were able to escape from their death, but almost all small trees, bushes and grasses in the forest were burnt up. I think, to my regret, many eggs, caterpillars and chrysalises of moths may have been killed by the fire. Probably it will take some 30 years to recover the vegetation as before. If it is so, the moths recorded in the books "Moths of Godavari (1) and (2)" will be very valuable for my successors because some species of moths of Mt. Phulchouki would have been made extinct by the forest fire this spring. As my helpers and I will carry on the work of catching moths on Mt. Phulchouki as before, I may write a report about the change of moth-fauna before and after the fire on the mountain in these years.

On June 28th in 1992, I tried light-collecting at Daman Pass about 30km westward from Godavari. I set two mercury bulbs at Daman Pass (2,330m in altitude) and Sin Bhajyan (Bhanjyan means "pass" in Nepalese, 2,480m in altitude). As the Daman area does not belong to the Godavari area, so I had a little hesitation to record the species in this book, but as it was only one night of collecting, I included the moths from the Daman area in this part as an additional point of Godavari. Then the catching places in this part are as follows.

Godavari: 1,600m, southeast of Kathmandu, northern foot of Mt. Phulchouki.

Mt. Phulchouki: lower point (2,075m) and higher point (2,275m).

Daman Pass: Daman Pass (2,330m) and Sin Bhanjyan (2,420m).

I express my hearty thanks to Dr Sanat K. Dhungel, director general of National parks and Wildlife conservation Department, Ministry of Environment, Royal Government of Nepal, to allow me to catch moths and take them to Japan. I also appreciate the assistance of the moth-catching team in Godavari, Mr Mahendra S. Limbu, the leader, Mr Augustine Thapa, Mr Babu Krishna Silwal, Mr Surya Bahadur and Mr Kancha Tamang. I am much indebted to the authors, Mr K. Horie, Mr Y. Kishida, Dr R. Sato, Mr S. Sugi, Mr K. Yazaki and Mr H. Yoshimoto, who wrote this book taking partial charge of the moths. I express my heartfelt gratitude to Dr H. Inoue and Dr M. Owada for their constant assistance and advice in many ways. And I am grateful to Mr T. Inomata who arranged the publication of this book, to Mr S. Yamaguchi who took the color photographs of the plates and to Mr K. Suzuki who designed the cover of this book.

In the text, the scientific name, full reference to its original description and collecting data are given for each species. Comments are given if necessary. In the color plates, all the species recorded here are illustrated with at least one specimen. Unless otherwise stated, all the holotypes of new species and sub-species described here will be deposited in the National Science Museum, Tokyo.

Except the type specimens, the most of the specimens will be returned to Nepal and will be kept in the Science Museum of Tribuvan University, and some moths will be kept in Chiba Central Museum and each author's private collection.

Now as a continuation of this series, I am preparing to publish "Moths of Nepal, Part 3". It will be published by the end of 1993 at the latest, and will treat the moths of east Nepal which have been caught at Jiri (Janakpur Zone), Okhaldhunga (Sagarmatha Z.), Pheksinda (Kosi Z.) and Basantpur (Kosi Z.) and the moths taken in 1963 by the "Lepidopterological reseach expeditional party" to Nepal Himalaya which I led. I am going to publish still more "Moths of Nepal, Part 4" titled "Moths in high altitude" recording the most attractive moths from Mt. Kangchenjunga, Mt. Everest, Mt. Langtang and Mt. Annapurna of the Himalayan region. Part 4 will be published by the end of 1994.

The excellent book "Fauna of British India, Moths 1" by Hampson was published in 1892. At the end of Preface of the book he kept on actual date "November 27th, 1892". It is my pride and honor that I publish this book on the one hundred anniversary of Hampson.

November 27th, 1992
Toshiro Haruta

List of New Taxa and Nomenclatural Changes

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- Agalope glacialis* Butler, stat. n. p. 2.
Agalope primularis Butler, stat. n. p. 3.

Geometridae by R. Sato

- Arichanna flavimedia* (Hampson), comb. n. p. 5.
Alcis perspicuata (Moore), stat. rev. & comb. n. p. 6.
Alcis athola (Prout), comb. n. p. 6.
Alcis amica Sato, sp. n. p. 6.
Alcis harutai Sato, sp. n. p. 7.
Alcis changmaiensis nepalina Sato, subsp. n. p. 8.
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Limacodidae by H. Yoshimoto

- Phrixolepia similis* Yoshimoto, sp. n. p. 35.

Arctiidae by Y. Kishida

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Blasticorhinus varius Yoshimoto, sp. n. p. 74.
Mecodina quadripuncta Yoshimoto, sp. n. p. 75.
Pangrapta pseudalbistigma Yoshimoto, sp. n. p. 76.
Lophomilia albistria Yoshimoto, sp. n. p. 76.
Lophomilia violescens Yoshimoto, sp. n. p. 77.
Acronicta longatella Draudt, syn. n.; of *Triana denticulata* Moore. p. 124.
Orthosia harutai Yoshimoto, sp. n. p. 125.
Orthosia nepalensis Yoshimoto, sp. n. p. 126.
Orthosia nigralba Yoshimoto, sp. n. p. 126.
Harutaeographa Yoshimoto, gen. n. p. 127.
Harutaeographa fusciculata (Hampson), comb. n. p. 127.
Harutaeographa bipuncta Yoshimoto, sp. n. p. 127.
Harutaeographa castanea Yoshimoto, sp. n. p. 128.
Harutaeographa pallida Yoshimoto, sp. n. p. 128.
Harutaeographa caerulea Yoshimoto, sp. n. p. 129.
Lithopolia Yoshimoto, gen. n. p. 129.
Lithopolia confusa (Wileman), comb. n. p. 130.
Xylena nepalina Yoshimoto, sp. n. p. 131.
Xylena apicimacula Yoshimoto, sp. n. p. 132.

- Lophoterges taiwana semialba* Yoshimoto, subsp. n. p. 133.
Nyctycia angustipennis Yoshimoto, sp. n. p. 133.
Nyctycia shelpa Yoshimoto, sp. n. p. 134.
Meganephria splendida Yoshimoto, sp. n. p. 134.
Euplexidia nepalensis Yoshimoto, sp. n. p. 135.
Feliniopsis siderifera (Moore), comb. n. p. 135.
Feliniopsis albarenalis (Chang), comb. n. p. 136.

Noctuidae by T. Haruta

- Belciana kala nepalensis* Haruta, subsp. n. p. 63.
Aedia hollowayi Haruta, sp. n. p. 70.

Lymantriidae by Y. Kishida

- Daplasa variegata seminigra* Kishida, subsp. n. p. 82.
Euproctis marginata insulata Wileman, stat. n. p. 85.

Noctuidae by S. Sugi

- Sarbanissa tricycla* Sugi, sp. n. p. 96.

Geometridae by K. Yazaki

- Hemistola grandis* Yazaki, sp. n. p. 104.
Chlorissa aquamarina (Hampson), comb. n. p. 104.
Chlorissa arcana Yazaki, sp. n. p. 104.
Comostola leucosticta Yazaki, sp. n. p. 105.
Trichopteryx virens Yazaki, sp. n. p. 106.
Trichopterygia fulvifasciata Yazaki, sp. n. p. 107.
Trichopterygia nepalensis Yazaki, sp. n. p. 107.
Trichopterygia placida Yazaki, sp. n. p. 107.
Trichopterygia melanogramma Yazaki, sp. n. p. 107.
Trichopterygia harutai Yazaki, sp. n. p. 108.
Trichopterygia albipuncta Yazaki, sp. n. p. 108.
Trichopterygia superba Yazaki, sp. n. p. 108.
Xenortholitha falcata Yazaki, sp. n. p. 110.
Idiotephria occidentalis Yazaki, sp. n. p. 110.
Planociampa augustinei Yazaki, sp. n. p. 113.

Thyatiridae by H. Yoshimoto

- Habrosyne violacea* (Fixsen), stat. rev. p. 122.
Habrosyne violacea nigricans Werny, stat. n. p. 122.
Habrosyne violacea argenteipuncta Werny, stat. n. p. 122.
Habrosyne violacea chinensis Werny, stat. n. p. 122.
Habrosyne violacea burmanica Werny, stat. n. p. 122.
Habrosyne violacea szechwana Werny, stat. n. p. 122.
Habrosyne violacea pallescens Werny, stat. n. p. 122.

Epipsestis albicosta Yoshimoto, sp. n. p. 122.

Demopsestis formosana mahendrai Yoshimoto, subsp. n. p. 123.

Stenopsestis alternata bryki Yoshimoto, subsp. n. p. 123.

Lasiocampidae by Y. Kishida

Kunugia fulgens jianchuanensis Tsai & Hou, comb. & stat. n. p. 142.

Bombycidae by Y. Kishida

Sesquiluna mirifica Kishida, sp. n. p. 143.

Theophoba Mell, syn. n.; of *Sesquiluna* Forbes. p. 143.

Sesquiluna affinis Kishida, sp. n. p. 144.

Andraca angulata Kishida, sp. n. p. 144.

Notodontidae by S. Sugi

Cerura menciana basirectilinea Sugi, subsp. n. p. 148.

Rachiades danieli Sugi, comb. n. p. 149.

Rachiades siamensis Sugi, sp. n. p. 150.

Pheosiopsis sichuanensis (Cai), sp. rev. & comb. n. p. 150.

Ramesa bhutanica (Bänziger), comb. n. p. 151.

Ramesa siamica (Bänziger), comb. n. p. 151

Odontosina mahendra Sugi, sp. n. p. 152.

Miostauropus thomasi Sugi, syn. n.; of *Miostauropus mioides* (Hampson). p. 153.

Gazalina purificata Sugi, sp. n. p. 155.

ZYGAENIDAE

Kiyoshi Horie

Twenty species of the Zygaenidae are listed from Godavari and Kathmandu area based on the collections of Mr T. Haruta and National Science Museum, Tokyo, and on some other small collections.

Eterusia aedeae edocla Doubleday (Pl. 33: 1, 2)*Heterusia edocla* Doubleday, 1847, Zoologist 2: 469.

Godavari: 3♂, 9–14. vi. 1963; 3♂, 21–28. ix. 1989; 1♂, 1. x. 1989; 1♂, 2. iv. 1991; 2♂, 28. iv. 1991; 2♂, 7–9. v. 1991; 2♂, 16–18. v. 1991; 2♂, 23–29. v. 1991; 4♂, 6–13. vi. 1992.

The extent of median yellow area of hindwing is considerably variable in both sexes. The males are often attracted to light in the night.

Eterusia tricolor Hope (Pl. 33: 3)*Eterusia tricolor* Hope, 1841, Trans. Linn. Soc. Lond. 18: 445, pl. 31, fig. 4.

Godavari: 1♂, 30. v. 1990; 1♀, without collecting date.

Pidorus glaucopis (Drury) (Pl. 33: 5)*Phalaena glaucopis* Drury, [1773], Illust. nat. Hist. 2: 11, pl. 6, fig. 4.

Godavari: 1♂, 8. vi. 1991; 1♂, 12. vi. 1991; 1♂, 25. vi. 1991; 1♂, 12. ix. 1991.

Milleria adalifa (Doubleday) (Pl. 33: 9, 12)*Gynautocera adalifa* Doubleday, 1847, Ann. Mag. nat. Hist. (1) 19: 76.

Godavari: 1♀, 19. vi. 1963; 1♂, 27. vi. 1974. Kathmandu: 2♀, 5. x. 1981.

Chalcosia auxo albata Moore (Pl. 33: 11)*Chalcosia albata* Moore, 1879, Proc. zool. Soc. Lond. 1879: 390.

Godavari: 5♂ 3♀, 9–18. vi. 1963; 1♀, 6. ix. 1981; 1♀, 5. vi. 1987; 1♂, 10. vi. 1987. Sundarijal: 7♂, 8. x. 1981.

Corma maculata Hampson (Pl. 33: 18)*Corma maculata* Hampson, [1893], Fauna Br. India (Moths) 1: 268.

Godavari: 1♂ 2♀, 10–11. vi. 1963. Sundarijal: 1♀, 13. ix. 1981.

Sortia pulchella (Kollar) (Pl. 33: 14, 17)*Heterusia pulchella* Kollar, [1844], in Hügel, Kaschmir und das Reich Siek 4: 461.

Godavari: 4♂ 3♀, 8–12. vi. 1963; 1♂, 6. vi. 1990; 1♀, 12. vi. 1991.

Sortia bicolor (Moore) (Pl. 33: 13)*Devanica bicolor* Moore, 1884, Trans. ent. Soc. Lond. 1884: 955.

Sundarijal: 1♂, 6. x. 1981.

Gynautocera papilionaria Guérin-Méneville (Pl. 33: 4)

Gynautocera papilionaria Guérin-Méneville, 1831, Magasin Zool. Paris (1) Insectes 1: 12.

Godavari: 2♂ 1♀, 8–16. vi. 1963.

Histia flabellicornis flabellicornis (Fabricius) (Pl. 33: 6)

Zygaena flabellicornis Fabricius, 1775, Syst. Ent.: 831.

Godavari: 2♂, 4. ix. 1974.

Campylotes histrionicus Westwood (Pl. 33: 7)

Campylotes histrionicus Westwood, 1840, Madras J. Lit. & Sci. 12: 131.

Godavari: 4♀, 8–17. vi. 1963; 1♀, 4. vi. 1973; 1♂, 5. vi. 1987; 2♂ 4♀, 6. vi. 1988; 1♀, 19. iv. 1992. Nagarjan: 1♀, 6. vi. 1980. Dhulikhel: 1♂, 20. v. 1987.

Campylotes sikkimensis Elwes (Pl. 33: 8)

Campylotes sikkimensis Elwes, 1890, Proc. zool. Soc. Lond. 1890: 384, pl. 33, fig. 2.

Sundarijal: 1♀, 6. x. 1981.

In the Kathmandu area only a single female was captured at Sundarijal (1,600m). Its size and wing maculation are somewhat different from those of the specimens secured from Lukla, E. Nepal. I do not decide whether these differences come from individual variation or racial character. More material including the males is needed for further study.

Achelura bifasciata (Hope) (Pl. 33: 10)

Chelura bifasciata Hope, 1841, Trans. Linn. Soc. Lond. 18: 447.

Kathmandu: 23♂ 12♀, 25–28. ix. 1979.

Agalope hyalina (Kollar) (Fig. 110)

Chalcosia hyalina Kollar, [1844], in Hügel, Kaschmir und das Reich Siek 4: 462.

Mt. Phulchouki: 1♀, 19. v. 1984.

Agalope glacialis Butler, sp. rev. (Pl. 33: 15)

Agalope glacialis Butler, 1881, Illust. typical Specimens lepid. Heteroc. Colln Br. Mus. 5: 16, pl. 84, fig. 6.

Godavari: 1♂, 11. vi. 1963; 1♂, 19. v. 1984.

This and the following species, both described from Darjeeling, have been treated as junior synonyms of *A. hyalina*, but are clearly separated by the coloration of forewing and by the male genitalia. In this species the ground color of the basal area of forewing is pure white instead of creamy white as in *hyalina*. The male genitalia (Fig. 112) differ from those of *hyalina* (Fig. 111) in the shape of valva as figured.

Acherula glacialis (Moore, 1872) have once been treated under the genus *Agalope*, but no replacement name for *Agalope glacialis* Butler, 1881 has been proposed.

Agalope primularis Butler, sp. rev. (Pl. 33: 16)

Agalope primularis Butler, 1875, Proc. zool. Soc. Lond. 1875: 392.

Godavari: 2♀, 18. iv. 1989; 1♂, 12. iv. 1991.

The ground color of the basal area of forewing is bright yellow. In the male genitalia (Fig. 113) the shape of valva is considerably different from those of the preceding two species.

Phacusa tenebrosa Walker (Pl. 53: 29)

Phacusa tenebrosa Walker, 1854, List Specimens lepid. Insects Colln Br. Mus. 1: 150.

Godavari: 1♂, 7. vi. 1963.

Lophosoma cuprea (Walker) (Pl. 53: 30)

Synformis cuprea Walker, 1856, List Specimens lepid. Insects Colln Br. Mus. 7: 1596.

Godavari: 1♀, 12. vi. 1963.

Arachotia flaviplaga Moore (Pl. 53: 31)

Arachotia flaviplaga Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 14.

Godavari: 1♀, 12. vi. 1963; 1♀, 29. vi. 1992.

Zygaena cashmirensis Kollar (Pl. 53: 25)

Zygaena cashmirensis Kollar, [1844], in Hügel, Kaschmir und das Reich Siek 4: 459, pl. 19, fig. 6.

Godavari: 1♀, 2. v. 1991.

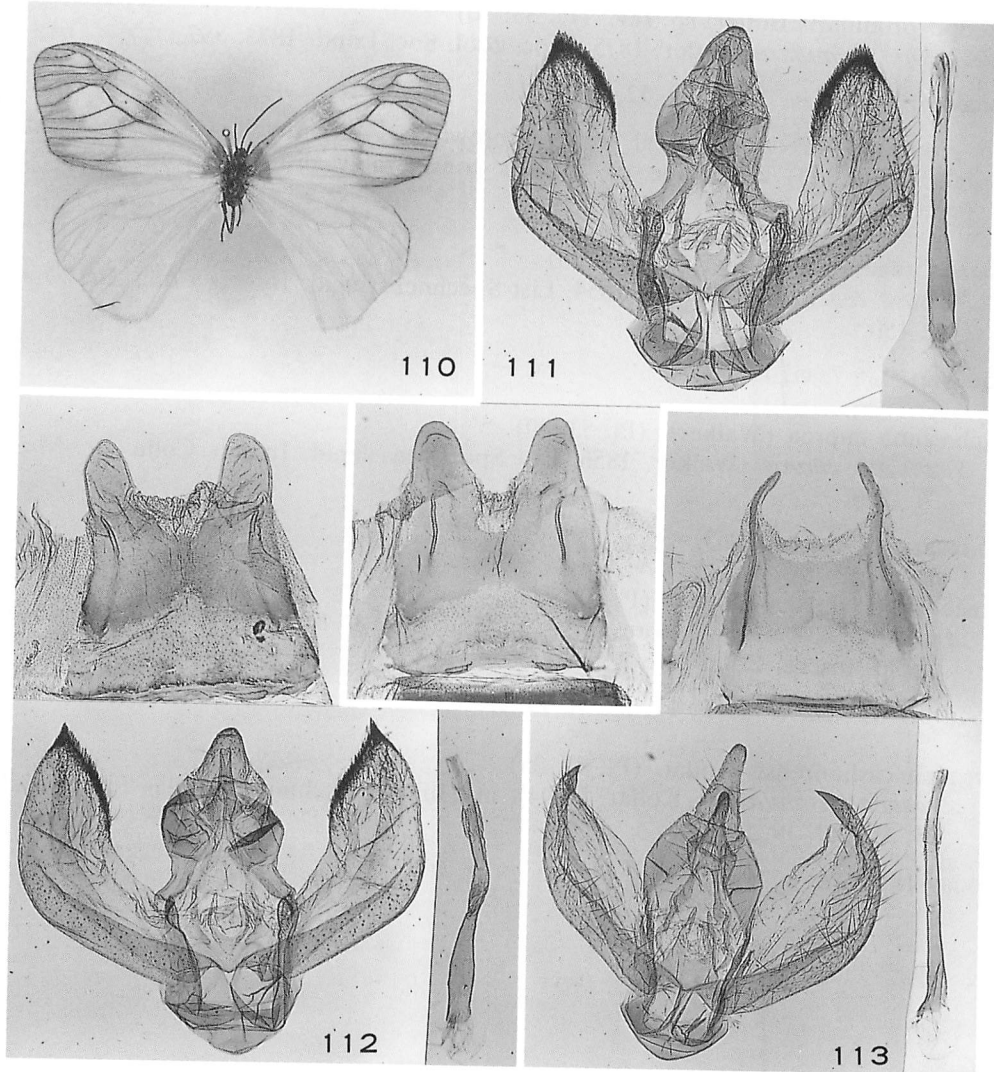


Fig. 110. Adult of *Agalope hyalina* (Kollar), ♀
 Figs 111–113. Male genitalia of *Agalope* spp. 111. *A. hyalina* (Kollar), E. Nepal. 112.
A. glacialis Butler. 113. *A. primularis* Butler.

GEOMETRIDAE: ENNOMINAE (part)

Rikio Sato

Arichanna (Epicterodes) flavinigra Hampson (Pl. 34: 1)*Arichanna flavinigra* Hampson, 1907, J. Bombay nat. Hist. Soc. 18: 43.

Godavari: 1♂ 1♀, 26–28. vi. 1990. Mt. Phulchouki: 1♀, 2. vii. 1990.

Arichanna (Icterodes) sparsa (Butler) (Pl. 34: 2)*Icterodes sparsa* Butler, 1890, Entomologist 23: 316.

Godavari: 2♂ 2♀, 17–24. vi. 1990. Mt. Phulchouki: 1♀, 17. vi. 1991.

Arichanna (Icterodes) ramosa ramosa (Walker) (Pl. 34: 7)*Scotosia ramosa* Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35:1688.

Godavari: 1♀, 29. iv. 1990; 1♀, 24. vi. 1990.

Arichanna (Paricterodes) lapsariata consocia (Butler) (Pl. 34: 3)*Abraxas consocia* Butler, 1880, Ann. Mag. nat. Hist. (5) 6: 226.

Godavari: 1♀, 7. xi. 1991; 1♀, 25. xi. 1991. Mt. Phulchouki: 15♂ 3♀, ix. 1991.

Arichanna furcifera Moore (Pl. 34: 4)*Arichanna furcifera* Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 275.

Godavari: 1♂, 26. vi. 1990. Mt. Phulchouki: 4♂, 21. vii. 1990.

Arichanna flavimedia (Hampson), comb. n. (Pl. 34: 6)*Boarmia flavimedia* Hampson, 1895, Fauna Br. India (Moths) 3: 272.

Godavari: 1♂, 15. iv. 1990; 1♂, 9. v. 1990; 1♂, 26. v. 1990; 1♂, 27. ii. 1992.

Male genitalia (Fig. 114) indicate this species is a close relative of *furcifera*.**Arichanna** sp. (Pl. 34: 5)

Godavari: 1♂, 21. ii. 1992.

This species will be described as new to science by Dr. Stüning and one male specimen recorded above will be designated as one of the paratypes by him. Male genitalia are shown as in Fig. 115.

Arichanna Moore, 1868 is a remarkably heterogeneous genus, in which *furcifera*, *flavimedia* and this undescribed species constitute a natural group.

Arichanna marginata Warren (Pl. 34: 8)*Arichanna marginata* Warren, 1893, Proc. zool. Soc. Lond. 1893: 423.

Godavari: 1♂, 13. iv. 1990. Mt. Phulchouki: 1♂, 15. vi. 1990.

Arichanna transfasciata Warren (Pl. 34: 9)

Arichanna transfasciata Warren, 1893, Proc. zool. Soc. Lond. 1893: 425.

Godavari: 1♂ 1♀, 24–30. ix. 1989; 1♂, 25. v. 1991; 1♀, 1. vi. 1991; 2♂, 11–24. vi. 1991; 8♂, 20–30. ix. 1991; 3♂, 2–6. x. 1991; 1♀, 2. xi. 1991.

Arichanna albolineata Inoue (Pl. 34: 10)

Arichanna albolineata Inoue, 1988, Tinea 12: 101, figs 6A, 7A.

Godavari: 1♂, 21. v. 1979.

This species was described from Sikkim and Nepal. The above mentioned specimen is one of the paratypes designated by Inoue (1988).

Arichanna tramesata Moore (Pl. 34: 11)

Arichanna tramesata Moore, 1868, Proc. zool. Soc. Lond. 1867: 658, pl. 33, fig. 2.

Godavari: 2♂, 28. iii. 1990; 1♂, 14. iv. 1990; 2♂, 7–25. v. 1990. Mt. Phulchouki: 1♂ 1♀, 11. v. 1991.

Alcis perspicuata (Moore), stat. rev. & comb. n. (Pl. 34: 12, 13)

Boarmia perspicuata Moore, 1868, Proc. zool. Soc. Lond. 1867: 630.

Godavari: 6♂ 2♀, 13–29. iv. 1990; 10♂ 3♀, 12–25. v. 1990; 15♂ 4♀, 1–11. v. 1991; 8♂ 2♀, 1–27. x. 1991; 3♂ 2♀, 2–11. xi. 1991. Mt. Phulchouki: 1♀, 25. v. 1990; 6♂ 2♀, 8–11. 1991.

This species has been regarded as a junior synonym of *Boarmia admissaria* Guenée, 1857, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.) 9: 239, since Hampson (1895), but it is distinct from the latter in male genitalia (Fig. 116): a pair of projections of juxta much longer and broader; a single cornutus much longer, over one-half length of aedeagus, pointed at apex.

Alcis athola (Prout), comb. n. (Pl. 34: 14)

Cleora athola Prout, 1926, Novit. zool. 33: 183.

Godavari: 1♂, 22. ii. 1992; 2♂, 4. iii. 1992.

Male and female genitalia (Figs 119, 122) clearly show this species belongs to *Alcis*.

Alcis amica sp. n. (Pl. 34: 15, holotype)

Male. Length of forewing 20mm. Antennal pectinations very long, the longest pecten about 10 times as long as the length of the segment, apical one fifth non-pectinate. Forewing brown; basal half strongly tinged with black, followed by whitish shade along postmedial line; discocellular spot black, represented by a short streak, involved in black area; antemedial line black, gently excurved; postmedial and subterminal lines pale, strongly crenulate. Hindwing paler than forewing, very sparsely irrorate with brown; lines wanting; a small discocellular spot visible. Underside: both wings yellowish, lightly irrorate with brown; basal half of forewing darker than the rest of wings as in upperside. Female unknown.

Male genitalia (Fig 117). Central process of gnathos slender, not triangular as in the preceding species; a pair of projections from dorsal end of juxta slender, with pointed tips; ampulla digitate; a short cornutus with a sharply pointed thorn.

Holotype. ♂, Godavari, 11. v. 1991.

Alcis variegata (Moore) (Pl. 34: 16)

Pseudocoremia variegata Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 240.

Godavari: 3♂ 2♀, 29–31. iii. 1990; 5♂, 15–29. iv. 1990; 5♂, 2–30. v. 1990; 4♂ 2♀, 7–24. vi. 1990; 1♂, 21. vii. 1990; 3♂, 8–18. iv. 1991; 2♀, 7. viii. 1991; 1♀, 26. ii. 1992; 8♂ 4♀, 1–30. iii. 1992. Mt. Phulchouki: 1♂ 1♀, 21. vii. 1990; 2♂, 8–23. v. 1991; 1♂, 4. viii. 1991.

Alcis harutai sp. n. (Pl. 34: 17, holotype; 18)

Length of forewing 16–18mm. Similar to *variegata* in maculation, but a little larger. Male antennal pectinations longer. Ground colour paler, tinged with brown. Forewing more sharply defined, area between antemedial and postmedial lines paler than the rest. Hindwing less marked. Also similar to *tenera* (Warren), 1893, *Proc. zool. Soc. Lond.* 1893: 422, from Sikkim, but distinguished from it by shorter male antennal pectinations.

Male genitalia (Fig. 120). Central process of gnathos triangular; a pair of projections from dorsal end of juxta broad; ampulla with two processes, both equal in length, ventral one pointed at apex; long horn-like cornutus with a short thorn near apex.

Female genitalia (Fig. 121). Colliculum shorter than wide; bursa copulatrix very long and slender, posterior one-sixth lightly sclerotized, remainder membranous; signum lacking.

Holotype. ♂, Godavari, 23. v. 1990. Paratypes. Godavari: 1♀, 29. iv. 1990; 2♂, 13. v. 1990; 2♂ 1♀, 8. v. 1991; 2♂ 1♀, 11. v. 1991; 1♂, 12. v. 1991; 1♂, 23. v. 1991; 1♂, 7. x. 1991; 1♂, 9. x. 1991. Mt. Phulchouki: 2♀, 25. v. 1990; 1♀, 8. v. 1991; 2♀, 11. v. 1991; 1♂, ix. 1991. Nr. Kathmandu, Mt. Siwapuri 2,650m, 1♂, 7. x. 1981 (M. Owada). C. Nepal, near Nilgiri, Lete 2,400m, 1♀, 23. vi. 1969 (T. Miyashita). C. Nepal, Gandaki, Parbat Dist., Ghorapani, Deolari 2,800m, 1♂, 15. x. 1981 (M. Owada).

Alcis decussata (Moore) (Pl. 34: 19)

Cleora decussata Moore, 1868, *Proc. zool. Soc. Lond.* 1867: 628, pl.33, fig.4.

Godavari: 1♂, 13. v. 1990; 4♂, 4. viii. 1991. Mt. Phulchouki: 1♂, 11. v. 1991; 3♂, 4. viii. 1991.

Alcis albifera (Moore) (Pl. 34: 20)

Pseudocoremia albifera Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 241.

Godavari: 4♂ 1♀, 15–29. iv. 1990; 7♂ 1♀, 1–15. v. 1990; 4♂, 16–27. iv. 1991; 9♂, 3–12. v. 1991; 4♂, 20–28. ix. 1991; 9♂, 7–9. x. 1991; 1♂ 1♀, 1–2. xi. 1991. Mt. Phulchouki: 1♂, 15. iv. 1990; 1♂, 25. v. 1990; 3♂, ix. 1991.

Alcis semialba (Moore) (Pl. 34: 21, 22, 23)

Pseudocoremia semialba Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 241.

Godavari: 1♂ 2♀, 28–31. iii. 1990; 4♂, 11–28. iv. 1990; 1♂, 19. v. 1991; 1♂, 3. xi. 1991; 1♂ 1♀, 25–29. ii. 1992; 4♂, 1–6. iii. 1992. Mt. Phulchouki: 1♂, 4. viii. 1991.

Variable in colour and maculation. Generally vernal brood (Pl. 34: 22, 23) is paler with better defined maculation than aestival and autumnal broods (Pl. 34: 21).

Alcis changmaiensis nepalina subsp. n. (Pl. 34: 24, holotype; 25)

Length of forewing 16–17mm in male, 16–18mm in female. Different from the nominotypical subspecies from Thailand as follows: forewing paler in colour, less tinged with red; antemedial and postmedial lines more clearly defined; fuscous marginal band of both wings less developed; underside paler, fuscous marginal band less developed.

Male genitalia (Fig. 118). A short process ventrad of ampulla represented by a small protuberance; a single horn-like cornutus longer than in the nominotypical subspecies.

Female genitalia (Fig. 123). Very similar to those of *semialba*, but posterior part of bursa copulatrix less sclerotized.

Holotype. ♂, Godavari, 27. ii. 1992. Paratypes. Godavari: 1♀, 26. iii. 1990; 1♂, 17. iv. 1990; 1♂, 22. iv. 1990; 1♂, 28. v. 1990; 1♀, 28. ii. 1992; 1♂, 6. iii. 1992.

This species was described based on eleven males from Thailand by me (Sato, 1991), but female material was not examined at that time. It is very similar to *semialba* in genitalia of both sexes, but characterized by the reddish brown forewing.

Alcis nigradorsaria (Guenée) (Pl. 34: 26)

Cleora nigradorsaria Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 9: 232.

Godavari: 1♀, 26. v. 1990; 1♀, 11. v. 1991; 1♀, 4. viii. 1991. Mt. Phulchouki: 1♀, 4. viii. 1991.

Alcis maculata prodictyota (Wehrli) (Pl. 34: 27)

Arichanna (Dictyodea) prodictyota Wehrli, 1934, Int. ent. Z. 27: 509.

Godavari: 1♂, 26. v. 1990. Mt. Phulchouki: 1♀, 11. v. 1991; 2♀, 4. viii. 1991.

Alcis quadrifera (Walker), sp. rev. & comb. n. (Pl. 35: 1–4)

Scotosia quadrifera Walker, List Specimens lepid. Insects Colln Br. Mus. 35: 1687.

Poecilalcis semiclarata ab. *fasciata* Warren, 1896, Novit. zool. 3:405. Syn. n.

Godavari: 5♂, 14–22. iv. 1990; 1♂, 2. v. 1990; 2♂, 8–9. v. 1991; 1♂, 4. viii. 1991. Mt. Phulchouki: 1♂, 11. v. 1991; 1♂, ix. 1991. E. Nepal, Sagarmatha, Solukhumbu, Manidinga 2,240m, 1♂ 1♀, 8. x. 1979; Nangbug 2,550m, 1♂, 5. x. 1979 (M. Owada). E. Nepal, Janakpur, Ramechhap, Changma 2,200m, 1♀, 13. x. 1979 (M. Owada). Nr. Kathmandu, Mt. Siwapuri 2,650m, 1♂, 7. x. 1981 (M. Owada). W. Nepal, Karnali, Mugu Dist., Rara Lake 2,990m, 1♂ 1♀, 25–26. ix. 1981 (M. Owada).

This species also flies in Sikkim (Bakkhim, Choka) and Bengal (Darjeeling, Tiger Hill).

This species was described from North Hindostan based on one female, and has been treated as a junior synonym of *Selidosema*? *semiclarata* Walker, 1862, List Specimens lepid. Insects Colln Br. Mus. 24: 1029, from Bootan (=Bhutan), since Hampson (1895). My close examination of the type material of *quadrifera* and *semiclarata* shows that they should be separated as independent species. They are so similar and variable that the specific separation between them based on superficial appearance is very difficult. *Semiclarata* is a typical member of *Alcis* (comb. n.). Male genitalia of *semiclarata* are shown as in Fig. 125.

Male genitalia (Fig. 124). A pair of projections of juxta broader and dilated distally, while in *semiclarata* much longer and slenderer, not dilated at apex. Valva broader, with longer digitate ampulla and long horn-like projection with serrate ventral margin. Aedeagus with a long lateral incurved arm and a short horn, while in *semiclarata* horn-like projection lacking.

Female genitalia (Fig. 133). Lamella postvaginalis evenly sclerotized oblong plate and elliptical median area; lamella antevaginalis narrow, heavily sclerotized; bursa copulatrix slender, posterior fourth sclerotized, finely on the right side and coarsely on the left side.

I also examined the type specimens of *fasciata*, *rufomarginata*, *subochrearia* and *albilinea* which had been treated as junior synonyms or aberrant forms of *semiclarata* since Hampson (1895), and confirmed one new synonym listed above and regarded the following three taxa as valid species. Holotypes examined. *Quadrifera* (Fig. 140): ♀, "Type/N. India". *Fasciata* (Fig. 141): ♀, "Type/SIKKIM, 25. 4. 89, J. G. PILCHER". *Semiclarata* (Fig. 142): ♂, "Type/Bootan/60·15, E. T. C.". All in BMNH.

Alcis rufomarginata (Moore), sp. rev. & comb. n. (Fig. 145)

Cleora rufomarginata Moore, 1868, Proc. zool. Soc. Lond. 1867: 628.

Length of forewing 17mm in male. Easily separable from *semiclarata* and its allies by longer antennal pectinations in male.

Male genitalia (Fig. 130). Different from those of *semiclarata*-complex in lacking of a lateral projection of aedeagus and having forked ampulla as in *perspicuata* (Moore).

Holotype (Fig. 145). ♂, "Type/Bengal/Moore Coll. 94–106", BMNH.

Alcis subochrearia (Leech), sp. rev. & comb. n. (Fig. 143)

Boarmia subochrearia Leech, 1897, Ann. Mag. nat. Hist. (6) 19: 422.

Length of forewing 17mm in female. Very similar to *quadrifera*, but hindwing concolorous with forewing, not so paler as in *quadrifera*.

Female genitalia (Fig. 135). Similar to those of *quadrifera*, but lamella postvaginalis broader, with heavily sclerotized median area, less wrinkled; lamella antevaginalis less sclerotized.

Holotype (Fig. 143). ♀, "Type/Omei-Shan, 3620ft. Native coll. July, 1890/Leech Coll. 1990-64", BMNH.

Alcis albilinea sp. n. (Pl. 35: 9, 10)

Poecilalcis semiclarata ab. *albilinea* Warren, 1896, Novit. zool. 3: 405.
[unavailable]

Length of forewing 15-16mm in male, 16mm in female. Similar to *quadrifera*, but orange-yellow in hindwing much stronger and subterminal white blotch better defined.

Male genitalia (Fig. 128). Similar to those of *quadrifera*. Medial horn-like projection of valva lacking; lateral arm of aedeagus shorter.

Female genitalia (Fig. 136). Similar to those of *quadrifera*. Lamella postvaginalis with more wrinkles; lamella antevaginalis narrower, less sclerotized; posterior part of bursa copulatrix less sclerotized.

Holotype (Fig. 134). ♀, Holotype of ab. *albilinea*, "Type/Darjeeling (Pilcher)/10. 3. 89", BMNH. Paratypes. India, W. Sikkim, Choka 3,050m, 1♂, 23-24. ix. 1983; Yuksam 1,780m, 1♂, 25. ix. 1983 (M. Owada). E. Sikkim, Dalapchand, Aritaal 1,500m, 1♀, 14. x. 1991 (ex. T. Haruta). India, W. Bengal, Darjeeling 2,100m, 2♂, 28. ix. 1983 (M. Owada); 1♀, 27-29. ix. 1986 (F. Aulombard & J. Plante).

Distribution. India (Sikkim, Bengal).

Aberrant name *albilinea* is not available under the International Code of Zoological Nomenclature.

Further three new species, closely related to *quadrifera*, will be described below.

Alcis paraclarata sp. n. (Pl. 35: 5, holotype; 6)

Alcis semiclarata: Sato, 1991: 283 (part).

Length of forewing 13-17mm in male, 16-18mm in female. It is so similar to *quadrifera* and its relatives, and so variable in colour and maculation that it is not clearly separable from them by the appearance.

Male genitalia (Fig. 126). Very similar to those of *quadrifera*, but different from them as follows. Ampulla slenderer; medial horn-like projection of valva longer; lateral arm of aedeagus longer, slenderer and straight; very small process arising near horn-like projection of anterior sclerotized part of aedeagus.

Female genitalia (Fig. 137). Very similar to those of *quadrifera*, but different from them as follows. Lamella postvaginalis with much more wrinkles, extended anteriorly in the shape of arms, left arm longer than right one.

Holotype. ♂, Godavari, 29. iv. 1990. Paratypes. Godavari: 1♂, 29. iii. 1990; 3♂, 11. iv. 1990; 1♂, 13. iv. 1990; 1♂, 15. iv. 1990; 1♂, 29. iv. 1990; 1♂, 18. iv. 1991; 1♂, 28. ix. 1991; 1♂, 6. x. 1991. Mt. Phulchouki: 1♂ 2♀, ix. 1991. C. Nepal, Gandaki, Parbat Dist., Ghorapani, Deolari 2,800m, 1♂, 15. x. 1981; Chomrong 2,000m, 1♀, 21. x. 1981 (M. Owada). India, Sikkim, Gangtok, 1♀, 2. v. 1991 (Y. Kishida). India, W. Bengal, Darjeeling 2,100m, 2♂, 28. ix. 1983 (M. Owada); 1♂, 27–29. ix. 1986 (F. Aulombard & J. Plante); 6 mile village 2,050m, 3♂, 25. iii. 1986 (W. Thomas). Thailand, Chiang Mai, Doi Inthanon 2,571m, 2♂ 3♀, 2. xi. 1985 (S. Moriuti, T. Saito & Y. Arita); ditto 1,300m, 1♀, 1 & 3. xi. 1985 (S. Moriuti, T. Saito & Y. Arita), UOP.

Distribution. Nepal, India (Sikkim, Bengal), Thailand.

Alcis neoclarata sp. n. (Pl. 35: 7, holotype; 8)

Length of forewing 17–18mm in male, 17–19mm in female. Ostensibly very similar to other congeners, but in general hindwing most whitish among them.

Male genitalia (Fig. 127). Similar to those of *paraclarata*, but can easily be distinguished from them by two shorter lateral projections of aedeagus.

Female genitalia (Fig. 138). Similar to those of *paraclarata*, but different from them in lacking of a pair of anterior arms of lamella postvaginalis.

Holotype. ♂, Godavari, 25. v. 1990. Paratypes. Godavari: 1♂, 23. v. 1990; 1♂ 1♀, 25. v. 1990; 1♀, 3. xi. 1991; 1♀, 8. xi. 1991. Mt. Phulchouki: 2♂, 23. v. 1990. Nr. Kathmandu, Mt. Siwapri 2,650m, 1♂ 1♀, 7. x. 1981 (M. Owada).

Alcis macroclarata sp. n. (Pl. 35: 11, holotype; 12)

Alcis semiclarata : Sato, 1991: 283 (part).

Length of forewing 18–20mm in male, 18–21mm in female. A little larger than *quadrifera* and its allies in wing size. Hindwing more strongly tinged with orange-yellow.

Male genitalia (Fig. 129). Similar to those of the preceding two new species, differing principally in very short lateral projection of aedeagus.

Female genitalia (Fig. 139). Similar to those of the preceding two new species, but lamella antevaginalis more widely sclerotized, and lamella postvaginalis not extended anteriorly.

Holotype. ♂, Thailand, Chiang Mai, Doi Inthanon 2,571m, 10. ix. 1987 (T. Saito, Y. Arita, Y. Yoshiyasu), UOP. Paratypes. Type locality, 4♂ 5♀, 3–5. ix. 1987 (M. Owada); 1♀, 8. ix. 1987 (S. Moriuti & Y. Yoshiyasu); 4♂ 2♀, 9. ix. 1987 (Y. Arita & Y. Yoshiyasu); 1♂, 11. ix. 1987 (S. Moriuti, T. Saito & Y. Arita). India, W. Sikkim, Bakkhim 2,670m, 1♂, 12. ix. 1983 (M. Owada). India, W. Bengal, Tiger Hill 2,573m, 1♂, 30. ix–5. x. 1986 (F. Aulombard & J. Plante); Darjeeling, Rambhi 650m, 1♀, 28. iii. 1986; 6 mile village 2,050m, 1♂, 25. iii. 1986 (W. Thomas); Tonglu 3,040m, 1♂ 1♀, 30. ix. 1983, 1♂ 1♀, 6. x. 1983 (M. Owada).

Distribution. India (Sikkim, Bengal), Thailand.

Harutalcis gen. n.

Type species: *Boarmia atrostipata* Walker, 1862.

Similar to *Alcis* Curtis, 1826, in external characteristics except the venation of forewing as follows. Veins R1 and R2 short-stalked, the stalk connected with vein Sc, rarely veins Sc and R1 free, while in *Alcis* veins R1 and R2 separate, rarely short-stalked, always free from Sc.

Male genitalia (Figs 148–150). Uncus short, triangular. Gnathos heavily sclerotized; medial plate slender, bluntly rounded at tip. Ampulla bearing many spines. Juxta long, pointed at apex. Aedeagus with elongate, slender sclerotized projection posteriorly. Easily separable from those of *Alcis* by lacking of a pair of bifid process of juxta.

Female genitalia (Figs 155–157). Ovipositor relatively short. Sterigma well developed; lamella postvaginalis with heavily sclerotized medial lobe. Ductus bursae ribbed and lightly sclerotized. Corpus bursae with no signum. Differing from those of *Alcis* in strongly sclerotized sterigma and enlarged corpus bursae.

The following four species belong to this genus.

Harutalcis glaucodisca (Swinhoe), comb. n. (Pl. 35: 13)

Boarmia glaucodisca Swinhoe, 1894, Ann. Mag. nat. Hist. (6) 9: 139.

Godavari: 1♂, 15. v. 1990; 1♂, 20. vi. 1990; 1♂, 3. xi. 1991.

Male and female genitalia are shown as in Figs 149, 150 and 156.

Harutalcis godavariensis sp. n. (Pl. 35: 14, holotype)

Length of forewing 18–22mm in male, 21mm in female. Similar to *glaucodisca*, but different from it as follows. Both wings more densely irrorate with fuscous. Forewing with paler median area and without yellowish tint along the posterior margin. Hindwing with white undulated subterminal line at posterior half. Underside of both wings more densely irrorate with fuscous, broader distal black band running.

Male genitalia (Figs 151, 152). Similar to those of *glaucodisca* (Figs 149, 150). Cucullus longer; digitate ampulla bearing more spines without horn-like projections; juxta shorter, gradually narrowed toward the apex; vesica armed with six or seven short spines. In *glaucodisca* ampulla emitting one or two horns and cornuti consisting of two or three spines.

Female genitalia (Fig. 157). Similar to those of *glaucodisca* (Fig. 156). Median lobe of lamella postvaginalis larger; ductus bursae longer, less ribbed; corpus bursae more globular.

Holotype. ♂, Godavari, 20. ix. 1991. Paratypes. Type locality, 2♂, v–vii. 1973; 34♂, 2–6. vi. 1987 (T. Miyashita); 1♂, 22. ix. 1989; 1♂, 23. ix. 1989; 3♂, 27. ix. 1989; 1♂, 24. v. 1990; 1♂, 3. vi. 1990; 1♂, 7. vi. 1990; 2♂, 10. vi. 1991; 1♂, 25. ix. 1991; 1♂, 27. ix. 1991; 1♂, 28. ix. 1991; 2♂, 29. ix. 1991; 1♂, 2. x. 1991; 1♂, 5. x. 1991; 1♂, 6. x. 1991. India, Sikkim, Gantok, 1♂ 1♀, 2. v. 1991 (Y. Kishida).

Distribution. Nepal, India (Sikkim).

Harutalcis atrostipata (Walker), **comb. n.** (Pl. 35: 15)

Boarmia atrostipata Walker, 1862, list Specimens lepid. Insects colln Br. Mus. 25: 1354.

Mt. Phulchouki: 2♂ 2♀, 19–21. vii. 1990; 2♂, 4. viii. 1991.

Male and female genitalia are shown as in Figs 148 & 155.

Harutalcis vialis (Moore), **comb. n.** (Pl. 35: 16)

Boarmia vialis Moore, 1888, in Hewitson & Moore, Descr. new. Indian lepid. Insects Colln late Mr Atkinson: 238, pl. 8, fig. 9.

Godavari: 1♀, 11. iv. 1990; 1♂, 29. iv. 1990.

Psilalcis breta breta (Swinhoe), **sp. rev. & comb. n.** (Pl. 35: 17, 18)

Narapa breta Swinhoe, 1889, Proc. zool. Soc. Lond. 1889: 426.

Godavari: 2♂, 17–29. iv. 1990; 1♂, 9. x. 1990; 1♂, 19. iv. 1991; 2♂, 3–12. v. 1991; 1♀, 31. vii. 1991; 1♀, 7. viii. 1991; 2♂, 8–28. ix. 1991. Mt. Phulchouki: 1♂, 11. v. 1991.

After my examination of the holotypes, I have come to the conclusion that *Prorhinia rantaizana* Wileman from Taiwan is conspecific with *breta* from Nilgiris, India. *Breta* has been considered as a junior synonym of *Tephrosia inceptaria* Walker, 1866, *List Specimens lepid. Insects Colln Br. Mus.* 35: 1590, since Hampson (1895). *Inceptaria* was described based on one female from Flores Is., Indonesia. In his letter dated July 24, 1984, Mr. D. S. Fletcher, British Museum (Natural History), kindly wrote me that the holotype of *inceptaria* lacks the abdomen. To be sure of its identity, it would be necessary to compare the holotype with similar specimens from Is. Flores. I will treat *breta* as a good species until the necessary material of *inceptaria* from Is. Flores is available for study.

Holotypes examined. *Breta*: ♂, "Type/2215 ♂, Nilgherrus, Hampson/Narapa breta Swinhoe, ♂, type", BMNH. *Rantaizana*: ♂, "Type/Rantaizan, Formosa, 7500ft., 16. iv. 1906, A. E. Wileman/Geometridae genitalia slide No. 2883", BMNH.

In my collection there are many specimens of the nominotypical subspecies which were taken from India (Bengal) and Thailand.

The following two other subspecies have so far been segregated. The populations of the Philippines, Sumatra and Sulawesi, which have paler wings than the other known subspecies, will require racial separation in future.

Psilalcis breta rantaizana (Wileman), **stat. n.**

Prorhinia rantaizana Wileman, 1911, *Entomologist* 44: 343.

Rantaizana was described from Taiwan and later recorded from Is. Amami-oshima (Inoue, 1964) and the Ryukyu Archipelago (Sato, 1984b) in Japan. It is structurally identical with *breta*, but differs from the latter in its greyer, less brown colour, less sharp markings and more strongly developed dark border on hindwing.

Distribution. Japan (Ryukyu, Is. Amami-oshima), Taiwan.

***Psilalcis breta postmaculata* Inoue, stat. n.**

Psilalcis postmaculata Inoue, 1956, Ent. Rev. Japan 7: 7, pl. 1, fig. 8.

Psilalcis rantaizana postmaculata: Inoue, 1964, Kontyû 32: 545.

Postmaculata was described from Is. Yakushima, situated about 70km south of the main land of Kyushu, and later was recorded from southern part of Kyushu. It was downgraded to a subspecies of *rantaizana* by Inoue (1964). It is different from the nominotypical subspecies in larger size, paler colour and less defined maculation.

Distribution. Japan (Southern part of Kyushu, Is. Yakushima).

***Psilalcis indistincta* (Hampson), sp. rev. & comb. n. (Pl. 35: 19)**

Cleora indistincta Hampson, 1891, Illust. typical Specimens lepid. Heterocera Colln Br. Mus. 8: 106, pl. 150, fig. 3.

This species was described from Nilgiris, India and has been considered as a junior synonym of *inceptaria* since Hampson (1895). Unquestionably Hampson's *inceptaria* indicates *breta*. *Indistincta* is different from *breta* in male (Fig. 131) and female genitalia (Fig. 132) as follows: valva slenderer, posterior fifth less sclerotized, no ribbing; lamella antevaginalis much smaller, not dilated distally.

Specimens examined. Holotype, ♂, "Type/NILGIRIS, Hampson Coll., 89-129/*Cleora indistincta* Hampson, type ♂", BMNH. Thailand, Nakhon Nayok, Kao Yai, 1♀, 26. viii. 1981 (S. Moriuti, Y. Arita & Y. Yoshiyasu); ditto 800m, 1♀, 22. vi. 1983 (H. Kuroko, S. Moriuti, Y. Arita and Y. Yoshiyasu); ditto, 1♂, 8. viii. 1987 (S. Moriuti, T. Saito, Y. Arita & Y. Yoshiyasu); Loei, Phu Rua 800m, 2♂ 1♀, 15-19. viii. 1987 (S. Moriuti, T. Saito, Y. Arita & Y. Yoshiyasu).

Distribution. India (Nilgiris), Thailand.

***Psilalcis subtochracea* (Hampson), comb. n. (Pl. 35: 20)**

Boarmia subtochracea Hampson, 1902, J. Bombay nat. Hist. Soc. 14: 505, pl. c, fig. 20.

Godavari: 1♂, 19. vii. 1990.

The generic position of this species in *Psilalcis* is tentative.

***Hypomecis nepalensis* (Hampson) (Pl. 35: 21)**

Medasina nepalensis Hampson, 1902, J. Bombay nat. Hist. Soc. 14: 509.

Godavari: 3♂, 6-7. x. 1991.

***Hypomecis cineracea* (Moore) (Pl. 35: 22)**

Astacuda cineracea Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 244.

Godavari: 1♂, 4. viii. 1991.

***Hypomecis lioptilaria* (Swinhoe) (Pl. 35: 23)**

Boarmia lioptilaria Swinhoe, 1903, Fasc. malayenses. 1: 91.

Godavari: 1♂, 31. vii. 1991; 1♂, 1. x. 1991; 1♂, 12. x. 1991.

Hypomecis fasciata (Swinhoe), comb. n. (Pl. 35: 24)

Icterodes fasciata Swinhoe, 1894, Trans. ent. Soc. Lond. 1894: 211, pl. 2, fig. 11.

Godavari: 1♂, 12. v. 1991; 1♂, 26. v. 1992. Mt. Phulchouki: 1♀, 4. vi. 1992.

This species is *Abraxas*-like in colour and maculation of wings and presents a very different appearance from the fuscous moths of *Hypomecis*. However male antennal structure, wing venation and genitalic characteristics show it to be a typical member of *Hypomecis*. Male antenna bipectinate; each pecten fully scaled dorsally, arising from the distal end of a segment. Forewing 11-veined, veins R1 and R2 coincident, then R1+2 anastomosing with Sc. Male and female genitalia are shown as in Figs 146 & 147.

Paralcis conspicuata (Moore) (Pl. 35: 25)

Menophra conspicuata Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 237.

Godavari: 1♂, 18. v. 1990; 1♂, 23. v. 1991.

The genus *Paralcis* Warren, 1894, was established for this species. The following two species are typical members of *Paralcis*.

Paralcis bisinuata (Hampson), comb. n. (Pl. 35: 26)

Boarmia bisinuata Hampson, 1895, Fauna Br. India (Moths) 3: 261.

Godavari: 1♂, 13. v. 1990; 4♂, 12–26. v. 1991.

Paralcis pallidaria (Moore), comb. n. (Pl. 35: 27)

Boarmia pallidaria Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 237.

Godavari: 3♂, 22. v. 1989; 5♂, 12–24. v. 1990; 1♂, 12. vi. 1990; 4♂, 7–24. v. 1991; 1♀, 24. vi. 1991; 1♀, 12. ix. 1991.

Cleora fraterna (Moore) (Pl. 36: 1, 2)

Chogada fraterna Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 245.

Godavari: 3♂, 29. ix. 1989; 1♀, 29. iii. 1990; 1♂, 29. iv. 1990; 1♀, 27. vi. 1990; 1♂, 4. iv. 1991; 3♂ 1♀, 7–13. v. 1991; 2♂ 3♀, 24–26. vi. 1991; 5♂ 2♀, 13–31. vii. 1991; 3♂ 2♀, 1–5. viii. 1991; 1♂ 1♀, 8–13. ix. 1991; 4♂ 2♀, 2–31. x. 1991; 18♂ 4♀, 2–28. xi. 1991; 4♂ 1♀, 22–29. ii. 1991; 2♂ 1♀, 4–6. iii. 1991. Mt. Phulchouki: 1♂, 2. vii. 1990; 1♂, 21. vii. 1990; 2♂, 4. viii. 1991.

Cleora injectaria (Walker) (Pl. 36: 4)

Boarmia injectaria Walker, 1860, List Specimens lepid. Insects Colln Br. Mus. 21: 376.

Godavari: 3♂, 26. iv. 1990.

Ascotis selenaria imparata (Walker) (Pl. 36: 3)

Boarmia imparata Walker, 1860, List Specimens lepid. Insects Colln Br. Mus. 21: 372.

Godavari: 1♂, 2. x. 1989; 2♂, 28–30. iii. 1990; 8♂ 1♀, 13–28. iv. 1990; 1♂, 18. vii. 1990; 1♂, 19. iv. 1991; 5♂, 5–13. v. 1991; 7♂, 9–31. vii. 1991; 1♂, 30. viii. 1991; 4♂, 9–30. ix. 1991; 2♂, 1–12. x. 1991.

Ophthalmitis cordularia (Swinhoe) (Pl. 36: 5)

Ophthalmodes cordularia Swinhoe, 1893, Ann. Mag. nat. Hist. (6) 12: 155.

Godavari: 1♂, 29. iv. 1990; 3♂, 2–11. v. 1990; 2♂, 13. vi. 1990; 1♂, 15. iv. 1991; 1♂, 12. x. 1991.

Ophthalmitis pertusaria (Felder & Rogenhofer) (Pl. 36: 6)

Boarmia pertusaria Felder & Rogenhofer, 1875, Reise öst. Fregatte Novara (Zool.) 2 (Abt. 2), pl. 125, fig. 17.

Godavari: 1♂, 23. iii. 1990; 1♀, 24. iv. 1990; 2♂ 1♀, 6–18. v. 1990; 1♀, 3. vi. 1990; 1♂, 30. iv. 1991; 1♀, 10. v. 1991; 1♂, 30. vii. 1991; 2♂, 1–7. viii. 1991; 2♀, 10–12. ix. 1991.

Racotis boarmiaria (Guenée) (Pl. 36: 7)

Hypochroma boarmiaria Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 9: 282.

Godavari: 1♂, 2. v. 1990; 2♀, 14. ix. 1991; 1♀, 3. x. 1991.

Paradarisa chloauges chloauges Prout (Pl. 36: 8)

Paradarisa chloauges Prout, 1927, J. Bombay nat. Hist. Soc. 31: 937.

Godavari: 1♂, 24. v. 1990; 2♂, 16–23. v. 1991.

Paradarisa comparataria comparataria (Walker) (Pl. 36: 9)

Tephrosia comparataria Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1582.

Godavari: 2♂, 23. xi. 1991; 1♀, 10. i. 1992; 1♀, 3. ii. 1992; 1♂, 1. iii. 1992. Mt. Phulchouki: 2♀, 21. vii. 1990.

Parectropis conspurcata (Walker) (Pl. 36: 10)

Scotosia conspurcata Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1685.

Godavari: 1♂, 29. iii. 1990; 1♂, 6. x. 1991; 1♂, 2. iii. 1992. Mt. Phulchouki: 1♀, 21. vii. 1990.

Parectropis recurvaria (Leech), comb. n. (Pl. 36: 11)

Boarmia recurvaria Leech, 1897, Ann. Mag. nat. Hist. (6) 19: 342.

Godavari: 1♂, 2–6. vi. 1987 (T. Miyashita).

Gasterocome pannosaria pannosaria (Moore) (Pl. 36: 12)

Cleora pannosaria Moore, 1868, Proc. zool. Soc. Lond. 1867: 629.

Godavari: 1♂, 12. v. 1990; 1♀, 12. vii. 1990; 1♂, 26. vi. 1991; 1♂, 4. iii. 1992.
Mt. Phulchouki: 1♀, 21. vii. 1990; 1♀, 21. viii. 1990; 1♀, 4. viii. 1991; 1♂, 1.
ix. 1991.

Apophyga sericea Warren (Pl. 36: 13)

Apophyga sericea Warren, 1893, Proc. zool. Soc. Lond. 1893: 418.

Godavari: 1♂, 17. vi. 1990.

Myrioblephara duplex (Moore) (Pl. 36: 14–16)

Cleora duplex Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid.
Insects Colln late Mr. Atkinson: 239.

Godavari: 1♀, 29. ix. 1989; 1♂, 3. x. 1989; 1♀, 29. v. 1990; 2♂ 1♀, 13–26. vi.
1990; 5♂ 1♀, 16–31. vii. 1991; 1♂, i. 1992; 1♂ 3♀, 4–29. ii. 1992.

The first generation (January-February) (Pl. 36: 16) is larger than the others
(May-July, September-October) (Pl. 36: 14, 15).

The following six species are closely related to *Myrioblephara rubrifusa*
(Warren), the type species of the genus.

Myrioblephara conifera (Moore), comb. n. (Pl. 36: 17)

Cleora conifera Moore, 1888, in Hewitson & Moore, Descr. new Indian
lepid. Insects Colln late Mr. Atkinson: 239.

Mt. Phulchouki: 1♀, 2–3. vii. 1987 (T. Miyashita).

Myrioblephara planaria (Swinhoe), comb. n. (Pl. 36: 18)

Ectropis planaria Swinhoe, 1894, Trans. ent. Soc. Lond. 1894: 221.

Godavari: 1♂, 10. ii. 1991; 2♂, 2–6. iii. 1992; 1♀, 26. x. 1991; 2♂, 1–26. xi.
1991; 3♂ 2♀, 22–29. ii. 1992. Mt. Phulchouki: 1♂ 1♀, 21. vii. 1990; 1♂, 11. v.
1991; 1♀, 2. iii. 1992.

Myrioblephara irrorata (Moore), comb. n. (Pl. 36: 19)

Cleora irrorata Moore, 1888, in Hewitson & Moore, Descr. new Indian
lepid. Insects Colln late Mr. Atkinson: 240.

Mt. Phulchouki: 1♀, 2–3. vii. 1987 (T. Miyashita).

Myrioblephara idaeoides (Moore), comb. n. (Pl. 36: 20)

Cleora idaeoides Moore, 1888, in Hewitson & Moore, Descr. new Indian
lepid. Insects Colln late Mr. Atkinson: 239.

Godavari: 1♀, 15. v. 1991; 1♂, 14. vi. 1991; 1♂ 3♀, 7–27. ii. 1992; 1♂, 4. iii.
1992.

Myrioblephara marmorata (Moore), comb. n. (Pl. 36: 23, 24)

Arichanna marmorata Moore, 1867, Proc. zool. Soc. Lond. 1867: 659.

Godavari: 8♂ 1♀, 13–30. iv. 1990; 1♂, 26. v. 1990; 1♂, 19. vii. 1990; 6♂, 4–25. v. 1991; 1♀, 28. vi. 1991; 2♂, 7–8. x. 1991; 8♂, 27–28. ii. 1992; 4♂, 2–3. iii. 1992.

Myrioblephara cervina (Hampson), comb. n. (Pl. 36: 25)

Boarmia cervina Hampson, 1895, Fauna Br. India (Moths) 3: 258.

Godavari: 1♂ 1♀, 27–30. iii. 1990; 1♂, 14. iv. 1990; 1♂, 19. iv. 1991.

I examined the holotype (♂) of *cervina*, "Type/Sikkim, Interior, Möller/Collectio, H. J. Elwes/Rothschild Bequest, B. M. 1939-1", BMNH. Male genitalia of the holotype are shown as in Fig. 154.

Myrioblephara benefica sp. n. (Pl. 36: 21, holotype)

Length of forewing 12–13mm in male. Similar to *M. albibasis* (Hampson) from Sikkim, but can be distinguished from it by the following characteristics. Distal half of both wings tinged with black instead of rufous in *albibasis*, and basal half more whitish. Forewing with white midterminal spot. Discocellular spot black, more clearly defined. Underside similarly marked as in upperside.

Female unknown.

Male genitalia (Fig. 153). Similar to those of *albibasis*, but ampulla broader, arising farther from costa; short projection from ventral margin of valva slenderer; aedeagus with a few minute spines near apex.

Holotype. ♂, Godavari, 13. ix. 1991. Paratypes. Godavari: 3♂, 24–29. iv. 1990; 1♂, 27. ii. 1992. Thailand, Nakhon Nayok, Khao Yai 800m, 1♂, 7. viii. 1987 (S. Moriuti, T. Saito, Y. Arita & Y. Yoshiyasu).

Distribution. Nepal, Thailand.

The following two species are related to *Calichodes difoveatus* (Wehrli), 1943, the type species of the genus.

Calichodes ochrifasciatus (Moore), comb. n. (Pl. 36: 26)

Cleora ochrifasciata Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr. Atkinson: 240.

Aethalura ochrifascia [misspelling]: Inoue, 1987, Bull. Fac. domest. Sci. Otsuma Wom. Univ. 23: 266.

Godavari: 1♂, 24. vi. 1990; 1♂, 21. vii. 1990; 1♂, 23. x. 1991. Mt. Phulchouki: 1♂, 2. vii. 1990; 1♂, 4. viii. 1990; 1♂, 2. iii. 1992.

The generic name *Calichodes* is the masculine in gender. Therefore the specific names *difoveata* and *ochrifasciata* must be changed to *difoveatus* and *ochrifasciatus*, respectively.

Calichodes defervescens (Prout), comb. n. (Pl. 36: 27)

Ectropis defervescens Prout, 1927, J. Bombay nat. Hist. Soc. 31: 933.

Godavari: 1♂, 11. v. 1991.

Diplurodes nepalensis sp. n. (Pl. 36: 22, holotype)

Length of forewing 13–14mm in male, 15mm in female. Very similar to *hollowayi* Sato, but ciliation of male antenna a little shorter; both wings less tinged with purple distad of postmedial line; postmedial line more clearly defined, strongly outcurved beyond discocellular spot.

Male genitalia (Fig. 160). Mostly similar to those of *parvularius* (Leech) among the congeners, but harpe much longer, bearing a single long spine at apex.

Female genitalia (Fig. 161). Similar to those of *hollowayi* Sato, but lamella antevaginalis with a pair of elongate lateral ridges; lamella postvaginalis ribbed laterally.

Holotype. ♂, Godavari, 13. v. 1990. Paratypes. Godavari: 1♂, 19. iv. 1990; 1♂, 12. v. 1990; 1♀, 14. vi. 1990; 1♂, 2. viii. 1991; 1♂, 29. ii. 1992; 1♂, 20. iii. 1992; 1♂, 28. iii. 1992.

Distribution. Nepal, Sikkim.

Three new species, closely related to *D. parvularius* (Leech) from Japan, were described by me (Sato, 1990): *D. karsholti* from Palawan, Philippines, *luzonensis* from Luzon, Philippines and *hollowayi* from Malaysia, Borneo and Sumatra. At that time I had no chance to examine the material from Sikkim. Therefore I thought "*parvularia*" from Sikkim recorded by Holloway (1976) was very probably identical with *hollowayi*. It was my hasty conclusion. I have no doubt that the material from Sikkim should be identified with *nepalensis*. On this occasion female genitalia of *luzonensis* which was not described in the original description are illustrated as in Fig. 162 (♀, N. Luzon, Ifugao, Banaway, x. 1988–i. 1989, T. & F. Vermolen leg.).

Ectropis dentilineata (Moore) (Pl. 37: 1, 2)

Tephrosia dentilineata Moore, 1868, Proc. zool. Soc. Lond. 1867: 631.

Godavari: 4♂, 26–29. iii. 1990; 1♂, 29. iv. 1990; 1♂, 12. v. 1990; 1♂, 1. ii. 1991; 3♂, 29–31. iii. 1991; 3♂, 22. v. 1991; 1♀, 30. vi. 1991; 1♀, 31. vii. 1991; 3♂, 1–3. viii. 1991; 1♂ 1♀, 13–20. ix. 1991; 1♂, 12. x. 1991; 1♂, 10. xi. 1991; 1♂ 1♀, 3–11. i. 1992; 12♂, 7–29. ii. 1992; 6♂ 2♀, 1–4. iii. 1992.

Ectropis bhurmitra (Walker) (Pl. 37: 3)

Boarmia bhurmitra Walker, 1860, List Specimens lepid. Insects Colln Br. Mus. 21: 381.

Godavari: 1♂, 6. viii. 1991.

Microcalicha fimbriata (Moore) (Pl. 37: 4)

Cleora fimbriata Moore, 1868, Proc. zool. Soc. Lond. 1867: 628.

Godavari: 1♀, 2. iii. 1992.

Abaciscus tristis Butler (Pl. 37: 5)

Abaciscus tristis Butler, 1889, Illust. typical Specimens Lepid. Heterocera Colln Br. Mus. 7: 102, pl. 135, fig. 18.

Godavari: 1♂, 5. vii. 1991; 1♂, 1. viii. 1991; 2♂, 13–15. ix. 1991. Mt. Phulchouki: 1♂, 4. viii. 1991.

Abaciscus kathmandensis sp. n. (Pl. 37: 6, holotype; 7)

Length of forewing 15–17mm in male, 16–17mm in female. Similar to *albipunctata* (Inoue, 1955), *Tinea* 2: 86, from Japan, but easily distinguished from it by much longer ciliation of male antenna. Besides, it differs from *albipunctata* as follows. Both wings darker, densely irrorated with black or brown; lines more clearly defined; subterminal white spot weak or absent; discocellular black streak developed; underside paler with more distinct maculation.

Male genitalia (Fig. 158). Differs from those of *albipunctata* in the following characteristics. Uncus roundish without wedge shaped projection; a pair of asymmetrical processes arising from juxta much stouter as a whole, bearing more spines on left process; spines of cornutus stouter.

Female genitalia (Fig. 159). Lamella postvaginalis rounded medially; lamella antevaginalis less wrinkled and bursa copulatrix longer than in *albipunctata*.

Holotype. ♂, Mt. Phulchouki, 8. v. 1991. Paratypes. Type locality: 1♀, 1. x. 1991; 1♂, 23. iii. 1992; 1♀, 22. iv. 1992; 1♂, 22. v. 1992; 1♀, 1. vi. 1992; 1♀, 3. vi. 1992; 1♀, 5. vi. 1992; 2♀, 15. vi. 1992; 1♀, 17. vi. 1992; 1♀, 23. vi. 1992; 1♀, 27. vi. 1992. Godavari: 1♂, 3. iv. 1991; 1♂, 1. x. 1991. Daman pass, 1♀, 28. vi. 1992. Nr Kathmandu, Mt. Siwapuri, 3♂ 3♀, 7. x. 1981 (M. Owada).

Albipunctata was described as a member of *Ectropis*, but was transferred to *Abaciscus* based on the study of adult and immature stages (Sato, 1980; 1984b). It feeds only on *Fagus crenata* (Fagaceae). Although this new species is very closely related to *albipunctata*, it must feed on other than *Fagus* which is not found in Nepal.

Menophra costistrigata (Warren) (Pl. 37: 8)

Ephemerophila costistrigata Warren, 1896, Novit. zool. 3: 134.

Godavari: 4♂, 15–23. iv. 1990; 1♂, 2. v. 1990.

Inoue (1990) separated East Asian species of *Menophra* Moore into two subgenera and four genera, but this species was not examined by him. This species is isolated from the congeners by lacking of costal free arm of valva in male genitalia (Fig. 168), and therefore its generic position in *Menophra* is tentative.

Menophra (Ephemerophila) decorata (Moore) (Pl. 37: 9)

Selenia decorata Moore, 1868, Proc. zool. Soc. Lond. 1867: 621, pl. 32: 9.

Godavari: 1♂, 11. iv. 1989; 7♂, 11–24. iv. 1990. Mt. Phulchouki: 1♂, 23. v. 1990.

Menophra (Ephemerophila) subplagiata (Walker) (Pl. 37: 10, 11)

Hemerophila subplagiata Walker, 1860, List Specimens lepid. Insects Colln Br. Mus. 21: 319.

Godavari: 1♂, 25. iii. 1990; 1♂, 19. v. 1990; 1♀, 14. v. 1991.

Menophra (Ephemerophila) serpentaria (Warren) (Pl. 37: 14)

Ephemerophila serpentaria Warren, 1896, Novit. zool. 3: 134.

Godavari: 3♂, 13–15. iv. 1990; 1♂, 13. v. 1991.

Menophra (Ceruncina) retractaria (Moore) (Pl. 37: 12)

Hemerophila retractaria Moore, 1868, Proc. zool. Soc. Lond. 1867: 627, pl. 32, fig. 7.

Godavari: 1♂, 20. vi. 1990. Mt. Phulchouki: 1♂, 21. vii. 1990.

Menophra (Ceruncina) subsenilis sp. n. (Pl. 37: 13, holotype)

Length of forewing 20–21mm in male, 21–23mm in female. Very closely related to *senilis* (Butler) from Japan. Postmedial line of forewing almost parallel with antemedial line, while in *senilis* two lines widely separated posteriorly. In some specimens antemedial and postmedial lines accompanied by distinct black band, which cannot be found in *senilis*. Exterior line of hindwing less sinuous than in *senilis*.

Male genitalia (Figs 164, 165). Very similar to those of *senilis*. Gnathos slenderer, gradually narrowed apicad, nearly twice as long as uncus, while in *senilis* narrowed abruptly near apical part, less than double length of uncus. Basal part of costal arm more heavily swollen than in *senilis*. Vesica armed with numerous spines, which consist of one long stout spine, about twenty short ones and over thirty shorter fine ones. The last group of fine spines lacking in *senilis* (Fig. 166).

Female genitalia (Fig. 167). Very similar to those of *senilis*. Lateral part of sterigma less sclerotized, not forming ring-shaped sterigma as in *senilis*.

Holotype. ♂, Godavari, 2. iii. 1992. Paratypes. Type locality: 1♀, 24. vi. 1990; 1♂, 26. xi. 1991; 1♀, 18. i. 1992; 1♂, 11. iii. 1992. Mt. Phulchouki: 1♀, 1. vi. 1991; 1♂, 26. iii. 1992; 1♀, 17. vi. 1992. Nepal, Kathmandu 1,300m, 1♀, 8. ix. 1981 (S. Ae). W. Nepal, Karnali, Jumla Dist. Chuchumara Dara 3,600m, 1♂, 27. ix. 1981 (M. Owada). E. Sikkim, Dalapchand Aritaal 1,500m, 1♀, 15. x. 1991 (ex. T. Haruta). India, Darjeeling (Town) 2,000m, 1♀, 11–20. viii. 1985 (ex. J. H. Cadiou).

Distribution. Nepal, India (Sikkim, Bengal).

This species is also similar to *retractaria* (Moore) from India, but distinguished from it by parallel antemedial and postmedial lines, besides remarkable differences in male and female genitalia. The male and female genitalia of *senilis* and *retractaria* were shown by Sato (1984a), but female of *retractaria* was misidentification of *bicornuta* Inoue, 1990. True female genitalia of *retractaria* were illustrated by Inoue (1990).

Hirasa scripturaria (Walker) (Pl. 37: 15, 16)

Boarmia scripturaria Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1590.

Godavari: 1♂, 26. v. 1990; 1♂, 17. vi. 1990; 1♂, 8. v. 1991; 1♂, ix. 1991; 1♂ 1♀, 1–7. x. 1991. Mt. Phulchouki: 4♂, 8–11. v. 1991; 6♂ 1♀, ix. 1991.

Hirasa muscosaria (Walker) (Pl. 37: 17)

Gnophos muscosaria Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1596.

Godavari: 1♂, 24. v. 1990. Mt. Phulchouki: 1♀, 25. v. 1990; 2♀, 17. vi. 1990.

Medasina albidaria albidaria (Walker) (Pl. 37: 18, 19)

Boarmia albidaria Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1582.

Godavari: 1♂, 26. v. 1990; 2♂, 17–19. vii. 1990; 1♀, 25. iii. 1991; 1♂, 3. viii. 1991; 1♂, 31. vii. 1991; 2♂, 1–4. viii. 1991. Mt. Phulchouki: 1♂, 2. ix. 1991.

I examined the holotype (♂) of *albidaria* from North Hindostan in BMNH. Besides I was able to get the photographs of its genitalia (BMNH, Geom. 6108) taken by Dr. Stüning. Male and female genitalia are shown as in Figs 171 & 172.

Medasina parvalbidaria nepalensis subsp. n. (Pl. 37: 20, holotype; 21)

Length of forewing 21–27mm in male and female. Different from the nominotypical subspecies of Taiwan as follows. Paler in colour; submarginal bluish band less defined; underside more whitish, black marks of both wings less developed, especially large rectangular marking below apex of forewing replaced by small lunulate one, sometimes all the marks very weak or vanished.

Male genitalia (Fig. 169). Stick-like process of harpe shorter and broader than in the nominotypical subspecies (Fig. 170).

Female genitalia (Fig. 172). Ribbing part of bursa copulatrix broader than in the nominotypical subspecies (Fig. 173).

Holotype. ♂, Godavari, 29. iv. 1990. Paratypes. Type locality: 1♂, 29. ii. 1990; 1♂, 2. iii. 1990; 8♂ 1♀, 25–31. iii. 1990; 2♂, 12–14. iv. 1990; 8♂, 21–30. iv. 1990; 1♂, 15. iv. 1991; 5♂, 3–9. v. 1991; 1♂, 12. v. 1991; 1♂, 4. viii. 1991; 1♂, 11. viii. 1991; 1♂, 25. i. 1992; 1♂, 3. ii. 1992; 1♂, 29. ii. 1992; 1♂, 3. iii. 1992. India, W. Bengal, Darjeeling, 6 mile village 2,050m, 1♂ 1♀, 25. iii. 1986 (W. Thomas); Darjeeling, 1♂, 1. v. 1981 (Y. Kishida); 1♂, 14. vi. 1987 (T. Miyashita). India, Sikkim, 1♂, 2. v. 1981 (Y. Kishida).

Distribution. Nepal, India (Bengal, Sikkim).

This species was described from Taiwan by Inoue, 1978. It is closely related to *M. albidaria* (Walker), but can be separated from it by more whitish wings.

Medasina combustaria (Walker) (Pl. 37: 22)

Gnophos combustaria Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1582.

Godavari: 1♀, 3. x. 1989; 1♀, 15. iv. 1990; 4♂, 11. v. 1991; 1♂, 24. vi. 1990. Mt. Phulchouki: 2♂ 1♀, 8–11. v. 1991.

Medasina sp. (Pl. 37: 23)

Godavari: 1♂, 23. ix. 1989; 1♂, 26. vi. 1990; 4♂, v–vii. 1973, 4♂, 2–6. vi. 1987 (T. Miyashita). Thailand, Chiang Mai, Doi Inthanon 1,300m, 1♂, 1 & 3. xi. 1985 (S. Moriuti, T. Saito & Y. Arita).

This species is similar to *infausta* Prout, 1914, from Taiwan and will be described as new to science by Dr. Stüning. Above mentioned specimens are supposed to be designated as paratypes. Male genitalia are shown as in Fig. 163.

Medasina firmilinea Prout (Pl. 38: 1)*Medasina firmilinea* Prout, 1926, Novit. zool. 33: 23.

Godavari: 1♂, 6. vi. 1990; 1♂, 6. x. 1991.

Medasina mucidaria (Walker) (Pl. 38: 2)*Boarmia mucidaria* Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1581.

Godavari: 1♀, 16. v. 1991; 1♂, 24. vi. 1991; 1♂, 12. ix. 1991; 1♀, 6. x. 1991.

Medasina basistrigaria (Moore) (Pl. 38: 3)*Hemerophila basistrigaria* Moore, 1868, Proc. zool. Soc. Lond. 1867: 626.

Godavari: 1♀, 27. v. 1990; 1♂ 1♀, 24. vi. 1990. Mt. Phulchouki: 1♀, 23. v. 1990; 1♀, ix. 1991.

Medasina stolidaria (Leech) (Pl. 38: 4)*Boarmia stolidaria* Leech, 1897, Ann. Mag. nat. Hist. (6) 19: 420.

Mt. Phulchouki: 7♂, 2–3. vii. 1987 (T. Miyashita).

Medasina obliterata (Moore) (Pl. 38: 5)*Boarmia obliterata* Moore, 1868, Proc. zool. Soc. Lond. 1867: 630.

Godavari: 1♂, 2–6. vi. 1987.

Medasina similis Moore (Pl. 38: 6)*Medasina similis* Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr. Atkinson: 235.

Mt. Phulchouki: 1♂, 19. v. 1992; 1♂, 25. v. 1992.

Medasina quadrinotata Warren (Pl. 38: 7)*Medasina quadrinotata* Warren, 1893, Proc. zool. Soc. Lond. 1893: 417.

Godavari: 1♂, 4. v. 1990; 1♂ 1♀, 11–13. v. 1992.

Medasina mauraria (Guenée) (Pl. 38: 8)*Hemerophila mauraria* Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid) 9: 218.

Godavari: 1♂, 23. v. 1990; 1♂, 9. ix. 1991.

Medasina creataria (Guenée) (Pl. 38: 10)*Hemerophila creataria* Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid) 9: 217.

Godavari: 4♂, 3–9. x. 1991; 1♂ 2♀, 1. xi. 1991.

Gnophos tephrosiaria Moore (Pl. 38: 9)*Gnophos tephrosiaria* Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr. Atkinson: 247.

Godavari: 2♂, 28–29. iii. 1990; 1♂, 1. viii. 1991; 1♂ 2♀, 4–9. x. 1991; 1♂, 7. xi. 1991.

Amraica recursaria (Walker) (Pl. 38: 11)

Boarmia recursaria Walker, 1860, List Specimens lepid. Insects Colln Br. Mus. 21: 374.

Godavari: 4♂, 14–29. iv. 1990; 3♂, 4–18. v. 1990; 8♂, 5–15. v. 1991.

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Abbreviations

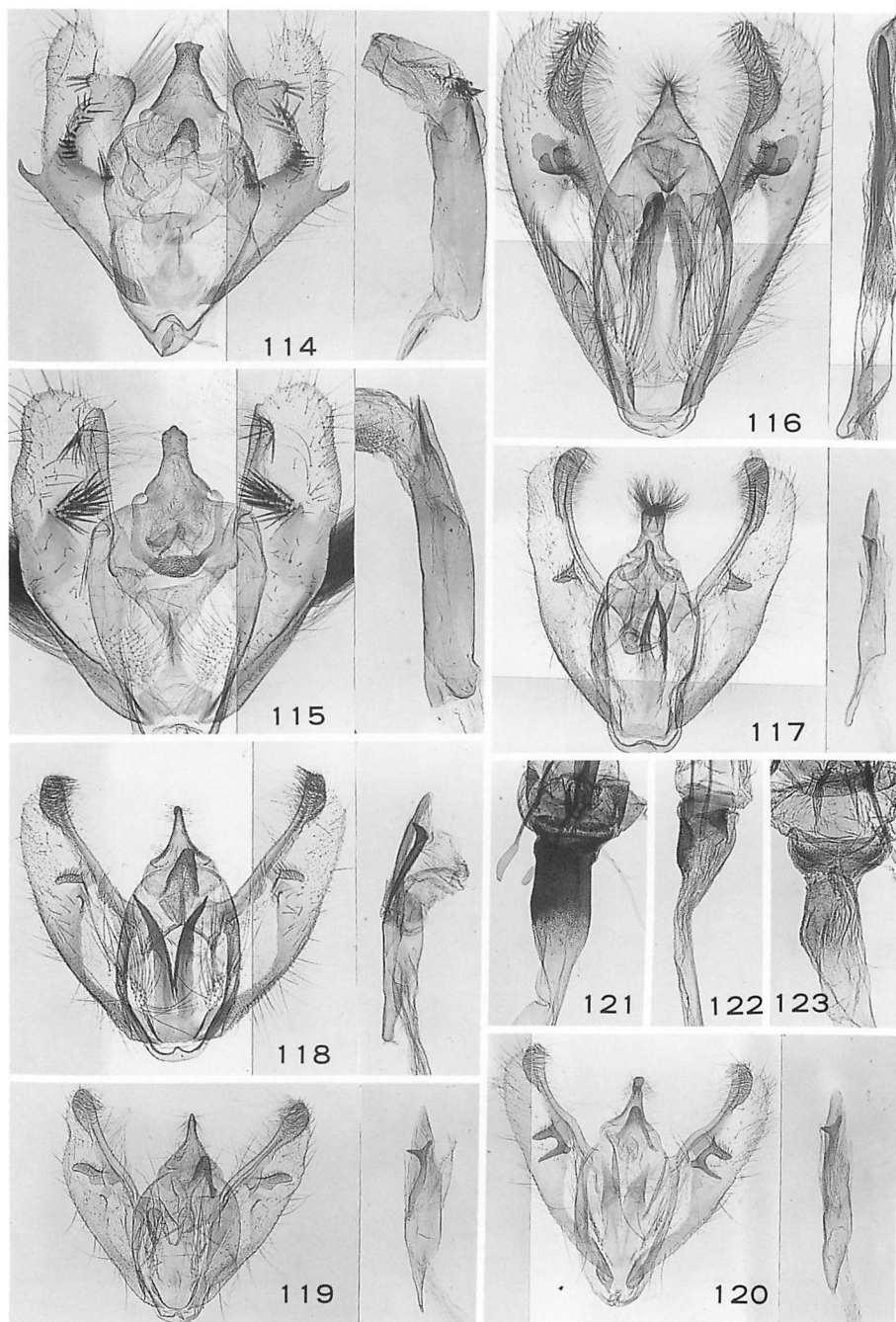
The following abbreviations are used to indicate the location of specimens.

BMNH: British Museum (Natural History), London.

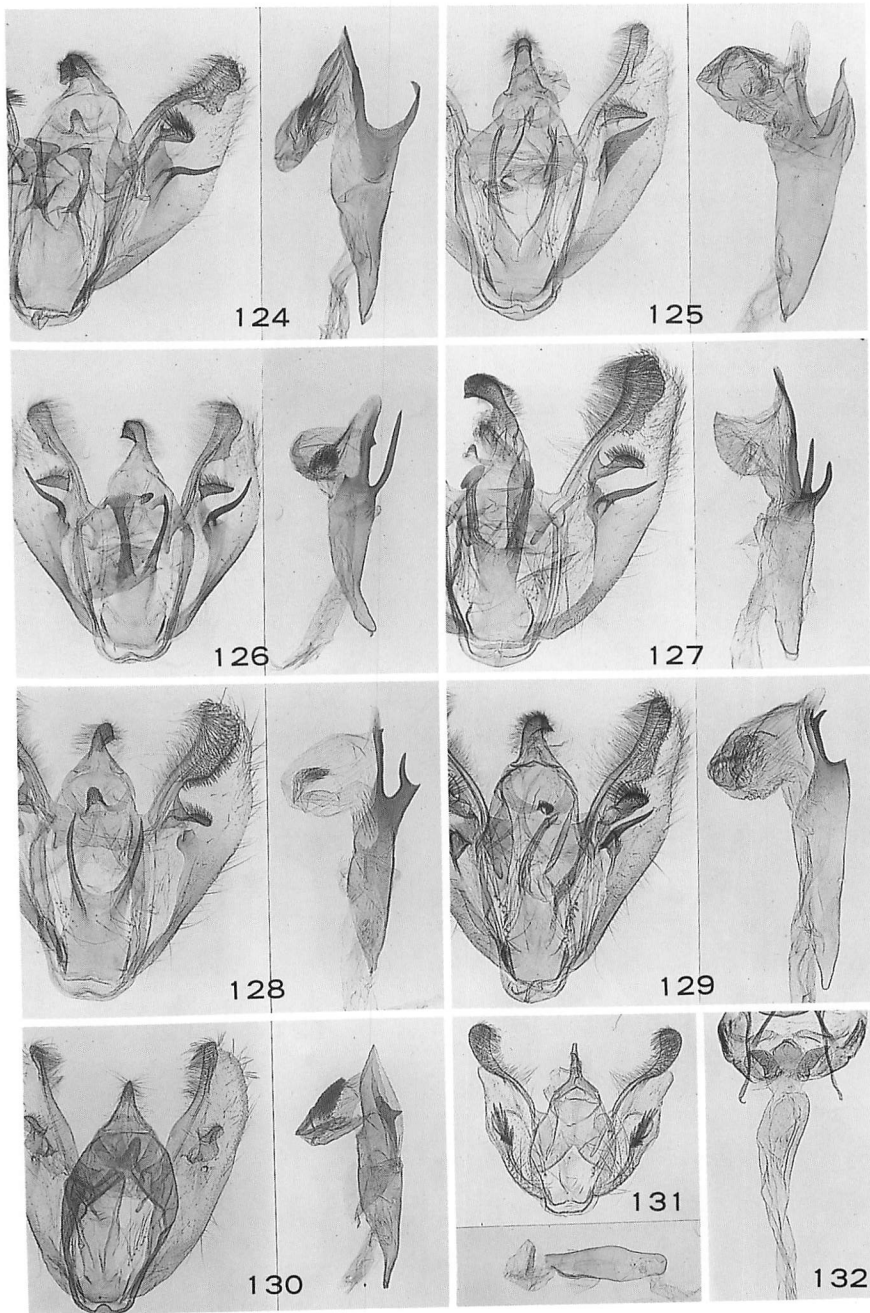
UOP: Entomological Laboratory, University of Osaka Prefecture.

References

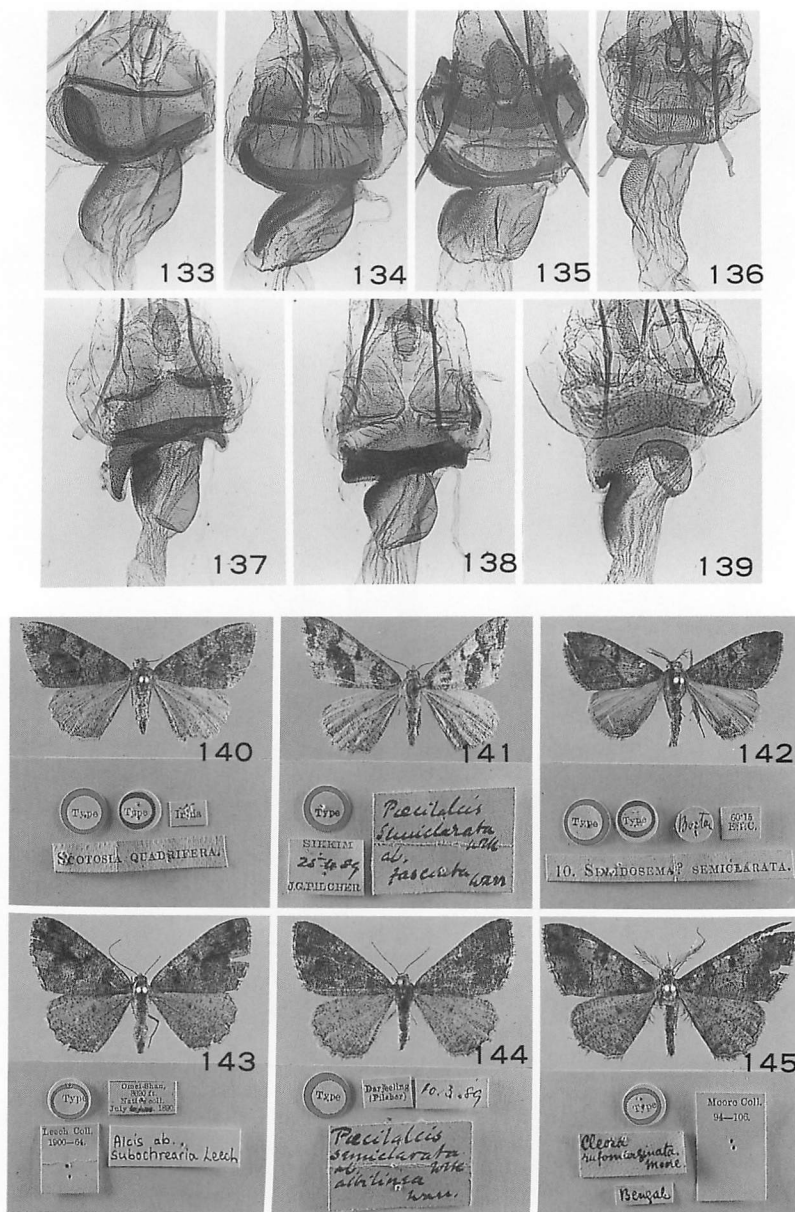
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- , 1991. Records of the genera *Hypomecis*, *Cleora* and *Alcis* (Geometridae: Ennominae) from Thailand, with descriptions of three new species and one new subspecies. *Tyô Ga* 42: 271–283.



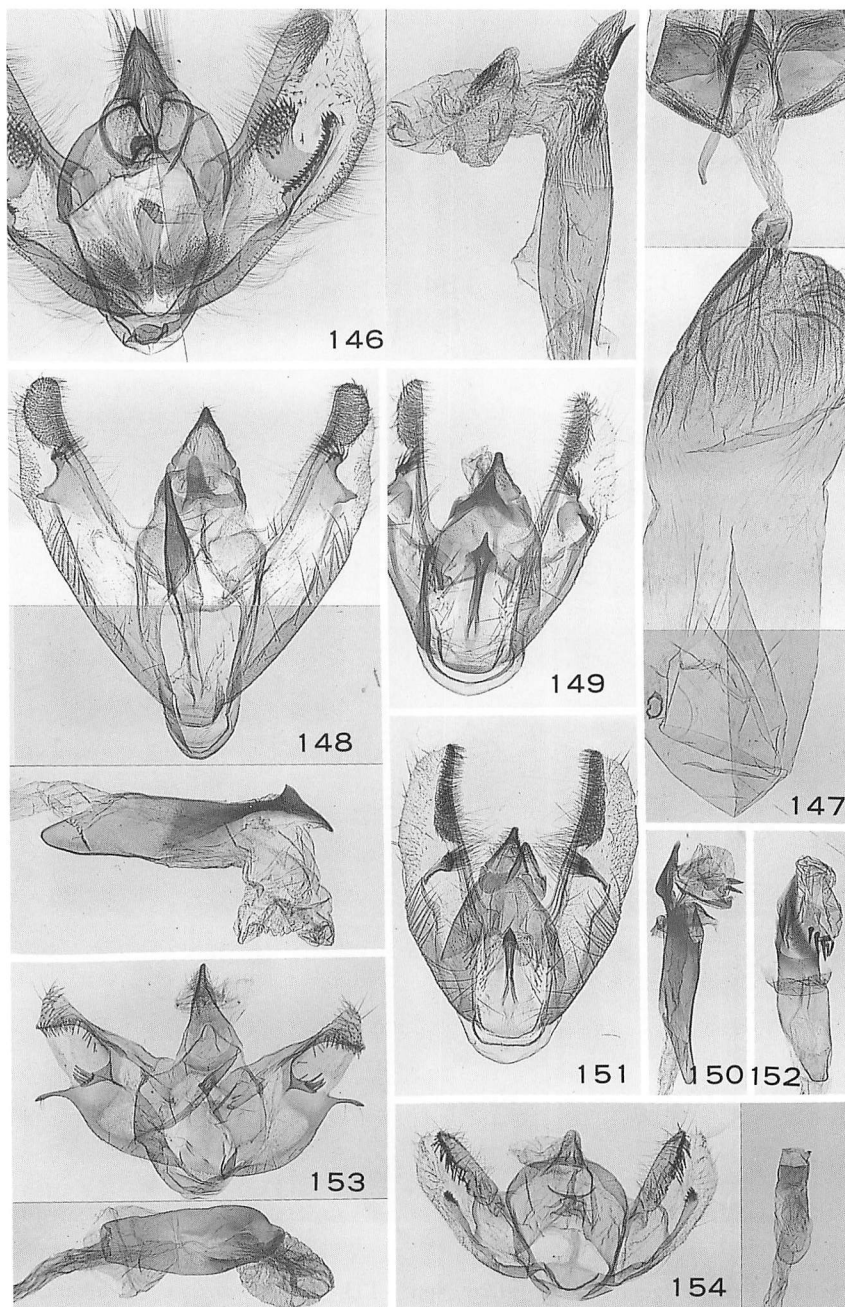
Figs 114–120. Male genitalia. 114. *Arichanna flavimedia* (Hampson). 115. *Arichanna* sp. 116. *Alcis perspicuata* (Moore). 117. *Alcis amica* sp. n., holotype. 118. *Alcis changmaiensis nepalina* subsp. n. 119. *Alcis athola* (Prout). 120. *Alcis harutai* sp. n. Figs 121–123. Female genitalia of *Alcis* spp. 121. *A. harutai* sp. n. 122. *A. athola* (Prout). 123. *A. changmaiensis nepalina* subsp. n.



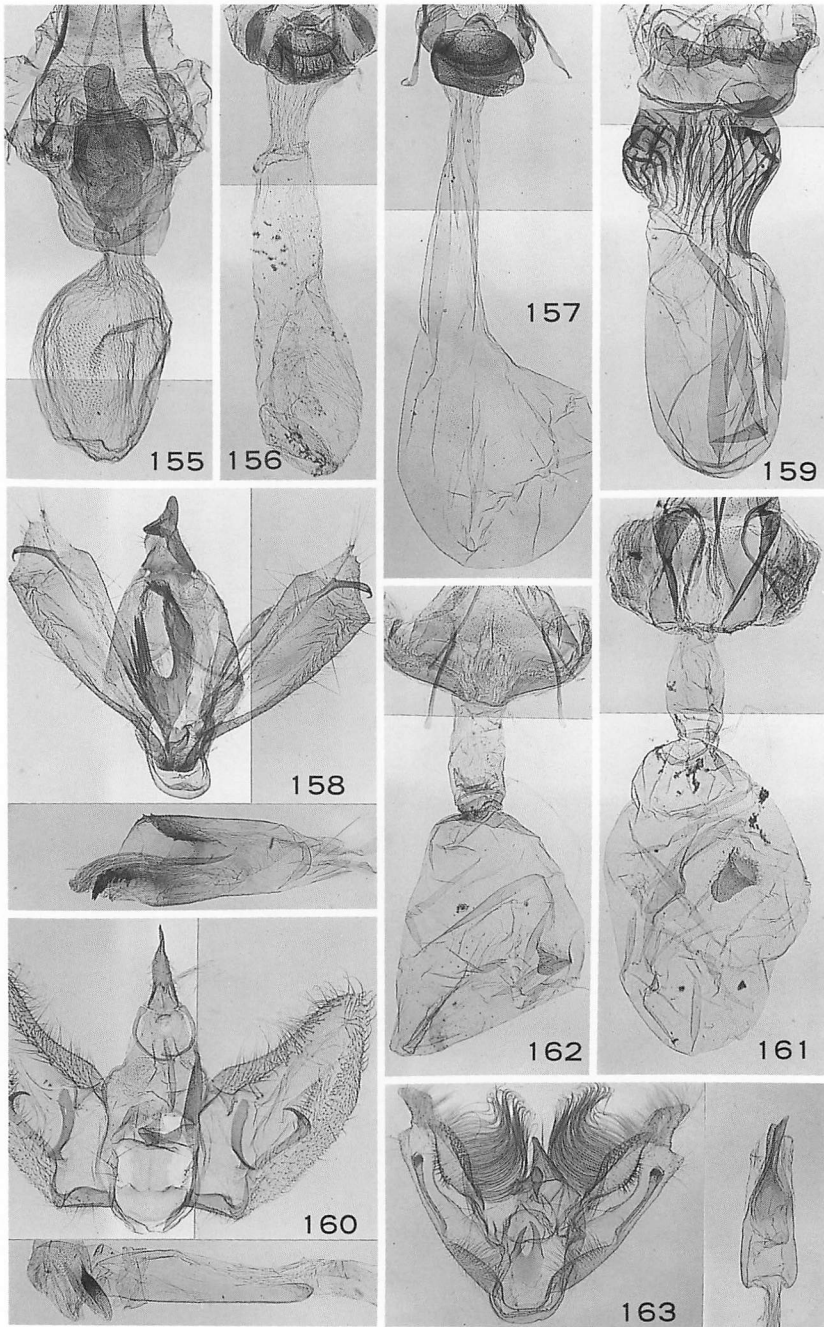
Figs 124–130. Male genitalia of *Alcis* spp. 124. *A. quadrifera* (Walker). 125. *A. semiclarata* (Walker), holotype, Bhutan, BMNH. 126. *A. paraclarata* sp. n., holotype. 127. *A. neoclarata* sp. n., holotype. 128. *A. albilinea* sp. n. 129. *A. macroclarata* sp. n., Thailand. 130. *A. rufomarginata* (Moore), holotype, Bengal, BMNH. Figs 131–132. Genitalia of *Psilalcis indistincta* (Hampson), Thailand. 131. Male. 132. Female.



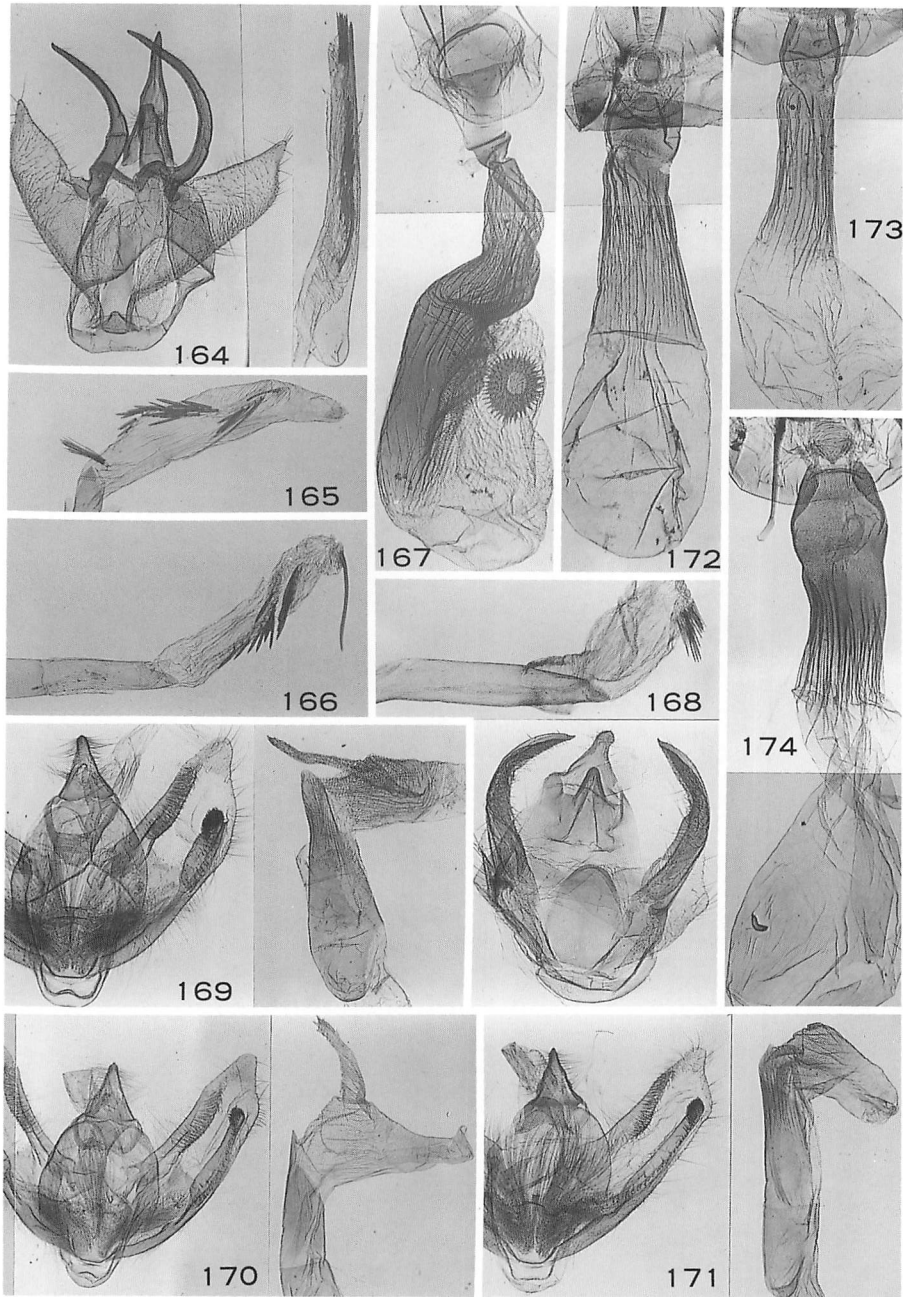
Figs 133-139. Female genitalia of *Alcis* spp. 133. *A. quadrifera* (Walker), holotype, BMNH. 134. *Ditto*, holotype of *Poecilalcis semiclarata* ab. *fasciata* Warren, BMNH. 135. *A. subochrearia* (Leech), holotype, BMNH. 136. *A. albilinea* sp. n., holotype, BMNH. 137. *A. paraclarata* sp. n. 138. *A. neoclarata* sp. n. 139. *A. macroclarata* sp. n. Figs 140-145. Holotypes of *Alcis* spp. in BMNH. 140. *Scotosia quadrifera* Walker. 141. *Poecilalcis semiclarata* ab. *fasciata* Warren. 142. *Selidosema? semiclarata* Walker. 143. *Boarmia subochrearia* Leech. 144. *Poecilalcis semiclarata* ab. *albilinea* Warren. 145. *Cleora rufomarginata* Moore.



Figs 146–147. Genitalia of *Hypomecis fasciata* (Swinhoe). 146. Male. 147. Female.
 Figs 148–154. Male genitalia. 148. *Harutalcis atrostipata* (Walker). 149–150. *H. glaucodisca* (Swinhoe). 151–152. *H. godavariensis* sp. n. 153. *Myrioblephara benefica* sp. n. 154. *M. cervina* (Hampson), holotype, BMNH.



Figs 155–157. Female genitalia of *Harutalcis* spp. 155. *H. atrostipata* (Walker). 156. *H. glaucodisca* (Swinhoe). 157. *H. godavariensis* sp. n.
 Figs 158–159. Genitalia of *Abaciscus kathmandensis* sp. n. 158. Male. 159. Female.
 Figs 160–161. Genitalia of *Diplurodes nepalensis* sp. n. 160. Male. 161. Female.
 Fig. 162. Female genitalia of *Diplurodes luzonensis* Sato.
 Fig. 163. Male genitalia of *Medasina* sp.



Figs 164–168. Genitalia of *Menophra* spp. 164. *M. subsenilis* sp. n., male. 165. *Ditto*. Apical portion of vesica. 166. *M. senilis* (Butler). Apical portion of vesica. 167. *M. subsenilis* sp. n., female. 168. *M. costistrigata* (Warren).
 Figs 169–171. Male genitalia of *Medasina* spp. 169. *M. parvalbidaria nepalensis* subsp. n. 170. *M. parvalbidaria parvalbidaria* Inoue, Taiwan. 171. *M. albidaria albidaria* (Walker).
 Figs 172–174. Female genitalia of *Medasina* spp. 172. *M. parvalbidaria nepalensis* subsp. n. 173. *M. parvalbidaria parvalbidaria* Inoue, Taiwan. 174. *M. albidaria albidaria* (Walker).

LIMACODIDAE

Hiroshi Yoshimoto

Belippa horrida Walker (Pl. 39: 3)*Belippa horrida* Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 508.

Godavari: 3♂, 15–19. v. 1990; 11♂, 23–30. v. 1990; 3♂ 1♀, 3–10. vi. 1990; 1♂, 17. vii. 1990; 1♀, 4. viii. 1990.

Belippa thoracica (Moore) (Pl. 39: 4)*Contheyla thoracica* Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 74, pl. 3, fig. 7.

Godavari: 2♂, 19. vi. 1990; 1♂, 20. vi. 1990; 1♂, 27. vi. 1990. Mt. Phulchouki: 1♂, 9. v. 1991.

Cheromettia apicata (Moore) (Pl. 39: 1, 2)*Belippa apicata* Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 75.

Godavari: 4♂ 1♀, 10–16. vi. 1990; 1♀, 14. vi. 1991; 2♀, 6. viii. 1991.

Demonarosa rufotessellata (Moore) (Pl. 39: 8)*Narosa rufotessellata* Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 73, pl. 3, fig. 24.

Godavari: 1♂, 14. v. 1991; 1♀, 10. vi. 1991; 1♂, 16. vi. 1991; 2♂, 25. vi. 1991; 1♂, 1. viii. 1991.

Altha subnotata (Walker) (Pl. 39: 7)*Belgoraea subnotata* Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 496.

Godavari: 1♂, 15. v. 1990; 1♂, 24. v. 1990; 1♂, 28. v. 1990; 1♂, 9. vi. 1991.

Althonarosa horisyaensis Kawada (Pl. 39: 6)*Althonarosa horisyaensis* Kawada, 1930, J. imp. agric. Exp. Stn Nishigahara 1: 251.

Godavari: 1♀, 15. vi. 1991; 1♂, 16. vi. 1991; 1♂, 18. vi. 1991.

Narosa conspersa Walker (Pl. 39: 9)*Narosa conspersa* Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 5: 1151.

Godavari: 1♂, 7. v. 1990; 1♂, 13. v. 1990; 1♂, 18. vii. 1990; 1♂, 3. v. 1991.

Atosia himalayana Holloway (Pl. 39: 10)*Atosia himalayana* Holloway, 1986, Malay. Nat. J. 40: 76.

Godavari: 1♂, 28. v. 1990; 1♂, 14. vi. 1990.

Cania himalayana Holloway (Pl. 39: 12)

Cania himalayana Holloway, 1987, in Holloway, Cock & Chenon, in Cock et al. ed., Slug and Nettle Caterpillars: 24, pl. 2, figs 3, 8, pl. 19, fig. 16.

Godavari: 1♂, 9. v. 1990; 1♂, 3. vi. 1990; 2♂ 1♀, 12–19. vi. 1990; 1♂, 23. vii. 1990; 1♂, 18. vi. 1991; 2♀, 21–27. vi. 1991.

Chalcoscelides castaneipars (Moore) (Pl. 39: 13)

Miresa castaneipars Moore, 1865, Proc. zool. Soc. Lond. 1865: 819.

Godavari: 4♂, 2–7. vi. 1990; 4♂, 11–16. vi. 1990; 1♂, 23. vi. 1990; 10♂, 16–19. vii. 1990; 1♂, 22. vii. 1990; 3♂, 18. vi. 1991; 1♂, 11. vii. 1991; 1♂, 2. viii. 1991. Mt. Phulchouki: 1♂, 12. vi. 1991.

Miresa bracteata Butler (Pl. 39: 14)

Miresa bracteata Butler, 1880, Ann. Mag. nat. Hist. (5) 6: 64.

Godavari: 1♂, 27. v. 1990; 5♂, 2–7. vi. 1990; 1♂ 1♀, 27–28. vi. 1990; 1♂, 26. vii. 1991; 1♂, 1. viii. 1991. Mt. Phulchouki: 2♂, 21. vii. 1990; 1♂ 1♀, 2–6. vi. 1991; 2♂, 12–13. 1991; 2♀, vii. 1991.

Parasa pastoralis Butler (Pl. 39: 17)

Parasa pastoralis Butler, 1880, Ann. Mag. nat. Hist. (5) 6: 63.

Godavari: 1♂, 25. vi. 1992.

Parasa himalepida Holloway (Pl. 39: 18)

Parasa himalepida Holloway, 1987, in Holloway, Cock & Chenon, in Cock et al. ed., Slug and Nettle Caterpillars: 31, pl. 4, fig. 4, pl. 5, fig. 4, pl. 19, fig. 36.

Godavari: 1♀, 2. vi. 1990; 1♀, 16. vi. 1991; 1♀, 25. vi. 1991; 1♀, 26. vi. 1992.

Parasa herbifera (Walker) (Pl. 39: 19, 20)

Nyssia herbifera Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 5: 1136.

Godavari: 2♂, 28. vi. 1992.

Parasa argentilinea Hampson (Pl. 39: 21)

Parasa argentilinea Hampson, [1893], Fauna Br. India (Moths) 1: 389.

Godavari: 1♂, 16. vii. 1990; 1♀, 21. vii. 1991; 1♂, 4. viii. 1991.

Scoperodes venosa Walker (Pl. 39: 26, 27)

Scoperodes venosa Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 5: 1105.

Godavari: 1♂, 15. vi. 1991; 2♂, 21–24. vi. 1990; 4♂ 1♀, vi. 1991; 2♂ 2♀, vii. 1991; 1♂, 4–8. viii. 1991.

Scoperodes testacea Butler (Pl. 39: 24)

Scoperodes testacea Butler, 1886, *Illust. typical Specimens Lepid. Heterocera Colln Br. Mus.* 6: 3, pl. 101, fig. 7, 8.

Godavari: 1♂, 22. vi. 1990; 1♂, 22. vii. 1990; 1♂, 27. vii. 1991; 1♂, 29. vii. 1991; 2♂, 6. viii. 1991.

Scoperodes vulpina Moore (Pl. 39: 22, 23)

Scoperodes vulpina Moore, 1879, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr Atkinson*: 73, pl. 3, fig. 22.

Godavari: 1♂, 19. vi. 1990; 1♂, 19. vii. 1990; 1♂, 12. vi. 1991; 1♀, vi. 1991; 1♀, 8. vii. 1991; 3♂, 1–6. viii. 1991.

Mahanta quadrilinea Moore (Pl. 39: 30)

Mahanta quadrilinea Moore, 1879, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr Atkinson*: 78, pl. 3, fig. 20.

Godavari: 1♂, 3. v. 1990; 1♂, 6. vi. 1990; 1♂, 24. vi. 1990; 1♂, 10. vi. 1991.

Susica himalayana Holloway (Pl. 39: 37)

Susica himalayana Holloway, 1982, in Barlow, *Introd. Moths South East Asia*: 186.

Godavari: 1♂, 16. vi. 1990.

Thosea brunti Holloway (Pl. 39: 33)

Thosea brunti Holloway, 1987, in Holloway, Cock & Chenon, in Cock et al. ed., *Slug and Nettle Caterpillars*: 54, pl.7, fig.6, pl.20, fig.20.

Godavari: 1♂, 11. vi. 1990; 1♂, 22. vi. 1991; 1♂, 26. vi. 1991; 1♂, 28. vi. 1991.

Aphendala cana (Walker) (Pl. 39: 36)

Parasa cana Walker, 1865, *List Specimens lepid. Insects Colln Br. Mus.* 32: 484.

Godavari: 1♂, 30. iv. 1990; 1♂, 6. v. 1990; 4♂ 1♀, 13–19. v. 1990; 4♂ 1♀, 25–30. v. 1990; 3♂, 28–29. iv. 1991; 3♂, 10–12. v. 1991; 2♂, 23–25. v. 1991; 1♀, 10. vi. 1991. Mt. Phulchouki: 2♂, 4. viii. 1991.

Setora baibarana (Matsumura) (Pl. 39: 34)

Thosea baibarana Matsumura, 1931, 6000 *illust. Insects Japan-Emp.*: 1007, fig. 1824.

Godavari: 1♂, 2. vi. 1990; 1♂, 14. vi. 1990; 1♂, 8. v. 1991; 1♂, 9. vi. 1991.

Setora sinensis Moore (Pl. 39: 35)

Setora sinensis Moore, 1877, *Ann. Mag. nat. Hist.* (4) 20: 93.

Godavari: 1♀, 7. vi. 1990; 14♂, 10–19. vi. 1990; 1♂, 24. vi. 1990; 1♀, 17. vii. 1990; 1♀, 22. v. 1991; 3♂ 1♀, 10–14. vi. 1991; 1♂ 1♀, 20–25. vi. 1991; 1♂, 14. vii. 1991; 1♂, 23. vii. 1991; 1♀, 6. viii. 1991.

Monema coralina Dudgeon (Pl. 39: 15)

Monema coralina Dudgeon, 1895, Trans. ent. Soc. Lond. 1895: 290.

Godavari: 8♂, 10–19. vi. 1990; 1♂ 6♀, 16–19. vii. 1990; 1♀, 23. vi. 1990; 1♂, vii. 1990; 2♂, 16–18. vi. 1991; 2♂, 22–23. vi. 1991; 1♂, 30. vii. 1991; 2♀, vii. 1991; 4♂ 1♀, 4–7. viii. 1991.

Phlossa crispa (Swinhoe) (Pl. 39: 31)

Miresa crispa Swinhoe, 1890; Proc. zool. Soc. Lond. 1889: 409, pl.43, fig.4.

Godavari: 1♂, 17. vi. 1990; 1♂, 20. vi. 1990; 1♂, 24. vi. 1990. Mt. Phulchouki: 3♂, 12. vi. 1991; 1♂, vi. 1991; 1♂, 16. vi. 1992. Daman Pass: 1♀, 28. vi. 1992.

Phlossa fasciata (Moore) (Pl. 39: 32)

Aphendala fasciata Moore, 1888, Proc. zool. Soc. Lond. 1888: 403.

Godavari: 1♀, 13. vi. 1991; 1♂, 25. vi. 1991; 1♂, 7. v. 1992.

Euphlyctinides rava Hering (Pl. 39: 11)

Euphlyctinides rava Hering, 1931, in Seitz, Gross-Schmett. Erde 10: 704, pl. 88, line d.

Godavari: 1♂, 17. vii. 1990.

Ceratonema retractata (Walker) (Pl. 39: 25)

Limacodes retractata Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 487.

Mt. Phulchouki: 1♂, 4. viii. 1991.

Dactylorhynchides rufibasale (Hampson) (Pl. 39: 5)

Ceratonema rufibasale Hampson, 1896, Fauna Br. India (Moths) 4: 485.

Godavari: 1♂, 23. v. 1991; 1♂, 7. vi. 1992.

Trichogyia circulifera Hering (Pl. 39: 28)

Trichogyia circulifera Hering, 1933, in Seitz, Gross-Schmett. Erde 2 (Suppl.): 206, pl. 15, line i.

Godavari: 1♂, 19. vi. 1990.

This species was described from Kwangton, China, and there has so far been no subsequent record. In this occasion, I record further specimens recently captured in Japan and Taiwan, and give a new Japanese name, Marumon-Iraga. Japan: 1♂, Ishigaki-jima I., Yonehara, 15. iii. 1991 (K. Suzuki); 3♂, Ishigaki-jima I., Omotodake (450m), 20. iii. 1991 (M. Owada); 1♂, Iriomote-jima I., Funaura, 25. viii. 1976 (S. Azuma). Taiwan: 1♂, Tsuilian, 29. viii. 1986 (B.-S. Chang).

***Phrixolepia similis* sp. n.** (Pl. 39: 16, holotype)

Hardly separable from Japanese *P. sericea* Butler in appearance, but the male genitalia (Fig. 175) are different as follows.

Uncus heavier; valva wider and shorter; sacculus larger and its terminal processes much longer. Aedeagus straight, thicker.

Holotype. ♂, Godavari, 26. v. 1990.



Figs 175–176. Male genitalia of *Phrixolepia*. 175. *P. similis* sp. n., holotype. 176. *P. sericea*, Japan.

ARCTIIDAE: LITHOSIINAE

Yasunori Kishida

Vamura ramelana (Moore), *comb. rev.* (Pl. 40: 1, 2)*Lithosia ramelana* Moore, 1866, Proc. zool. Soc. Lond. 1865: 798.

Godavari: 2♂ 1♀, 22–27. ix. 1989; 1♂, 4. v. 1990; 1♂, 25. v. 1990.

Since Hampson (1900, *Cat. Lepid. Phalaenae Br. Mus.* 2), this and the following two species have been included in the genus *Agylla* Walker, 1854, of which the type species *Agylla fasciculata* Walker, 1854 from Venezuela, S. America has sexual bands on both wings unlike the Oriental species combined with this genus. Here I use *Vamura* Moore, 1878 (type species: *Lithosia ramelana* Moore, 1866) for this species, and *Churinga* Moore, 1878 (type species: *Churinga rufifrons* Moore, 1878) for the following two species.

Churinga rufifrons Moore, *comb. rev.* (Pl. 40: 3)*Churinga rufifrons* Moore, 1878, Proc. zool. Soc. Lond. 1878: 10, pl.1, fig.12.

Godavari: 1♂, iv. 1990; 2♂, 24–30. v. 1990; 1♂, 16. v. 1991; 1♂, 9. vi. 1992.

Churinga beema (Moore), *comb. rev.* (Pl. 40: 4)*Lithosia beema* Moore, 1865, Proc. zool. Soc. Lond. 1865: 798.

Godavari: 1♂, 28. vi. 1990; 1♂, 18. vi. 1992; 1♂, 23. vi. 1992. Daman Pass: 1♀, 28. vi. 1992.

Macrobrochis staudingeri (Alpheraky), *comb. n.* (Pl. 40: 5)*Paraona staudingeri* Alpheraky, 1897, Mem. Rom. 9: 168, pl. 12, fig. 8.

Godavari: 2♂, 9. v. 1990; 2♂ 1♀, 23–25. v. 1990; 1♂, 1. vi. 1991.

The male genitalia of this species are very homogeneous with those of *Macrobrochis gigas* (Walker), the type species of *Macrobrochis*. Though I have not yet examined *Crambomorpha splendens* Butler, 1877, the type species of *Paraona* Butler, 1878, I venture to synonymize *Paraona* with *Macrobrochis* Herrich-Shaffer, 1855 (*syn. n.*).

Macrobrochis prasena (Moore) (Pl. 40: 8)*Tripura prasena* Moore, 1859, in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East India Hse 2: 299, pl. 7a, fig. 6.

Godavari: 1♂, 3. vi. 1990.

Macrobrochis gigas (Walker) (Pl. 40: 6)*Lithosia gigas* Walker, 1854, List Specimens lepid. Insects Colln Br. Mus. 2: 494.

Godavari: 2♂, 24–28. vi. 1992.

Macrobrochis albifascia (Fang), comb. n. (Pl. 40: 7)*Atolms albifascia* Fang, 1982, in Chen, et al, Insects Xizang 2: 60.

Godavari: 1♂, 28. vi. 1990; 1♂, 23. v. 1991. Mt. Phulchouki: 1♀, 9. vi. 1991.

This species was described upon 4 females from Xizang, China. The examination of male genitalia (Fig. 177) naturally concluded that this species belongs to *Macrobrochis*.

Agrisius fuliginosus Moore (Pl. 40: 9)*Agrisius fuliginosus* Moore, 1872, Proc. zool. Soc. Lond. 1872: 571, pl. 33, fig. 3.

Godavari: 1♀, 25. v. 1990; 3♀, 17–23. vii. 1990.

Chryсорabdia bivitta (Walker) (Pl. 40: 10, 11)*Lithosia bivitta* Walker, 1856, List Specimens lepid. Insects Colln Br. Mus. 7: 1682.

Godavari: 2♀, 20–24. ix. 1989; 1♀, 3. x. 1989; 1♂, 3. vi. 1990.

Chryсорabdia biridana (Walker) (Pl. 40: 12)*Lithosia biridana* Walker, 1864, List Specimens lepid. Insects Colln Br. Mus. 31: 225.

Mt. Phulchouki: 1♀, 11. v. 1991. Daman Pass: 2♂, 28. vii. 1992.

Sidyma albifines Walker (Pl. 40: 13)*Sidyma albifines* Walker, 1856, List Specimens lepid. Insects Colln Br. Mus. 7: 1686.

Mt. Phulchouki: 1♂, 1. vi. 1991.

Thysanoptyx tetragona (Walker) (Pl. 40: 16)*Lithosia tetragona* Walker, 1854, List Specimens lepid. Insects Colln Br. Mus. 2: 510.

Godavari: 1♂, 3. x. 1989; 1♀, 17. vii. 1990; 2♂, 11. v. 1991.

Eilema distorta (Moore) (Pl. 40: 14)*Lithosia distorta* Moore, 1872, Proc. zool. Soc. Lond. 1872: 572.

Godavari: 1♂, 11. v. 1990; 1♂, 30. v. 1990.

Eilema vagesa (Moore) (Pl. 40: 15)*Lithosia vagesa* Moore, 1859, in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East India Hse 2: 304.

Godavari: 1♂, 19. v. 1991; 1♂, 1. vi. 1991; 1♂, 21. vi. 1992.

Eilema tumida (Walker) (Pl. 40: 17)*Tegulata tumida* Walker, 1862, J. linn. Soc. Lond. (Zool.) 6: 110.

Godavari: 1♂ 1♀, 30. v. 1990.

Eilema basinota (Moore) (Pl. 41: 19)*Lithosia basinota* Moore, 1865, Proc. zool. Soc. Lond. 1865: 798.

Mt. Phulchouki: 1♀, 6. v. 1992.

Macotosa nubcula (Moore) (Pl. 40: 18)*Cossa nubcula* Moore, 1879, Proc. zool. Soc. Lond. 1879: 394.

Godavari: 1♀, 24. ix. 1989; 1♂, 13. v. 1990; 1♀, 10. vi. 1991.

Cyana bellissima (Moore) (Pl. 41: 1, 2)*Bizone bellissima* Moore, 1878, Proc. zool. Soc. Lond. 1878: 27, pl.3, fig.13.

Godavari: 6♂ 2♀, 24. ix. 1989; 1♂, 3. x. 1989; 1♀, 1. iv. 1990; 2♂, 11–18. vi. 1990; 1♀, 11. v. 1991. Many other wrapped specimens.

This species also inhabits Malaysia. The specimens secured from Cameron Highlands, Malay Peninsula are subspecifically separable as below.

Cyana bellissima inouei subsp. n. (Pl. 41: 3, holotype)Similar to *bellissima* from Himalaya, but differs from it in having a reddish subapical band on forewing instead of a broad, orange apical marking.

Holotype. ♂, Malaysia, Cameron Highlands, 1984 (ex H. Inoue). Paratype. 1♂, same data as holotype.

Cyana distincta babui subsp. n. (Pl. 41: 4; 5, holotype)Similar to the nominotypical race *distincta* (Rothschild, 1912) (Pl. 41: 6) from Myanmar to Thailand in wing maculation, but differs from it in the following characters. All the bands of forewing broader and more yellowish orange while they are scarlet red in nominotypical race. Hindwing paler and yellowish.

Holotype. ♂, Godavari, 13. v. 1991. Paratypes. Godavari: 1♂, 22. ix. 1989; 3♂, 13. v. 1990; 1♀, 26. v. 1990; 1♂, 10. v. 1991; 3♂ 1♀, 16–25. v. 1991; 1♂, 6. ix. 1991; 1♂, 18. ix. 1991; 2♀, 22. iv. 1992; 1♂, 5. v. 1992. India, Sikkim, Gangtok, 1♂ 3♀, 2. v. 1981 (Y. Kishida)

Cyana effracta (Walker) (Pl. 41: 7)*Barsine effracta* Walker, 1854, List Specimens lepid. Insects Colln Br. Mus. 2: 546.

Godavari: 1♂, 11. vi. 1990.

Cyana adita (Moore) (Pl. 41: 8, 9)*Bizone adita* Moore, 1959, in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East India Hse 2: 306, pl. 7a, fig. 11.

Godavari: 1♂, 12. iv. 1990; 1♂, 26. v. 1990; 1♂ 1♀, 8–12. v. 1991; 1♀, 23. v. 1991.

Cyana dohertyi (Elwes) (Pl. 41: 10, 11)*Bizone dohertyi* Elwes, 1890, Proc. zool. Soc. Lond. 1890: 394, pl.32, fig. 4.

Godavari: 2♂ 1♀, 20–24. ix. 1989.

Cyana sikkimensis (Elwes) (Pl. 41: 12)*Bizone sikkimensis* Elwes, 1890, Proc. zool. Soc. Lond. 1890: 395.

Godavari: 1♂, 26. iv. 1990; 1♂, 12. v. 1990; 1♂, 26. v. 1990; 2, 10–12. v. 1991; 1♂ 1♀, 23–24. iii. 1992.

Cyana gelida (Walker) (Pl. 41: 13)*Doliche gelida* Walker, 1854, List Specimens lepid. Insects Colln Br. Mus. 2: 529.

Godavari: 1♂, 2. v. 1990; 1♂ 1♀, 8–11. v. 1990.

Cyana gazella (Moore) (Pl. 41: 14)*Bizone gazella* Moore, 1872, Proc. zool. Soc. Lond. 1872: 572, pl. 33, fig. 4.

Godavari: 3♂, 24–29. iv. 1990; 1♂ 1♀, v. 1990; 1♂, 18. v. 1990.

Cyana detrita Walker (Pl. 41: 15)*Cyana detrita* Walker, 1854, List Specimens lepid. Insects Colln Br. Mus. 2: 529.

Godavari: 1♀, 8. vi. 1992.

Cyana guttifera (Walker) (Pl. 41: 18)*Bizone guttifera* Walker, 1856, List Specimens lepid. Insects Colln Br. Mus. 7: 1779.

Godavari: 2♂, 18. v. 1990; 1♂, 23. vi. 1992.

Eugoa bipunctata (Walker) (Pl. 40: 19)*Lyclene bipunctata* Walker, 1862, J. linn. Soc. Lond. (Zool.) 6: 115.

Godavari: 1♀, 1. viii. 1991; 1♂, 4. iii. 1992.

Asura dasara (Moore) (Pl. 41: 21)*Setina dasara* Moore, 1959, in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East India Hse 2: 303.

Godavari: 1♂, 26. iii. 1990; 1♂, 17. vi. 1990; 1♀, 5. viii. 1991; 1♂, 28. x. 1991.

Miltochrista linga (Moore) (Pl. 40: 20)*Barsine linga* Moore, 1959, in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East India Hse 2: 301.

Godavari: 2♂ 1♀, 24–30. ix. 1989; 1♀, 30. v. 1990.

Miltochrista punicea (Moore) (Pl. 41: 24)

Barsine punicea Moore, 1878, Proc. zool. Soc. Lond. 1878: 29.

Godavari: 2♂ 1♀, 21–24. vi. 1991.

Miltochrista defecta (Walker) (Pl. 41: 17)

Barsine defecta Walker, 1854, List Specimens lepid. Insects Colln Br. Mus. 2: 546.

Godavari: 1♂, 23. ix. 1989; 1♂, 25. v. 1992; 1♂, 2. vi. 1992; 1♂, 21. vi. 1992.

Miltochrista orientalis Daniel (Pl. 41: 16)

Miltochrista orientalis Daniel, 1951, Bonn. zool. Beitr. 2 (3-4): 324–325.

Godavari: 1♂, 11. v. 1990; 1♂, 21. iii. 1991.

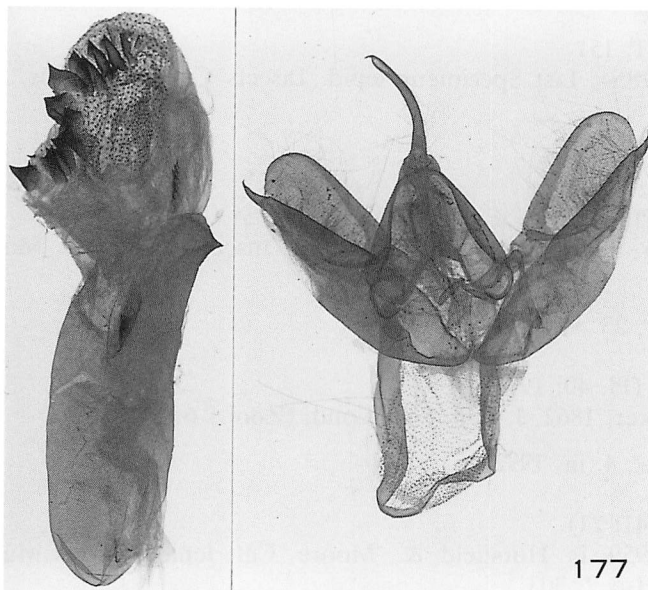


Fig. 177. Male genitalia of *Macrobrochis albifascia* (Fang).

ARCTIIDAE: SYNTOMINAE

Toshiro Haruta

Amata bicincta (Kollar) (Pl. 41: 22)*Syntomis bicincta* Kollar, [1844], in Hugel, Kaschmir und das Reich Siek 4: 460, pl. 19, fig. 8.

Godavari: 4♂, 6–11. vi. 1963; 2♂ 1♀, 21. vi. 1963; 2♂, 21. vi. 1992; 2♂ 1♀, 28–29. vi. 1992.

Syntomoides imaon (Cramer) (Pl. 41: 23, 25)*Sphinx imaon* Cramer, 1780, Uitlandsche Kapellen 3: 94, pl. 248, fig. E.

Godavari: 1♂, 24. iii. 1992; 1♂, 10. iv. 1992; 1♀, 2. vi. 1992; 1♂, 13. iv. 1992; 1♂, 23. vi. 1992.

CALLIDULIDAE

Toshiro Haruta

Tetragonus catamitus major (Moore) (Pl. 53: 33)*Cleosiris major* Moore, 1883, Proc. zool. Soc. Lond. 1883: 15.

Godavari: 1♂, 16. iv. 1990.

Callidula erycinoides Walker (Pl. 53: 35)*Callidula erycinoides* Walker, 1869, Char. undesc. Lep. Het.: 3.

Godavari: 1♂1♀, 22. v. 1980; 1♂, 10. vi. 1990; 1♂, 18. vi. 1991; 1♂, 28. vi. 1992.

Pterodecta anchora Pagenstecher (Pl. 53: 34)*Pterodecta anchora* Pagenstecher, 1887, Jb. nassau. Ver. Naturk 40: 238.

Godavari: 1♂, 11. vi. 1991; 1♂, 24. iv. 1992. Daman Pass: 2♂, 28. vi. 1992.

Herimba atkinsoni Moore (Pl. 53: 36)*Herimba atkinsoni* Moore, 1879, in Hewitson & Moore, Deswcr. new Indian lepid. Insects Colln late Mr Atkinson: 21, pl. 2, fig. 3.

Godavari: 1♂, 27. v. 1979; 1♂, 7. v. 1981.

EPICOPEIIDAE

Toshiro Haruta

Epicopeia polydora Westwood (Pl. 53: 32)*Epicopeia polydora* Westwood, 1845, Arcan. Entom. 1: 19, pl. 5, fig. 1.

Godavari: 1♂, 12. vii. 1984.

NOCTUIDAE

Hiroshi Yoshimoto

EUTELINAE

Eutelia geyeri (Felder & Rogenhofer) (Pl. 42: 1)

Eurhipia geyeri Felder & Rogenhofer, 1874, Reise öst. Fregatte Novara (Zool.) 2 (Abt. 2): pl. 110, fig. 23.

Godavari: 1♀, 17. vi. 1990; 2♂, 20–24. vi. 1990; 1♂ 3♀, 27–28. vi. 1990; 1♀, 2. vii. 1990; 1♀, 18. vii. 1990; 1♀, 19. v. 1991; 1♂, 23. vii. 1991; 1♂, 3. iii. 1992; 2♂, 20–21. iii. 1992. Mt. Phulchouki: 1♂, 25. v. 1990; 1♂ 1♀, 17. vi. 1990.

Eutelia blandatrix Hampson (Pl. 42: 2)

Eutelia blandatrix Hampson, 1912, Cat. Lepid. Phalaenae Colln Br. Mus. 11: 48, pl. 175, fig. 8.

Godavari: 1♀, 28. vi. 1990; 1♂, 20. iii. 1992; 2♂, 27–30. iii. 1992; 2♂ 2♀, 26–28. iv. 1992.

Eutelia favillatrixoides Pool (Pl. 42: 3)

Eutelia favillatrixoides Pool, 1989, in Heppner, Lepid. Cat. (N.S.) 118: 421.

Eutelia favillatrix Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1778 (nec Guenée, 1852).

Godavari: 1♂, 15. iv. 1990; 1♂, 24. iv. 1990; 1♀, 28. iii. 1992.

Penicillaria jocosatrix Guenée (Pl. 42: 12)

Penicillaria jocosatrix Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 6: 304.

Godavari: 2♂, 15. iv. 1990; 1♂, 17. iv. 1990. Mt. Phulchouki: 2♂, 2. vii. 1990; 1♂, vii. 1990.

Penicillaria simplex (Walker) (Pl. 42: 13)

Eutelia simplex Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 824.

Godavari: 1♂, 17. iv. 1990; 1♀, 8. iv. 1992. Mt. Phulchouki: 1♀, 21. vii. 1990.

Atacira chalybsa (Hampson) (Pl. 42: 14)

Penicillaria chalybsa Hampson, 1891, Illust. typical Specimens Lepid. Heterocera Colln Br. Mus. 8: 16, 80, pl. 146, fig. 1.

Godavari: 1♂, 24. ix. 1989; 1♂, 23. v. 1992.

Aplotelia diplographa (Hampson) (Pl. 42: 4)

Eutelia diplographa Hampson, 1905, Ann. Mag. nat. Hist. (7) 16: 375.

Mt. Phulchouki: 1♀, 18. vi. 1992.

Targalla sugii Holloway (Pl. 42: 7)*Targalla sugii* Holloway, 1985, Malay. nat. J. 38: 191, figs 68, 70.

Godavari: 1♂, 24. iii. 1992. Mt. Phulchouki: 1♂, 2. vii. 1990; 1♀, 21. vii. 1990.

Anigraea rubida Walker (Pl. 42: 9)*Anigraea rubida* Walker, 1862, J. Proc. Linn. Soc. (Zool.) 6: 139.

Godavari: 1♀, 28. vi. 1990.

Anuga multiplicans (Walker) (Pl. 42: 5)*Piada multiplicans* Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1747.

Godavari: 1♂, xi. 1991.

Anuga supraconstricta sp. n. (Pl. 42: 6)♂ ♀. Similar to *A. constricta* Guenée in appearance, but larger. Forewing pale to dark gray, not tinged with brown; reniform thickly defined by black. A tornal creamy marking of hindwing conspicuous, its outer margin oblique and not reaching to vein 3.Male genitalia (Fig. 179). Similar to those of *A. multiplicans* (Walker) (Fig. 178), but uncus wider and its tip concave; juxta thinner. Aedeagus slender and a caudal sclerotized bar not constricted at base; vesical granulation coarser.

Holotype. ♂, Godavari, 3. vi. 1990. Paratypes. Godavari: 1♂, 19. v. 1990; 1♂, 30. v. 1990; 1♀, 3. vi. 1990; 2♂, 7. vi. 1990; 1♂, 15. vi. 1990; 1♂, 10. vi. 1991; 1♂, 31. vii. 1991.

Anuga lunulata Moore (Pl. 42: 11)*Anuga lunulata* Moore, 1867, Proc. zool. Soc. Lond. 1867: 62.

Godavari: 1♂, 12. iv. 1990; 1♀, 17. vi. 1990; 1♀, 11. vii. 1990. Mt. Phulchouki: 1♀, 4. viii. 1991; 1♂, 6. iv. 1992.

Paectes subapicalis (Walker) (Pl. 42: 8)*Abrostola subapicalis* Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 12: 883.

Daman pass: 1♂, 28. vi. 1992.

STICTOPTERINAE

Odontodes aleuca Guenée (Pl. 42: 24)*Odontodes aleuca* Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 3: 51.

Godavari: 2♂ 3♀, 24–26. iv. 1990; 1♂, 19. v. 1990; 1♂ 2♀, 11–15. vi. 1990; 1♀, 28. vi. 1990; 2♂, 17–19. vii. 1990; 1♂ 4♀, 7–8. iv. 1991; 2♂ 11♀, 15–21. iv. 1991; 2♂ 7♀, 7–9. v. 1991; 6♂ 10♀, 11–19. v. 1991; 1♂, 3. vi. 1991; 1♀, 18. vi. 1991; 5♂ 1♀, 1. vii. 1991; 5♂ 5♀, 4–7. viii. 1991. Mt. Phulchouki: 1♂ 2♀, 17. vii. 1990; 1♂ 2♀, 21. vii. 1990; 2♂ 1♀, 4. viii. 1991.

Lophoptera illucida (Walker) (Pl. 42: 16–19)

Stictoptera illucida Walker, 1865, List Specimens lepid. Insects Colln Br. Mus.33: 918.

Godavari: 2♀, 24. ix. 1989; 1♂ 1♀, 3. x. 1989; 3♂ 1♀, 15–17. iv. 1990; 14♂ 17♀, 23–26. 1990; 1♂ 2♀, 14–18. v. 1990; 8♂ 5♀, 11–20. vi. 1990; 3♂ 2♀, 24–28. vi. 1990; 3♂ 1♀, 16–21. vii. 1990; 2♂ 7♀, 15–19. iv. 1991; 6♂ 12♀, 21–30. iv. 1991; 6♂ 6♀, 1–11. v. 1991; 3♀, 13–15. v. 1991; 3♂ 3♀, 11–18. vi. 1991; 1♂ 5♀, 21–28. vi. 1991; 1♀, 3. vii. 1991; 2♂ 1♀, 27–31. vii. 1991; 6♀, 2–8. viii. 1991. Mt. Phulchouki: 5♂ 4♀, 16–21. vii. 1990; 1♂ 3♀, 8. v. 1991; 1♂, 8. vi. 1991; 3♂, 4. viii. 1991.

Lophoptera olivascens (Moore) (Pl. 42: 10)

Stictoptera olivascens Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 164.

Godavari: 1♂ 1♀, 12. iv. 1990; 2♀, 17. iv. 1990; 1♂, 13. v. 1990; 1♂, 21. iv. 1991; 1♂, 26. iv. 1991; 1♂ 1♀, 29. iv. 1991.

Lophoptera apirtha (Swinhoe) (Pl. 42: 15)

Stictoptera apirtha Swinhoe, 1900, Cat. east. and Aust. Lepid. Heterocera Colln Oxf. Univ. Mus. 2: 92.

Godavari: 1♂, 27. iv. 1991; 1♀, 28. iv. 1991. Mt. Phulchouki: 1♂, 21. vii. 1990.

Lophoptera tenuis (Moore) (Pl. 42: 22)

Cucullia tenuis Moore, 1867, Proc. zool. Soc. Lond. 1867: 60.

Mt. Phulchouki: 1♂, 11. v. 1991.

Lophoptera longipennis (Moore) (Pl. 42: 21)

Sadarsa longipennis Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 165, pl. 5, fig. 14.

Godavari: 1♂, 24. vi. 1990; 1♀, 1. viii. 1991; 1♀, 11. ii. 1992.

Lophoptera squammigera Guenée (Pl. 42: 20)

Lophoptera squammigera Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 55, pl. 14, fig. 13.

Godavari: 2♂, 3. x. 1989; 1♂, 15. iv. 1990; 2♂ 1♀, 2–3. vi. 1990; 1♀, 17. vi. 1990; 1♀, 7. iv. 1991; 5♂ 1♀, 8–9. v. 1991; 1♂ 1♀, 15. v. 1991; 1♀, 22. v. 1991. Mt. Phulchouki: 1♀, 4. viii. 1991.

Sigmuncus albigrisea (Warren) (Pl. 42: 23)

Lophoptera albigrisea Warren, 1914, Novit. zool. 21: 416.

Godavari: 1♀, 27. ii. 1992.

SARROTHRIPINAE

Iscadia inexacta (Walker) (Pl. 42: 36)

Gadirtha inexacta Walker, [1858], List Specimens lepid. Insects Colln Br. Mus.13: 1102.

Godavari: 1♂, 20. iv. 1990.

Cryptothripa occulta (Swinhoe) (Pl. 42: 37)

Selepa occulta Swinhoe, 1885, Proc. zool. Soc. Lond. 1885: 461, pl. 27, fig. 11.

Godavari: 3♀, 11–16. vi. 1992; 1♂, 27. vi. 1992.

Risoba prominens Moore (Pl. 42: 25 ♂, 26, ♀)

Risoba prominens Moore, 1881, Trans ent. Soc. Lond. 1881: 329.

Godavari: 2♂ 2♀, 2–7. viii. 1991; 1♂, 19. iii. 1992; 1♂, 10. iv. 1992. Mt. Phulchouki: 1♂, 17. vi. 1990.

Risoba obstructa Moore (Pl. 42: 27)

Risoba obstructa Moore, 1881, Proc. zool. Soc. Lond. 1881: 328.

Godavari: 10♂, 13–18. v. 1990; 1♂, 26. v. 1990. Mt. Phulchouki: 1♂, 21. vii. 1990.

Risoba variegata (Moore) (Pl. 42: 28)

Pitrasa variegata Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 94, pl. 4, fig. 2.

Mt. Phulchouki: 1♂, 17. vii. 1990.

Labanda viridaloides Poole (Pl. 42: 32)

Labanda viridaloides Poole, 1989, in Heppner, Lepid. Cat. (N. S.) 118: 560.

Labanda viridalis Swinhoe, 1905, Ann. Mag. nat. Hist. (7) 16: 156 (nec Moore, 1867).

Godavari: 1♂, 17. iv. 1992.

Blenina quinaria Moore (Pl. 42: 31)

Blenina quinaria Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 158, pl. 5, fig. 5.

Godavari: 1♀, 1. v. 1990; 1♂, 8. iv. 1991; 1♂, 14. iv. 1991; 1♂, 29. iv. 1991; 1♂, 8. v. 1991; 2♂, 1–4. viii. 1991; 1♂, 7. viii. 1991. Mt. Phulchouki: 1♂, 4. viii. 1991.

Blenina rotunda sp. n. (Pl. 42: 30, holotype)

♂♀. Length of forewing 15–19mm (expanse 30–37mm). Antenna ciliate in male, filiform in female. Palpus with its 3rd segment slender. Forewing pale gray, densely irrorated with green. Antemedian line double, black, strongly angled at subcosta and below cell; orbicular and reniform represented by small white dots, thickly defined by black; dark shades between ante- and postmedian lines, the latter being double, black and serrate; subterminal line black, dentated outwards and thickened above vein 6, and excurved and narrowed below vein 5; whitish or ochereous shade before subterminal line between vein 4 and an oblique black tornal streak; a series of white lunules before termen conspicuous; cilia checkered with black and ocher. Hindwing uniformly dark fuscous; cilia concolorous, tipped with white between veins 6 and 3.

Male genitalia (Fig. 180). Uncus slender, tegumen moderate; valva membranous and normally rounded in outer half, its costa raised near base and having a short digitate pollex at middle; a thick and curved sclerite beyond middle of valva; sacculus wide with a long and curved process, which is flattened and clothed with special hair before tip; a short corema from the outer surface of base of sacculus; saccus wide, rounded. Aedeagus moderate, a long spine at tip of vesica.

Holotype. ♂, Godavari, 9. v. 1991. Paratypes. Godavari: 1♀, 26. vi. 1990; 1♂, 29. vii. 1991.

Aquis orbicularis (Walker) (Pl. 42: 38, 39)

Diomea orbicularis Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1804.

Godavari: 1♂ 3♀, 7–8. v. 1991; 3♀, 22. vi. 1991; 1♀, 7. viii. 1991; 1♂, 30. v. 1992; 1♀, 25. vi. 1992.

Nanaguna breviscula Walker (Pl. 42: 35, 40)

Nanaguna breviscula Walker, 1863, List Specimens lepid. Insects Colln Br. Mus. 27: 85.

Godavari: 1♂ 4♀, 12–15. iv. 1990; 1♀, 8. iv. 1991; 2♂ 2♀, 21–30. iv. 1991; 6♂ 6♀, 7–9. v. 1991; 9♂ 18♀, 15–19. v. 1991.

Gyrtothripa pusilla (Moore) (Pl. 42: 34)

Gyrtona pusilla Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 289.

Godavari: 3♂, 24. vi. 1992.

Characoma nilotica (Rogenhofer) (Pl. 42: 29)

Sarothripa nilotica Rogenhofer, 1881, Verhand. zool-botan. Vereins Wien 23: 26.

Godavari: 1♂, 15. iv. 1991.

Nycteola asiatica (Krulikowski) (Pl. 42: 33)

Sarothripus asiatica Krulikowski, 1904, Revue russe Ent. 4: 91.

Godavari: 1♀, 1. iii. 1992.

CHLOEPHORINAE

Westermannia superba Hübner (Pl. 43: 7)

Westermannia superba Hübner, 1823, Zutrage Samml. exot. Schmett.: 23, pl. [57], figs 323, 324.

Godavari: 1♂, 24. ix. 1989; 2♂ 1♀, 15. iv. 1990; 1♂, 2. iv. 1991; 1♂ 1♀, 1–2. viii. 1991. Mt. Phulchouki: 1♂, 21. vii. 1990.

Westermannia elliptica Bryk (Pl. 43: 6)

Westermannia elliptica Bryk, 1913, Int. ent. Z. 7: 217.

Godavari: 1♂, 2. viii. 1991; 1♂, 7. viii. 1991.

Westermannia triangularis Moore (Pl. 43: 8)

Westermannia triangularis Moore, 1877, Proc. zool. Soc. Lond. 1877: 605.

Godavari: 1♀, 18. iv. 1990; 1♀, 21. iv. 1991.

Westermannia cornucopia (Hampson) (Pl. 43: 9)

Ingura cornucopia Hampson, 1891, Illust. typical Specimens Lepid. Heterocera Colln Br. Mus. 8: 8, 61, pl. 141, fig. 12.

Godavari: 2♂, 27–28. iii. 1992.

Earias cupreoviridis (Walker) (Pl. 43: 10)

Xanthoptera cupreoviridis Walker, 1862, Trans. ent. Soc. Lond. (3) 1: 92.

Godavari: 1♂ 1♀, 15–18. iv. 1990.

Tyana callichlora Walker (Pl. 43: 3, 4)

Tyana callichlora Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1776.

Godavari: 1♂, 3. iv. 1991. Mt. Phulchouki: 2♀, 21. vii. 1990; 1♂, 23. v. 1992.

Tyana falcata (Walker) (Pl. 43: 5)

Hylophila falcata Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1772.

Godavari: 1♂, 20. iii. 1990; 1♂, 11. iv. 1990; 1♀, 4. viii. 1991. Mt. Phulchouki: 1♂, 4. viii. 1991.

Tyana pustrifera (Walker) (Pl. 43: 2)

Earias pustrifera Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1773.

Mt. Phulchouki: 1♂, 17. vii. 1990; 1♂, 21. vii. 1991; 1♂, 29. ii. 1992.

Tyana chloroleuca Walker (Pl. 43: 1)

Tyana chloroleuca Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1777.

Godavari: 1♀, 27. ii. 1992. Mt. Phulchouki: 1♀, 17. vi. 1990; 1♂, 20. v. 1992; 1♀, 31. v. 1992.

Kerala punctilineata Moore (Pl. 43: 11)

Kerala punctilineata Moore, 1881, Proc. zool. Soc. Lond. 1881: 330.

Godavari: 1♀, 24. ix. 1989; 1♀, 13. iv. 1990; 1♀, 22. iv. 1990; 1♂, 13. v. 1990; 1♀, 24. v. 1990; 2♀, 3–7. vi. 1990; 1♀, 21. vi. 1990; 1♀, 17. vii. 1990; 1♀, 5. iv. 1991; 1♀, 11. vi. 1991; 1♀, 3. vii. 1991; 2♂ 2♀, 2–5. viii. 1991.

Gelastocera castanea (Moore) (Pl. 43: 12)

Beara castanea Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 71, pl. 3, fig. 9.

Godavari: 2♀, 3. x. 1989; 4♂ 1♀, 27–31. iii. 1990; 2♂ 1♀, 11–13. iv. 1990; 1♂ 1♀, 22–26. iv. 1990; 1♀, 15. v. 1990; 2♀, 14–19. vi. 1990; 1♂, 19. vii. 1990; 1♂, 2. iv. 1991; 1♀, 22. iv. 1991; 1♀, 3. x. 1991. Mt. Phulchouki: 1♂, 21. vii. 1991.

Carea angulata (Fabricius) (Pl. 43: 17)

Bombyx angulata Fabricius, 1793, Ent. Syst. Emend. Aucta. 3 (1): 481.

Godavari: 2♀, 20–24. ix. 1989; 1♀, 1. x. 1989; 1♀, 12. iv. 1991; 1♀, 6. vi. 1991.

Carea endophaea Hampson (Pl. 43: 16)

Carea endophaea Hampson, 1905, Ann. Mag. nat. Hist. (16) 7: 596.

Godavari: 1♀, 12. iv. 1990; 1♂, 17. vii. 1990. Mt. Phulchouki: 2♂ 1♀, 16. vii. 1990; 1♂, 21. vii. 1990; 2♂, 4. viii. 1991.

Carea varipes Walker (Pl. 43: 18)

Carea varipes Walker, [1857], List Specimens lepid. Insects Colln Br. Mus. 10: 475.

Godavari: 1♂, vi. 1991.

Carea albopurpurea Hampson (Pl. 43: 19)

Carea albopurpurea Hampson, 1894, Fauna Br. India (Moths) 2: 424.

Godavari: 2♂, 8. xi. 1991. Mt. Phulchouki: 1♂, 21. vii. 1990; 1♂, 4. viii. 1991.

Camptoloma binotatum Butler (Pl. 43: 21)

Camptoloma binotatum Butler, 1881, Ann. Mag. nat. Hist. (5) 7: 35.

Godavari: 1♀, 18. vi. 1991; 1♂ 2♀, 13. vi. 1992.

Tortriciforma viridipuncta Hampson (Pl. 43: 22)

Tortriciforma viridipuncta Hampson, 1894, Fauna Br. India (Moths) 2: 425, fig. 240.

Godavari: 1♀, 17. iii. 1992.

Tympanistes pallida Moore (Pl. 43: 25)

Tympanistes pallida Moore, 1867, Proc. zool. Soc. Lond. 1867: 49, pl. 6, fig. 1.

Godavari: 1♂, 20. iii. 1992. Mt. Phulchouki: 1♂, ix. 1991; 1♂, 24. v. 1992.

Tympanistes testacea Moore (Pl. 43: 26)

Tympanistes testacea Moore, 1867, Proc. zool. Soc. Lond. 1867: 49, pl. 6, fig. 2.

Godavari: 1♂, 26. xi. 1991; 1♂, 2. ii. 1992.

Pterogonia episcopalis Swinhoe (Pl. 43: 20)

Pterogonia episcopalis Swinhoe, 1891, Trans. ent. Soc. Lond. 1891: 152.

Godavari: 1♂, 7. viii. 1991.

Urbona sublineata Walker (Pl. 43: 14)

Urbona sublineata Walker, 1862, J. Proc. Linn. Soc. (Zool.) 6: 184.

Mt. Phulchouki: 1♂ 1♀, 21. vii. 1990; 1♂ 1♀, 4. viii. 1991.

Urbona soliera (Swinhoe) (Pl. 43: 13)

Doranaga soliera Swinhoe, 1895, Ann. Mag. nat. Hist. (6) 15: 7.

Mt. Phulchouki: 1♀, 21. vii. 1990.

Maurilia iconica (Walker) (Pl. 43: 15)

Acontia iconica Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1141.

Godavari: 2♂ 1♀, 11–17. iv. 1990; 3♂ 2♀, 21–26. iv. 1990; 1♂ 2♀, 12–17. vi. 1990; 1♂ 1♀, 24–28. vi. 1990; 1♂ 1♀, 3–8. iv. 1991; 1♂ 4♀, 16–19. iv. 1991; 4♀, 21–30. iv. 1990; 20♂ 18♀, 7–9. v. 1991; 18♂ 24♀, 10–16. v. 1991; 1♂ 2♀, 24. vi. 1991; 1♀, 31. vii. 1991; 5♂ 8♀, 1–2. viii. 1991. Mt. Phulchouki: 1♀, 1. vi. 1990; 1♂, 17. vi. 1990; 1♂, 16. vii. 1990; 2♀, 8–9. v. 1991; 2♂ 6♀, 4. viii. 1991.

Siglophora sanguinolenta (Moore) (Pl. 43: 23)

Chionomera sanguinolenta Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 285.

Godavari: 1♂, 28. iii. 1990; 1♀, 17. iv. 1991; 1♀, 29. iv. 1992. Mt. Phulchouki: 1♂, 23. v. 1990; 1♂, 4. viii. 1991.

Ariolica superba (Moore) (Pl. 43: 29)

Tyana superba Moore, 1867, Proc. zool. Soc. Lond. 1867: 668, pl. 33, fig. 15.

Mt. Phulchouki: 1♂, 4. viii. 1991; 1♂, 8. ii. 1992.

Gabala polyspilalis Walker (Pl. 43: 31)

Gabala polyspilalis Walker, [1866], List Specimens lepid. Insects Colln Br. Mus. 34: 1221.

Godavari: 1♀, 8. v. 1992.

Gabala roseoretis Kobes (Pl. 43: 30)

Gabala roseoretis Kobes, 1988, Heterocera sumatr. 2: 88, figs 6, 21, 26.

Mt. Phulchouki: 1♂, 11. v. 1991.

Sinna dohertyi Elwes (Pl. 43: 32)

Sinna dohertyi Elwes, 1890, Proc. zool. Soc. Lond. 1890: 400, pl.33, fig.5.

Godavari: 1♀, 29. iii. 1990; 1♀, 28. vi. 1990; 1♀, 2. vii. 1990. Mt. Phulchouki: 3♀, 16. vii. 1990.

ACONTIINAE

Corgatha costinotalis (Moore) (Pl. 43: 35)

Hypena costinotalis Moore, 1867, Proc. zool. Soc. Lond. 1867: 83.

Mt. Phulchouki: 1♂, 16. vii. 1990; 1♂, 4. viii. 1991.

Corgatha semipardata (Walker) (Pl. 43: 33)

Guriauna semipardata Walker, 1861, List Specimens lepid. Insects Colln Br. Mus. 24: 1101.

Godavari: 1♂, 1. x. 1991.

Corgatha costipicta Hampson (Pl. 43: 34)

Corgatha costipicta Hampson, 1895, Trans. ent. Soc. Lond. 1895: 300.

Godavari: 1♂, 19. v. 1990; 1♀, 16. vi. 1992.

Zurobata reticulata (Moore) (Pl. 43: 36)

Selenis reticulata Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Colln late Mr Atkinson: 178, pl. 6, fig. 9.

Mt. Phulchouki: 1♀, 11. v. 1991.

Oruza divisa (Walker) (Pl. 43: 37)

Selenis divisa Walker, Trans. ent. Soc. Lond. (3) 1: 107.

Godavari: 1♀, 2. vi. 1990; 1♀, 1. viii. 1991; 1♀, 19. ix. 1991.

Maliattha quadripartita (Walker) (Pl. 43: 38)

Acontia quadripartita Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 786.

Godavari: 1♂, 1. viii. 1991; 1♀, 19. vi. 1992.

Maliattha signifera (Walker) (Pl. 43: 42)

Acontia signifera Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 12: 796.

Godavari: 1♀, 4. viii. 1991.

Maliattha arefacta (Butler) (Pl. 43: 44)

Acontia arefacta Butler, 1879, Ann. Mag. nat. Hist. (5) 4: 366.

Godavari: 1♂, 14. vi. 1992.

Maliattha picata (Butler) (Pl. 43: 43)

Acontia picata Butler, 1889, Illust. typical Specimens Lepid. Heterocera
Colln Br. Mus. 7: 62, pl. 129, fig. 2.

Godavari: 3♂ 1♀, 1–7. viii. 1991.

Maliattha vialis (Moore) (Pl. 43: 41)

Acontia vialis Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid.
Colln late Mr Atkinson: 135.

Godavari: 1♂, 17. vii. 1990; 2♂, 2–4. viii. 1991.

Pseudodeltote subcoenia (Wileman & South) (Pl. 43: 39)

Lithacodia subcoenia Wileman & South, 1916, Entomologist 49: 181.

Godavari: 1♂, 20. vii. 1990.

Koyaga larentiformis (Hampson), comb. n. (Pl. 43: 45)

Erastria larentiformis Hampson, 1894, Fauna Br. India (Moths) 2: 301, fig.
163.

Erastria cidarioides Moore, 1882, in Hewitson & Moore, Descr. new Indian
lepid. Colln late Mr Atkinson: 142 (nec Moore, 1882).

Godavari: 1♂, 27. vi. 1990. Mt. Phulchouki: 3♀, 21. vii. 1990; 1♀, 4. viii. 1991.

Ueda (1984) revised *Deltote* and its allied genera based on the Japanese and
Taiwanese material. The male genitalia of this species (Fig. 181) show that it
belongs to the genus *Koyaga* Ueda, 1984.

Bryophilina mollicula (Graeser) (Pl. 43: 46)

Erastria mollicula Graeser, [1889], Berl. ent. Z. 32: 368.

Godavari: 1♂, 25. iii. 1992.

Ozarba punctigera Walker (Pl. 43: 40)

Ozarba punctigera Walker, 1865, List Specimens lepid. Insects Colln Br. Mus.
32: 685.

Godavari: 1♀, 12. v. 1990; 1♀, 24. vi. 1991.

Ozarba incondita Butler (Pl. 43: 47)

Ozarba incondita Butler, 1889, Illust. typical Specimens Lepid. Heterocera
Colln Br. Mus. 7: 69, pl. 130, fig. 13.

Godavari: 1♂, 2. viii. 1991; 1♂ 1♀, 18–19. vi. 1992.

Xanthodes transversa Guenée (Pl. 43: 27)

Xanthodes transversa Guenée, 1852, in Boisduval & Guenée, Hist. nat. In-
sectes (Lépid.) 6: 211, pl. 10, fig. 5.

Godavari: 1♂, 7. viii. 1991.

Amyna punctum (Fabricius) (Pl. 43: 28)

Noctua punctum Fabricius, 1794, Ent. Syst. 3 (2): 34.

Godavari: 2♂, 7–8. viii. 1991.

***Amyna stellata* Butler (Pl. 43: 24)**

Amyna stellata Butler, 1878, Ann. Mag. nat. Hist. (5) 1: 162.

Godavari: 1♂, 31. vii. 1991; 1♂, 7. viii. 1991.

PLUSIINAE

***Abrostola anophioides* Moore (Pl. 44: 2)**

Abrostola anophioides Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 148.

Godavari: 1♂, 24. iv. 1990; 1♂, 22. v. 1991. Mt. Phulchouki: 1♂, 8. v. 1991.

***Abrostola suisharyonis robertsi* Dufay (Pl. 44: 1)**

Abrostola suisharyonis robertsi Dufay, 1971, Reichenbachia 13: 273.

Godavari: 1♀, 3. x. 1989; 1♀, 14. vi. 1992.

***Puriphusia tetragona* (Walker) (Pl. 44: 3)**

Plusia tetragona Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 12: 932.

Godavari: 1♂ 1♀, 1–6. v. 1990; 1♀, 26. v. 1990; 1♂, 27. vi. 1990; 1♀, 9. v. 1991; 1♂, 23. v. 1991; 1♂, 30. i. 1992; 1♂, 11. ii. 1992; 1♀, 27. ii. 1992; 2♀, 6. iii. 1992.

***Sclerogenia jessica* (Butler) (Pl. 44: 5)**

Plusia jessica Butler, 1878, Ann. Mag. nat. Hist. (5) 1: 201.

Godavari: 1♂, 26. iii. 1990.

***Antoculeora ornatissima* (Walker) (Pl. 44: 4)**

Plusia ornatissima Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1786.

Godavari: 1♀, 17. vii. 1990; 1♂, 12. v. 1991.

***Erythroplusia rutilifrons* (Walker) (Pl. 44: 8)**

Plusia rutilifrons Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1785.

Godavari: 1♀, 13. iii. 1992.

***Erythroplusia pyropia* (Butler) (Pl. 44: 6, 7)**

Plusia pyropia Butler, 1879, Ann. Mag. nat. Hist. (5) 4: 267.

Godavari: 1♂, 22. iv. 1990; 1♀, 30. iv. 1991; 1♀, 26. v. 1991; 1♀, 7. viii. 1991; 1♂, 15. ix. 1991.

***Autographa nigrisigna* (Walker) (Pl. 44:)**

Plusia nigrisigna Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 12: 928.

Godavari: 1♂, 28. iii. 1990; 3♂ 3♀, 11–19. iv. 1990; 1♂, 28. iv. 1990; 2♂, 8–13. iv. 1991; 2♂, 17–20. iv. 1991; 1♂, 30. iv. 1991; 1♂ 1♀, 7–9. v. 1991; 1♂, 27. ii. 1992; 1♀, 2. iii. 1992.

Anaplusia pannosa (Moore) (Pl. 44: 9)

Plusia pannosa Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 149.

Godavari: 1♀, 29. iv. 1990; 1♀, 3. v. 1991; 2♂, 2–6. xi. 1991; 1♂, 14. xi. 1991.

Zonoplusia ochreatea (Walker) (Pl. 44: 17)

Plusia ochreatea Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 839.

Godavari: 1♂, 16. vii. 1990; 1♂, 24. vii. 1991; 1♂, 22. ix. 1991.

Trichoplusia ni (Hübner) (Pl. 44: 11)

Noctua ni (Hübner), [1803], Samml. eur. Schmett. 4: pl. 58, fig. 284.

Godavari: 1♂, 21. iv. 1991.

Trichoplusia lectula (Walker) (Pl. 44: 16)

Prodenia lectula Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1679.

Godavari: 1♂, 14. v. 1990.

Scriptoplusia nigriluna (Walker) (Pl. 44: 27)

Plusia nigriluna Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 12: 931.

Godavari: 3♂, 14–15. iv. 1990; 1♂, 17. vii. 1990; 1♂, 24. vi. 1991; 1♂, 3. viii. 1991. Mt. Phulchouki: 1♂, ix. 1991.

Thysanoplusia orichalcea (Fabricius) (Pl. 44: 12)

Noctua orichalcea Fabricius, 1775, Syst. Ent.: 607.

Godavari: 2♂ 1♀, 13–15. iii. 1990; 9♂ 6♀, 25–27. iii. 1990; 1♂ 1♀, 11–15. vi. 1990; 1♂, 27. vi. 1990; 1♂, 16. iv. 1991; 3♂ 1♀, 7–9. v. 1991; 3♂ 2♀, 11–15. v. 1991; 2♂, 23. v. 1991; 1♀, 1. viii. 1991; 1♀, 11. xi. 1991; 1♂, 25. xi. 1991; 1♂, 10. i. 1992; 13♂ 1♀, 24–29. ii. 1992; 8♂ 3♀, 1–3. iii. 1992. Mt. Phulchouki: 1♂, 17. viii. 1990; 1♂, ix. 1991.

Thysanoplusia intermixta (Warren) (Pl. 44: 13)

Phytometra intermixta Warren, 1913, in Seitz, Gross-Schmett. Erde 3: 357, pl. 64, row g.

Godavari: 1♂, 3. x. 1989; 1♂, 25. iii. 1990; 1♂, 2. v. 1990; 3♀, 23–28. vi. 1990; 1♀, 16. vii. 1990; 1♂, 8. iv. 1991; 1♀, 14. vi. 1991; 1♂, 7. viii. 1991; 1♂, 5. ii. 1992; 1♂, 11. ii. 1992; 5♂ 3♀, 26–29. ii. 1992; 3♂ 1♀, 2–5. iii. 1992. Mt. Phulchouki: 1♀, 23. v. 1990; 3♂, 21. vii. 1990.

Thysanoplusia reticulata (Moore) (Pl. 44: 26)

Plusia reticulata Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 148.

Godavari: 1♀, 27. iii. 1990; 1♀, 29. iii. 1992.

Thysanoplusia daubei (Boisduval) (Pl. 44: 14)*Plusia daubei* Boisduval, 1840, Genera Index meth. eur. Lepid.: 159.

Godavari: 1♂, 29. iii. 1990.

Ctenoplusia albostriata (Bremer & Grey) (Pl. 44: 18, 19)*Plusia albostriata* Bremer & Grey, 1853, in Motschulsky, Études ent. 1: 65.

Godavari: 1♂ 1♀, 15–18. iv. 1990; 1♂ 2♀, 1–10. v. 1990; 1♀, 26. v. 1990; 1♂, 2. vii. 1990; 2♀, 17. vii. 1990; 1♂, 23. v. 1991; 7♂ 1♀, 31. vii. 1991; 2♂ 2♀, 5–7. viii. 1991. Mt. Phulchouki: 1♂, 17. vii. 1990; 1♀, 11. v. 1991; 1♂, 1. xi. 1991.

Ctenoplusia furcifera (Walker) (Pl. 44: 30, 31)*Plusia furcifera* Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 12: 927.

Godavari: 2♂, 14–17. iv. 1990; 2♂, 24–26. iv. 1990; 1♀, 18. v. 1990; 2♂ 1♀, 12–15. vi. 1990; 3♂, 2–8. iv. 1991; 1♂, 15. iv. 1991; 3♂ 2♀, 7–9. v. 1991; 8♂ 5♀, 10–19. v. 1991; 1♂, 23. v. 1991.

Ctenoplusia placida (Moore) (Pl. 44: 28)*Plusia placida* Moore, [1884], Lepid. Ceylon 3: 73, pl. 151: 10.

Godavari: 3♂ 1♀, 15. iv. 1990; 2♂, 19–22. iv. 1990; 8♂ 1♀, 1–9. v. 1990; 2♂, 18–19. vii. 1990; 3♂ 2♀, 10–19. v. 1991; 1♀, 24. vi. 1991; 5♂ 1♀, 1–8. viii. 1991; 1♂, 19. ix. 1991; 1♀, 27. x. 1991; 3♂, 1–2. xii. 1991; 1♂, 27. ii. 1992.

Acanthoplusia tarassota (Hampson) (Pl. 44: 23)*Plusia confusa* Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 149 (nec Stephens, 1850).*Phytometra tarassota* Hampson, 1913, Cat. Lepid. Phalaenae Colln Br. Mus. 13: 473, pl. 237, fig. 13.

Godavari: 1♂, 28. iii. 1990; 1♂, 23. iv. 1990; 1♂, 11. vi. 1990; 1♂, 27. vi. 1990; 1♂ 1♀, 17. vii. 1990; 1♀, 17. iv. 1991; 1♂ 1♀, 8. v. 1991; 4♂ 2♀, 12–16. v. 1991; 1♂, 23. v. 1991; 1♂, 1. viii. 1991; 1♂, ix. 1991; 1♀, 22. ix. 1991; 2♀, 3–5. xi. 1991; 3♂ 3♀, 14–17. xi. 1991; 5♂ 1♀, 24–30. xi. 1991; 3♂ 1♀, 1. xii. 1991; 1♂, 10. i. 1992; 3♂ 2♀, 2–7. ii. 1992; 4♂, 22–29. ii. 1992; 6♂ 2♀, 1–5. iii. 1992. Mt. Phulchouki: 1♂, 2. vii. 1990; 3♂ 2♀, 16–17. vii. 1990; 4♂ 1♀, 19–21. vii. 1990; 1♀, 9. v. 1991; 1♀, ix. 1991.

Acanthoplusia agnata (Staudinger) (Pl. 44: 22)*Plusia agnata* Staudinger, 1892, in Romanoff, Mém. Lépid. 6: 547.

Godavari: 1♂ 1♀, 25–29. iii. 1990; 1♀, 15. v. 1990; 1♂, 11. vi. 1990; 2♀, 25–29. ix. 1991; 1♀, 28. x. 1991; 1♀, 3. xi. 1991.

Chrysodeixis eriosoma (Doubleday) (Pl. 44: 24)

Plusia eriosoma Doubleday, 1843, in Dieffenbach, Travels New Zealand 2: 285.

Godavari: 1♂ 1♀, 26–28. iii. 1990; 3♀, 12–15. iv. 1990; 1♀, 23. iv. 1990; 2♀, 15–16. v. 1990; 1♂, 15. vi. 1990; 5♂ 3♀, 16–19. vii. 1990; 1♂ 2♀, 7–8. iv. 1991; 3♂ 2♀, 9–15. v. 1991; 1♂, 13. vi. 1991; 3♂ 3♀, 29–31. vii. 1991; 13♂ 20♀, 1–7. viii. 1991; 4♀, 3–9. ix. 1991; 1♂ 4♀, 12–24. ix. 1991; 1♂, 2. x. 1991; 3♂ 2♀, 12–24. x. 1991; 1♂ 3♀, 5–13. xi. 1991; 2♂ 3♀, 22–30. xi. 1991; 1♂, 6. iii. 1992. Mt. Phulchouki: 1♂, 21. vi. 1990; 4♂ 5♀, 17–19. vii. 1990; 3♂ 8♀, 4. viii. 1991; 1♂ 3♀, ix. 1991.

Chrysodeixis acuta (Walker) (Pl. 44: 25)

Plusia acuta Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 12: 992.

Godavari: 1♂, 15. iv. 1991; 1♀, 6. xi. 1991; 1♂, 21. iii. 1992.

Chrysodeixis taiwani Dufay (Pl. 44: 20)

Chrysodeixis taiwani Dufay, 1974, Bull. Soc. mens. linn. Lyon 43: 103, fig. 5.

Godavari: 1♂, 28. iii. 1990.

I examined only a worn specimen, and I show a fresh male from Taiwan (Pl. 44: 21).

Chrysodeixis minuta Dufay (Pl. 44: 15)

Chrysodeixis minuta Dufay, 1970, Bull. mens. Soc. linn. Lyon 39: 101.

Godavari: 1♂, 15. iv. 1990; 1♂, 17. vii. 1990; 1♂, 15. iv. 1991; 1♂, 3. viii. 1991; 1♀, 30. x. 1991. Mt. Phulchouki: 1♂, ix. 1991.

Argyrogramma aeneofusa (Hampson) (Pl. 44: 29)

Plusia aeneofusa Hampson, 1894, Fauna Br. India (Moths) 2: 576.

Godavari: 1♂, 25. iii. 1990; 1♂, 27. iii. 1992.

Anadevidia hebetata (Butler) (Pl. 44: 33)

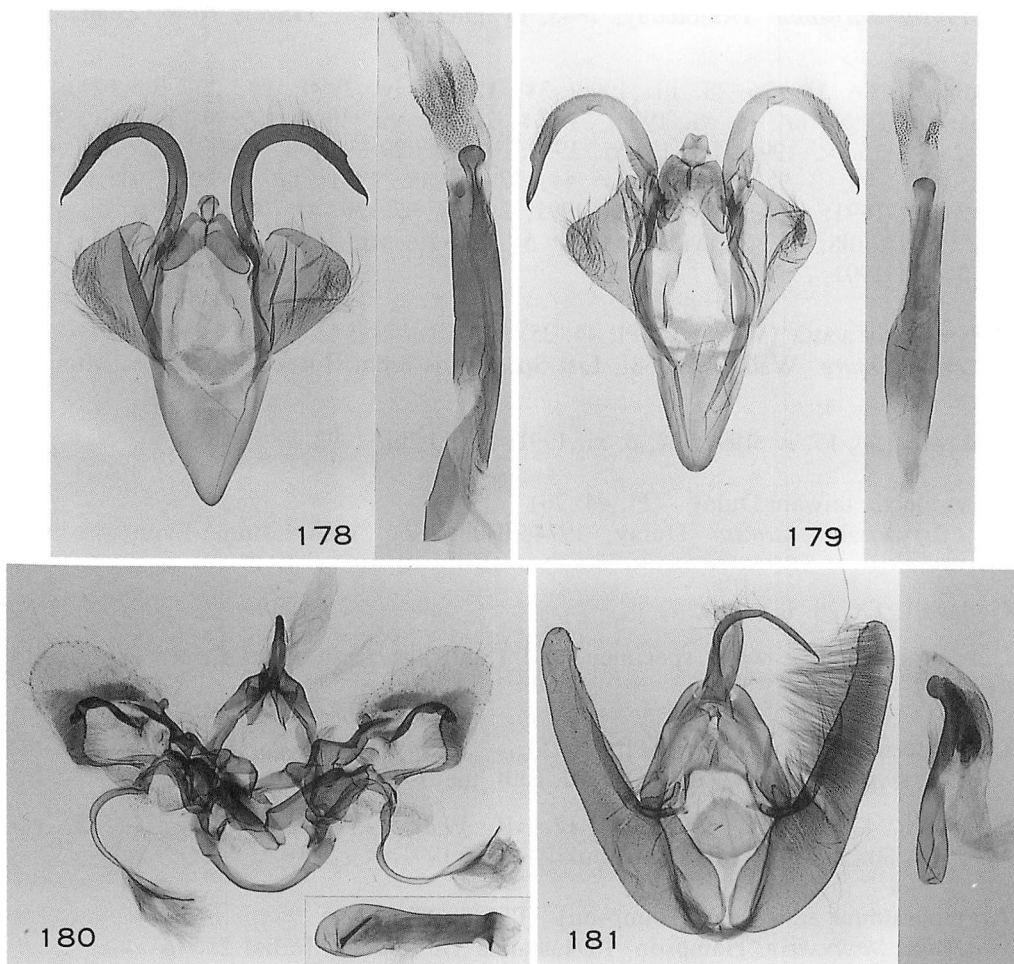
Plusia hebetata Butler, 1889, Illust. typical Specimens Lepid. Heterocera Colln Br. Mus. 7: 71, pl. 131, fig. 1.

Godavari: 1♂, 29. iii. 1990; 1♂, 9. v. 1990; 1♂, 2. xi. 1991; 1♀, 7. ii. 1992.

Anadevidia peponis (Fabricius) (Pl. 44: 32)

Noctua peponis Fabricius, 1775, Syst. Ent.: 608.

Godavari: 1♂, 7. viii. 1991; 1♂, 3. xi. 1991; 1♂, 16. xi. 1991; 1♂, 10. i. 1992; 1♂, 2. ii. 1992; 2♂, 7–11. ii. 1992; 1♀, 26. ii. 1992.



Figs 178–181. Male genitalia. 178. *Anuga multiplicans*. 179. *A. supraconstrictata* sp. n., holotype. 180. *Blenina rotunda* sp. n., holotype. 181. *Koyaga larentiformis*.

NOCTUIDAE: CATOCALINAE and OPHIDERINAE 1

Toshiro Haruta

CATOCALINAE

Catocala prolifica Walker (Pl. 45: 1)

Catocala prolifica Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1211.

Godavari: 1♀, 11. viii. 1990; 1♀, 8. vii. 1991; 1♀, 24. vi. 1992.

Catocala sponsalis Walker (Pl. 45: 2)

Catocala sponsalis Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1213.

Godavari: 1♀, 11. v. 1961; 1♀, vi. 1963; 1♂, 27. vi. 1991.

Catocala tapestrina Moore (Pl. 45: 3)

Catocala tapestrina Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 166, pl. 5, fig. 13.

Godavari: 1♂ 1♀, 27–28. vi. 1990. Mt. Phulchouki: 2♂, 20–24. vi. 1990; 9♂ 1♀, 19–21. vii. 1990; 4♂ 1♀, 2–4. vii. 1991; 1♂ 1♀, 17–19. vii. 1991; 4♂, 4. viii. 1991; 1♀, 22. vi. 1992. Daman Pass: 1♂, 28. vi. 1992.

Catocala hyperconnexa Sugi (Pl. 45: 5)

Catocala hyperconnexa Sugi, 1965, Tinea 7: 87, pl. 17, fig. 15.

Godavari: 1♀, 21. vi. 1991; 1♂, 18. vi. 1992.

The first record from outside of Japan. The male genitalia of the Nepalese specimen (Fig. 182) are completely identical with those of Japanese one.

Ulotrichopus macula (Hampson) (Pl. 45: 8)

Audea macula Hampson, 1891, Illust. typical Specimens Lepid. Heterocera Colln Br. Mus. 8: 84, pl. 146, fig. 21.

Godavari: 1♀, 13. iv. 1990; 1♂, 1. iv. 1991; 1♂, 10. iv. 1991.

Ophiusa coronata (Fabricius) (Pl. 45: 4)

Noctua coronata Fabricius, 1775, Syst. Ent.: 596.

Godavari: 1♂, 2. vii. 1990; 2♂, 7. vii. 1991; 1♂, 31. x. 1991. Mt. Phulchouki: 1♂, 19. vii. 1990.

Ophiusa tirhaca (Cramer) (Pl. 45: 12)

Phalaena tirhaca Cramer, 1877, Uitlandsche Kapellen 2: 116, pl. 172, fig. E.

Godavari: 1♂, 24. ix. 1989; 1♀, 24. vi. 1990; 1♂, 19. vii. 1990; 1♂, 15. v. 1991; 1♂, 26. v. 1991; 1♀, 10. vi. 1991; 1♂, 21. vii. 1991; 1♀, 8. ix. 1991; 1♂, 28. iv. 1992. Mt. Phulchouki: 1♀, 16. vi. 1990; 1♂ 1♀, 17–19. vii. 1990; 1♀, 23. vi. 1992.

Ophiusa trapezium (Guenée) (Pl. 45: 9)

Ophisma trapezium Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 231.

Godavari: 2♂, 2. x. 1989; 1♀, 17. iv. 1990; 1♂, 26. v. 1990; 1♂, 7. viii. 1991; 1♂, 29. ix. 1991; 1♂, 31. x. 1991. Mt. Phulchouki: 1♂ 1♀, 19–21. vii. 1990.

Ophiusa triphaenoides (Walker) (Pl. 45: 6)

Ophiodes triphaenoides Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 14: 1358.

Godavari: 1♂, 1. x. 1989; 1♂, 17. iv. 1990; 1♂, 13. v. 1990; 1♂, 12. v. 1991; 7♂ 2♀, 15–25. v. 1991; 1♂, 16. vi. 1991; 1♂, 21. vii. 1991; 1♀, 8. viii. 1991; 1♀, 6. x. 1991. Mt. Phulchouki: 1♂, 2. vii. 1990.

Ophiusa olista (Swinhoe) (Pl. 45: 7)

Minucia olista Swinhoe, 1898, Ann. Mag. nat. Hist. (6) 12: 261.

Godavari: 1♀, 24. ix. 1989; 1♀, 1. x. 1989; 1♂, 15. iv. 1990; 1♂, 8. v. 1990; 1♂, 3. vi. 1990; 1♂ 2♀, 19–23. vii. 1990; 3♂ 4♀, 10–13. v. 1991; 3♂ 1♀, 10–19. vi. 1991; 1♀, 24. vi. 1991; 1♂, 29. xi. 1991; 1♂, 20. i. 1992; 1♀, 23. ii. 1992. Mt. Phulchouki: 1♂, 25. v. 1990; 1♂, 2. vii. 1990; 2♀, 17–21. vii. 1990; 2♂ 2♀, 9–12. vi. 1991; 1♂ 1♀, 4. viii. 1991.

Achaea janata (Linnaeus) (Pl. 45: 13)

Phalaena janata Linnaeus, 1758, Syst. Nat. (Edn 10) 1: 527.

Godavari: 1♂, 24. ix. 1989; 1♀, 2. vii. 1990; 1♀, 8. iv. 1991; 1♀, 15. v. 1991; 1♀, 7. vii. 1991; 1♀, 6. viii. 1991. Mt. Phulchouki: 1♂, 4. viii. 1991.

Achaea serva (Fabricius) (Pl. 45: 10)

Noctua serva Fabricius, 1775, Syst. Ent.: 593.

Godavari: 1♂, 24. vi. 1990; 1♀, 1. x. 1990; 1♂, 18. iv. 1992.

Parallelia crameri (Moore) (Pl. 46: 1)

Phalaena achatina Cramer, 1780, Uitlandsche Kapellen 3: 145, pl. 273, fig. 3 (nec Sulzer, 1776).

Dysgonia crameri Moore, [1885], Lepid. Ceylon 3: 177, pl. 171, fig. 2.

Godavari: 1♀, 24. ix. 1989; 1♀, 23. iii. 1992.

Parallelia praetermissa (Warren) (Pl. 46: 2)

Ophiusa praetermissa Warren, 1913, in Seitz, Gross-Schmett. Erde 3: 329, pl. 61, row c, pl. 63, row c.

Godavari: 1♀, 12. vi. 1989; 1♂, 27. ix. 1989; 2♂, 1–3. x. 1989; 1♀, 24. iv. 1990; 1♂, 18. v. 1990; 1♀, 26. v. 1990; 1♀, 28. vi. 1990; 1♀, 23. vii. 1990; 2♂ 1♀, 7–9. v. 1991; 1♀, 20. v. 1991; 2♂, 16. vi. 1991. Mt. Phulchouki: 1♀, 4. viii. 1991.

This and the preceding species are distinguished from each other by the presence or absence of the small black point in cell respectively. Hacker & Weigert (1990: 270) stated that the two forms occurred in *praetermissa* from India and Myanmar, and that the specific analysis should be re-examined. I think that another and more stable discriminative character is in the running pattern of the postmedian line: a little strongly curved in *crameri* and rather straight in *praetermissa*. Here I show the male genitalia of these two species (Figs 184: *crameri*, 183: *praetermissa*).

Parallelia stuposa (Fabricius) (Pl. 46: 4)

Noctua stuposa Fabricius, 1794, Ent. Syst. 3 (2): 42.

Godavari: 1♂, 1. x. 1989; 1♀, 19. vii. 1990; 1♂, 20. v. 1991. Mt. Phulchouki: 1♂, 21. vii. 1990.

Parallelia properata (Walker) (Pl. 46: 6)

Ophiusa properata Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 14: 1433.

Godavari: 1♀, 5. vi, 1991.

Berio (1955) treated this species as a variety of the following one.

Parallelia torrida (Guenée) (Pl. 46: 5)

Ophiusa torrida Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 269.

Godavari: 1♀, 19. vii. 1990; 9♂, 13–19. v. 1991; 1♀, 21. vi. 1992. Daman Pass: 1♂, 28. vi. 1992.

Parallelia arctotaenia (Guenée) (Pl. 46: 8)

Ophiusa arctotaenia Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 272.

Godavari: 1♂, 12. vi. 1963; 1♀, 24. ix. 1989; 1♂, 3. x. 1989; 1♂, 28. vi. 1991; 1♂, 2. viii. 1991; 1♀, 8. ix. 1991; 1♂ 1♀, 18–20. ix. 1991; 1♀, 5. iii. 1992.

Parallelia analis (Guenée) (Pl. 46: 9)

Ophiusa analis Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 271.

Godavari: 1♀, 24. ix. 1989; 1♂, 27. iii. 1992.

Parallelia maturata (Walker) (Pl. 46: 3)

Ophiusa maturata Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 14: 1382.

Godavari: 2♂, 17–25. iii. 1990; 1♂, 26. vi. 1990; 2♂ 1♀, 18–21. vii. 1990; 2♂ 2♀, 13–23. v. 1991; 1♂, 7. viii. 1991; 6♂ 1♀, 2–8. xi. 1991; 1♀, 13. xi. 1991; 1♂ 1♀, 22–25. xi. 1991; 1♀, 25. i. 1992; 2♀, 7–11. ii. 1992; 2♀, 20–24. ii. 1992; 2♂ 4♀, 27–29. ii. 1992; 1♂, 4. iii. 1992. Mt. Phulchouki: 1♂, 2. vii. 1990; 1♂, 3. vi. 1991.

Parallelia amygdalis (Moore) (Pl. 46: 7)*Dysgonia amygdalis* Moore, [1885], Lepid. Ceylon 3: 551.

Godavari: 1♀, 14. iv. 1990; 1♀, 14. v. 1991. Mt. Phulchouki: 1♂, 21. vii. 1990.

Parallelia arcuata (Moore) (Pl. 46: 12)*Ophiusa arcuata* Moore, 1887, Proc. zool. Soc. Lond. 1887: 609.

Mt. Phulchouki: 1♂, 1. x. 1989; 1♂, 7. v. 1991.

Parallelia joviana (Stoll) (Pl. 46: 10)*Noctua joviana* Stoll, 1782, in Cramer, Uitlandsche Kapellen 4: 237, pl. 399, fig. B.

Godavari: 1♂, 21. iii. 1992.

Parallelia palumba (Guenée) (Pl. 46: 11)*Hulodes palumba* Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 211.

Godavari: 1♂, 3. xi. 1991.

Parallelia luteipalpis (Walker) (Pl. 46: 16)*Ophiusa luteipalpis* Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 968.

Godavari: 1♀, 1. x. 1989.

For this species, the genus *Caranilla* Moore might have to be used.**Parallelia conficiens** (Walker) (Pl. 46: 13)*Ophiusa conficiens* Walker, 1858, List. Specimens lepid. Insects Colln Br. Mus. 14: 1432.

Khathmandu: 1♀, vi. 1963.

This species might have to be separated from this genus judging from the ground color of the wings and the particular shape of the marginal line on forewing.

Grammodes geometrica (Fabricius) (Pl. 46: 14)*Noctua geometrica* Fabricius, 1775, Syst. Ent.: 599.

Godavari: 1♂ 2♀, 24–27. ix. 1989; 1♂, 23. v. 1990.

Grammodes stolidia (Fabricius) (Pl. 46: 15)*Noctua stolidia* Fabricius, 1775, Syst. Ent.: 599.

Godavari: 1♀, 22. iv. 1992.

Chalciope mygdon (Cramer) (Pl. 46: 21)*Phalaena mygdon* Cramer, 1777, Uitlandsche Kapellen 2: 94, pl. 156, fig. G.

Godavari: 1♂, 3. x. 1989; 1♀, 8. ix. 1991; 1♂, 5. x. 1991.

Attatha regalis (Moore) (Pl. 45: 11)

Hypercompa regalis Moore, 1872, Proc. zool. Soc. Lond. 1872: 575, pl. 33, fig. 7.

Mt. Phulchouki: 1♀, 24. vi. 1992.

Mocis undata (Fabricius) (Pl. 46: 19)

Noctua undata Fabricius, 1775, Syst. Ent.: 600.

Godavari: 1♂, 24. ix. 1989; 1♀, 26. vi. 1990; 1♀, 8. v. 1991; 1♂, 24. vi. 1991; 2♂, 1–7. viii. 1991; 1♂, 15. x. 1991; 1♂, 29. ix. 1991; 2♂, 9. x. 1991; 2♂ 1♀, 2–4. xi. 1991; 1♂, 6. iii. 1992. Mt. Phulchouki: 1♂, 8. vi. 1991; 2♀, ix. 1991.

Remigia frugalis (Fabricius) (Pl. 46: 18)

Noctua frugalis Fabricius, 1775, Syst. Ent.: 611.

Godavari: 1♂, 24. ix. 1989; 1♂, 3. x. 1989; 1♀, 25. vi. 1992. Daman Pass: 1♂, 28. vi. 1992.

Trigonodes hyppasia (Cramer) (Pl. 46: 17)

Phalaena hyppasia Cramer, 1779, Uitlandschen Kapellen 3: 99, pl. 250, fig. E.

Godavari: 1♀, 15. iv. 1990; 1♀, 12. v. 1991; 1♀, 20. iii. 1992. Mt. Phulchouki: 1♂, 19. vii. 1989.

Pseudathyrma chinensis (Warren) (Pl. 46: 20)

Hypaetra chinensis Warren, 1913, in Seitz, Gross-Schmett. Erde 3: 377, pl. 68, row c.

Godavari: 1♀, 7. i. 1992. Mt. Phulchouki: 1♂, 22. vi. 1992.

Entomogramma faultrix Guenée (Pl. 48: 8)

Entomogramma faultrix Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 304.

Godavari: 1♂, 15. v. 1991; 1♂, 4. viii. 1991; 1♂, 21. iii. 1992.

Ericheia umbrosa Butler (Pl. 46: 23)

Ericheia umbrosa Butler, 1881, Trans. ent. Soc. Lond. 1881: 194.

Godavari: 1♂, 23. vii. 1990; 1♂, 18. viii. 1990; 1♀, 2. iv. 1991; 1♂, 4. viii. 1991; 1♀, 26. iii. 1992.

Lagoptera juno (Dalman) (Pl. 48: 3)

Noctua juno Dalman, 1823, Analecta Ent.: 52.

Godavari: 1♂, 11. iv. 1990; 1♂, 1. v. 1990; 1♂, 14. v. 1990; 2♀, 27–30. v. 1990; 1♂, 17. vi. 1990; 3♂ 2♀, 20–27. vi. 1990; 1♂, 2. vii. 1990; 3♀, 17–23. vii. 1990; 1♀, 16. v. 1991; 1♂, 10. vi. 1991; 1♀, 28. xi. 1991; 1♀, 20. i. 1992; 1♀, 26. ii. 1992. Mt. Phulchouki: 1♂ 1♀, 2. vii. 1990; 8♂ 4♀, 17–20. vii. 1990; 1♂, 9. v. 1991; 1♂, 4. vi. 1991; 2♂ 1♀, 11–14. vi. 1991; 2♂ 2♀, 4. viii. 1991.

Artena dotata (Fabricius) (Pl. 48: 4)

Noctua dotata Fabricius, 1794, Ent. Syst. 3 (2): 55.

Godavari: 1♂, 24. ix. 1989; 2♂, 1–3. x. 1989; 1♂ 1♀, 22–28. vi. 1990; 1♂ 2♀, 16–18. vii. 1990; 3♂ 1♀, 31. vii. 1991; 1♂ 1♀, 7. ix. 1991; 1♀, 3. xi. 1991; 1♂, 11. xi. 1991. Mt. Phulchouki: 2♂ 1♀, 19. vii. 1990; 1♀, 12. vi. 1991; 4♂ 2♀, 4. viii. 1991.

Arcte coerulea (Guenée) (Pl. 48: 5)

Cocytodes coerulea Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 41, pl. 13, fig. 10.

Godavari: 1♂, 2. x. 1989; 1♂, 17. vi. 1990; 2♀, 24–30. vi. 1990; 1♂, 17. vii. 1990; 1♂, 9. v. 1991; 1♂, 6. viii. 1991. Mt. Phulchouki: 1♂, 19. vii. 1990; 1♂, 21. vii. 1990. Daman Pass: 1♂, 28. vi. 1992.

Arcte modesta (Hoeven) (Pl. 48: 6)

Catocala modesta Hoeven, 1840, Tijdschr. Nat. Gesch. Physiol. 7: 282, pl. 7, fig. 8.

Godavari: 1♀, 24. ix. 1989; 1♂, 2. x. 1989; 1♂, 2. vii. 1990. Mt. Phulchouki: 1♂, 4. viii. 1991.

Pericyma umbrina (Guenée) (Pl. 46: 22)

Alamis umbrina Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 4.

Godavari: 1♂, 26. v. 1990; 1♂ 2♀, 24–28. vi. 1990; 1♂ 1♀, 16–19. vii. 1990; 1♂, 16. v. 1991. Mt. Phulchouki: 1♂ 1♀, 19. vii. 1990.

Anisoneura aluco (Fabricius) (Pl. 48: 7)

Noctua aluco Fabricius, 1775, Syst. Ent.: 591.

Godavari: 1♀, 24. vi. 1990; 1♀, 7. v. 1991; 1♂ 1♀, 19–23. v. 1991; 1♂, 9. x. 1991. Mt. Phulchouki: 1♀, 17. vii. 1990.

Hypopyra feniseca Guenée (Pl. 48: 2)

Hypopyra feniseca Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 200.

Godavari: 1♂, 25. iii. 1990; 1♀, 17. iv. 1990; 1♀, 2. vii. 1990; 1♀, 2. iv. 1992. Mt. Phulchouki: 1♂, 8. vii. 1991.

Hypopyra vespertilio (Fabricius) (Pl. 48: 1)

Noctua vespertilio Fabricius, 1787, Mantissa Insect. 2: 136.

Godavari: 1♀, 10. v. 1991; 1♂, 27. iii. 1992.

Spirama retorta (Clerck) (Pl. 47: 6, 7)

Phalaena retorta Clerck, 1759, Icones Insect. rariorum 1: pl. 54, fig. 2.

Godavari: 1♀, 17. vi. 1989; 1♀, 21. ix. 1989; 3♂ 1♀, 1. x. 1989; 1♂, 24. iii. 1990; 2♀, 15–18. iv. 1990; 1♂, 27. iv. 1990; 1♂ 1♀, 4–5. v. 1990; 2♂ 3♀, 14–18. v. 1990; 1♀, 26. v. 1990; 1♂, 10. vi. 1990; 1♂, 21. vi. 1990; 1♀, 19. vii. 1990; 1♀, 7. iv. 1991; 1♂, 5. v. 1991; 1♀, 16. ix. 1991.

Spirama helicina (Hübner) (Pl. 47: 5)

Speiredonia helicina Hübner, [1831], Zuträge Samml. exot. Schmett. 3: 14; [1824], *ibid.* pl. 76, figs 437, 438.

Godavari: 1♂, 2. v. 1990; 1♂, 18. vi. 1992.

Erebus caprimulgus (Fabricius) (Pl. 47: 1)

Noctua caprimulgus Fabricius, 1775, *Syst. Ent.*: 591.

Godavari: 1♀, 20. vii. 1963; 2♀, 27. v. 1990; 1♀, 19. vii. 1990.

Erebus glaucopis (Walker) (Pl. 47: 2)

Nyctipao glaucopis Walker, 1858, *List Specimens lepid. Insects Colln Br. Mus.* 14: 1306.

Godavari: 1♂ 1♀, 14. v. 1990; 2♀, 28. vi. 1990; 1♂, 11. v. 1991; 1♂, 3. v. 1992; 1♀, 23. v. 1992.

Erebus gemmans (Guenée) (Pl. 47: 4)

Nyctipao gemmans Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes (Lépid.)* 7: 185.

Godavari: 1♂, 25. iii. 1990; 1♀, 23. iii. 1992.

Eupatula macrops (Linnaeus) (Pl. 47: 3)

Phalaena macrops Linnaeus, 1768, *Syst. Nat. (Edn 12)* 3: 225.

Godavari: 1♀, 6. ix. 1991. Mt. Phulchouki: 1♂, 18. vii. 1990.

OPHIDERINAE 1

Perinaenia accipiter (Felder & Rogenhofer) (Pl. 48: 10)

Spintherops accipiter Felder & Rogenhofer, 1874, *Reise öst. Fregatte Novara (Zool.)* 2 (Abt. 2): pl. 111, fig. 29.

Godavari: 1♂, 23. iv. 1990.

Baorisa hieroglyphica Moore (Pl. 49: 2)

Baorisa hieroglyphica Moore, 1882, in Hewitson & Moore, *Descr. new Indian lepid. insects Colln late Mr Atkinson*: 133, pl. 4, fig. 14.

Godavari: 1♂, 28. vi. 1990. Mt. Phulchouki: 2♂, 16–17. vii. 1990; 1♀, 2. iv. 1992; 1♂, 6. iv. 1992.

Belciana kala nepalensis subsp. n. (Pl. 49: 5)

Differs from the nominal race from Borneo and the Malay peninsular as follows: the ground color of forewing tinged with blue and the submarginal brown shade not separated between veins 2 and 4; a median black shade conspicuous below vein 2. The yellow area of hindwing pale creamy and a little wider.

The male genitalia are as in Fig. 185.

Holotype. ♂, Godavari, 14. iv. 1990. Paratypes. Godavari: 1♀, 14. v. 1990; 1♂, 18. v. 1990; 1♀, 23. vii. 1990. Mt. Phulchouki: 1♂, 19. vii. 1990

Donda eurychlora (Walker) (Pl. 49: 7)

Dandaca eurychlora Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1670.

Godavari: 1♂, 29. ix. 1989; 1♂, 12. vii. 1991.

Lygephila dorsigera (Walker) (Pl. 48: 9)

Toxocampa dorsigera Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 873.

Godavari: 1♀, 10. i. 1992; 1♀, 11. ii. 1992; 1♂, 28. ii. 1992; 1♂, 28. ii. 1992; 1♀, 19. iii. 1992. Mt. Phulchouki: 1♀, 21. vii. 1990; 1♂, 11. v. 1991; 1♀, 24. v. 1992.

Anomis flava (Fabricius) (Pl. 49: 8)

Noctua flava Fabricius, 1775, Syst. Ent.: 601.

Godavari: 1♂, 19. vi. 1991; 1♂, 27. ix. 1991

Anomis mesogona (Walker) (Pl. 49: 13)

Gonitis mesogona Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1002.

Godavari: 1♀, 17. vii. 1990; 1♀, 13. vi. 1991; 1♂ 1♀, 3–4. viii. 1991; 1♂, 16. ix. 1991; 1♂ 1♀, 1–2. x. 1991; 1♂, 24. x. 1991; 1♂, 11. xi. 1991; 1♀, 2. iv. 1992; 1♀, 10. iv. 1992.

Anomis figlina Butler (Pl. 49: 11)

Anomis figlina Butler, 1889, Illust. typical Specimens Lepid. Heterocera Colln Br. Mus. 7: 71, pl. 131, fig. 2.

Godavari: 1♂, 14. v. 1990.

Anomis involuta (Walker) (Pl. 49: 12)

Gonitis involuta Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1003.

Godavari: 1♀, 5. viii. 1991; 1♀, 25. vi. 1992.

Anomis combinans (Walker) (Pl. 49: 9)

Gonitis combinans Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1001.

Godavari: 1♂, 24. ix. 1989; 1♂ 1♀, 15–17. iv. 1990; 1♂, 7. viii. 1991; 2♂, 11–17. ix. 1991; 1♂, 2. x. 1991; 3♂ 1♀, 12–17. x. 1991; 2♀, 24–28. x. 1991; 1♂, 20. iii. 1992; 1♂ 1♀, 27–30. iii. 1992. Mt. Phulchouki: 1♂, 17. vii. 1990; 1♂, 2. vii. 1991; 2♂, 4–7. viii. 1991.

Anomis metaxantha (Walker) (Pl. 49: 10)

Gonitis metaxantha Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1005.

Mt. Phulchouki: 1♂, 21. vii. 1990; 1♂, 28. iii. 1992.

Lineopalpa horsfieldi Guenée (Pl. 49: 3, 4)

Lineopalpa horsfieldi Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 6: 291, pl. 14, fig. 2.

Godavari: 1♂, 28. vi. 1990; ♂, 1. xi. 1991; 1♀, 25. i. 1992; 1♀, 4. iii. 1992. Mt. Phulchouki: 1♀, 21. vii. 1990; 1♀, 8. v. 1991.

Batracharta irrorata Hampson (Pl. 49: 15)

Batracharta irrorata Hampson, 1894, Fauna Br. India (Moths) 2: 444, fig. 251.

Godavari: 1♂, 28. v. 1990; 1♀, 28. vi. 1990; 1♀, 30. iv. 1992. Mt. Phulchouki: 1♂, 4. viii. 1991.

Calyptra bicolor (Moore) (Pl. 49: 17)

Calpe bicolor Moore, 1883, Proc. zool. Soc. Lond. 1883: 19.

Godavari: 3♂ 1♀, 20–28. ix. 1989; 2♂ 1♀, 2–3. x. 1989; 1♂, 28. iii. 1990; 2♂, 15. iv. 1990; 3♂ 4♀, 21–29. iv. 1990; 3♂ 1♀, 2–9. v. 1990; 1♀, 5. iv. 1991; 7♂ 7♀, 8–16. v. 1991; 1♂, 23. v. 1991; 1♀, 9. vi. 1991; 1♂, 5. viii. 1991; 1♀, 19. x. 1991. Mt. Phulchouki: 2♂, 25. v. 1990; 2♂ 4♀, 8–11. v. 1991; 1♂, 4. viii. 1991.

Calyptra fasciata (Moore) (Pl. 49: 20)

Calpe fasciata Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 151.

Godavari: 2♂, 15–19. iv. 1990; 1♂, 16. v. 1990; 1♀, 23. v. 1990. Mt. Phulchouki: 1♀, 17. vi. 1990.

Calyptra fletcheri (Berio) (Pl. 49: 18)

Calpe fletcheri Berio, 1956, Mem. Soc. ent. Italy 35: 118, figs 7, 18.

Godavari: 2♂, 15–17. vi. 1990; 1♀, 20. vi. 1990; 3♂ 3♀, 24–26. vi. 1990.

Calyptra minuticornis (Guenée) (Pl. 49: 21)

Calpe minuticornis Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 6: 374.

Godavari: 2♂, 20. vii. 1990; 1♂, 21. vii. 1991; 1♂ 1♀, 5–6. viii. 1991; 1♂, 29. ix. 1991.

Oraesia emarginata (Fabricius) (Pl. 49: 23)

Noctua emarginata Fabricius, 1794, Ent. Syst. 3 (2): 82.

Godavari: 1♀, 15. iv. 1990; 1♂ 1♀, 10–11. v. 1990; 1♂, 14. v. 1990; 1♀, 26. v. 1990; 1♂, 6. ix. 1991; 1♀, 13. ix. 1991; 1♂ 1♀, 29. ix. 1991; 2♂ 1♀, 12. x. 1991. Mt. Phulchouki: 3♂, 21. vii. 1990.

Oraesia rectistria Guenée (Pl. 49: 22)

Oraesia rectistria Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 6: 363, pl. 12, fig. 4.

Godavari: 1♂, 3. x. 1989; 1♂ 3♀, 8–14. iv. 1990; 1♂ 2♀, 29. iv. 1990; 1♂, 4. v. 1990; 1♀, 13. v. 1990; 3♂ 1♀, 10–20. vi. 1990; 3♀, 16–18. vii. 1990; 3♂, 13–21.

ix. 1991; 2♂ 1♀, 8–12. x. 1991; 3♂, 8–11. xi. 1991; 1♂, 30. xi. 1991; 1♂, 27. ii. 1992. Mt. Phulchouki: 1♂, 21. vii. 1990.

Plusiodonta coelonota (Kollar) (Pl. 49: 14)

Plusia coelodonta Kollar, 1844, in Hügél, Kaschmir und das Reich Siek 4: 482.

Godavari: 3♂, 18–22. iv. 1990; 1♀, 2. v. 1990; 2♀, 11–13. v. 1990.

Othreis fullonia (Clerck) (Pl. 50: 3)

Phalaena fullonia Clerck, 1764, Icones Insect, rariorum 2: pl. 48.

Godavari: 1♂, 3. vi. 1990; 1♂ 1♀, 20–26. vi. 1990; 1♂, 1. vii. 1991. Mt. Phulchouki: 1♂ 2♀, 19–21. vii. 1990.

Othreis materna (Linnaeus) (Pl. 50: 4)

Noctua materna Linnaeus, 1767, Syst. Nat. (Edn 12) 1: 840.

Mt. Phulchouki: 1♂, 19. vii. 1990; 1♂, 4. viii. 1991.

Adris okurai Okano (Pl. 50: 2)

Adris okurai Okano, 1964, Tohoku Konchu Kenkyu 1: 44, pl. 4, fig. 4

Godavari: 1♂ 1♀, 2. vii. 1990.

Adris tyrannus (Guenée) (Pl. 50: 1)

Ophideres tyrannus Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 110.

Godavari: 1♂, 27. v. 1990; 2♀, 20–24. vi. 1990; 1♂, 2. vii. 1990; 1♂ 1♀, 16–18. vii. 1990; 1♂ 1♀, 16–20. v. 1991; 2♂, 9–14. xi. 1991; 1♂, 29. x. 1991. Mt. Phulchouki: 2♂, 19. vii. 1990; 1♀, 11. vi. 1991.

Eudocima salaminia (Cramer) (Pl. 50: 5)

Phalaena salaminia Cramer, 1777, Uitlandsche Kapellen 2: 117, pl. 174, fig. A.

Godavari: 1♂ 1♀, 17–19. vii. 1990; 1♂, 30. vi. 1991; 4♀, 12–17. ix. 1991; 1♂, 25. ix. 1991; 2♂, 2–8. x. 1991; 1♀, 17. x. 1991; 1♂, 24. x. 1991. Mt. Phulchouki: 3♂ 3♀, 17–21. vii. 1990.

Hypocala rostrata (Fabricius) (Pl. 52: 3)

Noctua rostrata Fabricius, 1794, Ent. Syst. 3 (2): 127.

Godavari: 1♂, 25. v. 1990; 1♂, 1. v. 1991; 1♂, 9. v. 1991; 1♂, 30. i. 1992. Mt. Phulchouki: 1♂, 27. iv. 1992.

Hypocala sabsatura Guenée (Pl. 52: 1)

Hypocala sabsatura Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 75.

Godavari: 1♂, 15. iv. 1990; 1♀, 26. v. 1990; 3♂, 17–27. vi. 1990; 1♀, 19. vii. 1990; 4♂, 7–8. iv. 1991; 4♂ 2♀, 7–15. v. 1991; 7♂ 6♀, 16–23. v. 1991; 1♀, 1. vi. 1991; 1♂, 12. vi. 1991; 1♂ 1♀, 1. viii. 1991. Mt. Phulchouki: 1♂, 16. vi. 1990; 1♂ 1♀, 17–21. vii. 1990; 2♂, 8–11. v. 1991; 1♀, 6. vi. 1991.

Hypocala violacea Butler (Pl. 52: 2)*Hypocala violacea* Butler, 1879, Trans. ent. Soc. Lond. 1879: 6.

Godavari: 1♂, 9. vi. 1991.

Hypocala deflorata (Fabricius) (Pl. 52: 4)*Noctua deflorata* Fabricius, 1794, Ent. Syst. 3 (2): 127.Godavari: 1♂, 16. v. 1991; 4♂, 1–5. viii. 1991; 1♀, 13. x. 1991; 1♂, 6. xi. 1991.
Mt. Phulchouki: 1♂, 16. vii. 1990.**Ischyia manlia** (Cramer) (Pl. 50: 6)*Phalaena manlia* Cramer, 1776, Uitlandsche Kapellen 1: 144, pl. 92, fig. A.

Godavari: 1♂, 1. x. 1989; 1♀, 15. iv. 1990; 1♂ 1♀, 16–18. v. 1990; 1♀, 27. v. 1990; 1♀, 24. vi. 1990; 1♂ 2♀, 1–2. vii. 1990; 4♀, 16–19. vii. 1990; 1♂ 1♀, 8–9. v. 1991; 1♀, 16. v. 1991; 1♂, 1. vii. 1991; 1♂, 25. vii. 1991. Mt. Phulchouki: 1♂, 19. vii. 1990; 1♀, 7. ix. 1991.

Lacera procellosa Butler (Pl. 50: 9)*Lacera procellosa* Butler, 1879, Ann. Mag. nat. Hist. (5) 4: 368.

Godavari: 1♀, 3. x. 1989; 1♀, 19. vi. 1990; 1♂, 28. vi. 1990; 1♀, 25. vi. 1991; 1♂, 12. x. 1991.

Serrododes campana Guenée (Pl. 50: 7)*Serrododes campana* Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 7: 252, pl. 21, fig. 6.

Godavari: 1♂, 2. vii. 1990; 1♂ 1♀, 19. vii. 1990.

Daddala lucilla (Butler) (Pl. 51: 13)*Sypna lucilla* Butler, 1881, Trans. ent. Soc. lond. 1881: 206.

Godavari: 2♂, 24. ix. 1989; 1♂, 1. x. 1989; 1♂, 14. iv. 1990; 1♀, 18. v. 1990; 3♂ 1♀, 26–30. v. 1990; 4♂ 1♀, 11–15. vi. 1990; 3♂, 20–28. vi. 1990; 1♂, 18. iii. 1991; 12♂ 3♀, 15–26. v. 1991; 1♂ 1♀, 16. vi. 1991; 1♂, 26. vii. 1991; 4♂, 1–7. viii. 1991; 1♂, 7. ix. 1991; 1♂ 1♀, 3–7. x. 1991; 1♂, 28. x. 1991; 8♂ 8♀, 1–7. xi. 1991; 1♂ 3♀, 22–30. zi. 1991; 1♀, 7. i. 1992; 1♀, 8. ii. 1992; 2♂ 1♀, 27–29. ii. 1992; 1♂, 2♀, 1–5. iii. 1992. Mt. Phulchouki: 1♂, 9. v. 1991; 1♂, 12. vi. 1991; 2♀, 16–17. vii. 1990; 5♂ 1♀, 21. vii. 1990; 3♂ 1♀, 4. viii. 1991.

Daddala brevicauda (Wileman & South) (Pl. 51: 14)*Sypna brevicauda* Wileman & South, 1921, Entomologist 54: 202.

Godavari: 1♂, 14. ix. 1991.

Sypna dubitaria (Walker) (Pl. 51: 1, 4)*Tavia dubitaria* Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 939.

Godavari: 1♀, 26. iii. 1990; 1♀, 24. vi. 1990; 1♀, i. iv. 1991; 1♂, 7. viii. 1991; 1♂, 18. iii. 1992. Mt. Phulchouki: 1♀, 4. vi. 1990; 1♂ 1♀, 13–17. vi. 1990; 1♂, 26. iii. 1992; 1♀, 6. iv. 1992.

Sypna albilinea Walker (Pl. 51: 2, 3)

Sypna albilinea Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 14: 1261.

Godavari: 1♂, 18. iv. 1992. Mt. Phulchouki: 1♂, 21. vii. 1990; 1♂, 8. viii. 1991.

Sypnoides prumosa (Moore) (Pl. 51: 6)

Sypna prumosa Moore, 1883, Proc. zool. Soc. Lond. 1883: 25.

Godavari: 2♀, 12. vi. 1990.

Sypnoides cyanivitta (Moore) (Pl. 51: 8, 9)

Sypna cyanivitta Moore, 1867, Proc. zool. Soc. Lond. 1867: 70.

Godavari: 1♀, 2. x. 1989; 2♂, 28–29. iii. 1990; 1♂, 29. iv. 1991; 1♂, 27. vi. 1990; 1♀, 6. v. 1991; 1♀, 31. vii. 1991; 1♀, 23. ix. 1991; 1♀, 29. ii. 1992; 1♂ 1♀, 1–2. iii. 1992; 1♂, 12. iii. 1992. Mt. Phulchouki: 1♀, 17. vi. 1990; 1♀, 4. viii. 1991.

Sypnoides pannosa (Moore) (Pl. 51: 7)

Sypna pannosa Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 168, pl. 5, fig. 12.

Godavari: 1♂ 1♀, 13–15. iv. 1990; 1♂, 14. vi. 1990. Mt. Phulchouki: 1♂, 6. vi. 1991.

Hypersypnoides biocularis (Moore) (Pl. 51: 5)

Tavia biocularis Moore, 1867, Proc. zool. Soc. Lond. 1867: 71.

Godavari: 1♂, 1. x. 1989; 1♂, 15. iv. 1990. Mt. Phulchouki: 1♂, 1. iv. 1991.

Hypersypnoides umbrosa (Butler) (Pl. 51: 11)

Sypna umbrosa Butler, 1881, Trans ent. Soc. Lond. 1881: 204.

Godavari: 1♂ 1♀, 26–27. iii. 1990; 1♂, 12. iv. 1990; 1♂, 28. ii. 1992; 1♂, 10. iii. 1992; 2♂, 26–27. iii. 1992. Mt. Phulchouki: 1♂, 2. vii. 1990; 1♂ 1♀, 21. vii. 1990.

Hypersypnoides caliginosa (Walker) (Pl. 51: 13)

Tavia caliginosa Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 940.

Mt. Phulchouki: 1♂, 11. v. 1991.

Hypersypnoides constellata (Moore) (Pl. 51: 10)

Sypna constellata Moore, 1883, Proc. zool. Soc. Lond. 1883: 24.

Godavari: 1♂, 20. vi. 1990; 1♂ 1♀, 24. vi. 1990; 1♂ 3♀, 2. vii. 1990; 1♂, 27. vii. 1990. Mt. Phulchouki: 1♀, 28. vi. 1990; 1♀, 2. vii. 1990; 11♂ 2♀, 16–17. vii. 1990; 5♂, 20–21. vii. 1990; 1♂, 16. iii. 1991; 1♂ 1♀, 13. vi. 1991; 1♂, 3. vii. 1991; 10♂ 1♀, 4–8. viii. 1991; 1♂, 2. iii. 1992.

Tinolius hypsana Swinhoe (Pl. 51: 15)*Tinolius hypsana* Swinhoe, 1889, Proc. zool. Soc. Lond. 1889: 405.

Godavari: 1♂, 25. vi. 1992.

Ericeia pertendens (Walker) (Pl. 52: 9)*Remigia pertendens* Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 14: 1512.

Godavari: 1♀, 19. vi. 1990; 1♂, 9. v. 1991; 1♂, 31. vii. 1991; 1♂, 2. viii. 1991; 1♂, 9. x. 1991; 1♂, 26. ii. 1992; 1♂, 20. iii. 1992; 1♀, 9. vi. 1992. Daman Pass: 1♀, 28. vi. 1992.

Hamodes propitia (Boisduval) (Pl. 50: 8)*Ophiusa propitia* Boisduval, 1832, in d'Urville, Voyage de Découvertes de l'Astrolabe 1: 244.

Godavari: 1♂ 1♀, 16. iv. 1991; 1♂, 7. v. 1991; 1♀, 24. iii. 1992; 1♂, 27. iii. 1992. Mt. Phulchouki: 1♀, 17. iv. 1991.

Hulodes caranea (Cramer) (Pl. 49: 24)*Phalaena caranea* Cramer, 1780, Uitlandsche Kapellen 3: 140, pl.269, figs E,F.

Godavari: 1♀, 8. iv. 1992.

Polydesma boarmoides Guenée (Pl. 52: 8)*Polydesma boarmoides* Guenée, 1852, in Boisduval & Guenée, 1852, Hist. nat. Insectes (Lépid.) 6: 441.

Mt. Phulchouki: 1♀, 8. ii. 1992.

Oxyodes scrobiculata (Fabricius) (Pl. 49: 19)*Noctua scrobiculata* Fabricius, 1775, Syst. Ent.: 592.

Godavari: 1♂, 6. v. 1991.

Oxyodes billeti Joannis (Pl. 49: 16)*Oxyodes billeti* Joannis, 1900, Bull. Soc. ent. Fr. 1900: 280.

Godavari: 1♀, 28. v. 1992.

Aedia leucomelas (Linnaeus) (Pl. 52: 17)*Phalaena leucomelas* Linnaeus, 1758, Syst. Nat. (Edn 10) 1: 518.

Godavari: 1♀, 13. iv. 1990; 1♂, 19. iv. 1990; 1♂, 14. v. 1990; 1♂, 15. vi. 1990; 1♀, 20. vi. 1990; 1♂, 7. iv. 1991; 2♀, 21–24. iv. 1991; 1♂ 2♀, 20–25. iii. 1992; 1♂ 30. iii. 1992; 1♀, 4. iv. 1992; 1♂ 2♀, 19–22. iv. 1992; 2♂, 8–11. v. 1992. Mt. Phulchouki: 1♂, 22. iii. 1992; 1♀, 30. iii. 1992; 1♂ 1♀, 2–4. iv. 1992; 2♂, 6–7. iv. 1992; 1♀, 27. iv. 1992. Daman Pass: 1♀, 28. vi. 1992.

The following specimens (not illustrated) are distinguished from *leucomelas* by the well-marked forewing and the hindwing with gray suffusion above cell and with a narrower white marking as those figured by Sugi (1982, pl. 216, figs 33, 34). Holloway (1976) showed two forms of genitalia in the view of coronal

spining for Bornean *leucomelas* complex, suggesting the presence of two distinct species, but later he (1979) withdrew this idea and concluded them as variation in both facies and characters of the male genitalia. However, these two forms are clearly separable from each other, and they seem to represent two independent species.

Godavari: 1♀, 3. x. 1989; 1♂, 16. vi. 1992; 2♀, 23–25. vi. 1992.

***Aedia hollowayi* sp. n. (Pl. 52: 18)**

♂ ♀. Length of forewing 18–20mm (expanse 35–38mm). Similar to *A. leucomelas* (Linnaeus), but somewhat larger and a basal white marking of hindwing much reduced. Forewing dark blackish gray as in *leucomelas*, but densely covered with glossy fuscous gray beyond postmedian line; subterminal band characteristic, being diffuse and dark bronze; no pale streak below reniform, while in *leucomelas* two pale streaks are present there.

The male genitalia are as figured (Fig. 186).

Holotype. ♂, Godavari, 19. vii. 1990. Paratypes. Godavari: 1♀, 16. vii. 1990; 1♂ 4♀, 17. vii. 1990; 1♂ 2♀, 18. vii. 1990; 2♂ 2♀, 19. vii. 1990; 2♀, 23. vii. 1990; 1♂, 24. vii. 1990; 1♂, 4. viii. 1991; 1♀, 6. ix. 1991; 1♂, 9. ix. 1991; 1♀, 16. ix. 1991; 2♂, 13. ix. 1991; 1♂ 1♀, 1. x. 1991; 1♂, 9. x. 1991; 1♂, 28. vi. 1992. Mt. Phulchouki: 1♀, 17. vii. 1990. E. Nepal, Kosi, Pheksinda (780m): 1♀, 15. vii. 1992; 1♀, 16. vii. 1992; 1♂, 18. vii. 1992. E. Nepal, Sagarmatha, Okhaldhunga : 1♀, 24. viii. 1971; 1♂, 1. viii. 1972.

This new species is probably the same as Holloway's (1976) Assamese specimen of *leucomelas*, for which he noted that it has a squarer projection on dorsibasal margin of sacculus in the male genitalia. A Sikkim specimen stated by Hampson (1894) as "the white area of the hindwing is reduced" also seems to be this new species.

***Catephia flavescens* Butler (Pl. 52: 20)**

Catephia flavescens Butler, 1889, *Illust. typical Specimens lepid. Heterocella* Colln Br. Mus. 7: 74, pl. 131, fig. 2.

Mt. Phulchouki: 1♂, 17. vi. 1990; 1♂, 8. v. 1991.

***Catephia perdicipennis* (Moore) (Pl. 52: 21)**

Anophia perdicipennis Moore, 1882, in Hewitson & Moore, *Descr. new Indian lepid. Insects* Colln late Mr Atkinson: 162, pl. 5, fig. 18.

Godavari: 1♂, 28. vi. 1990; 1♀, 2. vii. 1990. Mt. Phulchouki: 1♂, 2. vii. 1990.

***Nagia linteola* (Guenée) (Pl. 52: 16)**

Catephia linteola Guenée, 1852, in Boisduval & Guenée, 1852, *Hist. nat. Insectes (Lépid.)* 7: 44.

Godavari: 1♀, 14. xi. 1991. Mt. Phulchouki: 1♀, 17. vi. 1991. Daman Pass: 1♂, 28. vi. 1992.

Lycimna polymesata Walker (Pl. 52: 10)

Lycimna polymesata Walker, 1860, List Specimens lepid. Insects Colln Br. Mus. 20: 215.

Godavari: 1♂, 27. ix. 1989; 1♀, 6. x. 1991.

Chrysopera combinans (Walker) (Pl. 52: 6)

Achaea combinans Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 14: 1399.

Godavari: 2♂, 21. vii. 1991; 1♀, 17. ix. 1991.

Dinumma placens Walker (Pl. 52: 7)

Dinumma placens Walker, 1858, List Specimens lepid. Insects Colln Br. Mus. 15: 1805.

Godavari: 1♀, 1. xi. 1991.

Fodina pallula Guenée (Pl. 52: 5)

Fodina pallula Guenée, 1852, in Boisduval & Guenée, 1852, Hist. nat. Insectes (Lépid.) 7: 44.

Godavari: 1♀, 17. vii. 1990.

Isoura fuscicollis (Butler), or close (Pl. 49: 1)

Triphaena fuscicollis Butler, 1889, Illust. typical Specimens lepid. Heterocera Colln Br. Mus. 7: 56, pl. 127, fig. 4.

Mt. Phulchouki: 1♂, 3. vii. 1991.

A sole specimen I examined lacks the submarginal black band on hindwing which is seen in *fuscicollis*, but otherwise it nearly matches with *fuscicollis*. An additional material is expected for determining whether this specimen represents an aberration or a distinct species.

Anticarsia irrorata (Fabricius) (Pl. 52: 12)

Noctua irrorata Fabricius, 1781, Species Insect. 2: 506.

Godavari: 1♂ 1♀, 2. xi. 1991.

Hyospila bolinoides Guenée (Pl. 52: 11)

Hyospila bolinoides Guenée, 1852, in Boisduval & Guenée, 1852, Hist. nat. Insectes (Lépid.) 7: 358.

Godavari: 1♂, 7. vi. 1992. Mt. Phulchouki: 1♂, 4. viii. 1991.

Avitta rufifrons Moore (Pl. 52: 14)

Avitta rufifrons Moore, [1887], Lepid. Ceylon 3: 554, pl. 215, fig. 2.

Godavari: 1♀, 3. x. 1989.

Avitta taiwana Wileman (Pl. 52: 15)*Avitta taiwana* Wileman, 1915, Entomologist 48: 192.

Mt. Phulchouki: 2♂, 21. vii. 1990.

The male genitalia are figured in Fig. 187.

Itmaharela basalis (Moore) (Pl. 52: 13)*Harmatelia basalis* Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 183, pl. 6, fig. 13.

Godavari: 1♂, 20. v. 1991.

Calesia dasyptera (Kollar) (Pl. 52: 24, 25)*Erebus dasypterus* Kollar, [1844], in Hügel, Kaschmir und das Reich Siek 4: 476.

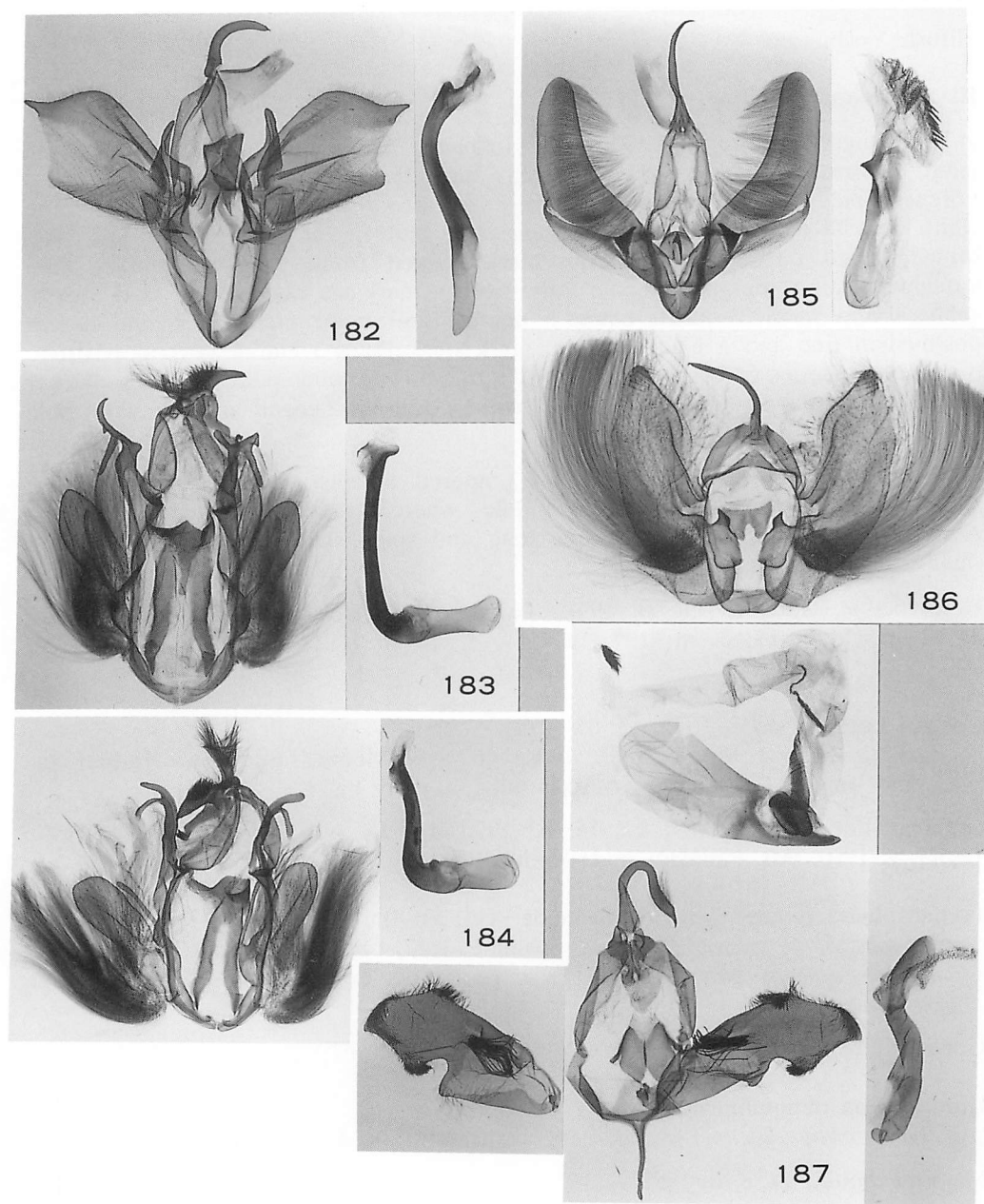
Godavari: 1♂, 1. x. 1991; 1♀, 28. iii. 1992; 1♀, 16. iv. 1992; 1♂, 22. iv. 1992.

Pasipeda haemorrhoea (Guenée) (Pl. 52: 23)*Calesia haemorrhoea* Guenée, 1852, in Boisduval & Guenée, 1852, Hist. nat. Insectes (Lépid.) 7: 258.

Godavari: 1♂, 3. vi. 1990; 1♂ 1♀, 30. iv. 1991; 1♂, 4. v. 1991.

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Figs 182–187. Male genitalia. 182. *Catocala hyperconnexa*. 183. *Parallelia praetermissa*. 184. *P. crameri*. 185. *Belciana kala nepalensis* ssp. n., holotype. 186. *Aedia hollowayi* sp. n. 187. *Avitta taiwana*.

NOCTUIDAE: OPHIDERINAE 2

Hiroshi Yoshimoto

Blasticorhinus varius sp. n. (Pl. 53: 1, 2)

♂ ♀. Length of forewing 19–20mm (expanse 34–36mm). Antenna ciliate in male, filiform in female. Head, thorax and abdomen pale grayish ochreous. Forewing pale to dark ochreous, sparsely irrorated with black scales; two minute white dots at the upper and lower angles of end of cell; postmedian line pale brown, edged outside with fuscous black, curved from apex to vein 6, then straight to hind margin; in pale form other markings obscure; in dark form, subbasal and median shades black; a dentate and interrupted black line before postmedian line and a black triangle mark on cellules 3 and 4 beyond postmedian line; a series of black dots before termen. Hindwing pale ochreous, darker in outer one-third; outer line dark brown, posteriorly edged outside with pale ochreous.

Male genitalia (Fig. 188). Uncus long, tapered at apex; tegumen rather short; valva slender, strongly angled in middle, where its costa is bulged inwards. Aedeagus moderate, vesica with one long and some short diverticula, bearing a small sclerite at base.

Holotype. ♂, Godavari, 1. xi. 1991. Paratypes. Godavari: 1♂, 27. vi. 1990; 3♂ 2♀, 2. xi. 1991; 1♀, 3. xi. 1991; 1♂ 1♀, 7. xi. 1991; 2♀, 27. ii. 1992; 1♂, 29. ii. 1992.

Coarica fasciata Moore (Pl. 53: 6)

Coarica fasciata Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 153, pl. 5, fig. 1.

Godavari: 1♂, 24. ix. 1989; 1♂, 15. iv. 1990; 1♂, 18. iv. 1990; 1♂, 24. iv. 1990; 1♂, 19. v. 1990. Mt. Phulchouki: 1♀, 6. iv. 1992.

Pseudosphetta moorei Cotes & Swinhoe (Pl. 53: 8)

Pseudosphetta moorei Cotes & Swinhoe, 1887, Cat. Moths India 2: 172.

Sphetta apicalis Moore, 1879, Proc. zool. Soc. Lond. 1879: 405, pl. 33, fig. 7 (nec Walker, 1865).

Godavari: 1♀, 23. iii. 1992.

Eurogramma obliquilineata (Leech) (Pl. 53: 5)

Talapa obliquilineata Leech, 1900, Trans. ent. Soc. Lond. 1900: 646.

Mt. Phulchouki: 1♀, 8. ii. 1992.

Mecodina subcostalis (Walker) (Pl. 52: 19)

Ophiusa subcostalis Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 969.

Godavari: 1♂, 18. v. 1991; 1♀, 24. iv. 1992; 1♂, 7. v. 1992.

Mecodina quadripuncta sp. n. (Pl. 52: 22)

♂ ♀. Length of forewing 17–18mm (expanse 32–33mm). Head and thorax pale grayish ochreous. Forewing pale brown with slight purplish tint; subbasal line dark brown, thin and sinuous; median shade dark brown, obscure and diffuse; postmedian line dark brown, thin, dentate at veins; a costal triangle marking brown, diffuse inside, and a conspicuous black mark below it. Hindwing pale grayish brown with purplish tinge, having a large and conspicuous black sub-tornal marking with its outer margin dentate; a thin and brown median line traceable below cell.

Male genitalia (Fig. 189). Uncus slender, tegmen narrow; valva simply rounded, with a short process from sacculus; juxta roundish, shallowly cleft in caudal end; sacculus deep. Aedeagus thick; vesica densely clothed with minute dents.

Holotype. ♂, Godavari, 8. ix. 1991. Paratype. Godavari, 14. v. 1990.

Perciana marmorea Walker (Pl. 53: 9)

Perciana marmorea Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 813.

Godavari: 2♀, 27–28. iii. 1990; 1♂, 23. iii. 1991. Mt. Phulchouki: 1♀, 25. iv. 1992.

Condote purpurea (Hampson) (Pl. 53: 4)

Caponodes purpure Hampson, 1902, J. Bombay nat. Hist. Soc. 14: 216.

Godavari: 1♂, 11. v. 1990; 1♂, 7. ix. 1991.

In determining this and the following species, I owed much to Dr. H. Inoue, Iruma, for his kindness in sending me many photographs of the type specimens of Taiwanese Noctuids taken by himself at British Museum (Nat. Hist.).

Condote angulina (Guenée) (Pl. 53: 3)

Sanys angulina Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lepid.) 7: 351.

Godavari: 1♀, 27. iii. 1992.

Pangrapta trimantesalis (Walker) (Pl. 53: 12)

Egnasia trimantesalis Walker, [1859], List Specimens lepid. Insects Colln Br. Mus. 16: 220.

Godavari: 2♂, 17–19. iv. 1990; 2♂, 22–26. iv. 1990; 1♂, 9. v. 1990; 2♂ 2♀, 15–18. v. 1990; 1♀, 22. ix. 1991; 1♂ 2♀, 25–27. ix. 1991; 1♂, 1. iv. 1992.

Pangrapta albistigma (Hampson) (Pl. 53: 13)

Zethis albistigma Hampson, 1897, J. Bombay nat. Hist. Soc. 11: 457.

Godavari: 1♂ 2♀, 22–24. ix. 1989; 1♂, 29. ix. 1989; 1♀, 3. x. 1989; 1♂, 11. vi. 1990; 1♀, 16. vii. 1990; 1♀, 9. iv. 1991; 1♂, 20. iii. 1992.

The Japanese and Taiwanese specimens formerly assigned to *albistigma* seem to represent a distinct species described below.

Pangrapta pseudalbistigma sp. n. (Pl. 53: 14, 15)

♂ ♀. Similar to *albistigma*, but in hindwing, four cell-end white spots larger and more conspicuous and a subterminal series of lunules thicker and more obvious.

Male genitalia (Fig. 193). A pair of sclerites from juxta shorter, not so strongly scobinated as in *albistigma*; manical scobination weaker; valva with its base narrower and saccular projection shorter than in *albistigma* (Fig. 192).

Female genitalia (Fig. 195). The sclerotization and dentation in caudal area of corpus bursae weaker than in *albistigma* (Fig. 7).

Holotype. ♂, Japan, Yamanashi Pref., Otsuki, Fukushima (600m), 22. v. 1976 (H. Yoshimoto). Paratypes. Japan: same data as holotype, 1♂; Yamanashi Pref., Uenohara (200m), 1♂, 25. vii. 1977 (H. Yoshimoto); Yamanashi Pref., Minobu, 1♀, 2. viii. 1992 (H. Yoshimoto). Taiwan: Nantou Hsien, Lushan Spa (1,200m), 1♀, 24–27. viii. 1983, 1♂ 1♀, 29. iv–1. v. 1984 (H. Yoshimoto), 1♂, 20–24. viii. 1984 (Y. Kishida); Taoyuan Hsien, Paling, 1♀, 17–19. viii. 1984 (Y. Kishida).

Lophomilia takao Sugi (Pl. 53: 20)

Lophomilia takao Sugi, 1962, Akitu 10: 37, fig. 2.

Godavari: 1♀, 17. vi. 1992.

This is the first record from outside of Japan. The female genitalia of the above specimen completely match with those of the Japanese specimen.

Lophomilia albistria sp. n. (Pl. 53: 18)

♂ ♀. Length of forewing 13–14mm (expanse 27–28mm). Antenna ciliate in male, filiform in female; palpus, head and thorax ochreous; abdomen pale ocher, banded by black in the 3rd segment, where a black and small crest arises. Forewing pale ochreous; antemedian line pale grayish, diffuse and obscure, oblique below cell; postmedian line thin, oblique from costa and angled beyond cell, then parallel to termen, broadened and conspicuously whitened below vein 1; subterminal line traceable as a thin and pale wavy line, shaded inside with blackish fuscous below vein 4; cilia ochreous, with a black apical spot. Hindwing pale whitish ocher, widely darkened in outer area.

Male genitalia (Fig. 190). Uncus slender, tapered toward tip; tegumen narrow; valva slender, with a long and stout saccular projection, which is asymmetrical, left one slender and bent near tip; harpe long and slender, its base more or less broadened; juxta wide at bottom with a ventral prominence, bearing a caudally projected long process from middle. Aedeagus slightly curved; vesica with a row of short and stout cornuti near base.

Holotype. ♂, Godavari, 12. iv. 1990. Paratypes. Godavari: 1♂, 12. iv. 1990; 1♂, 11. vi. 1990; 1♂, 2. iii. 1992; 1♂, 22. iii. 1992; 1♀, 2. iv. 1992.

Lophomilia violescens sp. n. (Pl. 53: 19)

♂. Length of forewing 13–15mm (expanse 24–28mm). Antenna ciliate; palpus, head and thorax gray with some purplish tinge; abdomen pale cinerous gray. Forewing dark purplish gray; a black streak along median nervure from base to postmedian line; antemedian line blackish, obscure, twice excurved in cell and cellule 1; a black dot at end of cell; postmedian line black, oblique from costa and acutely angled at vein 7, then incurved to hind margin; subterminal line thin, blackish, waved and leaving some black dots below costa; a pale grayish shade from apex to near angulated part of postmedian line; terminal line black; cilia dark gray with a pale basal line. Hindwing pale cinerous gray, its outer area widely darkened, with a diffuse and dark median line.

Male genitalia (Fig. 191). Uncus stout, broadened before tip; tegumen narrow; valva broadened toward tip; saccular projection short, with an acute dorsal process; harpe thick and long; juxta reverse heart-shaped, with a wide-based and caudally projected process from middle; saccus shallow. Aedeagus vesica with a small and scobinated sclerite near base.

Holotype. ♂, Mt. Phulchouki, 4. viii. 1991. Paratypes. Mt. Phulchouki: 1♂, 22. iv. 1992; 1♂, 6. v. 1992.

Diomea rotundata Walker (Pl. 52: 26)

Diomea rotundata Walker, [1858], List Specimens lepid. Insects Colln Br. Mus. 13: 1110.

Godavari: 1♂, 9. vi. 1990.

Plecoptera oculata (Moore) (Pl. 53: 10, 11)

Poaphila oculata Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 172, pl. 5, fig. 11.

Godavari: 1♀, 26. iv. 1990; 1♂, 5. v. 1991; 1♂, 13. iii. 1992; 1♀, 10. iv. 1992.

Plecoptera reflexa Guenée (Pl. 53: 7)

Plecoptera reflexa Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 6: 430.

Godavari: 1♂, 11. vi. 1990; 1♂, 28. iii. 1992.

Acantholipes regularis (Hübner) (Pl. 53: 24)

Noctua regularis Hübner, [1813], Samml. eur. Schmett. 4: pl. 128, fig. 588.

Godavari: 1♀, 23. vi. 1992.

Gesonia obeiditalis Walker (Pl. 53: 27)

Gesonia obeiditalis Walker, [1859], List Specimens lepid. Insects Colln Br. Mus. 16: 75.

Mt. Phulchouki: 1♂, 4. viii. 1991.

Phytometra usta (Butler) (Pl. 53: 23)

Raparna usta Butler, 1889, Illust. typical Specimens lepid. Heterocera
Colln Br. Mus. 7: 80, pl. 133, fig. 3.

Godavari: 1♂, 4. iv. 1992.

Raparna ochreipennis Moore (Pl. 53: 22)

Raparna ochreipennis Moore, 1882, in Hewitson & Moore, Descr. new Indian
lepid. Insects Colln late Mr Atkinson: 178, pl. 6, fig. 8.

Godavari: 1♂, 4. viii. 1991.

Raparna transversa Moore (Pl. 53: 21)

Raparna transversa Moore, 1882, in Hewitson & Moore, Descr. new Indian
lepid. Insects Colln late Mr Atkinson: 178.

Godavari: 1♀, 7. vi. 1992; 1♀, 26. vi. 1992.

Pseudogyrtonea marmorea (Wileman & South) (Pl. 53: 16)

Oglasa marmorea Wileman & South, 1916, Entomologist 49: 202.

Godavari: 1♂ 2♀, 26–30. i. 1992; 1♀, 1. ii. 1992; 2♂ 1♀, 26–28. ii. 1992; 4♀,
2–3. iii. 1992.

Rhesala imparata Walker (Pl. 53: 26)

Rhesala imparata Walker, 1858, List Specimens lepid. Insects Colln Br. Mus.
15: 1777.

Godavari: 1♀, 26. v. 1990; 1♀, 15. v. 1991; 1♀, 27. vi. 1991. Mt. Phulchouki:
1♀, 2. vii. 1990; 1♂, 21. vii. 1990.

Rivula auripalpis (Butler) (Pl. 53: 28)

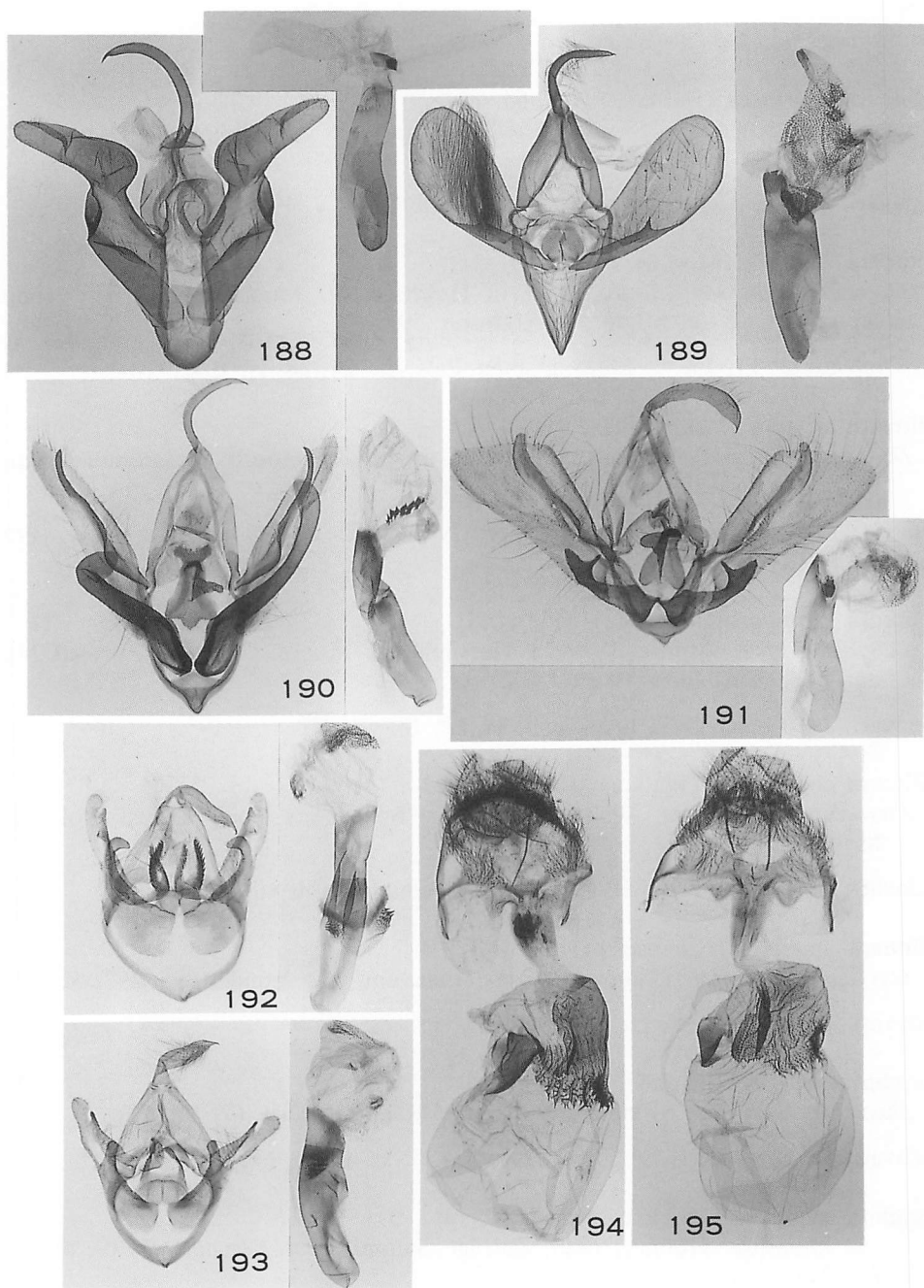
Hydrelia auripalpis Butler, 1889, Illust. typical Specimens lepid. Hetero-
cera Colln Br. Mus. 7: 64, pl. 129, fig. 8.

Godavari: 1♂, 9. v. 1990; 1♂, 19. iv. 1991; 1♀, 28. ii. 1992; 1♂, 23. iii. 1992.

Goniocraspedon mistura (Swinhoe) (Pl. 53: 17)

Hagadeba mistura Swinhoe, 1891, Trans. ent. Soc. Lond. 1891: 151.

Godavari: 1♂, 26. iv. 1990.



Figs 188–193. Male genitalia. 188. *Blasticorhinus varius* sp. n., paratype. 189. *Mecodina quadripuncta* sp. n., holotype. 190. *Lophomilia albistria* sp. n., holotype. 191. *L. violescens* sp. n., holotype. 192. *Pangrapta albistigma*. 193. *P. pseudalbistigma* sp. n., holotype, Japan.

Figs 194–195. Female genitalia of *Pangrapta*. 194. *P. albistigma*. 195. *P. pseudalbistigma* sp. n., paratype.

LYMANTRIIDAE

Yasunori Kishida

Calliteara postfusca (Swinhoe) (Pl. 54: 1)*Dasychira postfusca* Swinhoe, 1895, Trans. ent. Soc. Lond. 1895: 9, pl. 1, fig. 12.

Godavari: 2♂, 20–27. ix. 1989; 1♂, 25. iii. 1990; 1♂, 8. v. 1991.

Calliteara cinctata (Moore) (Pl. 54: 6)*Dasychira cinctata* Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 59.

Mt. Phulchouki: 1♀, 19. vi. 1992. Daman Pass: 1♂ 2♀, 28. vi. 1992.

Calliteara strigata (Moore) (Pl. 54: 2)*Dasychira strigata* Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 58.

Godavari: 1♀, 20. iii. 1990; 1♂, 11. v. 1991. Mt. Phulchouki: 1♂, 8. v. 1991; 1♀, 23. v. 1991; 1♂, 4. viii. 1991.

Calliteara grotei grotei (Moore) (Pl. 54: 5)*Dasychira grotei* Moore, 1859, in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East India Hse 2: 338.

Godavari: 1♂, 14. ix. 1989; 1♂, 9. v. 1991; 1♂, 16. v. 1991.

Calliteara complicata (Walker) (Pl. 54: 4)*Dasychira complicata* Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 365.

Godavari: 2♂ 1♀, 11–17. vi. 1990. Mt. Phulchouki: 1♂, 4. viii. 1991.

Calliteara angulata (Hampson) (Pl. 54: 3)*Dasychira angulata* Hampson, 1895, Trans. ent. Soc. Lond. 1895: 292.

Godavari: 1♂, 22. ix. 1989; 1♂, 3. v. 1991.

Dasychira dudgeoni Swinhoe (Pl. 54: 7, 8)*Dasychira dudgeoni* Swinhoe, 1907, Ann. Mag. nat. Hist. (7) 19: 203.

Godavari: 1♂, 8. v. 1991; 1♂, 7. viii. 1991; 1♀, 1. xi. 1991.

Dasychira mendosa (Hübner) (Pl. 54: 9, 10)*Olene mendosa* Hübner, 1823, Zuträge Samml. exot. Schmett. 2: 19, pl. [51], figs 293, 294.

Godavari: 1♂, 3. x. 1989; 1♀, 14. v. 1991.

Dasychira pennatula (Fabricius) (Pl. 54: 11)*Bombyx pennatula* Fabricius, 1793, Syst. Ent. 3: 465.

Godavari: 1♀, 28. iv. 1990; 1♀, 13. v. 1990; 2♂, 1–8. v. 1991: 1♂, 7. iv. 1992.

Neocifuna tenebrosa (Walker) (Pl. 54: 14)*Dasychira tenebrosa* Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 361.

Godavari: 2♂, 20–23. ix. 1989; 1♂, 20. iv. 1990; 1♀, 1. vi. 1992; 1♂, 15. vi. 1992. Many other wrapped specimens.

Pantana visum (Hübner) (Pl. 57: 7)*Liparis visum* Hübner, 1825, Zuträge Samml. exot. Schmett. 3: 33.

Godavari: 2♂, v–vii. 1973 (T. Miyashita).

Laelia exclamationis (Kollar) (Pl. 54: 17)*Euprepia exclamationis* Kollar, [1844], in Hügel, Kaschmir und das Reich Siek 4: 469.

Godavari: 1♂, 2. v. 1990; 1♂, 20. iii. 1992.

Aroa pyrrhochroma Walker (Pl. 54: 21)*Aroa pyrrhochroma* Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 329.

Godavari: 1♂, 4. vi. 1991.

Arctornis l-nigrum l-nigrum (Müller) (Pl. 54: 20)*Phalaena l-nigtum* Müller, 1764, Fauna Insectorum Fridichsdal.: 40.

Godavari: 1♀, 14. vi. 1990.

A close relative of this species, *Arctornis konistana* Freina, 1987, was described from Pakistan. *Konistana* is separable from *l-nigrum* by a shorter and apically broader signum in the female genitalia. The female from Godavari was safely determined as *l-nigrum* through the examination of genitalia. Several subspecies are known in this species and I treat the Nepalese specimen as nominal race for the time being.

Arctornis cygna (Moore) (Pl. 54: 18)*Redoa cygna* Moore, 1879, Proc. zool. Soc. Lond. 1879: 401.

Godavari: 1♂, 30. vii. 1991.

Daplasa irrorata Moore (Pl. 54: 13)*Daplasa irrorata* Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 52.

Godavari: 1♂, 2–6. vi. 1987 (T. Miyashita).

Daplasa variegata seminigra subsp. n. (Pl. 54: 12, holotype)

Similar to nominotypical race from Darjeeling, N. India, but differs from it as follows. Forewing with white markings less developed. Hindwing uniformly dark gray except costa, while it is white except terminal area in nominotypical race.

Holotype. ♂, Mt. Phulchouki, 14. viii. 1991. Paratypes. Mt. Phulchouki: 1♂, 21. vii. 1990; 2♂, 4. viii. 1991.

Pida apicalis Walker (Pl. 55: 1)

Pida apicalis Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 400.

Godavari: 1♂, 23. v. 1990; 1♂, 1. vi. 1990; 1♂, 4. viii. 1991; 1♂, 1. vi. 1992.

Pida decolorata decolorata (Walker) (Pl. 55: 2)

Cyclidia decolorata Walker, 1869, Char. undescr. Lep. Het.: 96.

Godavari: 2♂, 23–24. ix. 1989; 1♀, 7. vi. 1990; 1♂, 11. v. 1991; 1♂, 23. v. 1991; 1♂, 26. v. 1992.

Mardara irrorata (Moore) (Pl. 55: 3)

Mahoba irrorata Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 52.

Godavari: 1♀, 7. vi. 1990; 1♀, 10. vi. 1990; 1♀, 9. vi. 1991.

Mardara plagidotata (Walker) (Pl. 55: 4)

Cyclidia plagidotata Walker, 1862, List Specimens lepid. Insects Colln Br. Mus. 25: 1483.

Godavari: 1♀, 7. vi. 1990.

Mardara calligramma Walker (Pl. 55: 5)

Mardara calligramma Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 402.

Godavari: 2♂, 3. v. 1991; 1♀, 9. vi. 1991.

Heracula discivitta Moore (Pl. 55: 6)

Heracula discivitta Moore, 1865, Proc. zool. Soc. Lond. 1865: 804, pl. 43, fig. 2.

Godavari: 1♀, 5. v. 1990; 1♀, 24. vi. 1991.

Numenes siletti Walker (Pl. 55: 7, 8)

Numenes siletti Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 3: 663.

Godavari: 1♀, 21. ix. 1989; 3♀, 1. x. 1989; 1♂, 2. v. 1990; 2♀, vi. 1990.

Numenes patrana Moore (Pl. 55: 9, 10)

Numenes patrana Moore, 1859, in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East India Hse 2: 367.

Godavari: 2♂, 21–24. ix. 1989; 2♂ 1♀, 23–28. v. 1990; 2♂, 8. v. 1991; 1♀, 5. v. 1992. Many other wrapped specimens.

Cispa punctifascia Walker (Pl. 54: 19)

Cispa punctifascia Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 857.

Godavari: 2♀, 1–2. x. 1989; 2♂, 11–12. vi. 1990; 1♂ 1♀, 11. vi. 1991.

Medama diplaga (Hampson) (Pl. 54: 16)

Euproctis diplaga Hampson, 1910, J. Bombay nat. Hist. Soc. 20: 113.

Godavari: 1♀, 23. vii. 1990; 1♂, 30. vi. 1991; 1♂, 2. viii. 1991.

Lymantria concolor concolor Walker (Pl. 55: 11, 12)

Lymantria concolor Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 876.

Godavari: 1♂, 23. ix. 1989; 1♂ 1♀, 1–3. x. 1989; 1♀, 12. v. 1990; 1♂, 3. vi. 1990; 1♂, 4. vi. 1992. Many other wrapped specimens.

Lymantria bivittata (Moore) (Pl. 55: 13, 14)

Pegella bivittata Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 58.

Godavari: 1♂ 1♀, 15. iv. 1990; 1♀, 23. iv. 1990; 1♂, 25. v. 1990; 2♂, 21. vii. 1990.

Lymantria mathura Moore (Pl. 55: 15, 16)

Lymantria mathura Moore, 1865, Proc. zool. Soc. Lond. 1865: 85.

Godavari: 1♂ 1♀, 27. ix. 1989; 1♂, 2. x. 1989; 1♂, 26. vi. 1990; 1♀, 7. v. 1991; 1♂, 26. vi. 1992.

Lymantria marginata Walker (Pl. 55: 17, 18)

Lymantria marginata Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 877.

Godavari: 1♀, 3. x. 1989; 1♂, 14. v. 1992.

Himala argentea (Walker) (Pl. 57: 8)

Redoa argentea Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 827.

Godavari: 1♀, 18. vi. 1987 (T. Miyashita); 1♂, 12. v. 1992; 1♂, 23. vi. 1992.

Perina nuda (Fabricius) (Pl. 54: 15)

Bombyx nuda Fabricius, 1787, Mantissa Insect.: 119.

Godavari: 1♂, 1. ix. 1991.

Euproctis Hübner

[Partly collaborated with S. Sugi]

Euproctis is a large lymantriid genus most successful in the Old World tropics, containing more than 600 described species. Although the genus is a fascinating group and very richly represented in the Oriental region, there are scarce taxonomic works even for limited groups, except some regional reports dealing with Chinese (Collenette, 1934, etc.), Sundaland and Sulawesi (Collenette, 1948, etc.), Bornean (Holloway, 1976), Japanese (Inoue, 1956) and Taiwan faunas (Sugi, in preparation).

The Godavari material includes 23 species, in which three species are represented by only female(s), but for two of them male(s) from other source were available for study. Finally, the male of one species and the female of four species remain unexamined. The both sexes of all the species were dissected and the majority of their genitalia were illustrated for the convenience to future students and to make them easy to check our identification.

Euproctis varia Walker (Pl. 56: 1, 2)

Euproctis varia Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 840.

Godavari: 2♀, vi. 1991, genitalia slide 6852; 1♂, 25. vi. 1991; 1♀, 2. viii. 1991; 3♂ 2♀, 19–25. vi. 1992, genitalia slide 6831.

The male genitalia are as figured (Fig. 205)

Euproctis staudingeri (Leech) (Pl. 56: 3)

Chaerotracha staudingeri Leech, 1888, Proc. zool. Soc. Lond. 1888: 624, pl. 31, fig. 8.

Godavari: 1♂, 2. vi. 1990; 1♂, 7. v. 1991; 1♀, 18. iv. 1992. Mt. Phulchouki: 1♂, 19. vii. 1989, genitalia slide 6828; 1♂, 2. vii. 1990.

The male genitalia are as figured (Fig. 207)

Euproctis plagiata (Walker) (Pl. 56: 4)

Cispia plagiata Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 858.

Godavari: 1♂, 4. vi. 1991, genitalia slide 6844; 1♀, vi. 1991, genitalia slide 6845; 1♀, 1991; 2♀, 16–23. vi. 1992.

The male genitalia are as figured (Fig. 209)

Euproctis marginata (Moore) (Pl. 56: 5)

Chaerotracha marginata Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 49.

Chaerotracha quadrangularis Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 50, pl. 2, fig. 23 [as *angularis*, an incorrect original spelling].

Godavari: 1♀, 26. vi. 1990; 1♀, 8. v. 1991, genitalia slide 6887; 2♂, 8–9. iii. 1992, genitalia slide 6834; 2♂, 4. ix. 1992.

Our Godavari series of both sexes are typical of *marginata* Moore, instead of the form *quadrangularis*. We are not sure of that the two taxa are specifically distinct as insisted by some senior authors (Collenette, 1934: 142; Schintlmeister, 1989). *E. insulata* Wileman from Taiwan has the genitalia almost identical with those of Godavari specimens (Fig. 210), suggesting that it can be reduced into the subspecies of *marginata* Moore (stat. n.). The female genitalia are as figured (Fig. 234).

Euproctis uniformis (Moore) (Pl. 56: 6, 9)

Chaerotricha uniformis Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 49.

Godavari: 1♂, 2–6. vi. 1987 (T. Miyashita); 2♂, 20–24. ix. 1989, genitalia slide 6820; 1♀, 14. vi. 1990; 1♀, 4. viii. 1991; 1♂, 19. vi. 1992; 1♀, undated, genitalia slide 6847.

The male genitalia are as figured (Fig. 208)

Euproctis plana Walker (Pl. 57: 5)

Euproctis plana Walker, 1856, List Specimens lepid. Insects Colln Br. Mus. 7: 1731.

Godavari: 1♀, 19. vi. 1990; 1♀, 23. vii. 1990; 1♂, -. 1990; 1♂, 23. v. 1991; 1♀, vi. 1991; 2♂, 3. iv. 1992, genitalia slide 6819; 1♀, 5. v. 1992, genitalia slide 6851.

The male genitalia are as figured (Fig. 206)

Euproctis sp. 1 (Pl. 56: 7, 8)

Godavari: 1♀, 2–6. vi. 1987 (T. Miyashita), genitalia slide 6454; 3♀, 12–14. v. 1991, genitalia slides 6823, 6833.

The forewing pattern is somewhat similar to that of *E. magna* Swinhoe from Sikkim to Taiwan, but the apical black point is wanting in the Godavari species and the female genitalia (Fig. 232) are quite different. The male is unknown.

Euproctis scintillans (Walker) (Pl. 56: 12, 13)

Somena scintillans Walker, 1856, List Specimens lepid. Insects Colln Br. Mus. 7: 1734.

Godavari: 3♀, 2–6. vi. 1987 (T. Miyashita), genitalia slide 6460; 2♀, 13–23. iv. 1990, genitalia slide 6822; 1♂, 16. vii. 1990; 1♂, 14. vi. 1991, genitalia slide 6829; 3♂ 1♀, 15–28. iii. 1992; 1♀, 10. vi. 1992.

This and the following species, showing similar wing pattern and sexual dimorphism, belong to an insufficiently analysed complex in which the hindwing has the vein M3 lost.

In this species the terminal yellowish fringe of the forewing is ornamented with iridescent scales in both sexes. The male genitalia (Fig. 222) are characterized by a broad stout uncus with medial cleft and a rather short, apically largely bilobate simple valva. It can be identified with *scintillans* Walker. It commonly flies in Taiwan (examined) and a male from Luzon was examined. The female genitalia are as figured (Fig. 229)

Euproctis subnotata (Walker) (Pl. 56: 10, 11)

Orvasca subnotata Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 502.

Godavari: 1♂, 24. ix. 1989, genitalia slide 6816; 1♀, 3. vi. 1990, genitalia slide 6827; 1♂ 1♀, 12–18. vi. 1991, genitalia slides 6817, 6826; 2♂ 1♀, 25. vi. 1992.

In facies similar to the preceding, but the irridescent scales are wanting on the terminal yellow fringe of the forewing. The male genitalia (Fig. 223) show that this species comes to a different subgroup where the uncus is rather reduced and shortly hooked to a blunt apex, a small longitudinal scobination is on the ventral surface of the scaphium and the juxta has a basal spatulate extension. The Godavari specimens are here tentatively assigned to *subnotata* Walker. The female genitalia are as figured (Fig. 230)

The combination of the genitalic characters above are shared with *taiwana* Shiraki (Taiwan), *pulverea* Leech (Japan) and two other allies from Sumatra (examined).

Euproctis sp. 2 (Pl. 56: 14)

Godavari: 1♂, 2–5. vi. 1987 (T. Miyashita), genitalia slide 6830; 1♂, 12. iii. 1990; 1♂, 20. vi. 1992.

The female was not in the Godavari collection. The male genitalia (Fig. 215) are as illustrated.

Euproctis bipartita (Moore) (Pl. 56: 15)

Chaerotracha bipartita Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 49, pl. 2, fig. 4.

Godavari: 1♂, 17. vii. 1990, genitalia slide 6837.

The identification is provisional. *E. bipartita* seems to be only known from the female type. The male genitalia (Fig. 211) are as illustrated.

Euproctis seitzii Strand (Pl. 56: 16)

Euproctis seitzii Strand, 1910, in Seitz, Gross-Schmett. Erde 2: 139.

Godavari: 1♂, 11. v. 1990, genitalia slide 6836; 1♂, 11. v. 1992.

The female was not included in the Godavari collection. The male genitalia (Fig. 220) are also figured by Holloway (1976, fig. 300) from Bornean material.

Euproctis sp. 3 (Pl. 56: 17)

Godavari: 1♂, 3. vii. 1991, genitalia slide 6835; 1♀, 24. v. 1990, genitalia slide 6885.

Very similar to *E. vitellina* Kollar in the deep yellow forewing with medial segmented broad band not reaching the costa, but the upper end of the band does not extend into cell. The male genitalia (Fig. 214) also seem to differ in the more abruptly tapered valva.

This and the following species are in a well defined natural group in the genus where the caudal margin of the eighth abdominal tergite is roundish, distinctly raised and finely setose, and the more or less broad uncus is laterally associated with stout socii-like processes. These character states are shared with many other species such as *subflava* Bremer, *sakaguchii* Matsumura, *kanshireia* Wileman, *croceola* Strand and two unidentified Sumatran species examined (Sugi, in preparation).

Euproctis sp. 4 (Pl. 56: 21)

Godavari: 1♂, 13. iv. 1990; 1♂, 23. v. 1991; 2♀, 18–24. vi. 1992, genitalia slide 6884. Mt. Phulchouki: 1♂, 31. v-1. vi. 1987 (T. Miyashita), genitalia slide 6463.

The male genitalia are as figured (Fig. 213). Female is unknown to us.

Euproctis basalis (Moore) (Pl. 56: 18, 19)

Artaxa basalis Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 51, pl. 2, fig. 16.

Godavari: 1♂, 28. iii. 1990; 3♂, 8–15. iv. 1990, genitalia slide 6818; 1♀, 18. vii. 1990, genitalia slide 6883; 1♂, 21. vii. 1990; 3♂, 9–11. v. 1991.

In facies the male varies from almost immaculate yellow form just like the female (Fig. 19) to fully coloured typical one (Fig. 18). In the male genitalia (Fig. 216) characterized by paired digital process on the base of juxta and the aedeagus vesica ornamented with lateral small combs and more apically a few spinulate cornuti, this species is closely allied to *E. baibarana* Matsumura from Taiwan. The latter has also the variable coloured male but the female is dull white and quite immaculate (Sugi, in preparation).

Euproctis sp. 5 (Pl. 56: 20)

Godavari: 1♂, 20. ix. 1989, genitalia slide 6840; 1♂, 11. iv. 1990; 1♂, 11. iii. 1992; 5♂, 21–23. iii. 1992; 1♂, 2. iv. 1992; 2♂, 19–20. iv. 1992, genitalia slide 6815.

The female is unknown to us. The male genitalia (Fig. 226) have a large shovel-shaped uncus, much reduced tooth-like valva and relatively long stout saccus. The apex of aedeagus is pointed. These features are shared with *E. sericea* Wileman from Taiwan, showing their close relationship.

Euproctis inconcisa (Walker) (Pl. 57: 6)

Artaxa inconcisa Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 332.

Godavari: 1♀, 2–6. vi. 1987 (T. Miyashita), genitalia slide 6839.

The male genitalia (Fig. 217; genitalia slide 6854) are illustrated from a Darjeeling specimen (Fig. 201) in Kishida's collection, in which the body and forewing are more suffused with sulphur yellow than the female illustrated. The female genitalia are as figured (Fig. 231)

Euproctis sp. 6 (Pl. 56: 24, 25)

Godavari: 1♂, 18. vi. 1987 (T. Miyashita), genitalia slide 6451; 2♂, 14–24. vi. 1991, genitalia slide 6825; 1♀, 3. vi. 1992, genitalia slide 6882; 1♂, 15. vi. 1992.

The highly specialized structure of the male genitalia in this (Fig. 212) and some allied species will guarantee to establish a subgeneric unit. The uncus is triangular, tapered to a point with slight dorsal ridge before apex. The valva are deeply trilobed, the elongated ventral process arising from the proximal end of valva and the dorsal membranous one being also elongated, whip-like and apically setose. The central main process is wider at base, tapering and strongly curved beyond middle. These traits are exactly shared with *E. curvata* Leech from Japan and an unnamed species from Taiwan. The Javan twin species, *pollux* Collenette and *castor* Collenette, are described as having similarly trilobed valva (Collenette, 1948) and may fall into the same category. The female genitalia are as figured (Fig. 235).

Euproctis virguncula Walker (Figs 203, 204)

Euproctis virguncula Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 836.

Godavari: 1♀, 24. iv. 1992, genitalia slide 6881.

This is a small, purely white species with the abdomen also whitish above and the hindwing with vein M3 lost. Dissection of an Indian male (Fig. 225; genitalia slide 6856) proved it to be closely allied to Eurasian *E. similis* (Fuessly). The remarkable feature in the male genitalia is the caudal portion of juxta forming a complete ring to support the aedeagus, a good synapomorphy to define the subgroup *Sphrageidus* Maes, 1984, established to contain *similis* and further ten species from Madagascar (cf. Griveaud, 1973: 172–187). *E. virguncula* is the only known representative of that group in the Oriental tropics. In this species the cuticle of body is more strongly sclerotized and darker coloured than usual. The female genitalia (Fig. 228) are as illustrated.

Euproctis xanthorrhoea (Kollar) (Fig. 202)

Liparis xanthorrhoea Kollar, [1844], in Hgel, Kashmir und das Reich Siek 4: 470

Euproctis flavonigra Moore, 1879, Proc. zool. Soc. Lond. 1879: 400, pl. 32, fig. 11.

Kathmandu, 1♂, 12. i. 1963 (T. Haruta et al.), genitalia slide 6856.

The Kathmandu specimen well matches the original description and figure of *flavonigra* Moore from Nepal, except more rufous tint of the forewing and more extensive whitish suffusion in the basal to inner area of the hindwing. The genitalia (Fig.: 224) are, however, almost identical with the preceding species, with slightly more tapered apex of the valva, suggesting that Hampson ([1893]) could be justified in uniting them as a single species. The female is unknown to us.

Euproctis divisa Walker (Pl. 56: 22, 23)

Euproctis divisa Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 838.

Godavari: 2♂, 2–6. vi. 1987 (T. Miyashita); 1♂, 27. iii. 1989; 1♂, 27. iii. 1990, genitalia slide 6814; 1♀, 11. iv. 1990, genitalia slide 6838; 1♂, 23. v. 1991. Mt. Phulchouki: 2♂, 15. v. 1987 (T. Miyashita), genitalia slide 6444.

The shining, purely white wings associated with abdomen deep blackish above clearly separate this species from the following two species, having dull, pale creamy forewing and fuscous abdomen. In the male genitalia (Fig. 218), the branches of uncus are shorter and closer at their base and the sacculus is short.

Euproctis postica Walker (Pl. 57: 3, 4)

[? *Leucoma latifascia* Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 4: 831].

Euproctis postica Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 348.

Godavari: 1♂, 2–6. vi. 1987 (T. Miyashita), genitalia slide 6457; 1♂, 23. ix. 1989; 2♂ 4♀, 11–29. iv. 1990, genitalia slide 6821, 6843; 4♂, 8–11. v. 1991, genitalia slide 6812; 1♀, 23. v. 1991; 1♂, 3. iv. 1992, genitalia slide 6813; 1♂, 24. v. 1992. Mt. Phulchouki: 1♀, 7. ii[?]. 1992.

The immaculate female of this species is larger than that of the next species otherwise very similar in facies. In the male the body and forewing are suffused with pale cream, having a pale brownish medial band defined with whitish. The male (Fig. 219) and female (Fig. 233) genitalia are as illustrated.

A revision is needed for exact identification of the Himalayan *Euproctis* with pale, immaculate or poorly maculated forewing. The status of several names brought together as synonyms of *latifascia* Walker by Hampson ([1893]) are now in confusion, though Collenette (1948: 696) published some useful comments on the types of relevant taxa. He stated that the genitalia of the male type of the Himalayan *postica* were allied to *ochacantha* Collenette from Java, whose genitalia he illustrated. From this our Godavari specimens are here provisionally assigned to *postica* Walker, leaving a possibility that it would be a junior synonym of the female-based *latifascia* Walker, of which the type locality was Nepal.

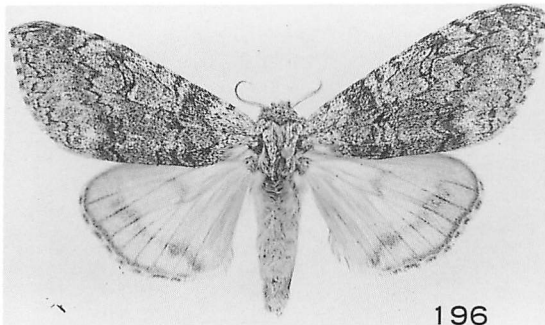
Euproctis sp. 7 (Pl. 57: 1, 2)

Godavari: 2♀, 2–6. vi. 1987 (T. Miyashita), genitalia slide 6445, 6841; 1♀, 24. ix. 1989; 1♂, 13. v. 1991, genitalia slide 6824; 1♂, 22. iv. 1992.

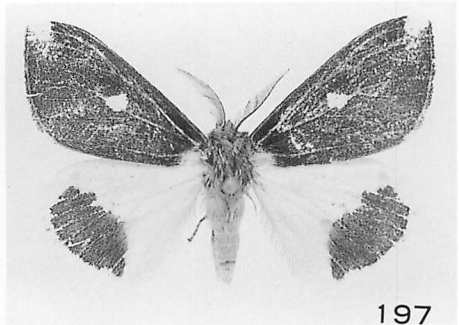
The male (Fig. 221) and female (Fig. 227) genitalia widely differ from the preceding species and are almost identical with those of *E. karapina* Strand from Taiwan (Sugi, in preparation).

References

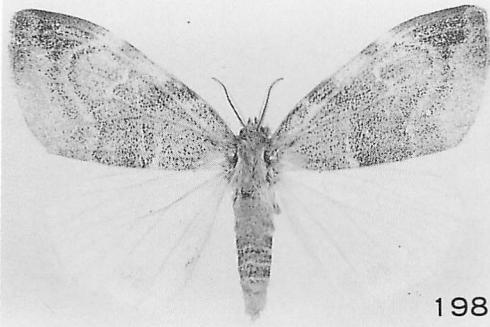
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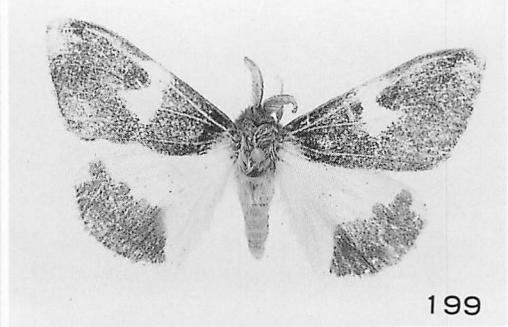
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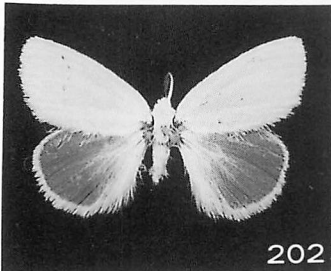
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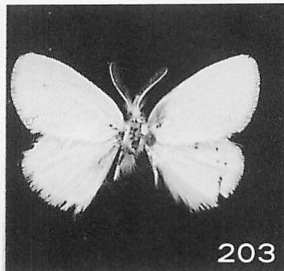
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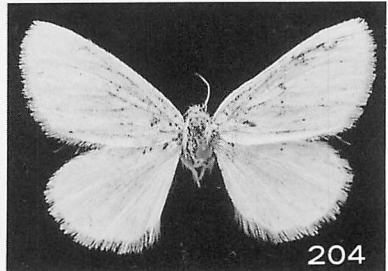
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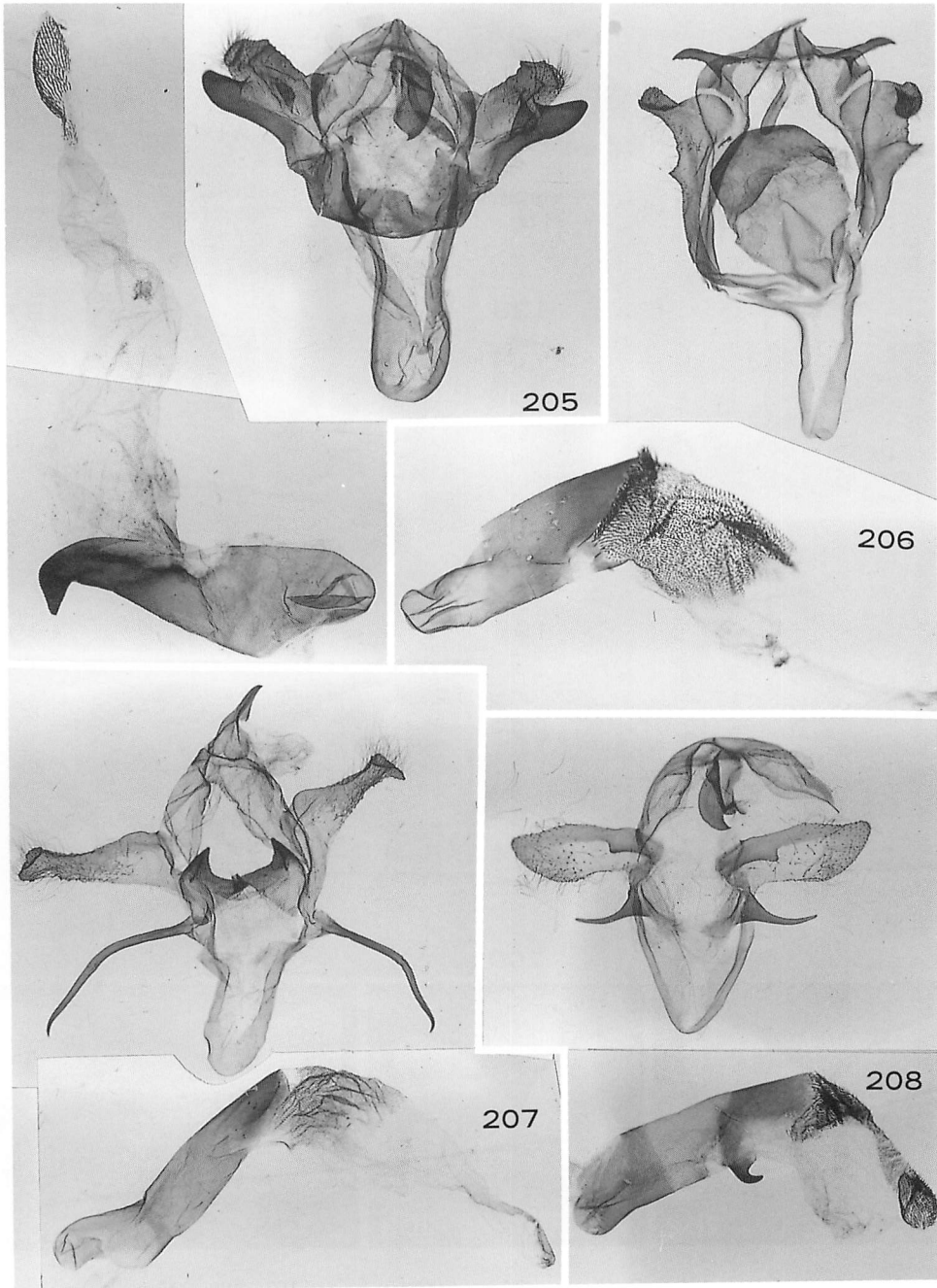


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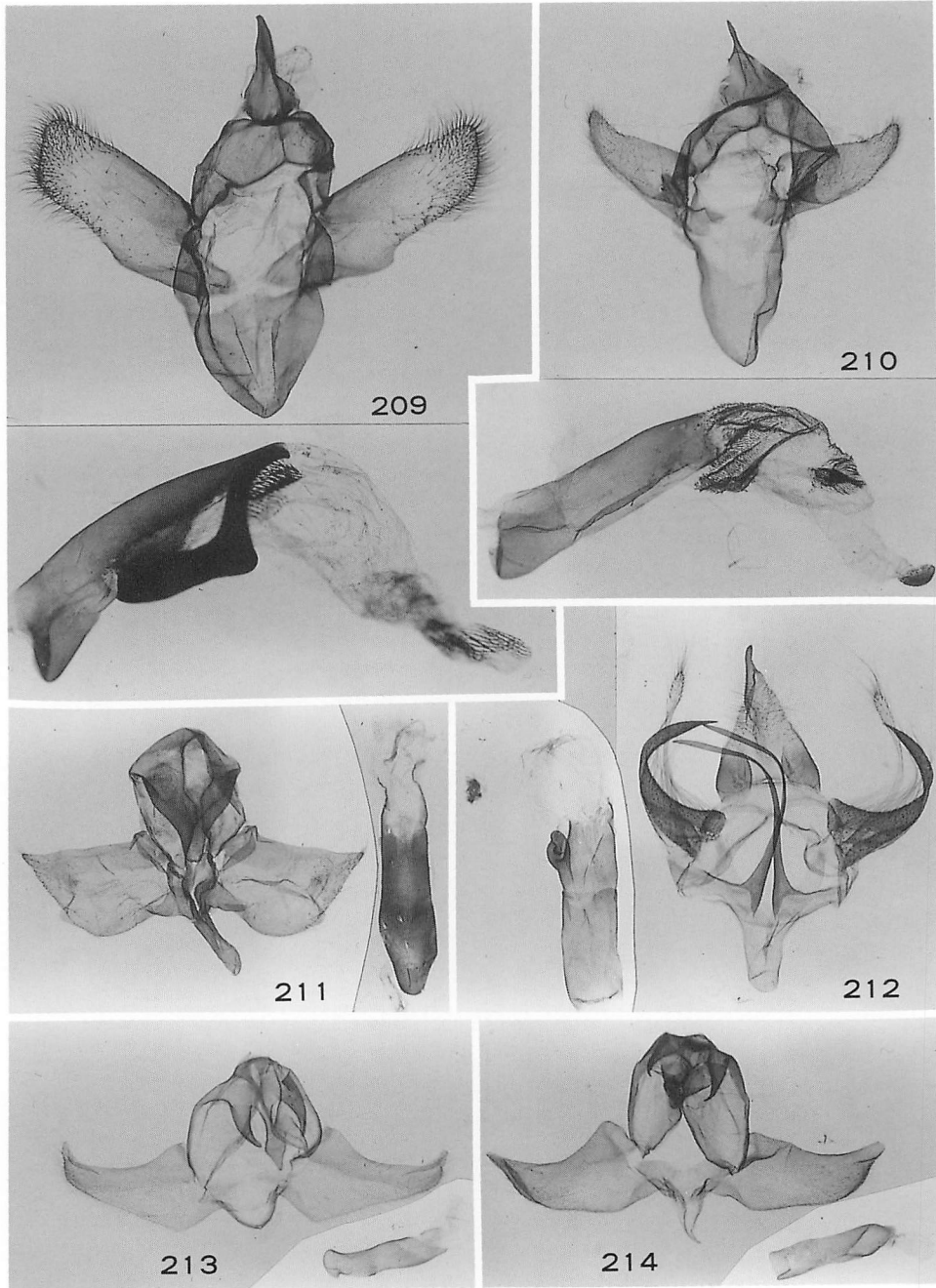


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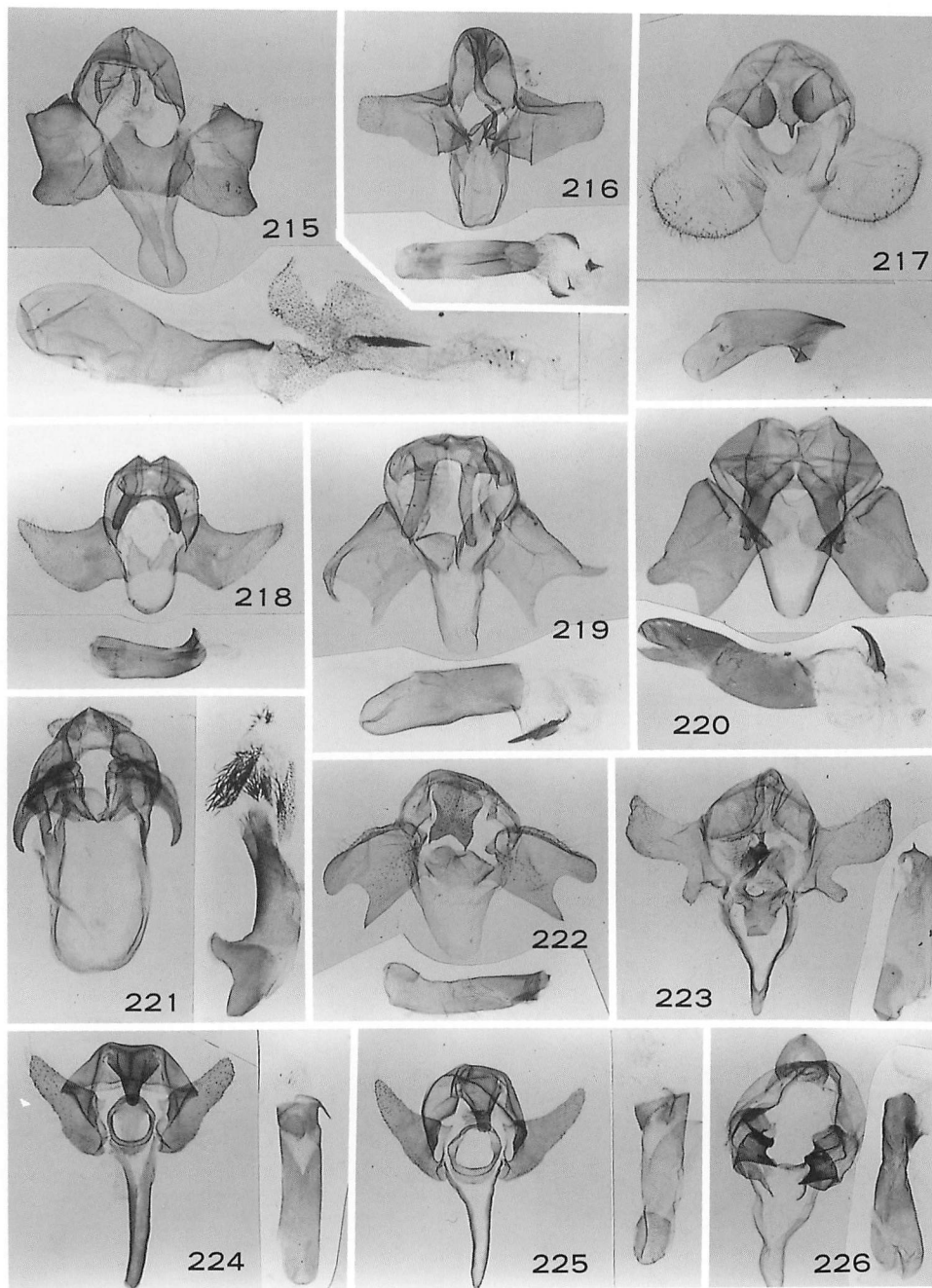
Figs 196–204. Adults. 196. *Calliteara strigata* (Moore), ♀. 197, 199. *Numenes patrana* Moore, ab., ♂. 198. *Pida decolorata decolorata* (Walker), ♀. 200. *Cisca punctifascia* Walker, ♂. 201. *Euproctis inconcisa* Walker, ♂. 202. *E. xanthorrhoea* (Kollar), ♂. 203. *E. virguncula* (Walker), ♂. 204. *Ditto*, ♀.



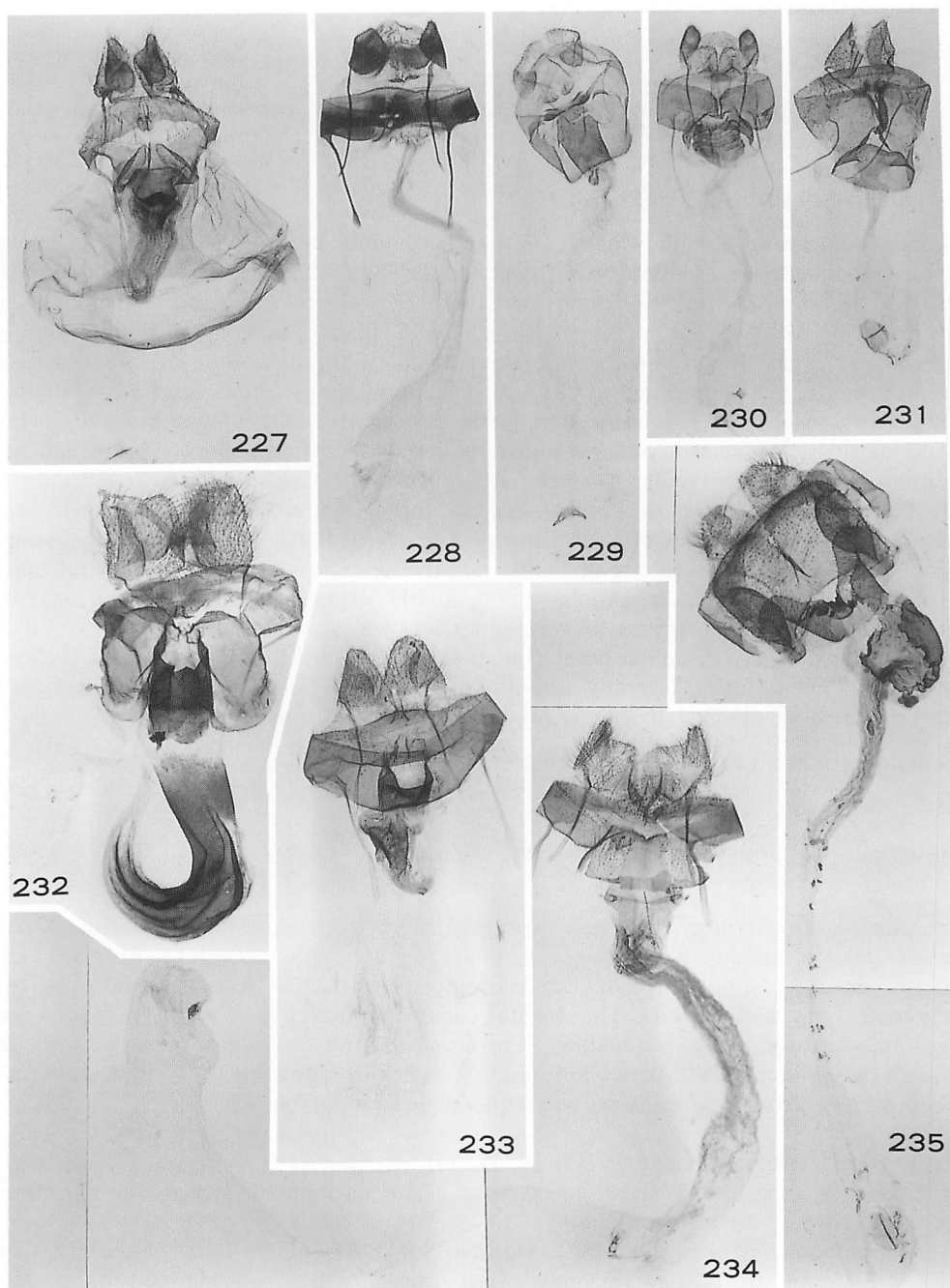
Figs 205–208. Male genitalia of *Euproctis* spp. 205. *varia* Walker. 206. *plana* Walker. 207. *staudingeri* (Leech). 208. *uniformis* (Moore).



Figs 209–214. Male genitalia of *Euproctis* spp. 209. *plagiata* (Walker). 210. *marginata* (Moore). 211. *bipartita* (Moore). 212. Sp. 6. 213. Sp. 4. 214. Sp. 3.



Figs 215–226. Male genitalia of *Euproctis* spp. 215. Sp. 2. 216. *basalis* (Moore). 217. *inconcisa* (Walker). 218. *divisa* Walker. 219. *postica* (Walker). 220. *seitzi* Strand. 221. Sp. 7. 222. *scintillans* (Walker). 223. *subnotata* (Walker). 224. *xanthorrhoea* (Kollar). 225. *virguncula* Walker. 226. Sp. 5.



Figs 227–235. Female genitalia of *Euproctis* spp. 227. Sp. 7. 228. *virguncula* Walker. 229. *scintillans* (Walker). 230. *subnotata* (Walker). 231. *inconcisa* (Walker). 232. Sp. 1. 233. *postica* (Walker). 234. *marginata* (Moore). 235. Sp. 6.

NOCTUIDAE: AGARISTINAE

Shigero Sugi

In this part eight species of the Agaristinae occurring in the Godavari area are dealt with.

Sarbanissa tricycla sp. n. (Pl. 58: 7)

Female. Forewing length 15mm. Front black with lateral whitish fringe. Palpi with terminal segment about 1.3 times longer than the second, apically slightly dilated, black with whitish fringe anterior to the second segment. Vertex black, overlaid by whitish hair. Thorax whitish, with black mark on the posterior of tegula and black longitudinal streak on patagia. Ground colour of forewing pale creamy white, with markings dark grey except subbasal round spot and longitudinal bar above it below costa, and subapical and tornal round spots and a few cuneous striae between them posterior to double postmedial line, all of which are deep red brown. Orbicular a black circle, reniform large oblique with its outer edge strongly indented, the both stigmata fused below with medial dark area which is irrorated with white. A terminal series of black lunules between veins; cilia white with black points at veins. Hindwing pale lemon yellow, with black broad marginal band, its inner edge being nearly straightish from middle of costa to vein CuA1, then parallel to termen. Cilia white, with black points on it at veins. There is no discoidal point (but present on underside). Abdomen yellow, with basal crests black laterally associated with pale yellow, and black quadrate spot on each of the 3rd to 8th segment; anal hair tuft absent.

Female genitalia (Fig. ²⁴⁰239). As illustrated.

Male unknown.

Holotype. ♀, Godavari, 18. iv. 1990. Paratype. Godavari, 1♀, 23. iv. 1990, genitalia slide 6865.

In external morphology, this new species differs from known species of *Sarbanissa* in the palpus with longer terminal segment, the vestiture of head and thorax mostly composed of delicate simple hair and the crests on the basal two segments long and raised. The frontal conical prominence is slightly higher and the apical raised ring is smaller. Furthermore, the forewing pattern and the chequered cilia of both wings are unique, indicating that the new species would be separable from *Sarbanissa* when the male is available for study.

Sarbanissa transiens (Walker) (Pl. 58: 14, 15)

Eusemia transiens Walker, 1855, List Specimens lepid. Insects Colln Br. Mus. 7: 1588.

Sarbanissa transiens (Walker): Barlow, 1982: 84, pl.25, fig.5 (male); Kobes, 1985: 18, pl. 2, fig. 18 (male) [not fig. 17, which is a female of *S. sundana* Holloway]; Holloway, 1989: 206, figs 382, 383, pl. 7, fig. 14 (male).

The type-locality of *S. transiens* (Walker) was Java. It occurs also in Sumatra (Kobes, 1985), Borneo (Holloway, 1989) and Peninsular Malaya (Barlow, 1982), flying there with two similar allies recently described: *S. sundana* Holloway, 1982, and *S. sugii* Kobes, 1992, though the last being restricted to Sumatra.

I examined a Thailand specimen of *transiens* (female, Pl. 58: 15), but this species does not appear to range further north to Himalaya and western China as considered by senior authors (Jordan, 1912; Kiriakoff, [1976]). The examination of a good series of Godavari specimens clarified that they were specifically distinct from *transiens*, and moreover, there is another species in Darjeeling to Sikkim and central Nepal as discussed below.

The male genitalia of *transiens*, already shown by Kobes (1985) and Holloway (1989), are here again illustrated from a Peninsular Malayan specimen (Fig. 238) for the facility of comparison.

Sarbanissa subalba (Leech) (Pl. 58: 11, 12)

Seudyra subalba Leech, 1890, Entomologist 23: 110.

Godavari: 1♀, 21. ix. 1989; 1♂, 27. ix. 1989; 2♀, 3. x. 1989; 1♀, 26. v. 1990; 2♂ 1♀, 7–11. vi. 1990; 1♀, 7. ix. 1991; 1♀, 25. iii. 1991; 1♂, 6. vi. 1992; 1♀, 19. vi. 1992.

On the forewing surface the costal half above cubital vein and oblique band towards tornus are finely dusted with pale cream, veins and annuli of orbicular and reniform being clearly defined by that colour. In *transiens* the oblique band is rather purely white, the dusting in subcostal space weak, and the stigmata are not sharply defined. The subtornal wine red spot on the dorsum is rather roundly triangular instead of much restricted and oblique to the dorsum as in *transiens*. In the male genitalia (Fig. 237), the valva is much broader with apex round, the harpe set more proximally and longer than in *transiens* (Fig. 238). Aedeagus rather slender, with vesica ending in a thin rod of less than half the width of that in *transiens*.

The name *subalba* has been taken as the Chinese subspecies of *transiens* by Jordan and Kiriakoff. Its use for covering the Himalayan specimens may be sound.

Sarbanissa sp. (Pl. 58: 8, 9, 10)

[? *Seudyra dissimilis* Swinhoe, 1890, Trans. ent. Soc. lond. 1890: 174.]

C. Nepal: Gandaki, Kaski Distr., Birethanti 1,020m, 1♂, 13. x. 1981 (M. Owada), genitalia slide 5271, NSMT. India: WB, Darjeeling 2,000m, 1♂, 11–20. viii. 1985 (W. Thomas), genitalia slide 6734; Sikkim, Pemayangtze 2,000m, 1♂, 20–27. viii. 1988 (W. Thomas), genitalia slide 6735; Sikkim, Dalapchand, Arिताar, 1♀, 15. x. 1991 (Tek B. Gurung & Bhim B. Mukhia).

The anterior part of the forewing from base to postmedian line is much darker and less irrorated with pale cream, with the cubital vein not clearly traced. The apical area is rather bluish black, with no wine coloured shade. The oblique whitish shade is rather reduced in width, degenerating towards the tornus. The black marginal band of hindwing is distinctly broader than the preceding and any other species in the *transiens* group.

In the male genitalia (Fig. 236), this species is readily separable from the preceding species and other allies in the broad valva with the apex oblique truncate inwards, the shorter harpe and the more robust aedeagus and apical spine on vesica, the latter somewhat S-curved and tapered to the tip.

This species is not represented in the Godavari material, but I found a Nepalese specimen in the NSMT collection. I am not sure of the possibility that the name *dissimilis* Swinhoe, used by Jordan to denote the Himalayan subspecies of *transiens*, would be applicable to this species. The type-locality of *dissimilis* is Mandalay, Myanmar.

The Chinese specimen illustrated as *transiens* in Chen (1982, fig. 2805) appears to be conspecific with this species.

Sarbanissa catacoloides (Walker) (Pl. 58: 5, 6)

Phaegorista catacoloides Walker, 1862, J. Linn. Soc. Zool. 6: 87.

Godavari: 1♂, 14. vi. 1990; 2♂ 1♀, ix. 1991; 1♀, 7. ix. 1991; 1♀, 19. ix. 1991; 1♀, 23. ix. 1991; 1♀, 7. x. 1991; 1♂, 9. x. 1991.

Readily distinguished from the preceding two species in having a small discoidal point on the upper and under surface of the hindwing, which is more prominent in the Himalayan than in the Sundaland specimens. In this species the terminal segment of palpus is markedly longer in the female than in the male, the character state never found in other related species. The male genitalia (Fig. 240) are as figured.

Sarbanissa bala (Moore) (Pl. 58: 13, 16)

Phaegorista bala Moore, 1865, Proc. zool. Soc. Lond. 1865: 795.

Godavari: 1♀, 20. vi. 1990; 1♀, 26. vi. 1990; 1♂ 1♀, 20–28. vi. 1990. Mt. Phulchouki: 1♀, 20. vi. 1992. Daman Pass: 1♀, 28. vi. 1992.

Exsula victrix (Westwood) (Pl. 58: 3)

Eusemia victrix Westwood, 1848, Cabinet Orient. Insects: 67, pl. 33, fig. 3.

Godavari: 1♂, 2. viii. 1983.

Episteme maculatrix (Duncan & [Westwood]) (Pl. 58: 1)

Eusemia maculatrix Duncan & [Westwood], 1841, in Jardine, Naturalist's Libr. 33: 88, pl. 2, fig. 3.

Godavari: 1♂, 7. vi. 1981.

Episteme adulatrix (Kollar) (Pl. 58: 2)

Eusemia adulatrix Kollar, [1844], in Hügel, Kaschimir und das Reich Siek 4: 464, pl. 20, fig. 1.

Godavari: 2♂, 17. viii. 1963; 1♂, 7. viii. 1978; 1♂, 13. ix. 1978; 1♂, 3. vi. 1980; 1♂, 13. vi. 1984; 1♀, 18. vii. 1987; 1♂, 14. vi. 1990.

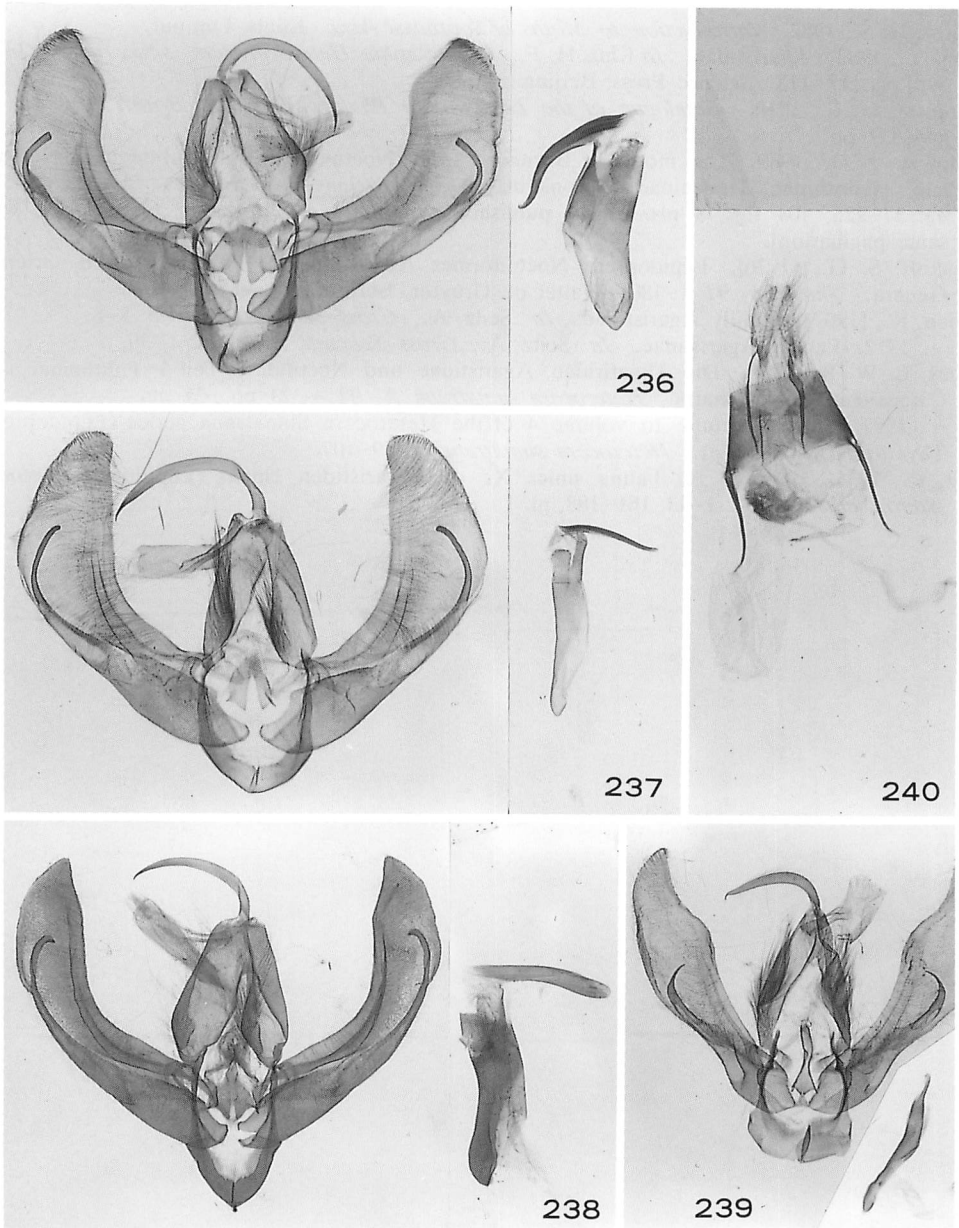
Chelonomorpha austeni (Moore) (Pl. 58: 4)

Eusemia austeni Moore, 1879, in Hewitson & Moore, descr. new Indian lepid. Insects Colln late Mr Atkinson: 11.

Godavari: 1♂, 19. iv. 1981 (A. Thapa).

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Figs 236–239. Male genitalia of *Sarbanissa* spp. 236. Sp., Darjeeling. 237. *subalba* (Leech). 238. *transiens* (Walker), Peninsular Malaya. 239. *catacoloides* (Walker).
 Fig. 240. Female genitalia of *Sarbanissa tricycla* sp. n.

Addenda to Part 1

GEOMETRIDAE

Katsumi Yazaki

OENOCHROMINAE

Noreia vulsipennis Prout (Pl. 59: 2)*Noreia vulsipennis* Prout, 1934, in Seitz, Gross-Schmett. Erde 12: 136.

Godavari: 1♂, 23. iii. 1992.

Eumelea biflavata assamensis Prout (Pl. 59: 1)*Eumelea biflavata assamensis* Prout, 1921, in Seitz, Gross-Schmett. Erde 12: 30.

Godavari: 1♂, 6. x. 1991.

GEOMETRINAE

Dindica subrosea (Warren) (Pl. 59: 15)*Perissolophia subrosea* Warren, 1893, Proc. zool. Soc. Lond. 1893: 350.

Godavari: 1♂, 16. iii. 1992; 1♂, 7. v. 1992.

A very rare species. Only two male holotypes (*subrosea* and its junior synonym *subsimilis*) from N. E. India have been known (Inoue, 1990). In appearance the Godavari specimens show a slight difference from the holotypes figured by Inoue (1990, figs 7, 8) in having a fuscous postmedian band on hindwing, but they are exactly identical in the male genitalia (cf. Inoue, 1990, fig. 95).

Agathia antitheta Prout (Pl. 59: 3)*Agathia antitheta* Prout, 1932, in Seitz, Gross-Schmett. Erde 12: 70, pl. 9, line d.

Godavari: 1♂, 4. iii. 1992.

Agathia lycaenaria lycaenaria (Kollar) (Pl. 59: 4)*Geometra lycaenaria* Kollar, [1844], in Hügel, Kashmir und das Reich Siek 4: 486.

Godavari: 1♀, 8. viii. 1991.

Uliocnemis castalaria (Oberthür) (Pl. 59: 5)*Phorodesma castalaria* Oberthür, 1916, Etudes Lépid. comparée 12: 111, pl. 387, fig. 3268.

Godavari: 1♂, 23. ix. 1991.

Gelasma inaptaria (Walker) (Pl. 59: 13)*Thalassodes inaptaria* Walker, [1863], List Specimens lepid. Insects Colln Br. Mus. 26: 1560.

Godavari: 1♂, 7. ix. 1991.

Spaniocentra lyra (Swinhoe) (Pl. 59: 6)*Oenospila lyra* Swinhoe, 1892, Trans. ent. Soc. Lond. 1892: 6.

Godavari: 1♂, 12. ix. 1991.

Comibaena tenera (Warren) (Pl. 59: 7)*Chlorochromodes tenera* Warren, 1896, Novit. zool. 3: 103.

Godavari: 1♂, 20. ii. 1992; 1♂, 18. iii. 1992; 1♂, 24. iii. 1992. Mt. Phulchouki: 3♂, 23–30. iii. 1992.

Hemistola flavicosta Inoue (Pl. 59: 11)*Hemistola flavicosta* Inoue, 1982, Bull. Fac. domest. Sci. Otsuma Wom. Univ. 18: 131, figs 6D, 9C.

Godavari: 3♂, v–vii. 1973 (T. Miyashita).

Hemistola grandis sp. n. (Pl. 59: 12, holotype)

Expanse 34mm. Apex of forewing acutely pointed. Hindwing produced to a pointed apex at vein M3. Wings bluish green. In forewing, ante- and postmedian lines indicated by a row of small white spots on veins; discal dot of an indistinct dark dash; cilia white, with brown dots beyond veins. In hindwing, postmedian line white, strongly dentate from costa to vein M2, then obsolete, leaving white spots on veins; discal dot and cilia as in forewing.

Male genitalia (Fig. 241). Similar to those of *H. orbicurosa* Inoue from Taiwan (cf. Inoue, 1978: 213, fig. 22). Valva with ventral angle rather bluntly produced; sacculus broader than that of *orbiculosa*, with a thorn-like process arising from near base of dorsal margin, while in *orbiculosa* from middle; distal process of sacculus bearing a thorn-like process before apex. Aedeagus as in *orbicurosa*. Eighth sternite deeply bilobed, with round apex.

Holotype. ♂, Godavari, 26. ix. 1991.

This species is easily distinguished from the other congeners by the larger size, bluish ground color of wings, and indistinct, broken transverse lines.

Chlorissa aquamarina (Hampson), comb. n. (Pl. 4: 22)*Hemithea aquamarina* Hampson, 1895, Fauna Br. India (Moths) 3: 491.*Chlorissa rubripicta* : Yazaki, 1992, Tinea 13 (Suppl. 2): 13, pl. 4, fig. 22 (nec Warren).Recorded in part 1 of this series as *Chlorissa rubripicta* (Warren).

The male genitalia (Fig. 246) clearly show this species to belong *Chlorissa*. This species has been considered to inhabit N. India and Taiwan, but the Taiwanese population is distinct specifically as described below.

Chlorissa arcana sp. n. (Pl. 59: 8, holotype)*Hemithea aquamarina* : Inoue, 1978: 212, fig. 17; Chang, 1990: 99, fig. (nec Hampson).Hardly separable from *aquamarina* in appearance.

Male genitalia (Fig. 245). Valva straightish in apical area while it is bent dorsally in *aquamarina* ; base of costa highly raised dorsally forming a large

triangular sclerotized lobe with a stout process; basal process of sacculus shorter. Eighth sternite with central projection much longer.

Female genitalia (Fig. 253). Corpus bursae much longer and slenderer than that of *aquamarina* (Fig. 254).

Holotype. ♀, Taiwan, Taitung, Kuanshan Yakou (2,600m), 11–12. vi. 1989 (M. Owada). Paratypes. Taiwan: Chiayi, Mt. Alishan (2,200m), 1♀, 19–22. vi. 1973 (M. Owada), 2♂ 1♀, 2–5. viii. 1984 (K. Yazaki); Nantou, Lushan Spa (1,200m), 2♀, 29–30. iii. 1982 (H. Yoshimoto), 1♀, 24–27. viii. 1983 (H. Yoshimoto), 1♀, 9. iii. 1985 (K. Yazaki); Nantou, Yushih (1,700m), 1♀, 28. xii. 1988 (A. Kawabe).

Paramaxates taiwana Yazaki (Pl. 59: 14)

Paramaxates taiwana Yazaki, 1988, Tinea 12: 116, figs 5, 6, 10, 13.

Godavari: 1♂ 1♀, 22. iii. 1992; 2♂, 30. iii. 1992.

This species was recently described from Taiwan, and is recorded here for the first time from the Himalayas.

Comostola subtiliaria demeritaria Prout (Pl. 59: 9)

Comostola demeritaria Prout, 1917, Novit. zool. 24: 303.

Godavari: 1♂, 9. xi. 1991.

Comostola leucosticta sp. n. (Pl. 59: 10, holotype)

Nearly identical with *C. maculata* (Moore) in size and maculation. Both wings with discal reddish spot elliptical rather than round; postmedian row of creamy white spots not edged distally with red, rather large and prominent at hindmargin.

Male genitalia (Fig. 244). Valva with costa strongly sclerotized in proximal half, bearing a small triangular process at middle, while in *maculata* (Fig. 243) costa bears a long stick-like process; median spinous band-like sclerite much longer; sacculus broadly sclerotized, bearing a row of short spines along dorsal margin. Aedeagus vesica with a small bunch of short spines. Caudal margin of eighth sternite peaked bilaterally, minutely knotted mesally.

Holotype. ♂, Godavari, 15. iv. 1990.

In spite of the similarity in appearance, this species is not so closely related to *maculata* which is considered to be allied to Taiwanese *C. ocellulata* Prout in having a long stick-like process to costa of valva. The closest relative of this new species is *C. virago* Prout from N. India, W. China and Myanmar, which has similar structure of male genitalia (Fig. 242) to this species, but is distinguished by having broader valva with rather simple costa and broader sacculus, much shorter row of spines on dorsal margin of sacculus, and two small bunches of short spines on aedeagus vesica.

STERRHINAE

Synegiodes histrionaria Swinhoe (Pl. 59: 16)

Synegiodes histrionaria Swinhoe, 1892, Trans. ent. Soc. Lond. 1892: 12.

Godavari: 1♂, 16. iii. 1992.

Anisodes obstataria imbuta (Warren) (Pl. 59: 17)*Perixera imbuta* Warren, 1897, Novit. zool. 4: 58.

Godavari: 1♂, 9. xi. 1991; 1♀, 26. ii. 1992; 1♂, 29. ii. 1992.

Scopula moorei moorei (Cotes & Swinhoe) (Pl. 59: 18)*Anisodes moorei* Cotes & Swinhoe, 1888, Cat. Moths India 4: 532.

Godavari: 1♂, 28. ii. 1992; 1♂, 1. iii. 1992.

LARENTIINAE

Trichopteryx virens sp. n. (Pl. 59: 19, holotype)

Expanse 28mm. Forewing pale green, traversed by wavy olive and fuscous lines; subbasal line black, expanded distally at hindmargin; subterminal line fuscous brown, double, weakly sinuous; a series of fuscous brown dots beyond subterminal line; terminal line blackish brown, interrupted at veins; discal dot fuscous, large; cilia pale ochreous, dotted by fuscous on veins. Hindwing creamy white; postmedian and subterminal lines represented by a row of fuscous dots on veins; distal area broadly suffused with fuscous; terminal line fuscous brown, interrupted at veins; discal dot fuscous; cilia as in forewing.

Male genitalia (Fig. 247). Uncus rather short and stout. Costal process much shorter than valvula, gently curved dorsally; sacculus well sclerotized, ending in a short process with pointed apex. Aedeagus slender, slightly curved dorsally.

Holotype. ♂, Mt. Phulchouki, 29. ii. 1992.

The assignment of this new species to *Trichopteryx* is provisional, since in the male the frenulum is absent, the vein Sc+R1 of hindwing anastomoses with Rs and the costa of valva is rather strongly sclerotized. Examination of the female genitalia may clarify the systematic position of this species.

Trichopterigia adiopa Prout (Pl. 59: 20)*Trichopterigia adiopa* Prout, 1958, Bull. Br. Mus. (Nat. Hist.) Ent. 6: 454, fig. 51.

Godavari: 1♂, 14. iii. 1992; 1♂, 27. iii. 1992. Mt. Phulchouki: 1♂, 29. ii. 1992; 1♂, 28. iii. 1992. Other material examined. Holotype of *adiopa* (Fig. 260), male, labeled "Darjeeling (Pilcher)/19. 3. 89", in British Museum (Natural History), London.

The investigation in early spring revealed that the *Trichopterigia* is richly represented in the Godavari area. In addition to the two species recorded in part 1 of this series, eight species, of which six were new to science, were taken from February to March, 1992. Five of eight species were represented only by a sole male specimen, suggesting that more species would be discovered.

T. adiopa was described from India (Darjeeling) and Bhutan. The male genitalia of Nepalese specimens (Fig. 248) are exactly identical with those of holotype of *adiopa* (Fig. 250).

This and the following seven species are characterized in the male genitalia by having a developed and modified transtilla.

Trichopterigia fulvifasciata sp. n. (Pl. 59: 21, holotype)

Expanse 23mm. Slightly smaller than *adiopa*. In forewing, subbasal line broader in anterior half, lacking a black blotch at hindmargin found in *adiopa*; antemedian fascia consisting of two fuscous lines, filled in with pale orange; space between median and postmedian fasciae suffused with pale orange from lower margin of cell to hindmargin; subterminal double line as in *adiopa*; subterminal spots brownish orange instead of brown. Hindwing creamy white, while it is pure white in *adiopa*; discal dot as in *adiopa*.

Male genitalia (Fig. 249). Uncus rather short and stouter than in *adiopa*; apex bluntly pointed. Costal process arched dorsally in proximal third; transtilla shorter, with slightly dentate lateral margin, while it is densely covered with denticles in *adiopa*; sacculus rather stout. Juxta simple, while in *adiopa* it is keel-shaped, covered with minute spines in median area. Aedeagus shorter.

Holotype. ♂, Godavari, 22. ii. 1992.

Trichopterigia nepalensis sp. n. (Pl. 59: 22, holotype)

Expanse 23mm. Very similar to *adiopa*. Forewing with subbasal line slightly slenderer at hindmargin than in *adiopa*; median area tinged with pale brown instead of rufous brown; subterminal spots as in *adiopa*. Hindwing as in *adiopa*.

Male genitalia (Fig. 251). Uncus stouter than in *adiopa*, with bluntly pointed apex. Costal process rather short; transtilla covered with small denticles; sacculus gently curved dorsally, gradually tapering towards blunt apex which is roundly dilated in *adiopa*, bearing a small digitate process on dorsal margin near base. Juxta bilobed towards extremity, which is finely setose. Aedeagus a little slenderer.

Holotype. ♂, Godavari, 22. ii. 1992.

Trichopterigia placida sp. n. (Pl. 59: 23, holotype)

Expanse 24–26mm. Nearly identical with *nepalensis* in appearance, but subbasal line of forewing thin, with a short black streak along hindmargin instead of a small black blotch.

Male genitalia (Fig. 252). Uncus slightly longer than in *nepalensis*. Transtilla shorter, its apical portion finely scobinated; sacculus a little longer, strongly curved dorsally before apex, lacking a subbasal digitate process. Juxta simple, narrow, constricted near middle. Aedeagus shorter and stouter.

Holotype. ♂, Godavari, 23. ii. 1992. Paratypes. India, Bengal, Darjeeling, Batasi (2,200m), 2♂, 28. iii. 1983 (H. Yoshimoto).

Distribution. Nepal and India.

Trichopterigia melanogramma sp. n. (Pl. 59: 24, holotype)

Expanse 24mm. Forewing pale olive green, with a black streak on hindmargin from base to before median line; subbasal line thin, black, oblique from costa, sharply angled on vein M3, then curved inwardly to hindmargin; antemedian line thin, black, strongly curved outwardly, sharply angled on vein Cu2, then oblique to hindmargin; median line thin, black, oblique from costa to vein M3, then untraceable to hindmargin; subterminal inner line thin, not interrupted between

veins R5 and M1; subterminal spots pale brown. Hindwing as in *adiopa*.

Male genitalia (Fig. 255). Uncus rather short, round at apex. Transtilla ending in a large spherical lobe, bearing conical spines; sacculus with a digitate process at subbase. Juxta simple, narrow in basal third. Aedeagus long, slightly sinuous.

Holotype. ♂, Godavari, 27. ii. 1992.

***Trichopterigia harutai* sp. n.** (Pl. 59: 25, holotype)

Expanse 26–28mm. Somewhat similar in appearance to *adiopa*, but larger in size. Forewing paler, slightly yellowish; subbasal and antemedian lines strongly excurved and more sinuous; subterminal inner line not interrupted; subterminal spots rather obscure. Hindwing creamy white, with markings as in *adiopa*.

Male genitalia (Fig. 256). Uncus stout, sharply pointed at apex. Transtilla ending in a large, forked process; sacculus long, rather strongly curved dorsally. Juxta simple, nearly as in *melanogramma*. Aedeagus long and stout, slightly sinuous.

Holotype. ♂, Godavari, 23. ii. 1992. Paratypes. Godavari: 1♂, 27. ii. 1992; 1♂, 29. ii. 1992. India, Bengal, Darjeeling, Batasi (2,200m), 2♂, 28. iii. 1983 (H. Yoshimoto).

Distribution. Nepal and India.

***Trichopterigia albipunctata* sp. n.** (Pl. 59: 26, holotype)

Expanse 27mm. Forewing pale green, with a large, round white spot below costa between median and postmedian lines below costa, and a smaller one at hindmargin; a large white blotch just beyond subterminal line; subbasal line as in *adiopa*; antemedian, median and postmedian lines double, pale fuscous, indistinct; subterminal line as in *harutai*, but interrupted between veins M3 and CuA1, edged with white from costa to vein M2 and from vein CuA1 to hindmargin. Hindwing pure white; discal dot small, indistinct.

Male genitalia (Fig. 257). Uncus stout, bluntly pointed at apex. Transtilla ending in a large, horn-like setose process; sacculus rather short, stout, broadened beyond middle, gradually tapering towards round apex. Juxta bilobed towards extremity, which is densely covered with denticles. Aedeagus slightly sinuous.

Holotype. ♂, Godavari, 3. ii. 1992.

In this occasion, another *Trichopterigia* species from India is described as follows.

***Trichopterigia superba* sp. n.** (Pl. 59: 27, holotype)

Expanse 26–27mm. Forewing pale olive green; subbasal line thin, black, somewhat broadened in posterior third; antemedian line inconspicuous; median and postmedian fasciae consisting of two or three sinuous black lines; median row of rufous spots below cell between median and postmedian fasciae; subterminal fascia represented by a double row of black dots on veins; subterminal spots rufous. Hindwing pale fuscous brown; discal dot fuscous brown; cilia white, with fuscous brown dots beyond veins.

Male genitalia (Fig. 259). Uncus stout, with round apex. Transtilla short, finely setose; sacculus long, rather straightish. Juxta simple, slightly dilated towards extremity. Aedeagus rather broad, a little curved ventrally.

Holotype. ♂, India, W. Sikkim, Choka (3,050m), 23–24. ix. 1983 (M. Owada). Paratype. India, W. Bengal, Darjeeling, Tonglu (3,040m), 1♂, 6. x. 1983 (M. Owada).

Distribution. India.

Trichopterigia micradelpha Prout (Pl. 59: 28)

Trichopterigia micradelpha Prout, 1958, Bull. Br. Mus. (Nat. Hist.) Ent. 6: 454, fig. 53.

Godavari: 1♂, 27. ii. 1992; 1♂, 28. ii. 1992. Mt. Phulchouki: 1♂, 9. iii. 1992.

Although the venation of both wings is exactly identical with that of *Trichopterigia*, this species is unique among the congeners in the structure of male genitalia (Fig. 258): costa of valva confluent with valvula from base to before apex; sacculus short, bearing a bunch of short spines on apical portion. Further study is needed to clarify the systematic position of this species.

Brabira artemidora pallida Moore (Pl. 59: 29)

Brabira pallida Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 271, pl.8, fig. 12.

Godavari: 1♂, 22. ii. 1992; 1♂, 27. ii. 1992; 1♂, 2. iii. 1992.

Macrohastina gemmifera (Moore) (Pl. 59: 30)

Acidalia ? gemmifera Moore, 1868, Proc. zool. Soc. Lond. 1867: 644.

Mt. Phulchouki: 1♂, 15. vi. 1992.

Sauris ignobilis Butler (Pl. 59: 31)

Sauris ignobilis Butler, 1880, Ann. Mag. nat. Hist. (5) 6: 227.

Godavari: 1♂, 8. xi. 1991.

Scotopteryx duplicata duplicata (Warren) (Pl. 60: 1)

Ortholitha duplicata Warren, 1893, Proc. zool. Soc. Lond. 1893: 385.

Mt. Phulchouki: 1♀, ix. 1991.

Xenortholitha sp. (Pl. 6: 21)

Xenortholitha propinguata epigrypa : Yazaki, 1992, Tinea 13 (Suppl. 2): 18, pl. 6, fig. 21 (nec Prout).

After publishing the part 1 of this series, I examined some specimens of *Xenortholitha* secured from Nepal and India, and found that the sole female from Godavari, recorded as *X. propinguata epigrypa*, differs from *p. epigrypa* both in appearance and genitalia. Further material especially of the male from Godavari is needed for exact identification.

Xenortholitha falcata sp. n. (Pl. 59: 33, holotype)

Expanse 25–27mm. Similar to *X. propinguata epigrypa* (Prout), but much larger in size, apex of forewing more strongly falcate. Forewing dark fuscous brown, much darker than in *epigrypa*; discal dot black, rather large and more prominent than in *epigrypa*; postmedian line creamy white, oblique from costa to vein M3, then obscure, slightly sinuous to hindmargin; subterminal line represented by a row of creamy white spots as in *epigrypa*; terminal area sparsely irrorated with gray while in *epigrypa* it is densely covered with pale ochreous; cilia pale rufous instead of pale ochreous. Hindwing uniformly pale fuscous brown, much darker than in *epigrypa*, with a faint trace of pale postmedian line; discal dot blackish brown, obscure; cilia pale rufous.

Male genitalia (Fig. 263). Almost as in *epigrypa* (Fig. 265), but uncus much longer.

Female genitalia (Fig. 266). Nearly identical with those of *epigrypa* (Fig. 267), but ductus bursae rather strongly sclerotized; signum of right side larger.

Holotype. ♂, Godavari, 22. iii. 1992. Paratypes. Godavari: 1♂, 23. iii. 1992. Mt. Phulchouki: 1♀, 8. iv. 1992.

This new species is distinguished from the nominal race of *propinguata* (Kollar) by the darker terminal area of forewing without apical triangular marking. Another similar species, *X. latifusata* (Walker), from N. W. India to China and Taiwan is characterized by having biangulate discocellulars of hindwing.

X. propinguata was described from Masuri, N. W. India, and the following four subspecies are recognized: *suavata* (Christoph) (Amur and Ussuri), *niphonica* (Butler) (Japan), *epigrypa* (Prout) (Sikkim) and *superlata* (Prout) (Luzon). Dissection of the genitalia of *epigrypa* (Figs 265, 267), *niphonica* (Figs 264, 268) and *superlata* (Fig. 269; the male is unavailable for me) shows that these three taxa may represent distinct species. However, for the lack of material especially from the type locality of *propinguata*, I am not able to conclude their exact taxonomic status.

Idiotephria occidentalis sp. n. (Pl. 59: 32, holotype)

Expanse 24–25mm in male, 27mm in female. Very similar and closely related to *nakatomii* Inoue from Taiwan. Forewing somewhat paler and more brownish, with markings slightly less prominent; discal spot smaller; terminal row of fuscous brown spots smaller and inconspicuous. Hindwing somewhat darker; discal spot smaller; postmedian fuscous line obscure, situated more distally. Underside of wings more weakly marked than in *nakatomii*.

Male genitalia (Fig. 261). Uncus shorter than in *nakatomii*. Juxta rather long, more deeply bifurcated; dorsal process of juxta shorter and stouter.

Female genitalia (Fig. 271). Ductus bursae much longer than in *nakatomii*. Corpus bursae somewhat longer.

Holotype. ♂, Godavari, 10. iii. 1992. Paratypes. Godavari: 1♂, same data as holotype; 1♀, 12. iii. 1992.

The genus *Idiotephria* Inoue, 1943, comprised of four species, has been confined to the Far Eastern Asia (Ussuri, Japan and Taiwan) in distribution. This new species extends the range of *Idiotephria* far west to the Himalayan region.

Trichoplites lateritiata (Moore) (Pl. 60: 2)

Anticlea lateritiata Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 273.

Mt. Phulchouki: 2♂, ix. 1991.

Photoscotia miniosata miniosata (Walker) (Pl. 60: 3)

Scotosia miniosata Walker, 1862, List Specimens lepid. Insects Colln Br. Mus. 25: 1354.

Godavari: 2♂, 18. iii. 1992. Mt. Phulchouki: 1♂, 5. iv. 1992; 1♀, 7. iv. 1992.

Hysterura protagma protagma Prout (Pl. 60: 4)

Hysterura protagma Prout, 1940, in Seitz, Gross-Schmett. Erde 12: 311, pl. 31, line d.

Mt. Phulchouki: 1♂, 2–3. vii. 1987 (T. Miyashita).

Hydrelia subobliquaria (Moore) (Pl. 60: 5)

Timandra subobliquaria Moore, 1868, Proc. zool. Soc. Lond. 1867: 644.

Mt. Phulchouki: 1♀, 2–3. vii. 1987 (T. Miyashita).

Perizoma seriata (Moore) (Pl. 60: 6)

Cidaria seriata Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 278.

Mt. Phulchouki: 1♂ 1♀, ix. 1991.

Perizoma plumbeata (Moore) (Pl. 60: 7)

Anticlea plumbeata Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 273.

Mt. Phulchouki: 1♂, ix. 1991.

Gagitodes olivacea Warren (Pl. 60: 8)

Gagitodes olivacea Warren, 1893, Proc. zool. Soc. Lond. 1893: 382, pl. 30, fig. 6.

Daman Pass: 1♂, 28. vi. 1992.

Collix leuciota Prout (Pl. 60: 11)

Collix leuciota Prout, 1929, Novit. zool. 35: 66.

Godavari: 1♂, 2. xi. 1991.

Chloroclystis rubroviridis (Warren) (Pl. 60: 10)

Gymnoptera rubroviridis Warren, 1896, Novit. zool. 3: 127.

Godavari: 1♀, 27. ii. 1992; 1♀, 1. iii. 1992; 1♂, 4. iii. 1992.

Chloroclystis papillosa (Warren) (Pl. 60: 9)

Aetheolepis papillosa Warren, 1896, Novit. zool. 3: 124.

Godavari: 1♂, v–vii. 1973 (T. Miyashita).

ENNOMINAE

Ligdia coctata Guenée (Pl. 60: 12)

Ligdia coctata Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 10: 210.

Mt. Phulchouki: 1♂, 2. vi. 1992.

Hydatocapnia marginata (Warren) (Pl. 60: 13)

Zamarada (?) *marginata* Warren, 1893, Proc. zool. Soc. Lond. 1893: 388, pl. 32, fig. 22.

Godavari: 1♂, 11. ix. 1991.

Myrteta planaria Walker (Pl. 60: 17)

Myrteta planaria Walker, 1861, List Specimens lepid. Insects Colln Br. Mus. 23: 831.

Godavari: 1♂, 20. v. 1979.

Swannia marmarea Prout (Pl. 60: 14)

Swannia marmarea Prout, 1926, J. Bombay nat. Hist. Soc. 31: 784, pl. 1, fig. 16.

Godavari: 1♂, 20. iii. 1992; 1♂, 3. iv. 1992.

This species was described from Burma [Myanmar] on two males and two females, and no further locality has yet been recorded. Prout (1926) established the genus *Swannia* for this species, and suggested it to be a derive of *Myrteta*. The male genitalia (Fig. 276), however, show *Swannia* to stand rather close to *Lomographa* in having long uncus, slender gnathos and simple valva. In *Myrteta* the uncus is short with broad base, the gnathos is rather stout with a central tongue-shaped process, and the valva has a long costal process.

Plutodes warreni Prout (Pl. 7: 24)

Plutodes warreni Prout, 1923, Ann. Mag. nat. Hist. (9) 11: 322.

Plutodes costatus: Yazaki, 1992, Tinea 13 (Suppl. 2): 26, pl. 7, fig. 24 (nec Butler).

Through the advice of Mr Sommerer, I found the misidentification of this species with *P. costatus* in part 1 of this series. This species was described from N. W. India, and seems to be confined to N. W. Himalaya in distribution, whereas *costatus* is a rather widespread species occurring in N. E. India, Thailand (unrecorded), Malaya and Sumatra. Despite the very similar appearance, the male genitalia of these two species (Figs 274, 275) are widely different from each other.

Anonychia diversilinea Warren (Pl. 60: 15)

Anonychia diversilinea Warren, 1897, Novit. zool. 4: 101.

Godavari: 1♀, xi. 1991.

Calletaera subexpressa (Walker) (Pl. 60: 20)

Acidalia subexpressa Walker, 1861, List Specimens lepid. Insects Colln Br. Mus. 23: 773.

Godavari: 1♂, 23. vi. 1992.

Xenoplia foraria (Guenée) (Pl. 60: 18)

Percnia foraria Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 10: 217.

Mt. Phulchouki: 1♂, 16. v. 1992.

Metapercnia ductaria (Walker) (Pl. 60: 16)

Rhyparia ductaria Walker, 1862, List Specimens lepid. Insects Colln Br. Mus. 24: 1111.

Godavari: 1♀, 18. vii. 1990; 1♂, 2. xi. 1991.

Erebabraxas metachromata (Walker) (Pl. 60: 19)

Abraxas metachromata Walker, 1862, List Specimens lepid. Insects Colln Br. Mus. 24: 1122.

Godavari: 1♂, v–vii. 1973 (T. Miyashita).

Biston regalis regalis (Moore) (Pl. 10: 2)

Amphidasis regalis Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 234.

Biston bengaliaria : Yazaki, 1992, Tinea 13 (Suppl. 2): 33, pl. 10, fig. 2 (nec Guenée).

This species was erroneously recorded as *bengaliaria* in part 1 of this series.

Hyperythra lutea ennomaria Guenée (Pl. 60: 21)

Hyperythra ennomaria Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 9: 103.

Godavari: 1♂, 26. iii. 1992.

Mimochroa albifrons (Moore) (Pl. 60: 22)

Endropia albifrons Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 229.

Godavari: 1♂, 3. xi. 1991; 1♂, 6. xi. 1991.

Planociampa augustinei sp. n. (Pl. 60: 23, holotype)

Expanse 35–36mm. Wings shorter and broader than in *P. antipala* Prout; termen rather strongly sinuous. Forewing pale greenish gray instead of brownish gray in *antipala*; antemedian line serrate, black, sharply angled outwardly on vein M1; postmedian line sinuous, black, strongly produced outwardly between veins R5 and M1, then oblique to hindmargin; space between ante- and postmedian lines slightly darker than the rest; subterminal line represented only by black dashes on veins R2 and R5; terminal line black; cilia pale brownish gray. Hindwing pale

brownish gray, densely irrorated with pale fuscous brown in distal half; median line faint, fuscous brown; terminal line blackish brown. Underside of wings with fuscous brown subterminal line.

Male genitalia (Fig. 272). Uncus short and broad, shallowly bifurcate at apex. Valva broader than in *antipala* (Fig. 273), slightly asymmetrical, right valva more deeply bilobed at apex than left one; sacculus broadly sclerotized, terminating in a digitate process in right side, in a small lobe in left side. Saccus wide, deeply concave mesally. Aedeagus slightly longer and slenderer than in *antipala*, with a horn-like process at middle; vesica without cornutus.

Female genitalia (Fig. 277). Ductus bursae rather short, slender. Corpus bursae large, elliptical; signum large, with serrate margin.

Holotype. ♂, Godavari, 6. iii. 1992. Paratypes. Godavari, 1♂, 28. ii. 1992; 1♀, 11. iii. 1992.

The genus *Planociampa* Prout, 1930 has been represented only by two species, *modesta* (Butler) from Japan and *antipala* Prout from Japan and China. This is the first record of this genus from the Himalayan region.

Garaeus albipuncta (Warren) (Pl. 60: 24)

Hygrochroa albipuncta Warren, 1896, Novit. zool. 3: 145.

Godavari: 1♀, 3. x. 1989; 1♂, 30. iii. 1990; 1♂, 26. iv. 1990; 1♂, 5. v. 1990; 1♀, 20. vi. 1990; 1♂, 7. v. 1991.

Scardamia metallaria Guenée (Pl. 60: 25)

Scardamia metallaria Guenée, 1857, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 9: 89.

Godavari: 1♂, 27. ix. 1991; 1♀, 28. ii. 1992.

Sirinopteryx undulifera Warren (Pl. 60: 27)

Sirinopteryx undulifera Warren, 1893, Proc. zool. Soc. Lond. 1893: 385.

Godavari: 1♀, 8. xii. 1991; 1♂, 27. i. 1992.

Corymica deducta caustlomaria Moore (Pl. 60: 26)

Corymica caustlomaria Moore, 1888, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 231.

Godavari: 1♀, 15. xi. 1991.

Acknowledgements

I am much indebted to Ms L. M. Pitkin, British Museum (Nat. Hist.), London for the loan of type specimens of *Trichopterigia* in the museum. I also wish to express my sincere gratitude to Mr M. D. Sommerer, Munich, for his kind advice for my study.

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DREPANIDAE

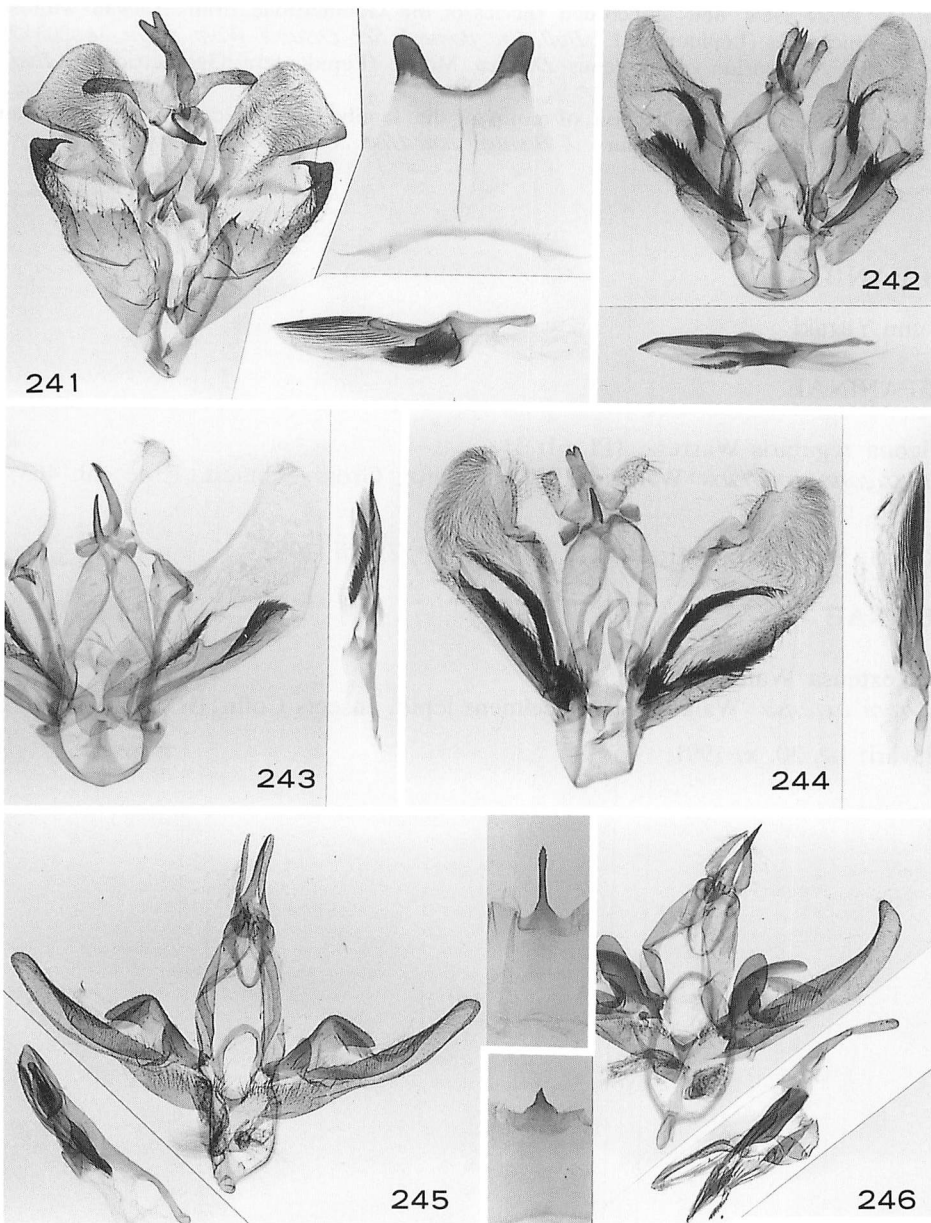
Katsumi Yazaki

DREPANINAE**Ditrigona regularis** Warren (Pl. 61: 3)*Ditrigona regularis* Warren, 1922, in Seitz, Gross-Schmett. Erde 10: 463, pl. 48, row k.

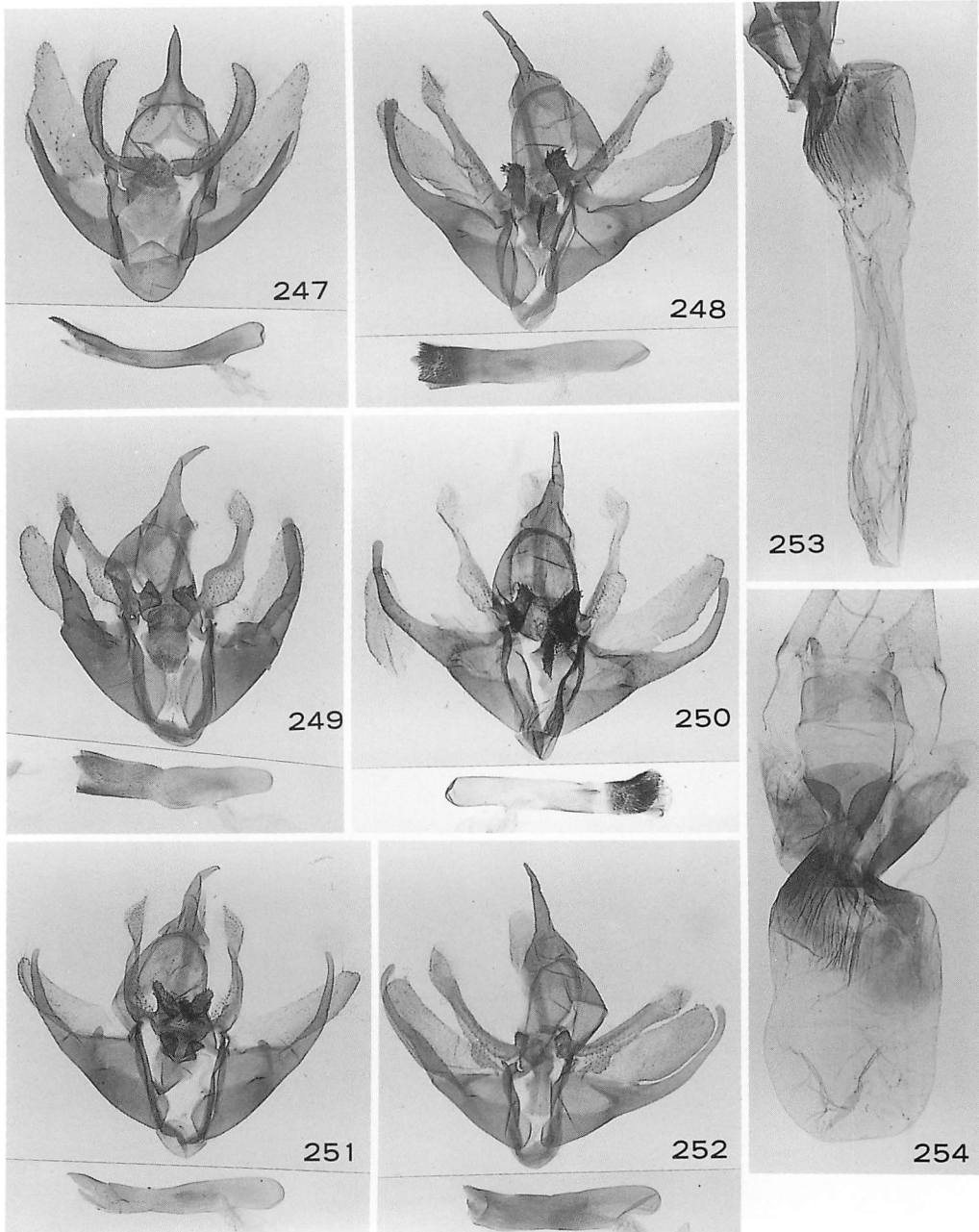
Godavari: 1♀, 25. xi. 1991; 1♂, 17. iii. 1992; 1♂, 21. iii. 1992.

ORETINAE**Oreta extensa** Waler (Pl. 61: 4)*Oreta extensa* Walker, List Specimens lepid. Insects Colln Br. Mus. 5: 1166.

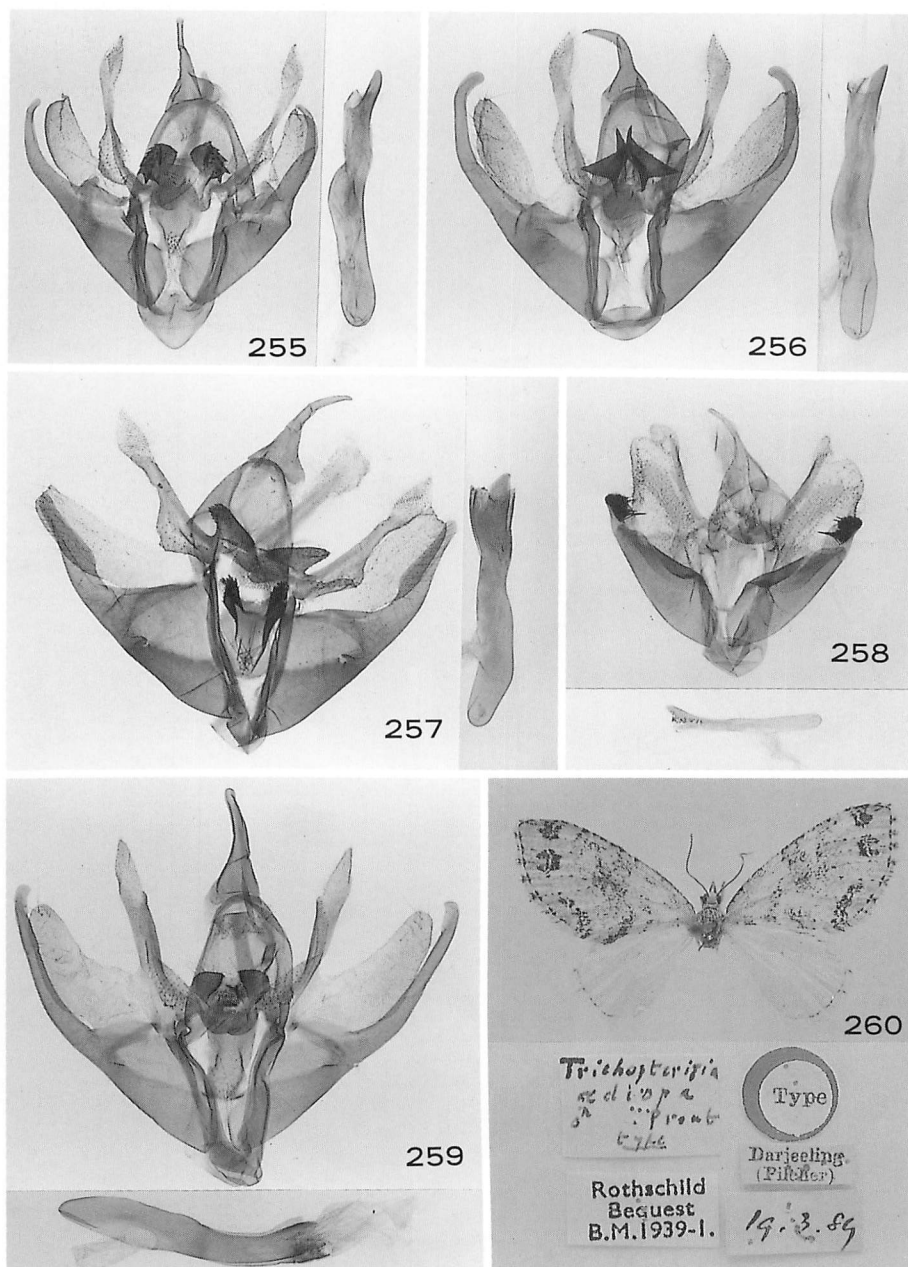
Godavari: 1♂, 30. x. 1991.



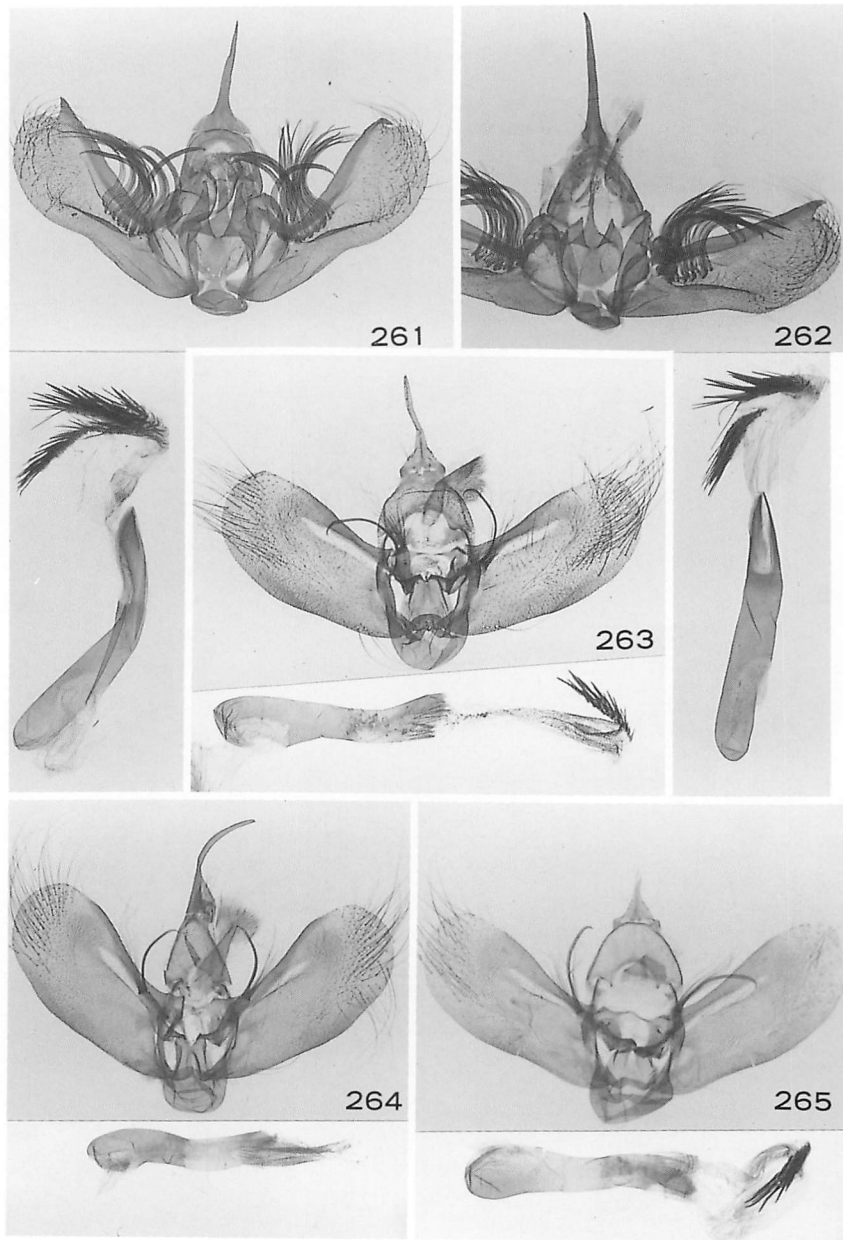
Figs 241–246. Male genitalia. 241. *Hemistola grandis* sp. n., holotype. 242. *Comostola virago* Prout, Darjeeling. 243. *C. maculata* (Moore), Darjeeling. 244. *Comostola leucosticta* sp. n., holotype. 245. *Chlorissa arcana* sp. n., paratype. 246. *Ch. aquamarina* (Hampson).



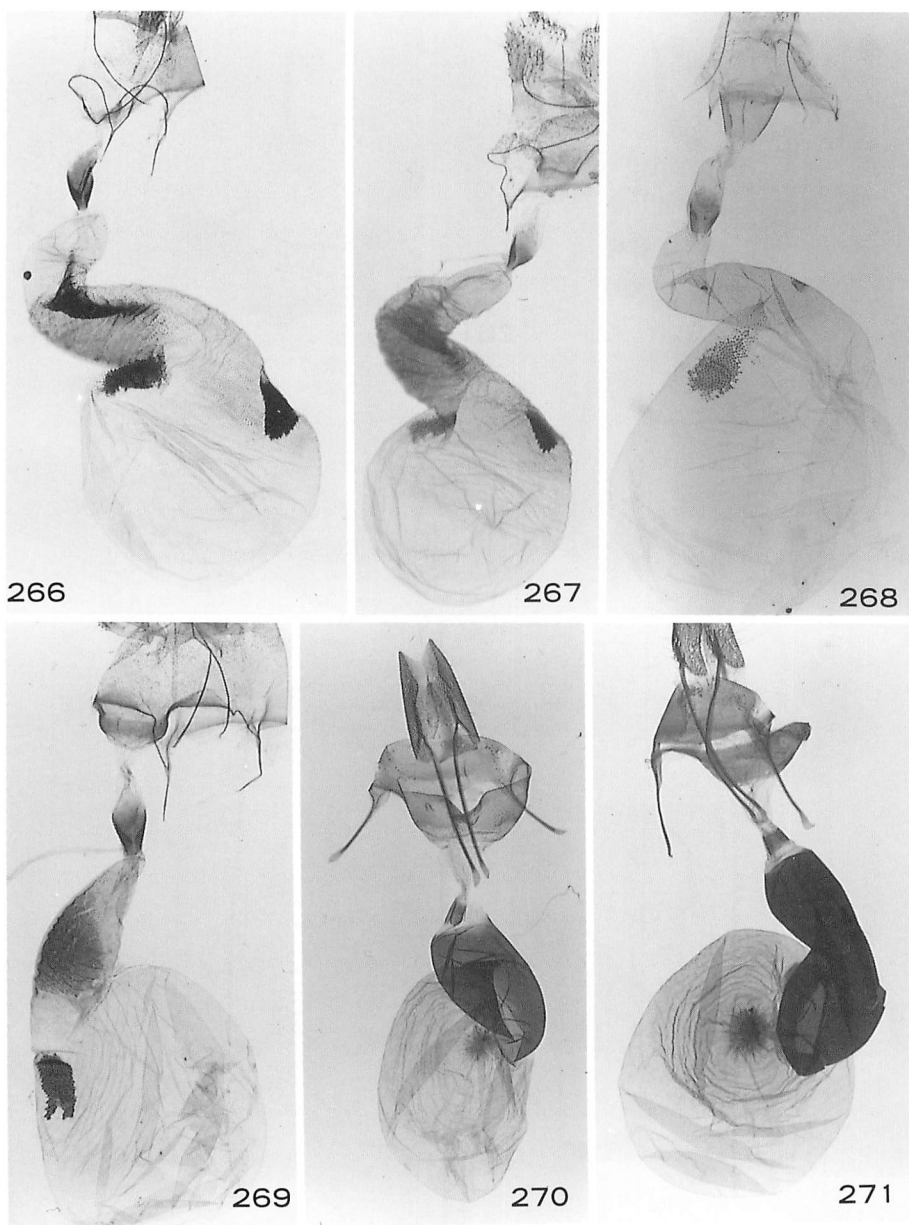
Figs 247–252. Male genitalia. 247. *Trichopteryx virens* sp. n., holotype. 248. *Trichopterygia adiopa* Prout. 249. *T. fulvifasciata* sp. n., holotype. 250. *T. adiopa* Prout, holotype. 251. *T. nepalensis* sp. n., holotype. 252. *T. placida* sp. n., holotype. Figs 253–254. Female genitalia. 253. *Chlorissa arcana* sp. n., paratype. 254. *Ch. aquamarina* (Hampson).



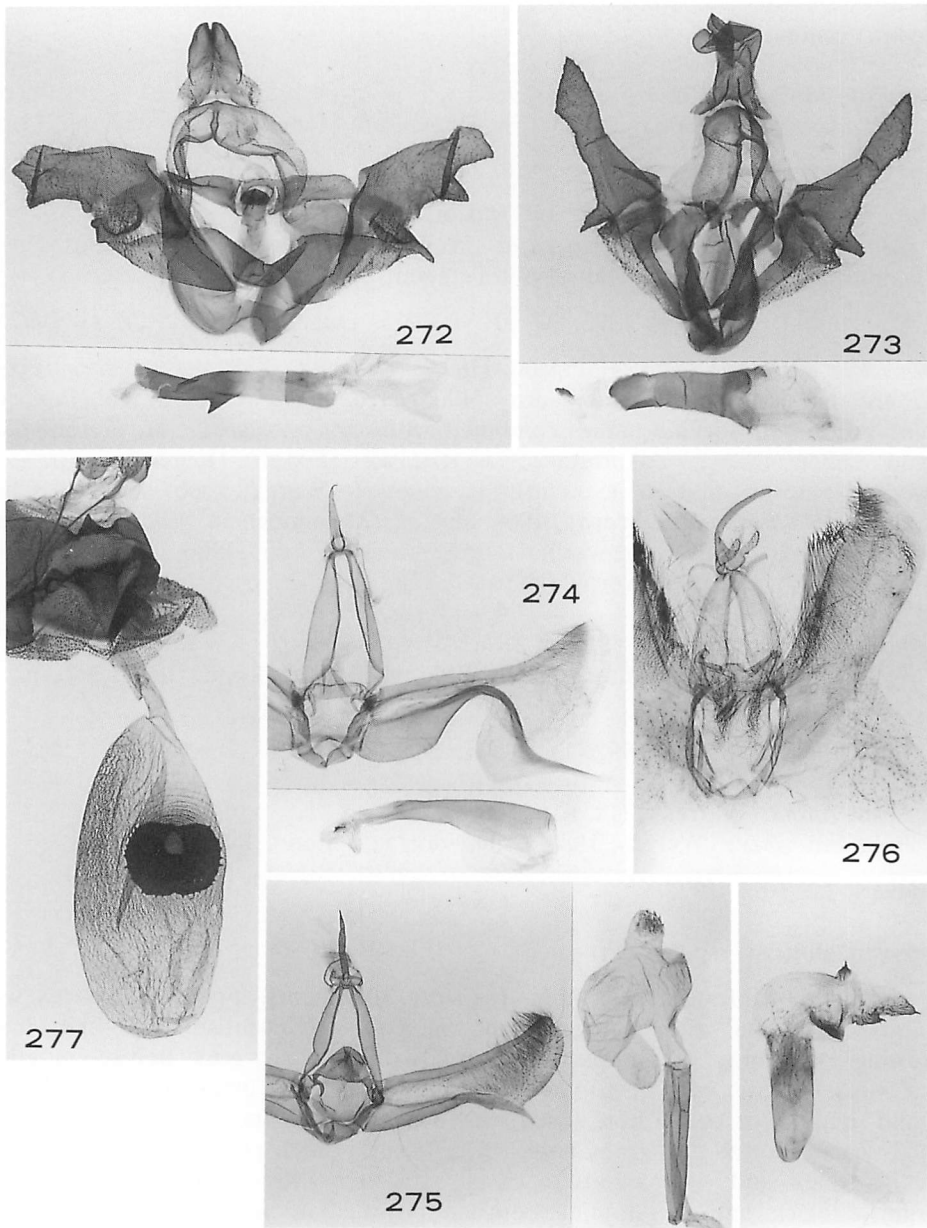
Figs 255–259. Male genitalia. 255. *Trichopterigia melanogramma* sp. n., holotype. 256. *T. harutai* sp. n., holotype. 257. *T. albipunctata* sp. n., holotype. 258. *T. micradelpha* Prout. 259. *T. superba* sp. n., holotype.
 Fig. 260. Holotype of *Trichopterigia adiopa* Prout.



Figs 261–265. Male genitalia. 261. *Idiotephria occidentalis* sp. n., paratype. 262. *I. nakatomii* Inoue, Taiwan. 263. *Xenortholitha falcata* sp. n., holotype. 264. *X. propinqua nipponica* (Butler), Japan. 265. *X. p. epigrypa* (Prout), E. Nepal.



Figs 266–271. Female genitalia. 266. *Xenortholītha falcata* sp. n., paratype. 267. *X. propinquata epigrypa* (Prout), C. Nepal. 268. *X. p. nipponica* (Butler), Japan. 269. *X. p. superlata* (Prout), Luzon. 270. *Idiotephria nakatomii* Inoue, Taiwan. 271. *I. occidentalis* sp. n., paratype.



Figs 272–276. Male genitalia. 272. *Planociampa augustinei* sp. n., paratype. 273. *P. anti-pala* (Prout), Japan. 274. *Plutodes costatus* (Butler), India. 275. *P. warreni* Prout. 276. *Swannia marmarea* Prout.
 Fig. 277. Female genitalia of *Planociampa augustinei* sp. n., paratype.

THYATIRIDAE

Hiroshi Yoshimoto

Habrosyne violacea (Fixsen), stat. rev.*Thyatira violacea* Fixsen, 1887, in Romanoff, Mém. lépid. 3: 352, pl. 15, fig. 11.**Habrosyne violacea nigricans** Werny, stat. n. (Pl. 61: 1)*Habrosyne argenteipuncta nigricans* Werny, 1966, Unters. Syst. Tribus Thyatirini, Macrothyatirini, Habrosyni, Tetheini: 294, fig. 127.

Mt. Phulchouki: 1♂, 17. vi. 1992; 1♂, 21. vi. 1992. Daman Pass: 1♂, 28. vi. 1992.

Habrosyne argenteipuncta Hampson, [1893] 1892 and *Thyatira violacea* Fixsen, 1887 are the same species and Werny (1966) erroneously adopted the Hampson's name. All the subspecific names combined with *argenteipuncta* are automatically moved under *violacea* as follows: *v. violacea* (Fixsen) (Korea); *v. argenteipuncta* Hampson, stat. n. (Sikkim); *v. chinensis* Werny, 1966, stat. n. (China: Chekiang); *v. burmanica* Werny, 1966, stat. n. (Myanmar); *v. szechwana* Werny, 1966, stat. n. (China: Szechwan); *v. pallescens* Werny, 1966, stat. n. (China: Shensi), and *v. nigricans* Werny (Nepal).**Isopsestis cuprina** (Moore) (Pl. 61: 2)*Palimpsestis cuprina* Moore, 1881, Proc. zool. Soc. Lond. 1881: 331, pl. 37, fig. 3.

Mt. Phulchouki: 1♂, 5. vi. 1992; 1♂, 18. vi. 1992.

Epipsestis dubia (Warren) (Pl. 61: 5, 8)*Polyploca dubia* Warren, 1888, Proc. zool. Soc. Lond. 1888: 300.

Godavari: 1♂, 10. i. 1992.

Epipsestis albicosta sp. n. (Pl. 61: 6)

♂ ♀. Length of forewing 15–16mm (expanse 30–32mm). Frons and vertex whitish gray. Tegula and patagia gray, mixed with whitish hair-like scales. Forewing pale gray, costal part irrorated with whitish gray before middle; a black raised-scale tuft at subbase of cellule 1; two black raised-scale dots beyond middle of cell, often fused with each other, and a minute and black raised-scaled dot at the lower angle of cell; ante- and postmedian lines double, blackish, thick and conspicuous in costal part, then diffuse and obsolete to hind margin; a black and serrate line between postmedian and subterminal lines, the latter pale whitish gray, serrate from an apical black streak; a diffuse dark gray shade before subterminal line below vein 2; terminal line of a series of thin and black lunules; cilia pale gray rayed with black beyond veins. Hindwing pale cinerous gray, a little darker in outer half; cilia pale gray with a pale and diffuse basal line.

Male genitalia (Fig. 278). Uncus wide, socius angulated at middle; a short and rod-like projection from tegumen below socius; anellus wide, scobinated in caudal half and in lateral sides, where the scobination is stronger; valva rather

narrow, ornamented with dents at end of sacculus, which produces a semioval and dentate process at end; juxta rather small and its caudal cleft shallow; juxtalappen thin. Aedeagus moderate for the genus; a caudal process a little curved; vesica with regular rows of minute dents.

Female genitalia (Fig. 279). Papilla analis wide, its ventral surface widely and strongly sclerotized in anterior part; 8th tergite deeply concave at middle; 8th sternite narrow and scobinated; lamella antevaginalis narrow, densely clothed with minute spines; ductus bursae swollen at caudal one-third; corpus bursae with a small pyriform signum.

Holotype. ♂, Godavari, 30. xi. 1991. Paratype. Godavari, 1♀, 2. ii. 1992.

This species is somewhat similar to *E. perornata sicki* Yoshimoto, 1988, but is easily distinguished from it by the costal whitish suffusion.

Demopsestis formosana mahendrai subsp. n. (Pl. 61: 7)

♂ ♀. Length of forewing 16–18mm (expanse 32–36mm). In appearance this subspecies is hardly separable from the nominate one from Taiwan, but the male genitalia are different.

Male genitalia (Fig. 280). Differ from those of the nominal race (Fig. 281) as follows: socius a little longer; sacculus larger, its outer margin not excised and harpe a little shorter. Aedeagus with a caudal process slightly larger.

Holotype. ♂, Godavari, 22. ii. 1992. Paratypes. Godavari: 1♂, 29. ii. 1992; 1♂, 2. iii. 1992; 1♂, 13. iii. 1992. Mt. Phulchouki (2,275m): 1♀, 22. iii. 1992.

The subspecific name is dedicated to Mr Mahendra S. Limbu, Kathmandu.

Stenopsestis alternata (Moore) (Pl. 61: 9)

Palimpsestis alternata Moore, 1881, Proc. zool. Soc. Lond. 1881: 331, pl. 37, fig. 2.

Mt. Phulchouki: 1♂, 24. v. 1992.

The Myanmar specimens of this species I examined are somewhat larger (length of forewing 20mm) than those of the nominate subspecies (length of forewing 18mm) and the ground color of forewing is paler. They seem to represent a distinct subspecies as named below.

Stenopsestis alternata bryki subsp. n. (Pl. 61: 10, holotype)

Holotype. ♂, labelled “ N. E. Burma, Kambaiti, 7000ft., 10/4 1934, R. Malaise” , “ Abgeb. Ark. Zool. 34A. n. 11, t. 2, f. 28 (♂), *Nemaces alternata* Moore, F. Bryk det. 1942” , “ 211 63” , “ 238 83” , “ Riksmuseum Stockholm” . Paratype. 1♀, same locality as holotype, 11/6, 1934 (R. Malaise). Both holo- and paratypes are preserved in Riksmuseum, Stockholm.

Spica luteola Swinhoe (Pl. 61: 12)

Spica luteola Swinhoe, 1889, Proc. zool. Soc. Lond. 1889: 424, pl.44, fig.10.

Daman Pass: 1♂, 28. vi. 1992.

Male genitalia of this species were described and illustrated by Forbes (1940, *Ann. ent. Soc. Am.* 33: 588–589).

NOCTUIDAE

Hiroshi Yoshimoto

PANTHEINAE

Trisuloides luteifascia Hampson (Pl. 61: 11)*Trisuloides luteifascia* Hampson, 1894, Fauna Br. India (Moths) 2: 437.

Godavari: 1♀, 1. xi. 1991; 1♀, 25. xi. 1991.

ACRONICTINAE

Triaena denticulata Moore (Pl. 61: 21)*Triaena denticulata* Moore, 1888, Proc. zool. Soc. Lond. 1888: 408.*Acronicta* (*Hyboma*) *longatella* Draudt, 1937, Ent. Rdsch. 54: 381, pl. 4, fig. 1f. Syn. n.*Acronicta pernivea* Chang, 1991, Illust. Moths Taiwan 5: 34, fig. 20.

Godavari: 1♂ 1♀, 21–23. iii. 1992; 1♂, 28. iii. 1992.

This species had been synonymized with *T. rubiginosa* (Walker, 1862) till Holloway (1989) who separated this as a good species inhabiting the Himalaya. The Taiwan population was recently described as *pernivea*, but the male genitalia are identical with *denticulata* (Fig. 283). Draudt's *longatella* was based on North Yunnan material and I think it also synonymous with *denticulata*.

Craniophora harmandi (Poujade) (Pl. 61: 20)*Acronycta harmandi* Poujade, 1898, Bull. Soc. ent. Fr. 1898: 229, fig.

Godavari: 1♀, 23. iii. 1992. Mt. Phulchouki: 1♂, 20. v. 1992.

NOCTUINAE

Perissandria sikkima (Moore) (Pl. 61: 13)*Mamestra sikkima* Moore, 1867, Proc. zool. Soc. Lond. 1867: 53.

Mt. Phulchouki: 1♀, 8. v. 1992.

Diarsia tincta (Leech) (Pl. 61: 14)*Graphiphora tincta* Leech, 1900, Trans. ent. Soc. Lond. 1900: 41.

Mt. Phulchouki: 1♂, 25. iv. 1992; 1♂, v. 1992.

Diarsia hoenei Boursin (Pl. 61: 15)*Diarsia hoenei* Boursin, 1954, Bonn. zool. Beitr. 5: 232, pl. 3, figs 1–3, pl. 8, fig. 16.

Mt. Phulchouki: 1♂, 27. v. 1992.

Xestia curviplena (Walker) (Pl. 61: 16)

Orthosia curviplena Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 33: 715.

Mt. Phulchouki: 1♀, ix. 1991.

HELIOTHINAE

Pyrrhia umbra (Hufnagel) (Pl. 61: 17)

Phalaena umbra Hufnagel, 1766, Berl. Mag. 3: 294, pl. 51, fig. 6.

Mt. Phulchouki: 1♀, 23. vi. 1992.

HADENINAE

Aospasta sikkima (Moore) (Pl. 61: 18)

Apamea sikkima Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 109.

Godavari: 1♂, 27. i. 1992. Mt. Phulchouki: 1♂, 21. vi. 1990; 1♂, 23. v. 1992.

Orthosia subcarnipennis Haruta (Pl. 61: 24)

Orthosia subcarnipennis Haruta, 1992, Tyô Ga 43: 62, figs 1, 2.

Godavari: 1♂, 23. iii. 1991.

Orthosia harutai sp. n. (Pl. 61: 22)

♂ ♀. Length of forewing 17–18mm (expanse 34–36mm). Antenna serrate in male, filiform in female. Head, tegulae, patagia and thorax ochreous, slightly tinged with gray. Forewing pale fuscous, irrorated with blackish scales; sub-basal line black, angled at median nervure; antemedian line thin and diffuse, black, angled at subcosta and vertical to hind margin; orbicular large, round, thinly defined by pale yellowish ocher; reniform large, filled with dark fuscous, thinly defined by pale yellowish ocher; postmedian line obscure, represented by some minute black dots below vein 4; subterminal line pale yellowish ocher, slightly indented below costa to vein 7, then nearly parallel to termen; a series of minute black dots between veins just before termen; cilia pale fuscous. Hindwing uniformly fuscous gray, with a diffuse and obscure discoidal dark bar; cilia concolorous, with a pale yellowish basal line across it.

Male genitalia (Fig. 288). Uncus rather short, deeply cleft; tegumen moderate; valva outside swollen from middle to before cucullus, which bears corona of double or triple rows of spines; right cucullus producing a short ventral process; harpe short and wide-based; ampulla long, acutely angled at middle and strongly upcurved; juxta constricted before caudal end. Aedeagus slender; vesica producing two short and long diverticula and with a mass of long spines at tip; another mass of spines at base of two diverticula.

Female genitalia (Fig. 295). Papilla analis moderate and apophysis posterioris long; 8th sternite large and apophysis anterioris short; ostium bursae short and wide; ductus bursae short, membranous; cervix bursae and the caudal portion of corpus bursae heavily sclerotized and ribbed, and the anterior portion of corpus bursae with four ribbon-like signa.

Holotype. ♂, Godavari, 6. v. 1991. Paratypes. Godavari: 1♂, 6. v. 1991. Mt. Phulchouki: 1♂, 29. ii. 1992.

Orthosia nepalensis sp. n. (Pl. 61: 23, holotype)

♂ ♀. Length of forewing 14–16mm (expanse 29–32mm). Antenna serrate in male, filiform in female. Forewing pale ochreous, slightly tinged with rufous; subbasal and antemedian lines obscure, the latter faintly traceable, thin, blackish and gently excurved; orbicular obsolete; reniform large, ill-defined, filled with dark brown and stained with black in lower half; postmedian line obscure, represented by some black scales on veins; subterminal line pale ochreous, thin, edged inside with brown; a costal diffuse fuscous shade before subterminal line; a series of minute black dots before termen; cilia pale ochreous, with a pale basal line across it. Hindwing pale gray, inner half paler; discocellulars dark gray; cilia ochreous gray, with a pale basal line.

Male genitalia (Fig. 289). Uncus slender, tegumen rather wide; valva with a large and wide-based harpe; ampulla stout and curved ventrad; cucullus producing a short ventral process, with corona of a series of marginal spines; juxta wide, its caudal margin concave and its bottom open V-shaped. Aedeagus stout, its tip with more than ten minute dents; vesica bearing two short diverticula, without cornutus.

Female genitalia (Fig. 299). Apophysis posterioris long; 8th sternite narrow, apophysis anterioris short; ostium bursae a little ribbed and its posterior margin dentate; ductus bursae wide and short, weakly ribbed; corpus bursae large and bearing longitudinal short signa.

Holotype. ♂, Godavari, 13. iii. 1992. Paratype. Mt. Phulchouki (2,075m): 1♀, 13. iii. 1992.

This species is ostensibly similar to *O. lushana* Sugi, 1986 from Taiwan, but the male genitalia are very different.

Orthosia nigralba sp. n. (Pl. 61: 30, holotype)

♀. Length of forewing 14mm (expanse 28mm). Antenna filiform. Head and thorax creamy white, with a pair of bundles of black hair-like scales on tegulae. Forewing pale creamy white with characteristic black maculation; subbasal line black, thick, acutely angled at median nervure; antemedian line represented by a costal black triangular speck, a black dot on median nervure and a black triangular mark above hind margin; an oblique and a little bent black band from just beyond the middle of costa to the bases of cellules 3 and 4; postmedian line represented by two costal black points and a large triangular black marking above hind margin; subterminal line represented by costal and subtornal triangular black markings; cilia pale creamy white, checkered with black beyond middle. Hindwing white, outer part suffused with gray except tornal area; discocellulars diffuse and grayish; cilia white with a pale grayish median line.

Female genitalia (Fig. 300). Apophysis posterioris and anterioris moderate in length; 8th sternite rather narrow; ostium bursae wide and long, somewhat constricted at caudal one-fourth, its posterior margin deeply concave and irregularly dentate; corpus bursae with four small and semioval signa.

Holotype. ♀, Mt. Phulchouki (2,075m), 6. iv. 1992.

This species is here tentatively combined with *Orthosia* because of unexamination of the male.

Harutaeographa gen. n.

Type species: *Hadena fusciculata* Hampson, 1894, Fauna Br. India (Moths) 2: 204.

Comprised of somewhat larger species with expanse 40–47mm. Antenna strongly bipectinate in male and serrate in female. Tegulae produced upwards into a ridge. A ridge-like dorsal crest on thorax prominent. Abdomen smooth above.

Male genitalia. Uncus simple, rather short; tegumen narrow with peniculus moderate; valva usual, harpe short and ampulla long, both stout and usually simple; cucullus with its base wide, its dorsal tip tapered and ventral end shortly protrude; corona lacking in general; juxta long and saccus moderate. Aedeagus long and stout; vesica very long, narrowly sclerotized beyond middle and ribbed before tip, and basically ornamented with three bunches of spines in basal, median and apical parts, and the last composed of long spines; a stout and scobinate small sclerite at base.

Female genitalia. Papilla analis moderate; both apophysis moderate in length; 8th sternite rather long; ductus bursae long, strongly sclerotized at least in caudal half; cervix bursae long, coiled sometimes, narrowly sclerotized in its basal area; corpus bursae long, with four ribbon-like signa.

Although the wing pattern of moths considerably differs according to species, the male genitalia are very similar to one another especially in the vesical feature. In appearance, the moths of this genus are reminiscent of *Orthosia* by the wing pattern and of *Perigrapha* by the male antennae and strong thoracic vestiture.

The generic name is derived from Mr Toshiro Haruta.

The following five species are included in this genus.

Harutaeographa fusciculata (Hampson), comb. n. (Pl. 61: 25)

Hadena fusciculata Hampson, 1894, Fauna Br. India (Moths) 2: 204.

Monima fusciculata: Hampson, 1905, Cat. Lepid. Phalaenae Colln Br. Mus. 5: 413, pl. 90, fig. 12.

Male genitalia (Fig.284). Valva with rather simple cucullus; harpe and ampulla simple; juxta long and narrow. Aedeagus long; vesica with a basal scobinate sclerite small; the median bunch of spines short.

Specimens examined. 1♂, N. India, Darjeeling, iv. 1985.

Harutaeographa bipuncta sp. n. (Pl. 61: 28, holotype)

♂. Length of forewing 22mm (expanse 43mm). Forewing pale ochreous brown; subbasal line thin, dark brown; antemedian line thin and obsolete, dark brown, oblique from costa to hind margin; orbicular ill-defined, large; reniform large, defined by pale ocher, the space between orbicular and reniform and the basal half of the latter dark ocher; a diffuse and somewhat dark median band below cell; postmedian line obsolete; subterminal line pale yellowish ocher, diffusely edged outside with brown; two black points in cellules 4 and 5 before subtermi-

nal line; cilia pale ochreous, with a paler basal line. Hindwing ochreous, slightly tinged with gray; discocellulars dark, inconspicuous.

Male genitalia (Fig. 285). Valva with harpe and ampulla rather simple; cucullus with its costa protrude triangularly and its outer margin weakly excurved; juxta narrowed in caudal part. Aedeagus vesica with a basal scobinated sclerite very small; the basal and apical bunches of spines moderate and the median bunch long.

Holotype. ♂, N. India, Darjeeling, Gairivbas (2,500m), 23. iii. 1983 (H. Yoshimoto).

Harutaecographa castanea sp. n. (Pl. 61: 26)

♂ ♀. Length of forewing 21–24mm (expanse 43–47mm). Forewing light brown; subbasal line dark brown, wavy; antemedian line dark brown, oblique from costa to below submedian fold, then vertical to hind margin; orbicular ill-defined, pale, large and roundish; reniform oblique, large, stained with dark brown at bottom; space between orbicular and reniform and the area beyond reniform suffused with dark brown; a diffuse dark brown median band below submedian fold; postmedian line obsolete, faintly traceable below vein 2, dark brown; subterminal line pale brown, diffusely edged with dark brown in both sides; cilia light brown. Hindwing uniformly pale brown; cilia concolorous with a diffuse brown median band.

Male genitalia (Fig. 286). Valva with cucullus large and its outer margin bulged roundly; harpe curved and ampulla wavy. Aedeagus vesica with a basal sclerite long and large; the median bunch of short spines long and wide from near base to middle.

Female genitalia (Fig. 298). Ductus bursae sclerotized in caudal half.

Holotype. ♂, Godavari, 13. iii. 1992. Paratype. Mt. Phulchouki (2,275m): 1♀, 26. iii. 1992.

Harutaecographa pallida sp. n. (Pl. 61: 29, holotype)

♀. Length of forewing 21mm (expanse 42mm). Forewing pale ochreous, somewhat tinged with rufous; subbasal line blackish, minutely wavy; antemedian line dark brown, oblique outwards; orbicular large, round, defined by pale ocher and edged outside with dark brown basally and terminally; reniform large, stained with gray in inner half, defined by pale ocher and edged as in orbicular; space between orbicular and reniform brown, slightly tinged with orange; a diffuse gray median band below reniform, incurved; postmedian line obscure, pale, excurved beyond cell and oblique to hind margin, where it touches median line; subterminal line pale yellowish ocher, edged outside with brown, nearly parallel to termen; a series of minute dots before termen; cilia pale ochreous. Hindwing pale grayish ocher, with an indistinct discocellular spot and a faint outer line; termen stained with gray between veins 1 and 7; cilia grayish ocher with a pale basal line.

Female genitalia (Fig. 297). Ductus bursae fully sclerotized.

Holotype. ♀, Godavari, 28. ii. 1992.

Harutaecographa caerulea sp. n. (Pl. 61: 27)

♂. Length of forewing 20–21mm (expanse 40–43mm). Head pale bluish gray. Tegulae bluish gray with brown margin; patagia and thoracic crest bluish gray, the latter tipped with brown. Forewing gray with some bluish tinge; subbasal line brown, thin, nearly vertical from costa to submedian fold; antemedian line brown, strongly oblique; orbicular and reniform large, both incompletely defined by brown, and fused with each other; a diffuse gray shade beyond orbicular and a diffuse gray median line below reniform; postmedian line brown, thin, ex-curved beyond cell and inwardly oblique to hind margin; subterminal line pale yellow, edged with brown, nearly straight; a series of black dots before termen; cilia pale bluish gray, tipped with brown, with a pale basal line. Hindwing dark gray, with a dark and obscure discocellular spot and a dark and thin outer line; cilia pale brown with a paler basal line across it.

Male genitalia (Fig. 287). Valva most modified in the genus; cucullus acute, leaving a short ventral rod; harpe rather long, weakly sclerotized; ampulla swollen and bearing several dents on dorsal margin; juxta wide; saccus deep. Aedeagus vesica moderate; a basal scobinated sclerite small; weak and shorter spines arising sparsely from the basal to median bunches of short spines; four or five spines beyond the latter bunch.

Holotype. ♂, Mt. Phulchouki (2,275m), 22. iii. 1992. Paratype. Mt. Phulchouki (2,075m): 1♂, 27. iii. 1992.

Xylopolia fulvireniforma Chang (Pl. 61: 19)

Xylopolia fulvireniforma Chang, 1991, *Illust. Moths Taiwan* 5: 95, fig. 63, 323, fig. 63.

Mt. Phulchouki: 1♂, 23. iii. 1992.

This species was recently described from Taiwan, and this is the first record from outside of Taiwan.

Lithopolia gen. n.

Lithopolia Chang, 1991, *Illust. Moths Taiwan* 5: 98 (nomen nudum).

Type species: *Xylomania confusa* Wileman, 1915, *Entomologist* 48: 144.

Comprised of small- to medium-sized species, with expanse 25–35mm. Antenna ciliate in male, filiform in female. Head moderate; thorax with a small anterior ridge between patagia; abdomen with a strong basal crest.

Male genitalia. Uncus simple, tegumen with densely hairy peniculus; valva with long and well developed ampulla; cucullus with a series of marginal spines. Aedeagus vesica bearing a mass of long spines beyond middle and two dentate sclerites near base.

Female genitalia. Papilla analis moderate; both apophysis moderate in length; ostium bursae long, well sclerotized, and sparsely scobinated in lateral parts in caudal area; cervix bursae well sclerotized and corpus bursae with longitudinal signa.

This genus contains two Taiwanese species, *L. confusa* (Wileman) and *L. contaminata* Chang, 1991 (*Illust. Moths Taiwan* 5: 99, fig. 66). The figures of a

pair of specimens of the latter in the original description were erroneously presented and are those of cuculline *Lophoterges taiwana* (Wileman) in truth.

Lithopolia confusa (Wileman), comb. n. (Pl. 61: 33, 34)

Xylomania confusa Wileman, 1915, Entomologist 48: 144.

Godavari: 1♂, 25. ii. 1992; 1♀, 12. iii. 1992.

I illustrate the male and female genitalia (Figs 290, 301) in this opportunity based on the Nepalese and Taiwanese specimens respectively.

Craterestra subterminata Hampson (Pl. 61: 31, 32)

Craterestra subterminata Hampson, 1905, Cat. Lepid. Phalaenae Colln Br. Mus. 5: 22, pl. 78, fig. 31.

Godavari: 5♂ 3♀, 27–29. ii. 1992; 1♂ 1♀, 4. iii. 1992.

Male genitalia (Fig. 291). Uncus spatular, tegumen rather short; valva wide with stickle formed cucullus; harpe short and weak, ampulla long and stout; cucullus with two strong dents on outer margin; juxta long, deeply cleft; saccus moderately V-shaped. Aedeagus vesica with a large and strong dent on proximal part and a mass of spines near tip; a short diverticulum with a long and stout spine at tip.

Female genitalia (Fig. 296). Ostium bursae widened in caudal portion, and its caudal margin shallowly concave at middle; ductus bursae long and wide, well sclerotized; cervix bursae roundish, well sclerotized, strongly furrowed in basal area; corpus bursae with four short signa.

The identification of this species is tentative and the comparison with the type is needed for exact determination. I do not know the suitable genus for this species. Type species of *Craterestra* Hampson, 1905, is a Mexican species.

Aletia bicolorata Plante (Pl. 62: 3)

Aletia bicolorata Plante, 1992, Tyô Ga 43: 218, figs 3, 4, 6.

Godavari: 1♂, 9. xi. 1991; 1♂, 2. iv. 1992.

Aletia legraini Plante (Pl. 62: 4)

Aletia legraini Plante, 1992, Tyô Ga 43: 217, figs 1, 2, 5.

Mt. Phulchouki: 1♀, 31. iii. 1992.

Aletia dharma (Moore) (Pl. 62: 2)

Leucania dharma Moore, 1881, Proc. zool. Soc. Lond. 1881: 338, pl.37, fig.17.

Mt. Phulchouki: 1♂, 2. vi. 1992; 1♂ 2♀, 21. v. 1992.

Aletia nainica (Moore) (Pl. 62: 5)

Leucania nainica Moore, 1881, Proc. zool. Soc. Lond. 1881: 337, pl.37, fig.15.

Mt. Phulchouki: 3♀, 21–23. iii. 1992; 1♀, 29. iii. 1992; 1♂, 25. iv. 1992.

Aletia modesta (Moore) (Pl. 62: 1)

Leucania modesta Moore, 1881, Proc. zool. Soc. Lond. 1881: 335, pl.37, fig.11.

Mt. Phulchouki: 1♀, 5. v. 1992; 1♀, 16. v. 1992; 1♂, 19. v. 1992.

Leucania irregularis (Walker) (Pl. 62: 8)

Nonagria irregularis Walker, 1857, List Specimens lepid. Insects Colln Br. Mus. 11: 712.

Godavari: 1♂, 23. iii. 1992.

Leucania yu Guenée (Pl. 62: 6)

Leucania yu Guenée, 1852, in Boisduval & Guenée, Hist. nat. Insectes (Lépid.) 5: 78.

Godavari: 1♀, 13. xi. 1991.

Leucania venalba Moore (Pl. 62: 7)

Leucania venalba Moore, 1867, Proc. zool. Soc. Lond. 1867: 48.

Godavari: 1♂, 14. ix. 1991; 1♀, 1. xi. 1991.

CUCULLINAE

Eupsilia strigifera Butler (Pl. 62: 9)

Eupsilia strigifera Butler, 1879, Ann. Mag. nat. Hist. (5) 4: 363.

Mt. Phulchouki: 1♂ 1♀, 4. iii. 1992; 1♀, 12. iii. 1992; 1♂, 23. iii. 1992.

Elwesia diplostigma Hampson (Pl. 62: 13)

Elwesia diplostigma Hampson, 1894, Fauna Br. India (Moths) 2: 172, fig. 111.

Godavari: 1♂, 16. iii. 1992. Mt. Phulchouki: 1♀, 5. iv. 1992.

The male genitalia (Fig. 292) are here shown for the comparison with those of the Japanese specimen illustrated by Sugi (1967). In Japan, the hibernating specimen has ever been captured as in *Nyctycia* species.

Xylena nepalina sp. n. (Pl. 62: 12)

♂ ♀. Length of forewing 25–26mm (expanse 51–52mm). Head and tegulae pale ochreous, the latter thinly margined with black; patagia fuscous. Abdomen pale fuscous gray, tipped with pale ocher. Forewing fuscous, a little paler in outer half; subbasal line indistinct, double, black, filled with pale ocher, angled outside in subcosta and in cellule 1; antemedian line double, black and filled with pale ocher, excurved below costa and in cell, then vertical to vein 1, and strongly angled outside above hind margin; orbicular large, slightly constricted at middle, thinly defined by black and with two dark and diffuse shades in it; reniform large, blackish with a pale lunule, before which two thin and black bars are present; a diffuse and dark fuscous mark below orbicular, and a diffuse and dark median band below vein 2; postmedian line indistinct, dark, double and serrate, outer line leaving black dots on veins; a series of minute black dots on veins beyond postmedian line; subterminal line pale ocher, indented below apex and slided outside on vein 7, roughly edged inside with dark fuscous; subterminal area pale ochreous; cilia pale fuscous, with a series of pale and black-margined dents beyond veins. Hindwing pale fuscous gray; cilia pale ochreous with a diffuse and gray median line.

Male genitalia (Fig. 302). Uncus long, its tip dilated; tegumen high and narrow; valva with cucullus and sacculus strongly elongated and deeply separated; cucullus narrowed, its tip dilated and weakly forked; harpe long, extending to just before tip of cucullus; sacculus a wide and elongated lobe; juxta long, a little constricted at middle and cleft in caudal part. Aedeagus long; vesica with its basal part strongly and narrowly sclerotized from caudal area of aedeagus, bearing a weak diverticulum before middle, where a long and weak spine arises.

Female genitalia (Fig. 303). Ostium bursae deeply invaginated, wide; ductus bursae about two-thirds of ostium bursae in length; corpus bursae very long, with four longitudinal ribbon-like signa.

Holotype. ♂, Godavari, 11. ii. 1992. Paratypes. Godavari: 2♀, 27–28. ii. 1992; 1♀, 11. iii. 1992; 1♀, 19. iii. 1992.

Xylena apicimacula sp. n. (Pl. 62: 11, holotype)

Similar to *X. tatajiana* Chang, 1991 (Pl. 62: 10), and the following description may state only an individual variation including that of the genitalia.

♀. Length of forewing 22mm (expanse 45mm). Forewing narrower than *tatajiana*; antemedian line less waved; postmedian line not filled with white between veins 7 and 2 as in *tatajiana*; subterminal line strongly oblique above vein 4.

Female genitalia (Fig. 305). Similar to those of *tatajiana* (Fig. 304), but ostium bursae shallower; sclerotized area of ductus bursae smaller.

Holotype ♀, Godavari, 22. iii. 1992.

Rhynchaglaea taiwana Sugi (Pl. 62: 14)

Rhynchaglaea taiwana Sugi, 1980, Tyô Ga, 30: 201.

Rhynchaglaea shyrshana Chang, 1991, Illust. Moths Taiwan 5: 157, fig. 119.

Mt. Phulchouki: 1♂, 2. iii. 1992.

Chang (1991) described two new species of *Rhynchaglaea* from Taiwan, viz. *terngjyi* and *shyrshana*. He compared the latter with *R. taiwana*, but his *taiwana* seems a mixture of true *taiwana* and *R. scitula* (Butler) and the male genitalia figured as *taiwana* are in fact those of *scitula*.

Dichoniopsis leucosticta (Moore) (Pl. 62: 20)

Dryobata [sic] *leucosticta* Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 129, pl. 4, fig. 22.

Godavari: 1♂, 14. ix. 1991.

Agrochola albirena Boursin (Pl. 62: 17)

Agrochola albirena Boursin, 1956, Z. wien. ent. Ges. 41: 35, pl. 5, figs 1, 5.

Conistra chihituana Chang, 1991, Illust. Moths Taiwan 5: 178, fig. 121.

Godavari: 1♂, 27. xii. 1991.

The male genitalia of *chihituana* Chang are identical with those of *albirena*.

Lophoterges taiwana semialba subsp. n. (Pl. 62: 16)

♂. Length of forewing 15–16mm (expanse 30–33mm). Smaller than the nominate subspecies. Forewing nearly identical with the nominate race, but hindwing uniformly whitish. Male genitalia (Fig. 307) are identical with those of Taiwan material.

Holotype. ♂, Mt. Phulchouki (2,275m), 26. iii. 1992. Paratypes. Godavari: 3♂, 7–13. iii. 1992.

Cucullia ? *taiwana* Wileman, 1915, was combined with *Lophoterges* Hampson, 1906 (type species: *Lithocampa fatua* Püngeler, 1904) by Chang (1991), but this combination is probably wrong and I agree with Ronkay's opinion (pers. comm.) that a new genus must be established for this species.

Xanthia melonina (Butler) (Pl. 62: 15)

Xestia melonina Butler, 1889, Illust. typical Specimens Lepid. Heterocera Colln Br. Mus. 7: 57, pl. 128, fig. 7.

Mt. Phulchouki: 1♀, 29. ii. 1991; 2♀, 2. iii. 1992.

Nyctycia angustipennis sp. n. (Pl. 62: 18)

♂. Length of forewing 14–15mm (expanse 29–31mm). Antenna ciliate. Head and tegulae pale ochreous, mixed with dark brown hair-like scales and tegulae margined with black; patagia dark fuscous gray. Forewing pale ochreous, with dark blackish fuscous marking in median and subterminal areas; a black streak along submedian fold from base to before antemedian line; subbasal line indistinct; antemedian line indistinct, traceable below median nervure, blackish, strongly dentate; a thin and black median line from subcosta, gently excurved to submedian fold, then obsolete and diffuse; an oblique V-shaped black mark before end of cell, through which a diffuse black band transverses from costa; space beyond cell widely pale whitish ocher to apex; postmedian line obsolete beyond cell, faintly traceable as a waved and excurved line, both sides edged with blackish below vein 3, oblique and minutely serrate to hind margin; cellule 2 above submedian fold densely irrorated with blackish fuscous between middle and postmedian line; subterminal line pale whitish ocher, ill-defined, twice angled at veins 4 and 3; space between subtermen before subterminal line and termen densely irrorated with blackish fuscous except apical area and subterminal line; cilia fuscous gray, with a pale basal line. Hindwing whitish gray, with a diffuse and dark discocellulars and median line; cilia pale fuscous, with a pale ochreous basal line.

Male genitalia (Fig. 294). Uncus rather short, tegumen narrow; valva narrow, its tip furcate; juxta wide at base, elongated caudally; saccus moderate. Aedeagus scobinated in caudal part; vesica strongly ribbed in basal area, with a mass of long spines before tip.

Holotype. ♂, Godavari, 7. i. 1992. Paratype. Godavari: 1♂, 4. ii. 1992.

Nyctycia shelpa sp. n. (Pl. 62: 19, holotype)

♂. Length of forewing 14mm (expanse 29mm). Antenna ciliate. Head and thorax pale gray with slight greenish tinge. Forewing pale greenish gray; sub-basal line represented by black dots on subcosta and cellule 1; an ill-defined blackish shade on subbase; antemedian line brownish black, oblique from costa to hind margin with two weak angles at median nervure and vein 1; oblique short black bars beyond this line in cell and in cellule 1, from which a diffuse and gray median line emerges and runs obliquely to hind margin with a slight angle at vein 1; orbicular of a diffuse dark bar; a thin and obsolete black bar beyond it from costa; reniform slender, defined inside by a thin black bar, above which a black costal speck is present; cellule 1 between ante- and postmedian lines roughly suffused with fuscous; postmedian line pale, edged inside with black, incurved below vein 3 and strongly angled at submedian fold, then vertical to hind margin; a diffuse black shade beyond this line around submedian fold; subterminal line obsolete; some black dots before termen on veins 3–6. Hindwing dark fuscous gray; discocellulars a little darker.

Male genitalia (Fig. 293). Uncus and tegumen moderate; valva with cucullus dilated and trifurcate, slightly asymmetrical; juxta bulbous, shortly elongated caudally. Aedeagus with two minute dents at caudal end; vesica armed with five short and stout spines in middle, and with a bunch of short and long spines before tip.

Holotype. ♂, Godavari, 25. i. 1992.

This species resembles *N. viridimaculata* (Owada) described on a sole female from Nepal. It is probable that these two are one and the same.

Meganephria splendida sp. n. (Pl. 62: 23, holotype)

♂. Length of forewing 22mm (expanse 46mm). Similar to *M. extensa* (Butler) from east Asia, but a longitudinal black band along submedian fold a little heavier.

Male genitalia (Fig. 300). Uncus widened near middle and its tip forked; tegumen moderate; valva with a long and stout ampulla; corona of a row of short spines; juxta pentagonal and manica densely clothed with minute spines; saccus rather long. Aedeagus slender; vesica narrowly sclerotized from middle to tip, with a long and stout spine at middle and about ten stout spines near base; about five minute spines in proximal area.

Holotype. ♂, Godavari, 10. i. 1992.

AMPHIPYRINAE

Lophotyna khumbuensis Owada (Pl. 62: 24)

Lophotyna khumbuensis Owada, 1981, Tyô Ga 31: 149, figs 1–3.

Mt. Phulchouki: 1♂, ix. 1991.

Arcilasisa sobrina Walker (Pl. 62: 32)

Arcilasisa sobrina Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 470.

Godavari: 1♂, 1. xi. 1991; 1♂, 6. xi. 1991.

Euplexia discisignata Moore (Pl. 62: 29)

Euplexia discisignata Moore, 1867, Proc. zool. Soc. Lond. 1867: 57, pl. 6, fig. 9.

Mt. Phulchouki: 1♀, 21. v. 1992.

Oroplexia luteifrons (Walker) (Pl. 62: 21)

Dianthaeicia luteifrons Walker, 1857, List Specimens lepid. Insects Colln Br. Mus. 11: 751.

Mt. Phulchouki: 2♂, ix. 1991.

Chandata partita Moore (Pl. 62: 22)

Chandata partita Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 114, pl. 4, fig. 16.

Mt. Phulchouki: 2♂ 2♀, ix. 1991.

Euplexidia inextotica sp. n. (Pl. 62: 25)

♂ ♀. Length of forewing 16–17mm (expanse 32–34mm). Similar to *E. noctuiformis* Hampson, but forewing deep green except median area (in the illustrated specimen, ground color faded when mounted).

Male genitalia (Fig. 282). Hardly separable from those of *E. exotica* Yoshimoto from Taiwan.

Holotype. ♂, Daman Pass, 28. vi. 1992. Paratypes. 2♀, same data as holotype.

Actinotia sikkimensis (Moore), sp. rev. (Pl. 15: 17)

Auchmis sikkimensis Moore, 1867, Proc. zool. Soc. Lond. 1867: 49, pl. 6, fig. 15.

Actinotia polyodon: Yoshimoto, 1992, Tinea 13 (Suppl. 2): 60 (nec Clerck, 1759).

A. sikkimensis, described from Darjeeling, has long been treated as a synonym of *A. intermedia* (Bremer), which I carelessly mistook for *A. polyodon* in part 1 of this series. The male genitalia of Nepalese material are different from those of *intermediata*, and are nearly identical with those of *A. australis* Holloway, 1989 from Borneo. Though I have not examined the type of *sikkimensis*, I consider it as a good species inhabiting the Himalayas, and *A. intermedia* from Nepal by Boursin (1964) may also be *sikkimensis*.

Paroligia hastata (Moore) (Pl. 62: 28)

Hadena hastata Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 130, pl. 4, fig. 20.

Godavari: 1♀, 20. iv. 1992. Mt. Phulchouki: 1♀, 6. iv. 1992; 1♀, 25. iv. 1992.

Feliniopsis siderifera (Moore), comb. n. (Pl. 62: 33)

Hadena siderifera Moore, 1881, Proc. zool. Soc. Lond. 1881: 357.

Godavari: 1♂, 28. iii. 1992.

Feliniopsis albarenalis (Chang), comb. n. (Pl. 62: 34)*Eutamsia albarenalis* Chang, 1991, illust. Moths Taiwan 5: 233, fig. 164.

Mt. Phulchouki: 1♀, 6. iv. 1992.

This species is recently described from Taiwan.

Dipterygina indica (Moore) (Pl. 62: 35)*Dipterygia indica* Moore, 1867, Proc. zool. Soc. Lond. 1867: 51.

Godavari: 1♂, 7. iv. 1992.

Amphipyra cupreipennis Moore (Pl. 62: 27)*Amphipyra cupreipennis* Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 155.

Godavari: 1♂, 27. ii. 1992; 1♀, 29. iii. 1992.

Anodontodes rotunda Hampson (Pl. 62: 26)*Anodontodes rotunda* Hampson, 1895, Trans. ent. Soc. Lond. 1895: 302, fig.

Godavari: 1♀, 12. vi. 1991.

Hadjina cupreipennis (Moore) (Pl. 62: 31)*Ilattia cupreipennis* Moore, 1882, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 112.

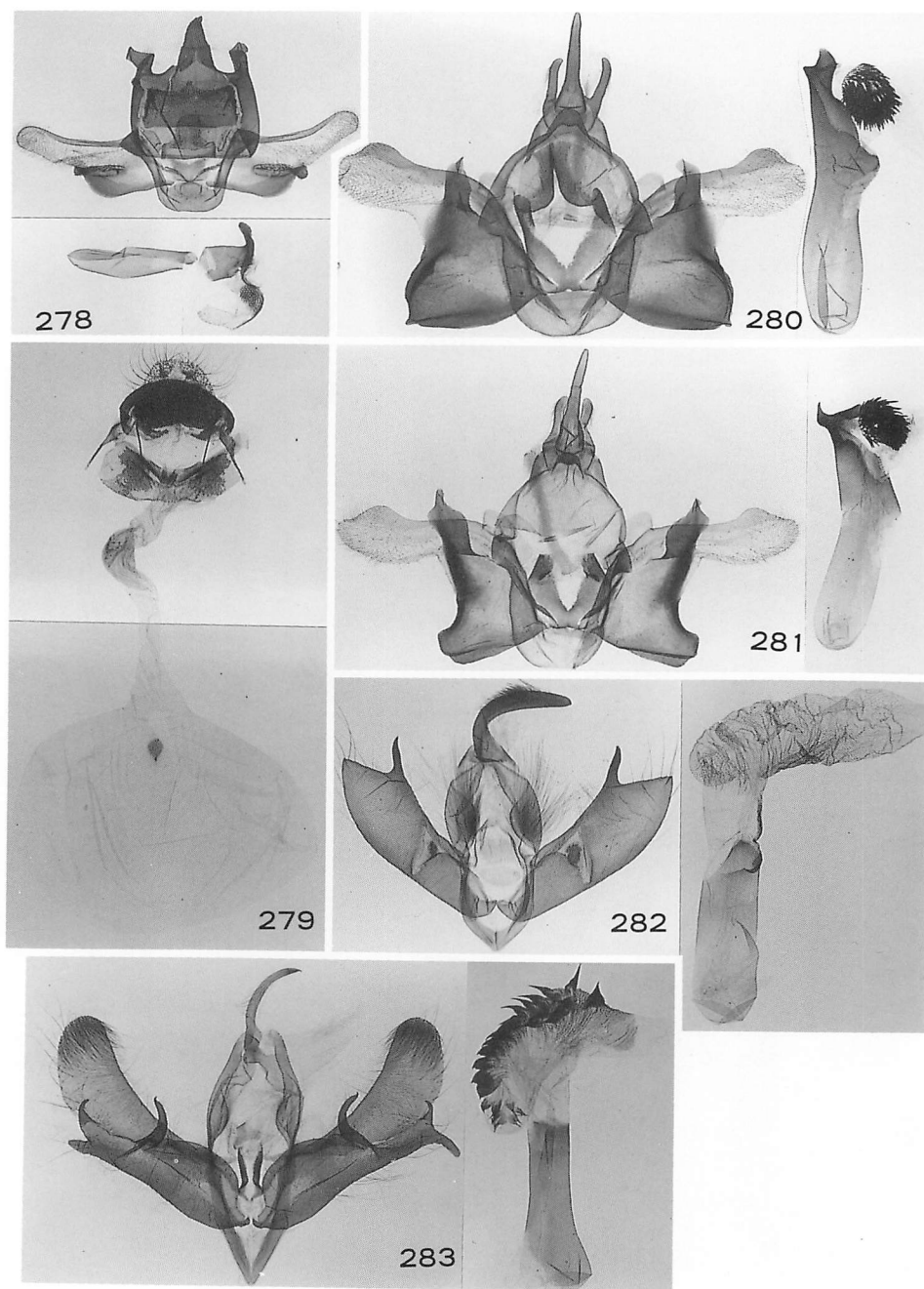
Mt. Phulchouki: 1♀, 17. vi. 1992.

Perigea albomaculata (Moore) (Pl. 62: 30)*Mamestra albomaculata* Moore, 1867, Proc. zool. Soc. Lond. 1867: 52.

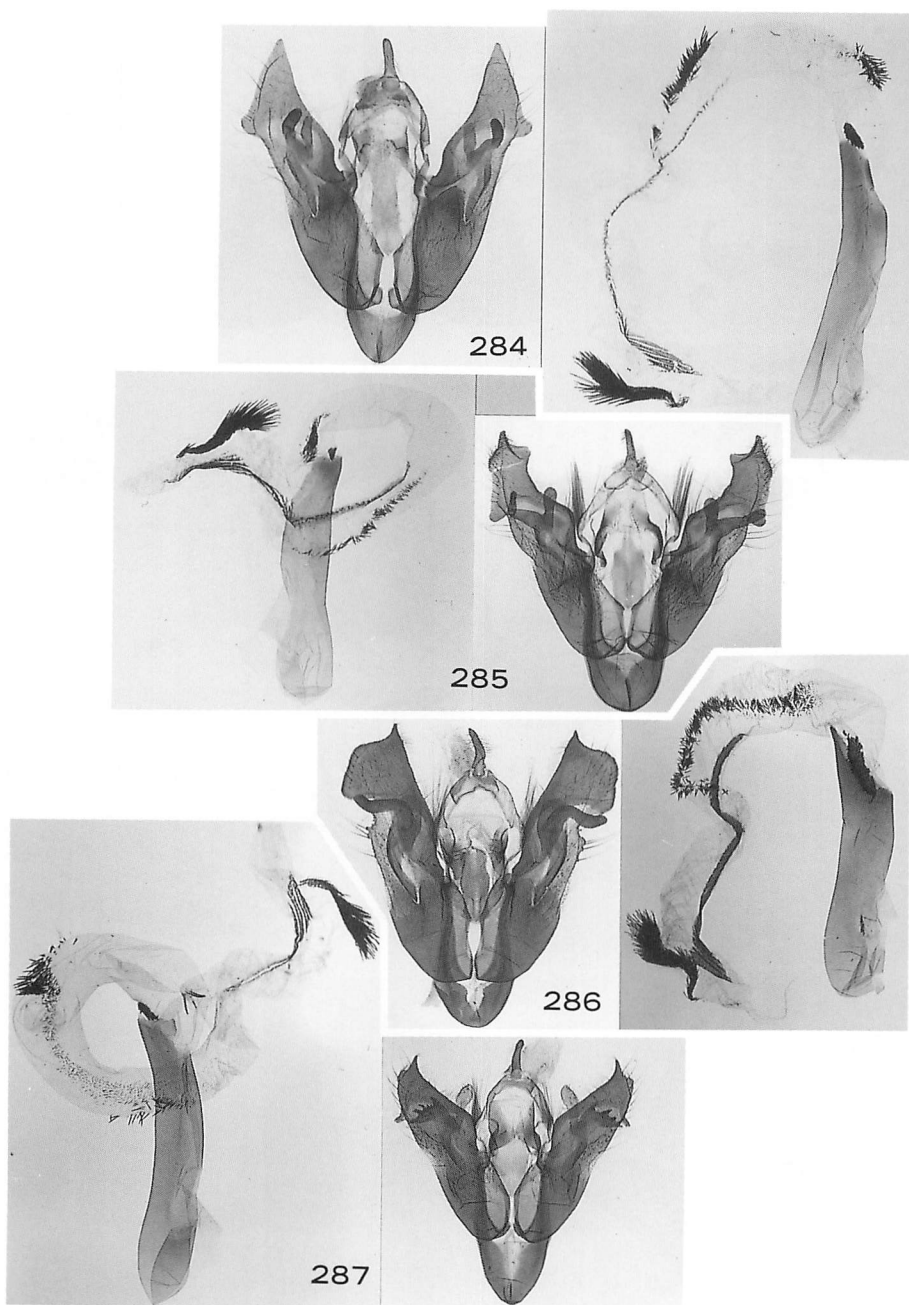
Mt. Phulchouki: 1♂, 8. v. 1992.

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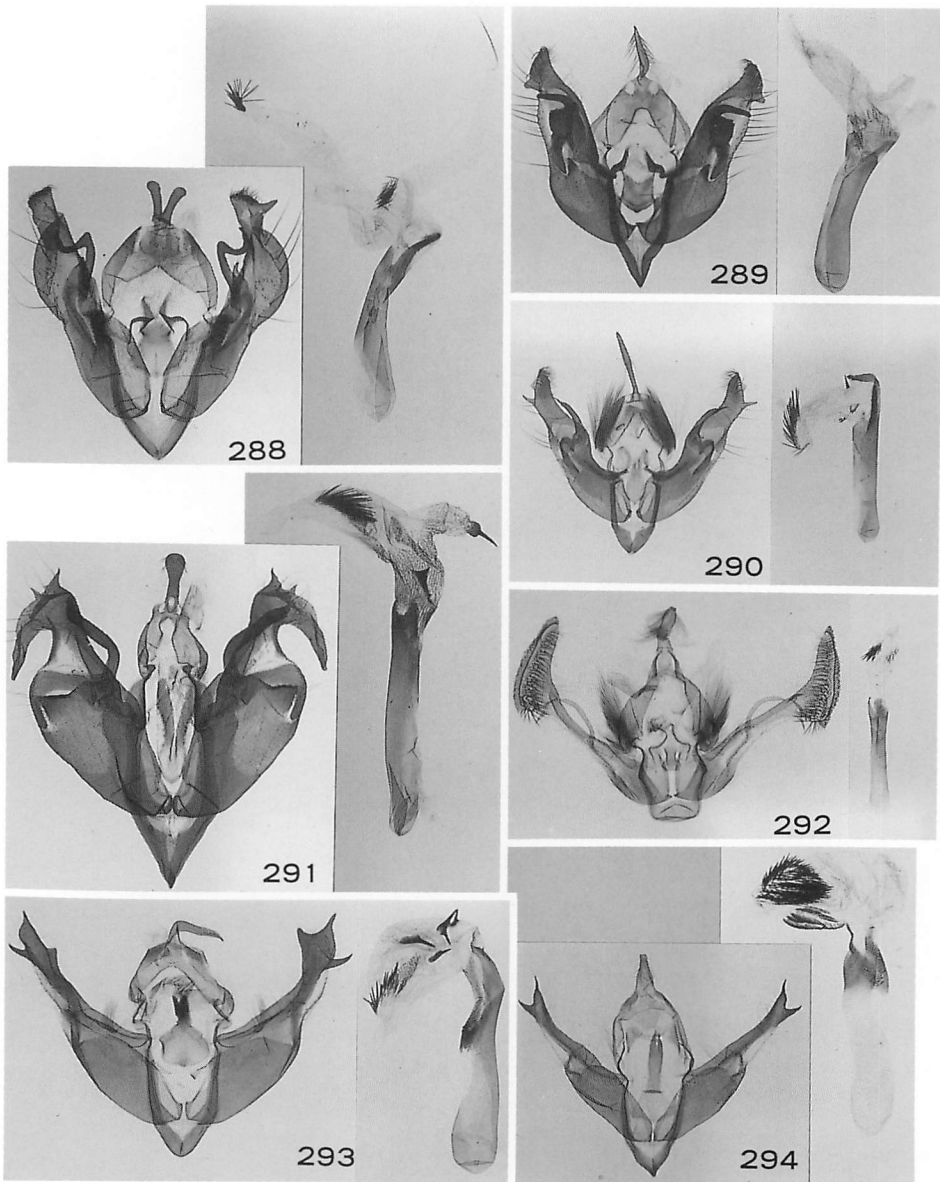
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- Holloway, J. D., 1989. The moths of Borneo: Family Noctuidae, trifine subfamilies: Noctuinae, Heliiothinae, Hadeninae, Acronictinae, Amphipyrinae, Agaristinae. *Malay. Nat. J.* 43: 57–226, 404 figs, pls 1–8.
- Sugi, S., 1967. Discovery of the moths of the genus *Elwesia* Hampson, hitherto known as Himalayan, from Japan (Lep., Noctuidae, Cuculliinae). *Tyô Ga* 18: 10–11 (in Japanese).



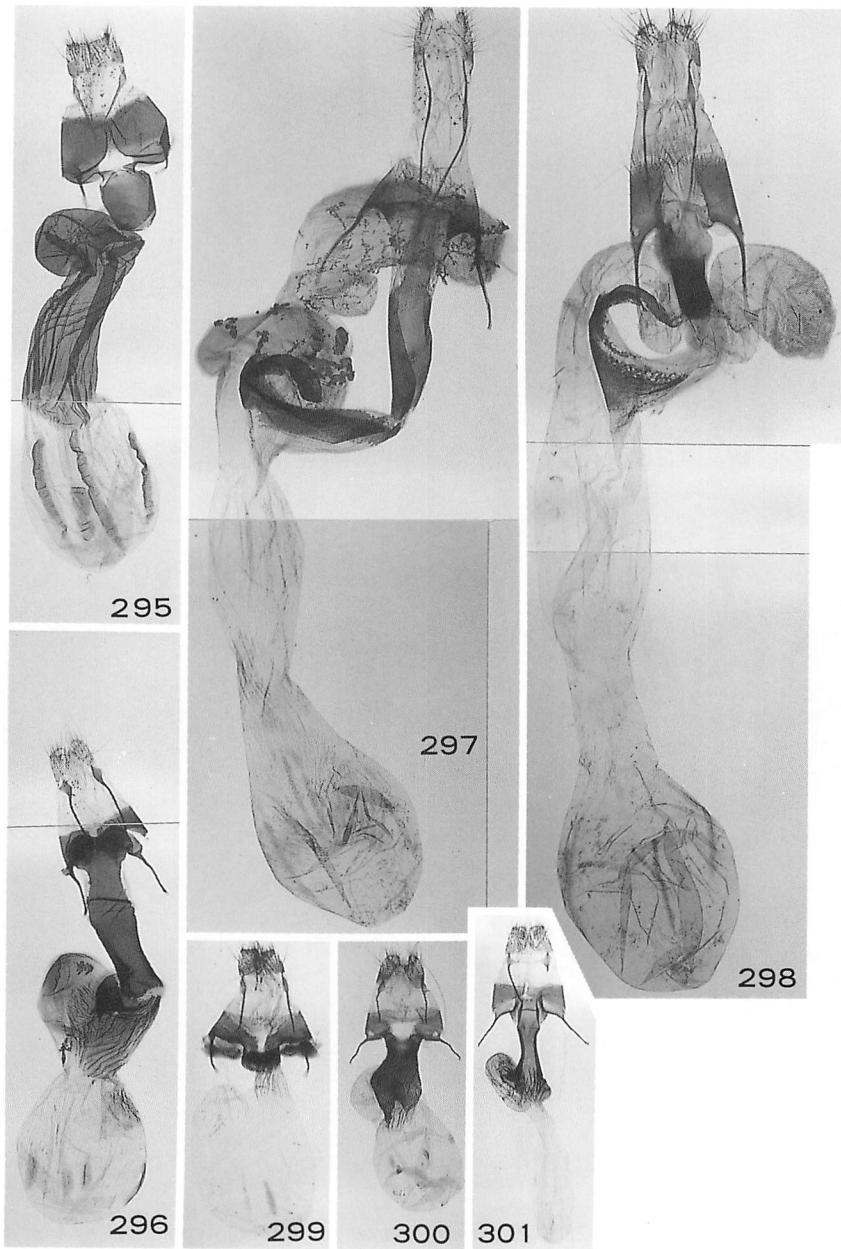
Figs 278–283. Male and female genitalia. 278. *Epipsestis albicosta* sp. n., ♂, holotype. 279. *Ditto*, ♀, paratype. 280. *Demopsestis formosana mahendrai* ssp. n., ♂. 281. *D. f. formosana*, ♂. 282. *Euplexidia inextotica* sp. n., ♂, holotype. 283. *Triaena denticulata*, ♂.



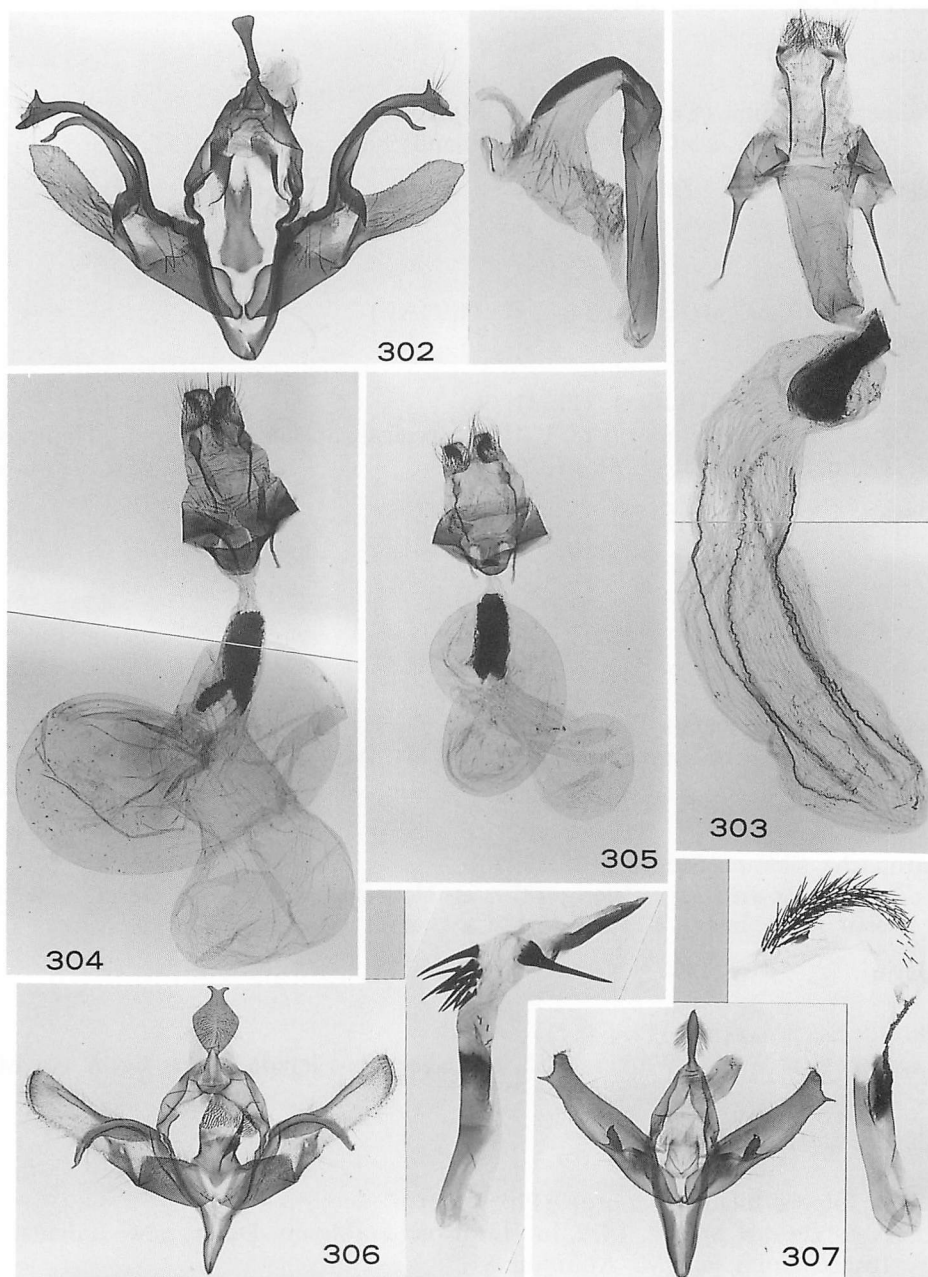
Figs 284–287. Male genitalia of *Harutaecographa*. 284. *H. fusciculata*. 285. *H. bipuncta* sp. n. 286. *H. castanea* sp. n., holotype. 287. *H. caerulea* sp. n., holotype.



Figs 288–294. Male genitalia. 288. *Orthosia harutai* sp. n., holotype. 289. *O. nepalensis* sp. n., holotype. 290. *Lithopolia confusa*. 291. *Craterestra subterminata*. 292. *Elwesia diplostigma*. 293. *Nyctycia shelpa* sp. n., holotype. 294. *N. angustipennis* sp. n., holotype.



Figs 295–301. Female genitalia. 295. *Orthosia harutai* sp. n., paratype. 296. *Craterestra subterminata*. 297. *Harutaecographa pallida* sp. n., holotype. 298. *H. castanea* sp. n., paratype. 299. *Orthosia nepalensis* sp. n., paratype. 300. *O. nigralba* sp. n., holotype. 301. *Lithopolia confusa*, Taiwan.



Figs 302–307. Male and female genitalia. 302. *Xylena nepalina* sp. n., ♂, holotype. 303. *Ditto*, ♀, paratype. 304. *X. tatajiana*, ♀, Taiwan. 305. *X. apicimacula* sp. n., ♀, holotype. 306. *Meganephria splendida* sp. n., ♂, holotype. 307. *Lophoterges taiwana semialba* ssp. n., ♂, holotype.

ARCTIIDAE: ARCTIINAE

Yasunori Kishida

Nyctemera lacticinia (Cramer) (Pl. 41: 20)*Geometra lacticinia* Cramer, 1777, *Uitlandsche Kapellen* 4: 153, pl.368, fig. H.

Godavari: 1♂, 23. iv. 1990.

NOCTUIDAE: AGANAINAE (= HYP SINAE)

Yasunori Kishida

Asota plana lacteata (Butler) (Pl. 41: 26)*Hypsa lacteata* Butler, 1881, *Illst. typical Specimens Lepid. Heterocera*
Colln Br. Mus. 5: 43, pl. 87, fig. 9.

Godavari: 1♂, 22. iii. 1992.

LASIOCAMPIDAE

Yasunori Kishida

Dendrolimus himalayanus Tsai & Liu (Pl. 57: 9)*Dendrolimus himalayanus* Tsai & Liu, 1964, *Acta ent. sinica* 13: 241.

Daman Pass: 4♂, 28. vi. 1992.

Gastropacha sikkima Moore (Pl. 57: 10)*Gastropacha sikkima* Moore, 1879, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr Atkinson*: 75.

Godavari: 1♂, 19. vi. 1990.

Euthix decisa (Walker) (Pl. 57: 11)*Lasiocampa decisa* Walker, 1855, *List Specimens lepid. Insects Colln Br. Mus.*
6: 1441.

Godavari: 1♂, 28. ix. 1991.

Kunugia fulgens fulgens (Moore) (Pl. 57: 12)*Lebeda fulgens* Moore, 1879, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr Atkinson*: 81.

Daman Pass: 1♂, 28. vii. 1992.

Cyclophragma jianchuanensis Tsai & Hou (1976, *Acta ent. sinica* 19: 449) from Yunnan, S. China is considered to be the same species with *fulgens*. But in *jianchuanensis* the ground color of forewing is pale ochreous, so I treat it as a distinct subspecies as follows.*Kunugia fulgens jianchuanensis* Tsai & Hou, 1976, *comb. & stat. n.*

BOMBYCIDAE

Yasunori Kishida

Penicillifera lectea (Hampson) (Pl. 57: 15)*Ocinara lectea* Hutton, 1865, Trans. ent. Soc. Lond. (3) 2: 328.

Godavari: 1♀, 8. x. 1991; 3♂, 10–13. x. 1991; 1♂, 1. xi. 1991; 1♂, 11. xi. 1991; 1♂, 6. iii. 1992.

Bombyx huttoni Westwood (Pl. 20: 8; 57: 16)*Bombyx incomposita*: Kishida, 1992, Tinea 13 (Suppl. 2): 80 (nec Eecke, 1929).

Godavari: 1♂, 2. xi. 1991.

This species was erroneously recorded as *B. incomposita* by me in the previous part of this series, and the female specimen illustrated as *huttoni* (Pl. 20: 7) represents a new species described below.

Sesquiluna mirifica sp. n. (Pl. 20: 7; 57: 17, holotype)*Bombyx huttoni*: Kishida, 1992, Tinea 13 (Suppl. 2): 80 (nec Westwood, 1847).

Length of forewing 18mm (expanse 32mm) in male, 19mm (expanse 33mm) in female. Forewing grayish fuscous; antemedian band dark fuscous, angled in cellule 1; postmedian band dark fuscous, excurved beyond cell, thinly edged outside with pale gray; a dark fuscous lunar mark below apex beyond subterminal line, which is conspicuous from apex to vein 3, then obsolete. Hindwing dark fuscous brown, with a faint and pale outer line; two black fascia on inner margin.

Male genitalia (Fig.310). Uncus short, its tip slightly bilobed; a pair of hairy processes from gnathos long, extending just beyond tip of uncus; valva somewhat constricted near middle, with a long and densely setose costal process; ventro-apical protrusion long; juxta wide, roundly excised at middle of caudal end. Aedeagus with two short caudal processes.

Holotype. ♂, Godavari, 22. ix. 1991. Paratype. Godavari, 1♀, 2. vi. 1990.

This and the following new species resemble the species of *Bombyx*, but are distinctive in the radial vein system of the forewing, which is biforked into R2+3 and R4+5, R2 being a very short spur towards costa. This state of the radial veins is identical with that of *Theophoba pendulans* Mell from China, the type species of *Theophoba* Fletcher & Nye, 1982 (the name originally proposed by Mell, 1958, but as nomenclaturally unavailable) and in the male genitalia the new species are very closely related to and apparently congeneric with *pendulans*. Mell intended further to place *Andraca albilunata* Hampson from Assam in *Theophoba*, being unaware of that this latter species had been designated as type species of its own genus *Sesquiluna* Forbes, 1955. The generic name *Sesquiluna*, originally established in the Eupterotidae, is thus valid for the concept of Mell, and is taken here in the Bombycidae as the senior synonym of *Theophoba* (syn. n.). Besides the species treated here, *Bombyx lemeepauli* Lemée, [1950] from Vietnam seems to come into this genus. The known host-plant both for *albilunata* and *pendulans* is *Cudrana*, the Moraceae, suggesting that the genus would be associated with the *Bombyx* lineage of Holloway (1987).

Sesquiluna affinis sp. n. (Pl. 57: 18, holotype)

Similar and closely related to *mirifica*, but a little larger (length of forewing 20mm, expanse 39mm). Both wings more brownish; forewing densely irrorated with pale olive along subcosta and in basal area.

Male genitalia (Fig. 311). Uncus stouter, its tip forked; a pair of hairy processes from gnathos shorter; valva longer and wider with ventro-apical protrusion rather weak. Aedeagus with two longer caudal processes.

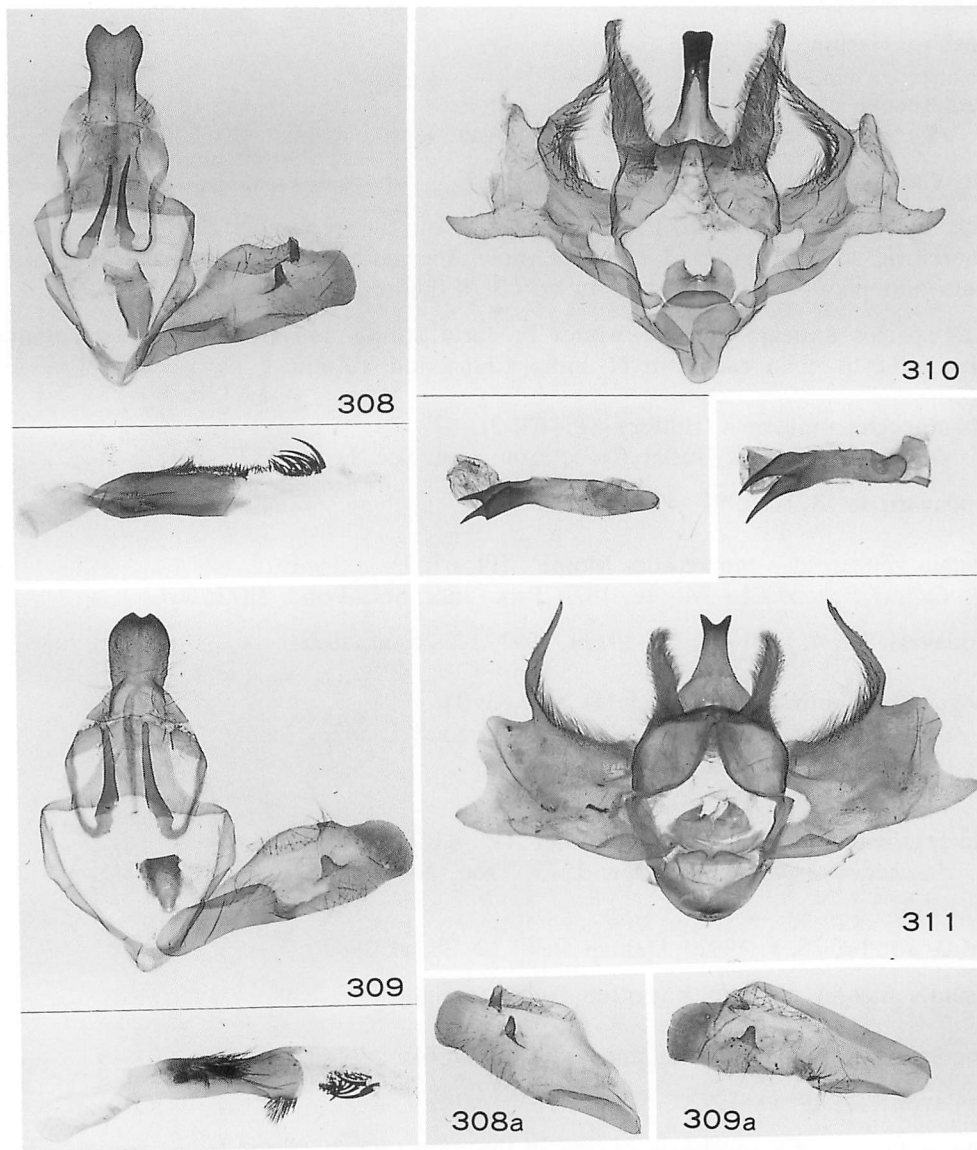
Holotype. ♂, Malaysia, Cameron Highlands, 1984 (ex. H. Inoue).

Andraca angulata sp. n. (Pl. 57: 13, holotype; 14)

Length of forewing 24mm (expanse 45mm) in male, 35mm (expanse 65mm) in female. Similar to *A. bipunctata* in general maculation and coloration, but the wing shape is different. Termen of both wings crenulate; protrusion of hindwing at vein 4 prominent. Black spot in cell minute in forewing, absent in hindwing, while in *bipunctata* it is conspicuous in both wings.

Male genitalia (Fig. 308). Similar to those of *bipunctata* (Fig. 309), but uncus more widely concave at tip and gnathos slenderer; valva a little shorter and harpe set more dorsally. Aedeagus with a row of short hairy spines, while in *bipunctata* it bears two bunches of spines.

Holotype. ♂, Godavari, 7. v. 1991. Paratypes. Godavari: 1♂, 3. x. 1989; 1♂, 25. v. 1990; 2♂ 1♀, 3–12. vi. 1990; 2♂, 6. vi. 1991; 3♂, 6. xi. 1991; 2♂, 26–29. xi. 1991; 1♀, viii. 1992; 1♂, 2. vi. 1992; 1♂, 21. vi. 1992. Mt. Phulchouki: 1♂, vi. 1991; 2♀, viii. 1991. India, E. Sikkim, Dalapchand Aritaal (1,500m), 1♂, 21. v. 1992.



Figs 308–311. Male genitalia (a: left valva). 308. *Andraca angulata* sp. n. 309. *A. bipunctata* Walker. 310. *Sesquiluna mirifica* sp. n. 311. *S. affinis* sp. n.

SPHINGIDAE

Toshiro Haruta

Pentateucha curiosa Swinhoe*Pentateucha curiosa* Swinhoe, 1908, Ann. Mag. nat. Hist. (8) 1: 62.

Mt. Phulchouki: 1♂, data uncertain.

This specimen is now in BMNH, London, by the request of Dr. I. J. Kitchin. Therefore, to my regret, I can not show the detailed data and color picture. Data and picture will be shown in part 3 of this series.

This species appears only in winter or early spring and only a few specimens have hitherto been caught in N. India, China and Taiwan.

Thamnoecha uniformis (Butler) (Pl. 63: 2)*Hyloicus uniformis* Butler, 1875, Proc. zool. Soc. Lond. 1875: 261.

Godavari: 1♂, 3. ix. 1991.

Langia zenzeroides zenzeroides Moore (Pl. 63: 1)*Langia zenzeroides* Moore, 1872, Proc. zool. Soc. Lond. 1872: 567.

Godavari: 1♂, 4. iii. 1992; 1♂, 19. iii. 1992; 1♂, 25. iii. 1992.

Degmaptera mirabilis (Rothschild) (Pl. 63: 3)*Cypa mirabilis* Rothschild, 1894, Novit. zool. 1: 542.

Godavari: 1♂, 12. iii. 1992.

Macroglossum corythus luteata Butler (Pl. 63: 8)*Macroglossa luteata* Butler, 1875, Proc. zool. Soc. Lond. 1875: 241, pl. 37, fig. 5.

Godavari: 1♂, 25. v. 1992. Daman Pass: 1♂, 28. vi. 1992.

Usually flies in daytime, but often comes to light.

Theretra griseomarginata (Hampson) (Pl. 24: 6)

Godavari: 1♂, 19. vi. 1992.

This is the second specimen of one of the rarest hawk-moths from Nepal. Only some four specimens have hitherto been taken in the world.

Rhagastis velata (Walker) (Pl. 63: 7)*Pergesa velata* Walker, 1866, List Specimens lepid. Insects Colln Br. Mus. 35: 1853.

Godavari: 1♂, 21. ix. 1989.

Rhagastis hayesi Diehl (Pl. 63: 5)

Rhagastis hayesi Diehl, 1980, *Heterocera sumatrana* 1: 71, pl. 9, fig. 116.

Godavari: 1♂, 13. iv. 1990.

New record from Nepal.

This species was recently separated from *Rh. acuta* Walker, 1856, by Dr. E. W. Diehl who was a famous investigator of moths particularly on hawk-moths. This species has been known from Sikkim and Burma.

Cechenena scotti Rothschild (Pl. 63: 4)

Cechenena scotti Rothschild, 1920, *Ann. Mag. nat. Hist.* (9) 5: 481.

Godavari: 1♂, 24. ix. 1989; 1♂, 13. v. 1990; 1♂, 25. v. 1990; 1♂, 16. iv. 1991; 2♂1♀, 9–18. v. 1991; 1♂, 22. v. 1992.

SATURNIIDAE

Toshiro Haruta

Dictyoploca simla (Westwood) (Pl. 63: 6)

Saturnia simla Westwood, 1848, *Cabinet Orient. Ent.*: 41, pl. 20, fig. 1.

Godavari: 2♀, 2–3. x. 1991.

Acknowledgement

I express my hearty thanks to Dr. J. M. Cadiou for his advice and help on the identification.

NOTODONTIDAE

Shigero Sugi

Further eight species of the Notodontidae are added to the Godavari fauna from the material I received since publication of the previous part. For some previously treated taxa, changes of generic or specific names are introduced and additional figures are given, particularly of the opposite sex.

Cerura menciana basirectilinea subsp. n. (Pl. 64: 1, holotype)

Male. Forewing length 23mm. Forewing uniformly dark grey, patterns generally similar to that of *Cerura menciana* except inner antemedial row of black dots almost erect to dorsal margin, not elbowed at middle, the costal half of antemedial line much reduced into a linear row of small dots, parallel to the inner antemedial line. The strongly wavy postmedial line weak and hardly traceable. Reniform lacking the ring, represented by a dark lunar bar, subterminal line moderately waved. Hindwing whitish, with veins fuscous, a dark discal bar and terminal series of black dots as in *menciana*.

Male genitalia (Fig. 314). Hardly separable from other subspecies of *menciana*.

Female unknown.

Holotype. ♂, Godavari, 11. iv. 1992, genitalia slide 6801.

C. menciana Moore, ranges widely throughout China, east to Japan and the western population is referred to the subspecies *birmanica* Bryk, 1950, the type locality being Burma (Schintlmeister, 1992: 79–90, fig. 172). In *birmanica* the forewing pattern is rather normal, with no tendency to intergrade to the Nepalese form described here.

Further Himalayan material is needed to establish the precise status of *basirectilinea*. Daniel (1972: 254) reported once *Cerura birmanica* from Kathmandu Chauni without any more comment.

Quadricalcarifera comata (Leech) (Pl. 27: 9, 13)

Stauropus comatus Leech, 1898, Trans. ent. Soc. Lond. 1898: 306.

Quadricalcarifera viridimacula Matsumura, 1925, Zool. Mag., Tokyo 34: 521; Sugi, 1992, Tinea 13 (Suppl. 2): 97.

The synonymy cited above was introduced by Schintlmeister (1992: 96), who examined the female holotype from China in BMNH. The name *comatus* had been overlooked in Kiriakoff's catalogue.

Phalera goniophora Hampson (Pl. 64: 17)

Phalera goniophora Hampson, 1910, J. Bombay nat. Hist. Soc. 20: 90.

Phalera himalayana Nakamura, 1974, Tyô Ga 25: 122, figs 13, 14.

Daman Pass: 3♂, 28. vi. 1992, genitalia slide 6798.

Although the specimens from Daman pass, near Godavari, show some difference in facies either from the population of Central Nepal (Nacheng near Nilgiri, 2♂, genitalia slide 4221) or the Assam series (Khasi Hills, 3♂, genitalia slides 3766, 5544) in my collection, all may be united as a single species for which the valid name is *goniophora* Hampson, described from Khasi Hills.

Neodrymonia vinacea (Moore) (Pl. 64: 3)

Stauropus vinaceus Moore, 1879, Proc. zool. Soc. Lond. 1879: 404, pl. 33, fig. 1.

Heterocampa brunnea Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 60, not Grote & Robinson, 1867.

Heterocampa moorei Kirby, 1892, Syn. Cat. Lepid. Heterocera 1: 565. Replacement name for *Heterocampa brunnea* Moore, 1879.

Daman Pass: 1♂, 28. vi. 1992, genitalia slide 6800.

This species had been known as *N. moorei* Kirby, until the female-based name *vinaceus* Moore was united with it as the senior synonym (Holloway & Bender, 1985: 106, 115).

Examination of the male genitalia proves that the Himalayan *vinacea* (Fig. 313) is very close to *seriatopunctata* (Matsumura) ranging in Taiwan (type locality) and China. They share a distinctive eighth sternite, bilobate with deep central cleft and terminal spurs (Fig. 312, also cf. Sugi, 1979, fig. 135; Schintlmeister, 1992, fig. 425) but slightly differ in the large costal flap, which in *seriatopunctata* has somewhat sinuous edges with a ridge running to the apex and bearing a row of fine teeth. The basal pattern of forewing is also identical, though in *seriatopunctata* the coloration is paler with much clearer markings especially at the outer half of wing and the size is smaller. Two Thailand males examined (genitalia slide 5415, NSMT) are better assigned to *seriatopunctata* in the structure of the genitalia.

Pseudofentonia argentifera (Moore) (Pl. 27: 8; Pl. 64: 2)

Daman Pass: 2♂, 28. vi. 1992.

The male is illustrated.

Rachiades Kiriakoff

In his just recent paper, Schintlmeister (1992: 113) discussed the status of the generic name *Rachiades* Kiriakoff, taking it as the senior synonym of *Pulia* Kiriakoff. He stated that the type material of *Semidonta lichenicolor* Oberthür, the type species of *Rachiades*, was a single female and that no specimen other than the type was known. This means that Kiriakoff's figure of male genitalia for *lichenicolor* (1967, text-fig. 67) was not based on the type material, but most likely to be drawn from a misidentified specimen. Thus there is no room to doubt the introduced synonymy, hence

Rachiades danieli (Sugi), comb. n. (Pl. 28: 11)

Pulia danieli Sugi, 1992, Tinea 13 (Suppl. 2): 101, pl. 28, fig. 11.

I received some more material from Godavari, but all are again females. The male is still unknown. Schintlmeister (1992) illustrated a Darjeeling female (but as *himalayana* Kiriakoff).

Taking this opportunity, a new species of *Rachiades* from Thailand will be described hereunder.

Rachiades siamensis sp. n. (Pl. 64: 12, holotype)

Male. Forewing length 30mm. Antenna serrate and strongly fasciculate as in *albimaculata* (Okano). Forewing termen slightly obtusely angled at vein M2, tone and pattern being unlike other known species, rather greyish partly irrorated with reddish brown and less blackish, with reniform rufous, normally sized and never suffused with whitish. Postmedial line sharply serrate on veins, not fringed with pale posteriorly and the space beyond it markedly paler towards subterminal. Hindwing pale greyish white, without any trace of medial band. Pale anal bar clear, shaded below with fuscous to termen.

Male genitalia (Fig. 319). Very similar to those of *albimaculata* (Fig. 66) particularly in the massive trigonate socii, which is more sharply elongated towards lateral angle, the apical spine being longer and strongly recurved. The strap-like terminal projection to the aedeagus is longer and more flexed, bearing several spinules at base and one on halfway to apex.

Female unknown.

Holotype. ♂, Thailand, Chiang Mai, Doi Pui, c. 1,300m, 1–4. ix. 1987 (Moriuti, Saito, Arita, Yoshiyasu). Genitalia slide 5735. UOP.

Pheosiopsis sichuanensis (Cai), sp. rev., comb. n. (Pl. 30: 3)

Suzukia sichuanensis Cai, 1981, Acta zootaxon. sin. 6: 96, figs.

[*Pheosiopsis sikkima* (Moore); Sugi, 1992, Tinea 13 (Suppl. 2): 102. Identification tentative]

The heading name is here used for the species of *Pheosiopsis* that I tentatively called *sikkima* Moore in the previous part, since then I found that the genitalia figure of *Suzukia sichuanensis* Cai, from Sichuan, China, was sufficiently identical with those of the Godavari specimens (Fig. 76). They are characterized by the much reduced uncus and socii, the basally narrow valva, with the sacculus less bulged ventrally and lacking digitate process (harpe), and the aedeagus bearing a conical spine extremely terminal. In the Godavari specimens the terminal spine is sharply directing basewards, but in the Thailand males (examined, genitalia slide 5444, NSMT) the spine is almost as figured by Cai. The eighth abdominal sternite is as figured in Fig. 76, with a pair of round lobations on the concaved posterior margin. Cai did not mention about the sternite character of the type material. The female genitalia are illustrated (Fig. 317) from a single Godavari specimen.

The combination of these genitalic features makes sure that *sichuanensis* is not a synonym of *formosana* (Okano), as stated by Schintlmeister (1992: 136) who downgraded the latter to a subspecies of *Pheosiopsis cinerea* (Butler).

P. cinerea and *formosana* are surely two close allopatric relatives with similar genitalia in the male (cf. Schintlmeister, 1992, figs 469, 470), but in the female there are more definite differences as figured. In *formosana* (Fig. 316) the posterior edge of the antevaginal plate waved, directly articulated to the sclerotized part of ostium bursae, which is rather symmetrical, cuplike, while in *cinerea* (Fig. 315) the antevaginal plate is free transversal sclerite with serrate posterior margin, and the ostium bursae is less sclerotized and asymmetrical. The posterior margin of the eighth tergite is highly raised centrally in *formosana*, while in *cinerea* only slightly rounded.

I should like to retain *P. formosana* (Okano) as a full species ranging in central to western China including Taiwan. *P. sichuanensis* thus flies in Nepal, N. Thailand and China (Prov. Sichuan, type-locality).

The taxonomic status of *P. sikkima* Moore had been puzzling to me. Kiriakoff (1959: 328–329), examining the Moore's type, stated that it was a larger male with antenna "ciliated" and forewing length 29.5mm. The photograph shown later (Kiriakoff, 1968, pl. 11, fig. 89) would be the same specimen but the antennae look somewhat thicker than ciliated. Schintlmeister's (1992: 136) conclusion based on the type material was that it was a senior synonym of *flavicincta* Gaede, though no detailed comment on *sikkima* type was published.

***Pheosiopsis flavicincta* (Gaede) (Pl. 64: 4)**

Notodonta flavicincta Gaede, 1930, in Seitz, Gross-Schmett. Erde 10: 641, pl. 80, line d.

Godavari: 1♂, 3. iv. 1992, genitalia slide 6802. There is another specimen in my collection: C. Nepal, Nacheng near Nilgiri, 1♂, 12–14. vi. 1969 (T. Miyashita), genitalia slide 4706.

The male genitalia are as illustrated (Fig. 320).

A purely Himalayan species already reported from Godavari (Daniel, 1972: 258).

***Ramesa bhutanica* (Bänziger), comb. n. (Pl. 64: 5)**

Poncetia bhutanica Bänziger, 1988, Nat. Hist. Bull. Siam 36: 32, figs 3, 4, 33, 34, 36.

Godavari: 1♂, 12. x. 1991, genitalia slide 6709.

The male genitalia are as illustrated (Fig. 323)

Described from two males from Bhutan (holotype, BMNH) and Khasis, Assam (paratype, BMNH). I examined a further male from Darjeeling, 8. ix. 1983 (Owada), genitalia slide 5291, NSMT. This species appears to be restricted to N. E. Himalaya, its close allopatric ally, *R. siamica* (Bänziger) (comb. n.) flying in Thailand and Vietnam (TM, examined).

***Zaranga pannosa* Moore (Pl. 31: 2; Pl. 64: 7)**

Mt. Phulchouki: 2♂, 7, 9. iv. 1992, genitalia slide 6797.

A male moth is here illustrated for the facility of identification.

***Formofentonia orbifer* (Hampson) (Pl. 64: 6)**

Stauropus orbifer Hampson, [1893], Fauna Br. India (Moths) 1: 152.

Godavari: 1♂, 31. x. 1991.

Pseudonerice pictibasis* (Hampson) (Pl. 31: 1)Pheosia pictibasis* Hampson, 1897, J. Bombay nat. Hist. Soc. 11: 282.*Pseudonerice unidentata* Bryk, 1950, Ark. Zool. 42 (A) (9): 40, pl. 3, fig. 10; Sugi, 1992, Tinea 13 (Suppl. 2): 108.

The confusion concerning the status of *P. pictibasis*, caused by Kiriakoff's misidentification, was clarified by Schintlmeister (1992: 116). *P. pictabasis* became the senior synonym of *unidentata* Bryk. The unique Godavari specimen examined is a female, but the genitalia of a Nepalese male are illustrated by Nakamura (1974). This species thus flies in Nepal, Assam, Myanmar, and also in Thailand (examined; Schintlmeister, 1989).

Omichlis rufotincta* Hampson (Pl. 64: 8)Omichlis rufotincta* Hampson, 1895, Trans. ent. Soc. Lond. 1895: 279.

Mt. Phulchouki: 1♂, 23. iii. 1992, genitalia slide 6799.

In the genitalia the Nepalese male examined (Fig. 322) is nearly identical with a Thailand male in my collection (Doi Suthep, genitalia slide 3790) (Fig. 321), but there are minor differences between them. In the Nepalese male the uncus is apically much dilated and truncate, with the ventral process on the stem of uncus more definitely triangular, and the costal central flap on the valva is much narrower and rounded apically, not triangular with broad base and tapered apex as in the Thailand male.

For the present, these two specimens may be better assigned to *O. rufotincta* Hampson described from E. Pegu, Myanmar, of which the male has been unknown (Kiriakoff, 1968: 163). *O. rufotincta* is thus the only representative of the genus in Himalaya to Thailand.

***Odontosina mahendra* sp. n. (Pl. 64: 10, holotype; 11)**

Female. Forewing length 24mm. Antenna filiform with minute ciliation. Forewing ochreous grey heavily irrorated with dark grey. Antemedial line sinuous, defined with white interiorly. A longitudinal black bar in cell connecting to black lunule at end of cell, dark diffuse median shade nearly straightish below it to dorsum. Postmedial line strongly serrate and defined with white exteriorly, dark broad shade beyond it defined with highly irregularly waved subterminal line. Hindwing pale fuscous grey at basal two-thirds, with distinct whitish medial line separating darker marginal area. Veins infuscated except towards base, a distinct oblique discoidal bar.

Female genitalia (Fig. 318). Posterior apophysis stout, about twice as long as anterior apophysis. Posterior margin of eighth tergite bilobate with wide medial cleft, each lobe with extremity bifid. ostium bursae oblique, ductus bursae short, once twisted, bursa copulatrix bulbous, fully membranous and without signum.

Holotype ♀ and paratype 2♀, Mt. Phulchouki, ix. 1991, genitalia slide 6776.

The generic placement of the present new species is provisional, since the male being unknown. *Odontosina* Gaede, 1933, includes three much smaller Chinese species. The new species has similarly patterned forewing with moderate scale-tooth on the dorsum, a crenulate termen, and an areole wanting but the compound eye is hairy, more markedly on the posterior area, the character not mentioned by authors. There are two pairs of spur in the hindtibia, contrary to the definition of *Odontosina* given by Kiriakoff (1967: 6) in his key to genera (couplet 28).

Stauropus sikkimensis Moore (Pl. 32: 11; 64: 9)

Mt. Phulchouki: 1♀, 27. v. 1992; 1♀, 5. vi. 1992.

An adult female is illustrated.

Miostauropus mioides (Hampson) (Pl. 32: 14, 15)

Stauropus mioides Hampson, 1904, J. Bombay nat. Hist. Soc. 16: 130.

Miostauropus thomasi Sugi, 1992, Tinea 13 (Suppl. 2): 113, pl. 32, figs 14, 15. Syn. n.

Schintlmeister (in litt.) kindly informed me that *thomasi* is strictly conspecific to the typical *mioides* from Assam, the stated difference in the genitalia being merely derived from rather inappropriate figure of Kiriakoff (1967, 1968).

THAUMETOPOEINAE

The Godavari material of thaumetopoeines include three species of a group known to most authors as *Gazalina*. They are strictly congeneric, having very similar structures of the male and female genitalia and can be referred to *apsara* (Moore), *chrysolopha* (Kollar) and *transversa* Moore as treated by Hampson ([1893]) for the Himalayan fauna.

Kiriakoff (1967) recognized for them two genera: *Gazalina* Walker, with type species *Gazalina venosata* Walker (now a synonym of *Dasychira apsara* Moore) and *Ansonia* Kiriakoff, with type species *Liparis chrysolopha* Kollar. However, his description and figure of the male genitalia as of *apsara* (Kiriakoff, 1967: 56, fig. 39; 1970: 13, fig. 2) are puzzling, quite unlike those of specimens before me in having a long hooked uncus, socii absent, and valva elongated with parallel sides and round apex, a longitudinal groove separating sacculus. Such morphological features are not shared with any other thaumetopoeines included in his work (1970), suggesting that Kiriakoff's statement on *Gazalina* be based on a misidentified specimen other than a thaumetopoeine. The traditional use of the generic name *Gazalina* is therefore adopted hereunder.

Anyway, the generic name *Ansonia* Kiriakoff is invalid, since it is a junior subjective synonym of *Oligoclona* Felder, 1874, of which *Oligochlaena* Kirby, 1892, is an incorrect subsequent spelling, and also a junior homonym of *Ansonia* Stoliczka, 1870 (Nye & Fletcher, 1980: 133).

Gazalina chrysolopha (Kollar) (Pl. 64: 13, 14, 20)

Liparis chrysolopha Kollar, [1844], in Hugel Kaschimir und das Reich Siek 4: 470.

Godavari: 1♂, 20. v. 1990; 1♂, 18. vii. 1990; 1♀, 30. vii. 1991; 1♀, 3. viii. 1991; 1♂ 1♀, 13–17. ix. 1991; 1♂, 2. x. 1991; 1♂, 18. iv. 1992; 1♂ 1♀, 5–8. v. 1992, 2♂, 20–30. v. 1992.

Male genitalia (Fig. 325). Nearly identical with those of the next species in having an apically broad, truncate uncus with terminal fine spurs laterally. The apex of aedeagus is finely scobinated and more definitely trilobed.

Female genitalia (Fig. 329). The sclerotized ostium bursae is funnel shaped, tapering anteriorly. The caudal margin of the eighth sternite has a deep medial notch.

Common in Godavari, flying in April to October. The series examined includes a small male (Pl. 64: 20) in which the forewing has medial lines much bolder, the antemedial being nearly erect to the dorsum and more distant from the post-medial towards costa, and infuscation on veins diminishing towards termen.

Gazalina apsara (Moore) (Pl. 64: 15, 16)

Dasychira apsara Moore, [1860], in Horsfield & Moore, Cat. lepid. Insects Mus. nat. Hist. East-India House (2): 341.

Gazalina venosata Walker, 1865, List Specimens lepid. Insects Colln Br. Mus. 32: 398.

Godavari: 1♀, 18. vi. 1987 (T. Miyashita). Mt. Phulchouki: 5♂, 8–11. v. 1991; 8♂, 21–26. iv. 1992. India, WB, Darjeeling, 1♀, v. 1979, genitalia slide 6771.

Differs from the preceding species in the more or less completely rudimentary medial lines of the forewing, and narrower, less whitish banding on the abdominal segments above. In the female the termen of the forewing is completely edged with black.

Male genitalia (Fig. 324). The apex of aedeagus is more weakly scobinate, the apical lobation being rather obscure.

Female genitalia (Fig. 328). The sclerotized ostium bursae is much reduced in size and the ductus bursae is longer and tubular.

Gazalina transversa Moore (Pl. 64: 21)

Gazalina transversa Moore, 1879, in Hewitson & Moore, Descr. new Indian lepid. Insects Colln late Mr Atkinson: 47, pl. 2, fig. 22.

Godavari: 3♂, 23. ix. 1989; 2♂, 18–25. v. 1990.

Male genitalia (Fig. 326). The uncus is a small hook, with bluntly pointed tip. The valva is rather short, ventral margin strongly bulged at basal two-thirds, with deep concavation before apex. The apex of aedeagus deeply cleft, the ventral lobe ending in conical lobe, the other belt-like, bearing a few fine granules before extremity.

The female is unknown to me.

A new *Gazalina* from Taiwan

Gazalina has been known as the only thaumetopoeine genus ranging in Himalaya to West China but the discovery of the following species from Taiwan extends its geographical range far eastwards to the Pacific. Although Kiriakoff (1970: 12) listed in his catalogue "*Thaumetopoea baibarana* Matsumura, Terra typica Formose" as species incertae sedis, it was non-existing binomen accompanied by false original reference. On this wrong basis he threw doubt on occurrence of *Thaumetopoea* in Taiwan, suggesting that if it were truly a thaumetopoeine it should be better assigned to *Gazalina* or *Ansonia*.

Gazalina purificata sp. n. (Pl. 64: 18, 19)

Male. Expanse 27–30mm. head and vertex white, frons and palpi dark grey, compound eye fringed with dark grey hair laterally and below, pectus dark grey. Legs white, foretibia suffused with fuscous grey inside, foretarsi mixed with fuscous grey towards tip. Terminal segment of mid- and hind tarsi tinged with fuscous. Thorax and abdomen white. Fore- and hindwings pure white, with transverse lines absent.

Male genitalia (Fig. 327). Very similar to those of *transversa* in respect of the uncal structure, shape of valva and apical bilobation of the aedeagus, showing close relationship between the two species. The apex of valva remarkably extends into a beak-like process.

Female. Expanse 35mm. Similar to male except robust abdomen with golden brown anal hair tuft. The dark portion of head, pectus and legs are somewhat paler, rather brownish grey, and often completely degenerate in tarsi.

Female genitalia (Fig. 330). Ostium bursae sclerotized, rather tubular, and not tapered anteriorly. Ductus bursae not tubular, dilated laterally at posterior portion. Bursa copulatrix elliptoid.

Holotype. ♂, Taiwan, Hualien Hsien, Kuanyuan, 2,400m, 7–8. viii. 1987 (S. Sugi), genitalia slide 5335. In Sugi's collection. Paratypes. Taiwan. Nantou Hsien: Lushan Spa, 1,200m, 1♀, 3–5. viii. 1985 (S. Sugi), 1♀, 9–10. viii. 1987, (S. Sugi), genitalia slide 5367. Hualien Hsien: Kuanyuan, 2,400m, 1♂, 7–8. viii. 1987 (S. Sugi). Chiayi Hsien: Alishan 2,270m, 2♂, 8–10. viii. 1985 (S. Sugi), genitalia slide 5366.

Abbreviations

The following abbreviations are added to those used in the previous part.

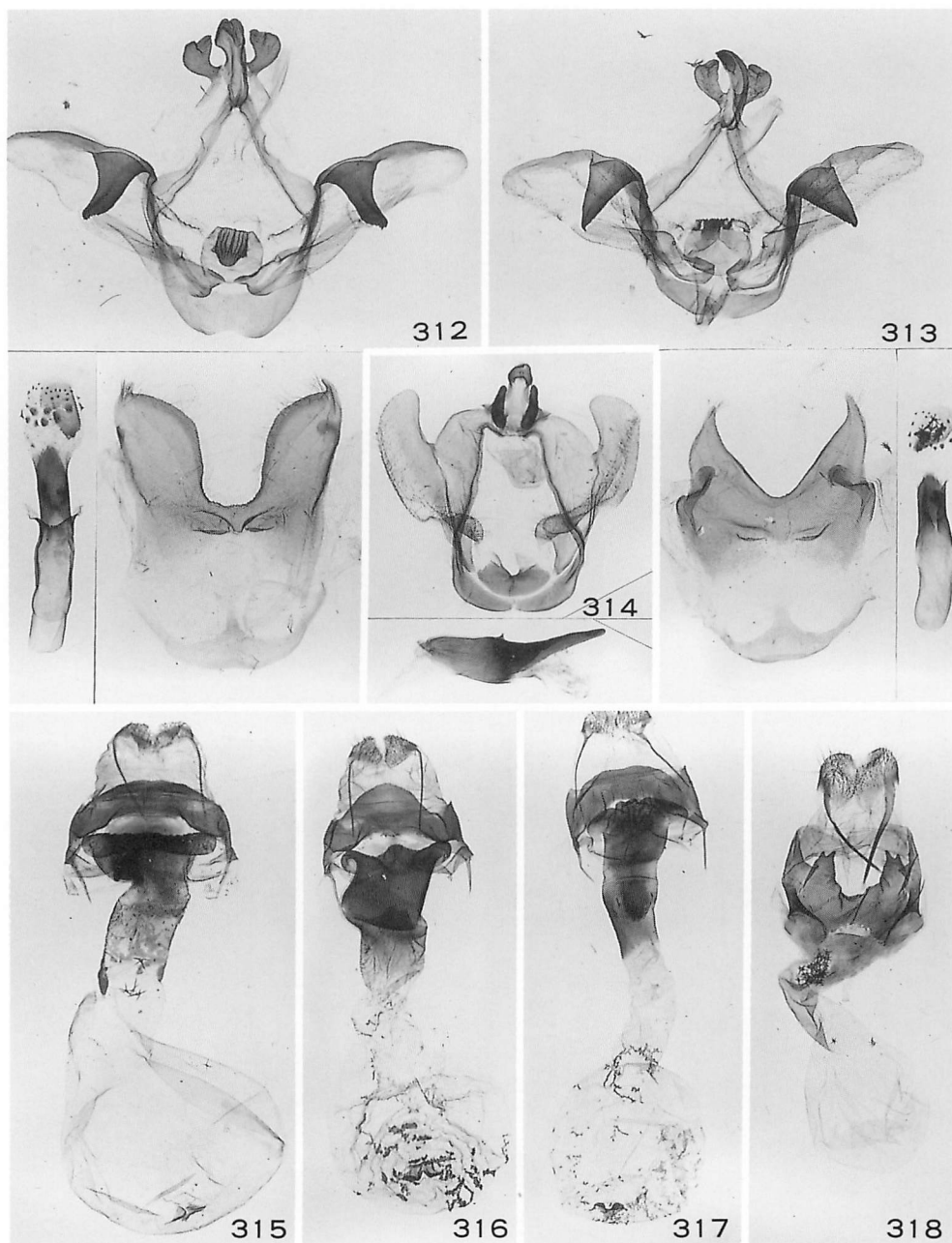
BMNH: Natural History Museum, London.

TM: Természettudományi Múzeum, Budapest.

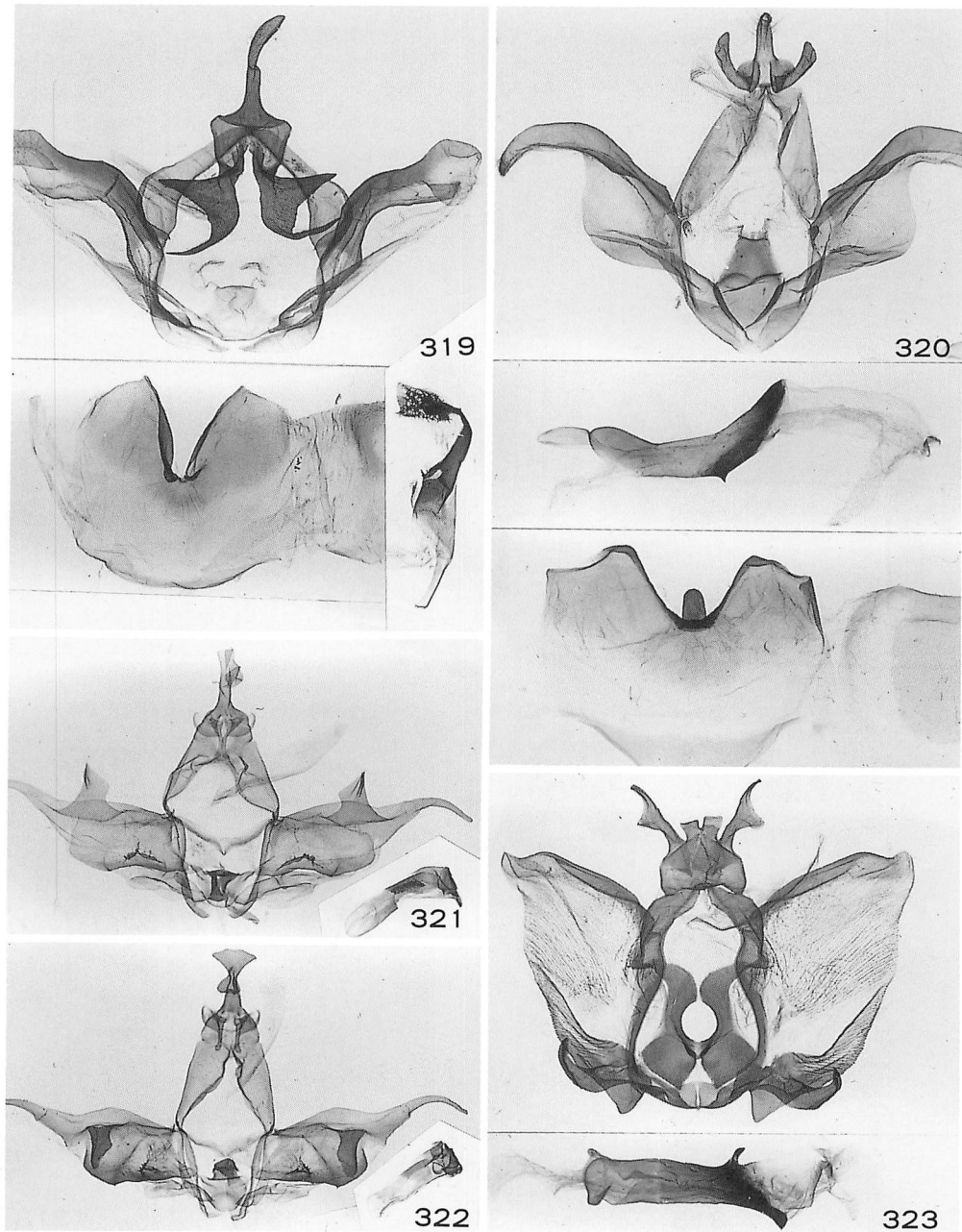
References

For saving space, references are confined to those not cited in the previous part.

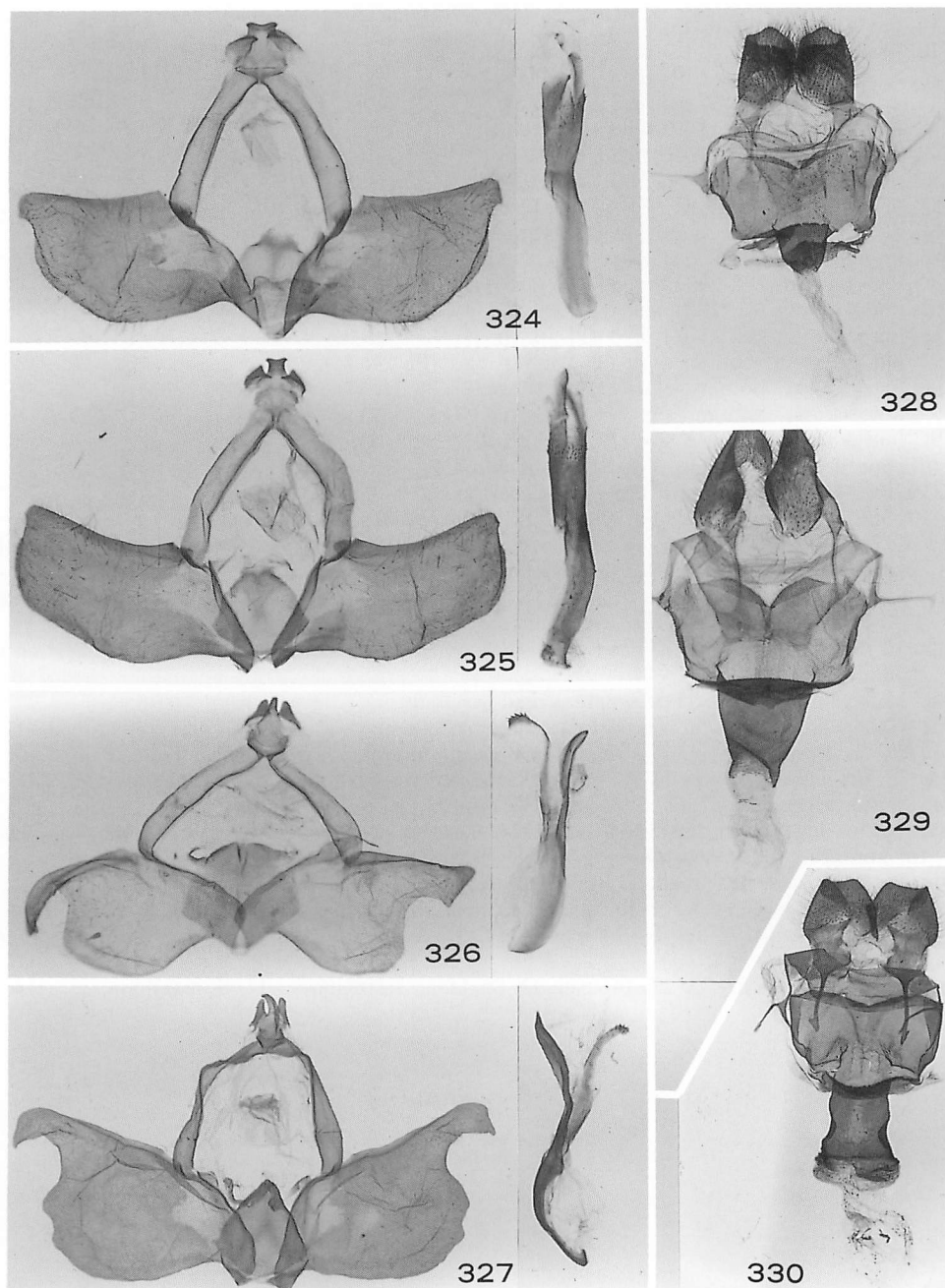
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Figs 312–314. Male genitalia. 312. *Neodrymonia seriatopunctata* (Matsumura), Taiwan. 313. *N. vinacea* (Moore). 314. *Cerura menciana basirectilinea* subsp. n., holotype. Figs 315–318. Female genitalia. 315. *Pheosiopsis cinerea* (Butler). 316. *P. formosana* (Okano). 317. *P. sichuanensis* (Cai). 318. *Odontosina mahendra* sp. n.



Figs 319–323. Male genitalia. 319. *Rachiades siamensis* sp. n., holotype, Thailand. 320. *Pheosiopsis flavicincta* (Moore). 321. *Omichlis rufotincta* (Hampson), Thailand. 322. *Ditto*, Nepal. 323. *Ramesa bhutanica* (Bänziger).



Figs 324–327. Male genitalia of *Gazalina* spp. 324. *apsara* (Moore). 325. *chrysolopha* (Kollar). 326. *transversa* Moore. 327. *purificata* sp. n., holotype, Taiwan.
 Figs 328–330. Female genitalia of *Gazalina* spp. 328. *apsara* (Moore). 329. *chrysolopha* (Kollar). 330. *purificata* sp. n., Taiwan.

Corrigenda to Part 1

- p. 18, line 10. For (Pl. 6: 15) read (Pl. 6: 17).
 p. 18, line 13. For (Pl. 6: 16) read (Pl. 6: 18).
 p. 18, line 19. For (Pl. 6: 17) read (Pl. 6: 16).
 p. 18, line 23. For (Pl. 6: 18) read (Pl. 6: 15).
 p. 48, line 10. For (Pl. 13: 9) read (Pl. 13: 10).
 p. 48, line 19. For (Pl. 13: 10) read (Pl. 13: 9).
 p. 57, lines 5, 6 from bottom. For *separans* read *separata*.
 p. 58, line 10, from bottom. For pl. 61, fig. 10 read pl. 111, fig. 10.
 p. 65, lines 12, 13. For *dolosa* read *dolorosa*.
 p. 80, line 14. For (Pl. 20: 11) read (Pl. 20: 12).
 p. 80, line 17. For (Pl. 20: 12) read (Pl. 20: 11).
 p. 83, line 9. For (Pl. 21: 3) read (Pl. 21: 2).
 p. 83, line 14. For (Pl. 21: 2) read (Pl. 21: 3).
 p. 91, line 12 from bottom. For (Pl. 24: 17) read (Pl. 24: 14).
 p. 91, line 5 from bottom. For (Pl. 24: 18) read (Pl. 24: 17).
 p. 94, line 9 from bottom. For (Pl. 25: 1) read (Pl. 25: 2).
 p. 94, line 3 from bottom. For (Pl. 25: 2) read (Pl. 25: 1).
 p. 101, line 4 from bottom. For NSMT read UOP.
 p. 110, line 11 from bottom. For (Pl. 31: 13) read (Pl. 31: 14).
 p. 110, line 7 from bottom. For (Pl. 31: 14) read (Pl. 31: 13).
 p. 121, Fig. 97. Photograph of male sternite and tergite printed above genitalia should correctly belong to Fig. 94 *Hexafrenum pseudosikkima*.
 Plate 6, for legends to figs 15–18 read: 15. Ecliptopera hampsoni 16. Eustroma melancholica
 17. Ecliptopera relata 18. E. triangulifera
 Plate 13, for legends to 9, 10 read: 9. Tethea consimilis commifera 10. T. oberthueri occidentalis.
 Plate 15, legends to fig 6. For *separans* read *separata*.
 Plate 16, legends to fig. 28. For *dolosa* read *dolorosa*.
 Plate 20, for legends to figs 1, 2 read: 1. Odonestis formosae harutai ♀ 2. Ditto ♂
 Plate 20, for legends to figs 11, 12 read: 11. Bivinculata kalikotei 12. Ernolatia moorei.
 Plate 21, for legends to figs 2, 3 read: 2. Acherontia lachesis 3. A. styx styx
 Plate 24, for legends to figs 14–16 read: 14. Cechenena lineosa lineosa 15. Rhagastis castor aurifera 16. R. confusa.
 Plate 25, for legends 1, 2 read: 1. Brahmaea hearseyi 2. B. wallichii.
 Plate 30, legend to fig. 5. For *doisuthepensis* read *doisuthepica*.
 Plate 30, for legends to figs 14–16 read: 14. Eushachia aurata 15. Mimopydna essa, ♂ 16. Ditto ♀.
 Plate 31, for legends to figs 13, 14 read: 13. Spatalina ferruginosa 14. S. argentata.

Color Plates

All figures are approximately natural size.



Plate 33

1. *Eterusia aedea edocla* 2. Ditto 3. *E. tricolor* 4. *Gynautocera papilionaria* 5. *Pidorus glaucopsis* 6. *Histia flabellicornis flabellicornis* 7. *Campylotes histrionicus* 8. *C. sikkimensis* 9. *Milleria adalifa* 10. *Achelura bifasciata* 11. *Chalcosia auxo albara* 12. *Milleria adalifa* 13. *Sortia bicolor* 14. *S. pulchella* 15. *Agalope glacialis* 16. *A. primularis* 17. *Sortia pulchella* 18. *Corma maculata*



Plate 34

1. *Arichanna flavinigra* 2. *A. sparsa* 3. *A. lapsariata consocia* 4. *A. furcifera* 5. *A. sp.*
 6. *A. flavimedia* 7. *A. ramosa ramosa* 8. *A. marginata* 9. *A. transfasciata* 10. *A. albolineata* 11. *A. tramesata* 12. *Alcis perspicuata*, ♂ 13. Ditto, ♀ 14. *A. athola* 15. *A. amica*
 16. *A. variegata* 17. *A. harutai*, ♂ 18. Ditto, ♀ 19. *A. decussata* 20. *A. albifera* 21. *A. semialba* 22. Ditto 23. Ditto 24. *A. changmaiensis nepalina*, ♂ 25. Ditto, ♀ 26. *A. nigridorsaria* 27. *A. maculata productyota*



Plate 35

1. *Alcis quadrifera*, ♂ 2. Ditto, ♂ 3. Ditto, ♀ 4. Ditto, ♀ 5. *A. paraclarata*, ♂ 6. Ditto, ♀ 7. *A. neoclarata*, ♂ 8. Ditto, ♀ 9. *A. albilinea*, ♂ 10. Ditto, ♀ 11. *A. macroclarata*, ♂ 12. Ditto, ♀ 13. *Harutalcis glaucodisca* 14. *H. godavariensis* 15. *H. atrostipata* 16. *H. vialis* 17. *Psilalcis breta breta*, ♂ 18. Ditto, ♀ 19. *P. indistincta* 20. *P. subtochracea* 21. *Hypomecis nepalensis* 22. *H. cineracea* 23. *H. lioptilaria* 24. *H. fasciata* 25. *Paralcis conspicuata* 26. *P. bisinuata* 27. *P. pallidaria*



Plate 36

1. *Cleora fraterna*, ♂ 2. Ditto, ♀ 3. *Ascotis selenaria imparata* 4. *Cleora injectaria* 5. *Ophthalmitis cordularia* 6. *O. pertusaria* 7. *Racotis boarmiaria* 8. *Paradarisa chloauges chloauges* 9. *P. comparataria comparataria* 10. *Parectropis conspurcata* 11. *P. recurvaria* 12. *Gasterocome pannosaria pannosaria* 13. *Apophyga sericea* 14. *Myrioblephara duplex* 15. Ditto 16. Ditto 17. *M. conifera* 18. *M. planaria* 19. *M. irrorata* 20. *M. idaeoides* 21. *M. benefica* 22. *Diplurodes nepalensis* 23. *Myrioblephara marmorata* 24. Ditto 25. *M. cervina* 26. *Calichodes ochrifasciatus* 27. *C. defervescens*



Plate 37

1. *Ectropis dentilineata*, ♂ 2. Ditto, ♀ 3. *E. bhurmitra* 4. *Microcalicha fimbriata* 5. *Abaciscus tristis* 6. *A. kathmandensis*, ♂ 7. Ditto, ♀ 8. *Menophra costistrigata* 9. *M. decorata* 10. *M. subplagiata*, ♂ 11. Ditto, ♀ 12. *M. retractaria* 13. *M. subsenilis* 14. *M. serpentaria* 15. *Hirasa scripturaria*, ♂ 16. Ditto, ♀ 17. *H. muscosaria* 18. *Medasina albidaria*, ♂ 19. Ditto, ♀ 20. *M. parvalbidaria nepalensis*, ♂ 21. Ditto, ♀ 22. *M. combustaria* 23. *M. sp.*



Plate 38

1. *Medasina firmilinea* 2. *M. mucidaria* 3. *M. basistrigaria* 4. *M. stolidaria* 5. *M. oblitterata* 6. *M. similis* 7. *M. quadrinotata* 8. *M. mauraria* 9. *Gnophos tephrosiaria* 10. *Medasina creataria* 11. *Amraica recursaria*



Plate 39

1. *Cheromettia apicata*, ♂ 2. Ditto, ♀ 3. *Belippa horrida* 4. *B. thoracica* 5. *Dactylorhynchides rufibasale* 6. *Althonarosa horisyaensis* 7. *Altha subnotata* 8. *Demonarosa rufotessellata* 9. *Narosa conspersa* 10. *Atosia himalayana* 11. *Euphyctinides rava* 12. *Cania himalayana* 13. *Chalcoscelides castaneipars* 14. *Miresa bracteata* 15. *Monema coralina* 16. *Phrioxolepia similis* 17. *Parasa pastoralis* 18. *P. himalepida* 19. *P. herbifera* 20. Ditto 21. *P. argentilinea* 22. *Scopelodes vulpina*, ♂ 23. Ditto, ♀ 24. *S. testacea* 25. *Ceratonema retractata* 26. *Scopelodes venosa*, ♂ 27. Ditto, ♀ 28. *Trichogyia circulifera* 29. Ditto, Japan 30. *Mahanta quadrilinea* 31. *Phlossa crispa* 32. *P. fasciata* 33. *Thosea brunti* 34. *Setora baibarana* 35. *S. sinensis* 36. *Aphendala cana* 37. *Susica himalayana*



Plate 40

1. *Vamuna ramelana*, ♀ 2. Ditto, ♂ 3. *Churinga rufifrons* 4. *C. beema* 5. *Macrobrochis staudingeri* 6. *M. gigas* 7. *M. albifascia* 8. *M. prasena* 9. *Agrisius fuliginosus* 10. *Chrysozabdia bivitta*, ♀ 11. Ditto, ♂ 12. *C. biridana* 13. *Sidyra albifines* 14. *Eilema distorta* 15. *E. vagesa* 16. *Thysanoptyx tetragona* 17. *Eilema tumida* 18. *Macotosa nubcula* 19. *Eugoa bipunctata* 20. *Miltochrista linga*



Plate 41

1. *Cyana bellissima bellissima*, ♂ 2. Ditto, ♀ 3. *C. bellissima inouei* 4. *C. distincta babui*, ♀ 5. Ditto, ♂ 6. *C. distincta distincta* 7. *C. effracta* 8. *C. adita*, ♀ 9. Ditto, ♂ 10. *C. dohertyi*, ♂ 11. Ditto, ♀ 12. *C. sikkimensis* 13. *C. C. gelida* 14. *C. gazella* 15. *C. detrita* 16. *Miltochrista orientalis* 17. *M. defecta* 18. *Cyana guttifer*a 19. *Eilema basinota* 20. *Nyctemera lacticina* 21. *Asura dasara* 22. *Amata bicincta* 23. *Syntemoides imaon*, ♂ 24. *Miltochrista punicea* 25. *Syntemoides imaon*, ♀ 26. *Asota plana lacteata*

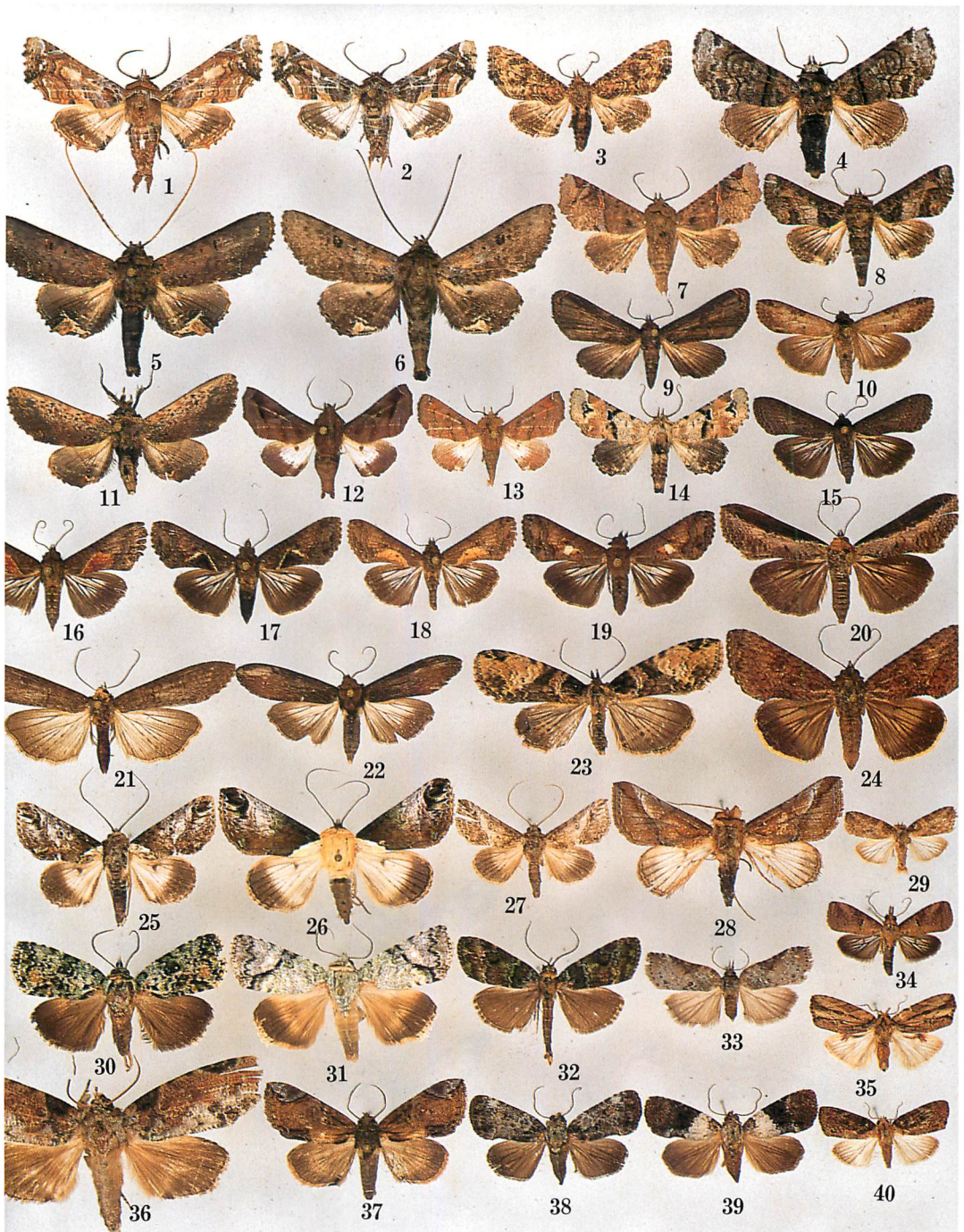


Plate 42

1. *Eutelia geyeri* 2. *E. blandatrix* 3. *E. favillatrixoides* 4. *Aplotelia diplographa* 5. *Anuga multiplicans* 6. *A. supraconstricta* 7. *Targalla sugii* 8. *Paectes subapicalis* 9. *Anigraea rubida* 10. *Lophoptera olivascens* 11. *Anuga lunulata* 12. *Penicillaria jocosatrix* 13. *P. simplex* 14. *Atacira chalybsa* 15. *Lophoptera apirtha* 16–19. *L. illucida* 20. *L. sqummigera* 21. *L. longipennis* 22. *L. tenuis* 23. *Sigmuncus albigrisea* 24. *Odontodes aleuca* 25. *Risoba prominens*, ♂ 26. Ditto, ♀ 27. *R. obstructa* 28. *R. variegata* 29. *Characoma nilotica* 30. *Blenina rotunda* 31. *B. quinaria* 32. *Labenda viridaloides* 33. *Nycteola asiatica* 34. *Gyrtothripa pusilla* 35. *Nanaguna breviscula*, ♂ 36. *Iscadia inexacta* 37. *Cryptothripa occulta* 38. *Aquis orbicularis* 39. Ditto 40. *Nanaguna breviscula*, ♀



Plate 43

1. *Tyana chloroleuca* 2. *T. pustrifera* 3. *T. callichlora*, ♂ 4. Ditto, ♀ 5. *T. falcata* 6. *Westermannia elliptica* 7. *W. superba* 8. *W. triangularis* 9. *W. cornucopia* 10. *Earias cup-reoviridis* 11. *Kerala punctilineata* 12. *Gelastocera castanea* 13. *Urbona soliera* 14. *U. sublineata* 15. *Maurilia iconica* 16. *Carea endophaea* 17. *C. angulata* 18. *C. varipes* 19. *C. albopurpurea* 20. *Pterogonia episcopalis* 21. *Camptoloma binotatum* 22. *Tortriciforma viridipuncta* 23. *Siglophora sanguinolenta* 24. *Amyna stellata* 25. *Tympanistes pallida* 26. *T. testacea* 27. *Xanthodes transversa* 28. *Amyna punctum* 29. *Ariolica superba* 30. *Gabala roseoretis* 31. *G. polyspialis* 32. *Sinna dohertyi* 33. *Corgatha semipardata* 34. *C. costipicta* 35. *C. costinotalis* 36. *Zurobata reticulata* 37. *Oruza divisa* 38. *Maliattha quadripartita* 39. *Pseudodeltote subcoenia* 40. *Ozarba incondita* 41. *Maliattha vialis* 42. *M. signifera* 43. *M. picata* 44. *M. arefacta* 45. *Koyaga larentiformis* 46. *Bryophilina mollacula* 47. *Ozarba incondita*



Plate 44

1. *Abrostola suisharyonis* 2. *A. anophioides* 3. *Puriplusia tetragona* 4. *Antoculeora ornaticissima* 5. *Sclerogenia jessica* 6. *Erythroplusia pyropia* 7. Ditto 8. *E. rutilifrons* 9. *Anaplusia pannosa* 10. *Autographa nigrisigna* 11. *Trichoplusia ni* 12. *Thysanoplusia orichalcea* 13. *T. intermixta* 14. *T. daubei* 15. *chrysodeixis minutus* 16. *Trichoplusia lectula* 17. *Zonoplusia ochreata* 18. *Ctenoplusia albostriata* 19. Ditto 20. *Chrysodeixis taiwani* 21. Ditto, Taiwan 22. *Acanthoplusia agnata* 23. *A. tarassota* 24. *Chrysodeixis eriosoma* 25. *C. acuta* 26. *Thysanoplusia reticulata* 27. *Scriptoplusia nigriluna* 28. *Ctenoplusia placida* 29. *Argyrogamma aeneofusa* 30. *Ctenoplusia furcifera* 31. Ditto 32. *Anadevidia peponis* 33. *A. hebetata*



Plate 45

1. *Catocala prolifica* 2. *C. sponsalis* 3. *C. tapestrina* 4. *Ophiusa coronata* 5. *Catocala hyperconnexa* 6. *Ophiusa triphaenoides* 7. *O. olista* 8. *Ulotrichopus macula* 9. *Ophiusa trapezium* 10. *Achaea serva* 11. *Attatha regalis* 12. *Ophiusa tirhaca* 13. *Achaea janata*

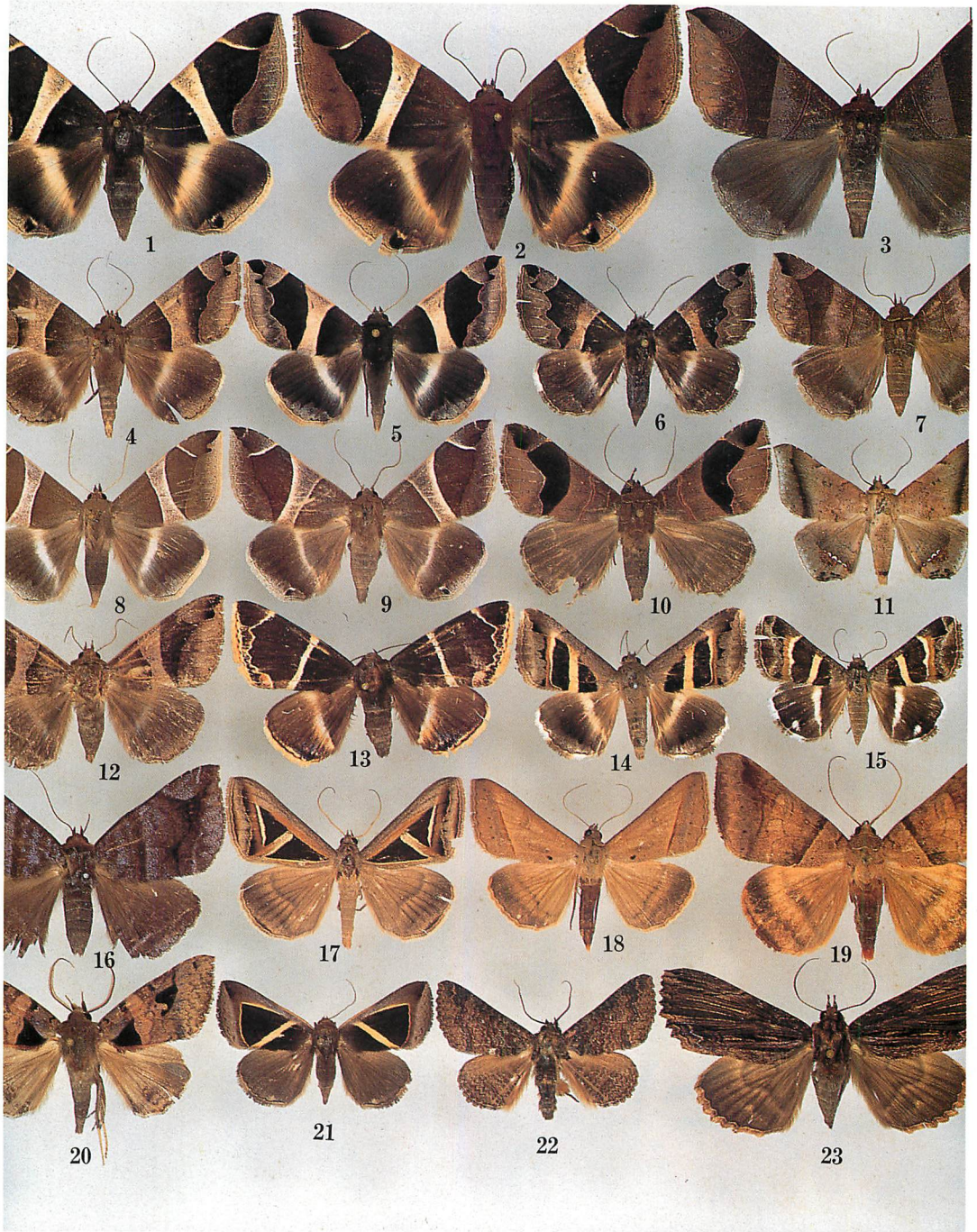


Plate 46

- 10
 1. *Parallelia cramer* 2. *P. praetermissa* 3. *P. maturata* 4. *P. stuposa* 5. *P. torrida* 6. *P. properata* 7. *P. amygdalis* 8. *P. arctotaenia* 9. *P. analis* 10. *P. joviana* 11. *P. palumba* 12. *P. arcuata* 13. *P. conficiens* 14. *Grammodes geometrica* 15. *G. stolidus* 16. *Parallelia luteipalpis* 17. *Trigonodes hyppasia* 18. *Remigia frugalis* 19. *Mocis undata* 20. *Pseudathyrma chinensis* 21. *Chalciopa mygdon* 22. *Pericyma umbrina* 23. *Ericeia umbrosa*



Plate 47

1. *Erebus caprimulgus* 2. *E. glaucopsis* 3. *Eupatula macrops* 4. *Erebus gemmans* 5. *Spirama helicina* 6. *S. retorta* (vernal form) 7. *Ditto* (aestival form)



Plate 48

1. *Hypopyra vespertilio* 2. *H. feniseca* 3. *Lagoptera junio* 4. *Artena dotata* 5. *Arcte coerulea* 6. *A. modesta* 7. *Anisoneura aluco* 8. *Entomogramma faurix* 9. *Lygephila dorsigera* 10. *Perinaenia accipiter*



Plate 49

1. *Isoura fuscicollis* (or close) 2. *Baorisa hieroglyphica* 3. *Lineopalpa horsfieldi* 4. Ditto
 5. *Belciana kala nepalensis* 6. *B. k. kala* 7. *Donda eurychlora* 8. *Anomis flava* 9. *A. combinans*
 10. *A. metgaxantha* 11. *A. figlina* 12. *A. involuta* 13. *A. mesogona* 14. *Plusiodonta coelonota*
 15. *Batracharta irrorata* 16. *Oxyodes billeti* 17. *Calyptra bicolor* 18. *C. fletcheri*
 19. *Oxyodes scrobiculata* 20. *Calyptra fasciata* 21. *C. multicornis* 22. *Oraesia rectistria*
 23. *O. emarginata* 24. *Hulodes caranea*



Plate 50

1. *Adris tyrannus* 2. *A. okurai* 3. *Othreis fullonia* 4. *O. materna* 5. *Eudocima salamina*
6. *Ischyia manlia* 7. *Serrodes campana* 8. *Hamodes propita* 9. *Lacera procellosa*



Plate 51

1. *Sypna dubitaria* 2. *S. albilinea* 3. Ditto 4. *S. dubitaria* 5. *Hypersynpnoides biocularis*
 6. *Synpnoides prumosa* 7. *S. pannosa* 8. *S. cyanivitta* 9. Ditto 10. *Hypersynpnoides constellata*
 11. *H. umbrosa* 12. *H. caliginosa* 13. *Daddala lucilla* 14. *D. brevicauda* 15. *Tinolius hypsana*



Plate 52

1. *Hypocala sabsatura* 2. *H. violacea* 3. *H. rostrata* 4. *H. deflorata* 5. *Fodina pallula*
 6. *Chrysopera combinans* 7. *Dinumma placens* 8. *Polydesma boarmoides* 9. *Ericcia pertendens*
 10. *Lycima polymesata* 11. *Hyospila bolinoides* 12. *Anticarsia irrorata* 13. *Itmaharea basalis*
 14. *Avitta rufifrons* 15. *A. taiwana* 16. *Nagia linteola* 17. *Aedia leucomelas* 18. *A. hollowayi*
 19. *Mecodina subcostalis* 20. *Catephia flavescens* 21. *C. perdicipennis* 22. *Mecodina quadripuncta*
 23. *Pasipeda haemorrhoea* 24. *P. dasyptera*, ♂ 25. Ditto, ♀ 26. *Diomea rotundata*

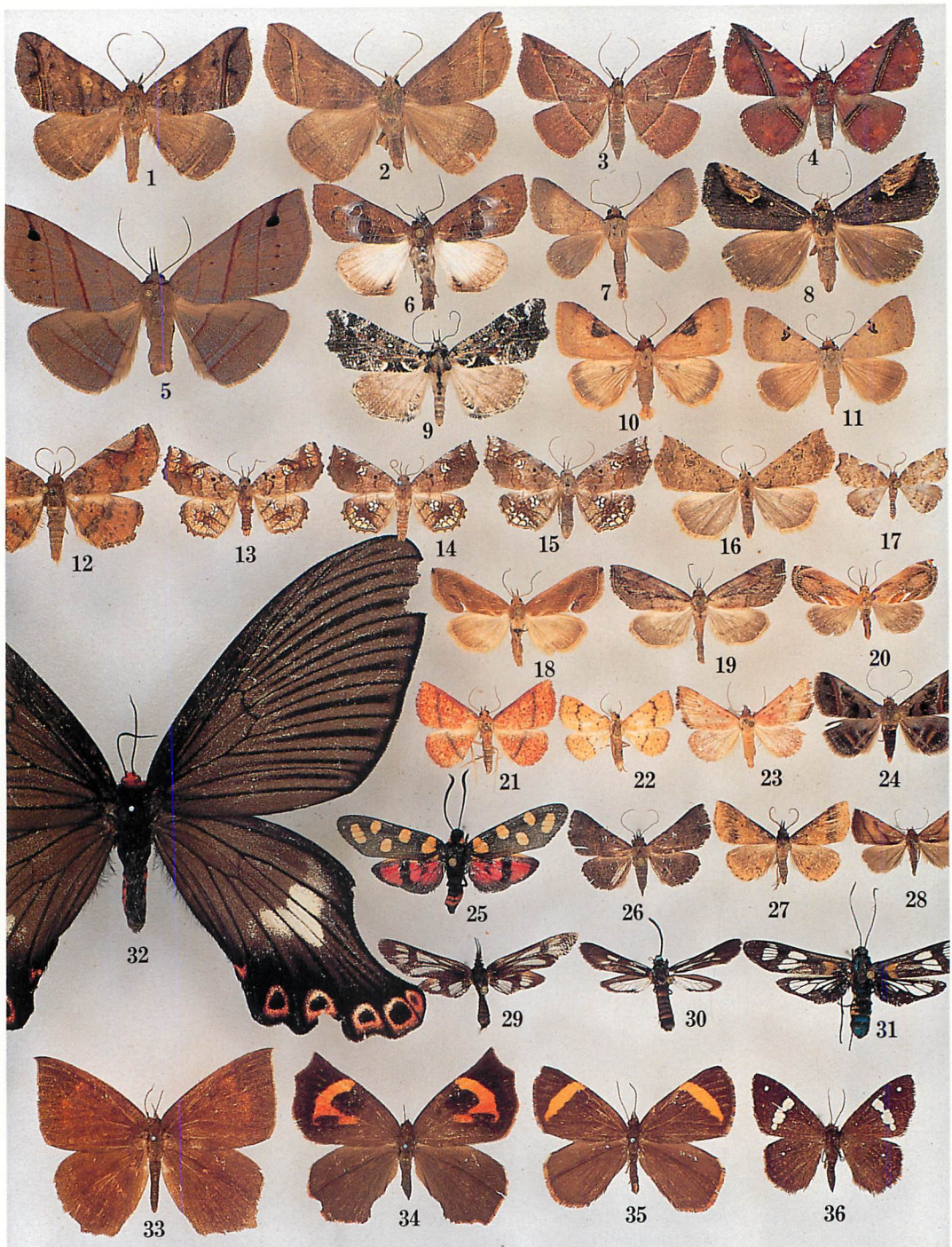


Plate 53

1. *Blasticorhinus varius* 2. Ditto 3. *Condote angulina* 4. *C. purpurea* 5. *Eurogramma obliquilineata* 6. *Coarica fasciata* 7. *Plecoptera reflexa* 8. *Pseudosphetta moorei* 9. *Perciana marmorea* 10. *Plecoptera oculata*, ♂ 11. Ditto, ♀ 12. *Pangrapta trimantesalis* 13. *P. albistigma* 14. *P. pseudalbistigma* (Taiwan) 15. Ditto (Japan) 16. *Pseudogyrtonea marmorea* 17. *Goniocraspedon mistura* 18. *Lophomilia albistria* 19. *L. violescens* 20. *L. takao* 21. *Raparna transversa* 22. *R. ochreipennis* 23. *Phytometra usta* 24. *Acantholipes regularis* 25. *Zygaena cashmirensis* 26. *Rhesala imparata* 27. *Gesonina obeiditalis* 28. *Rivula auripalpis* 29. *Phacusa tenebrosa* 30. *Lophosoma cuprea* 31. *Arachotia flaviplaga* 32. *Epicopeia polydora* 33. *Tetragonus catamitus* 34. *Pterodecta anchora* 35. *Callidula erycinoides* 36. *Herimba atkinsoni*

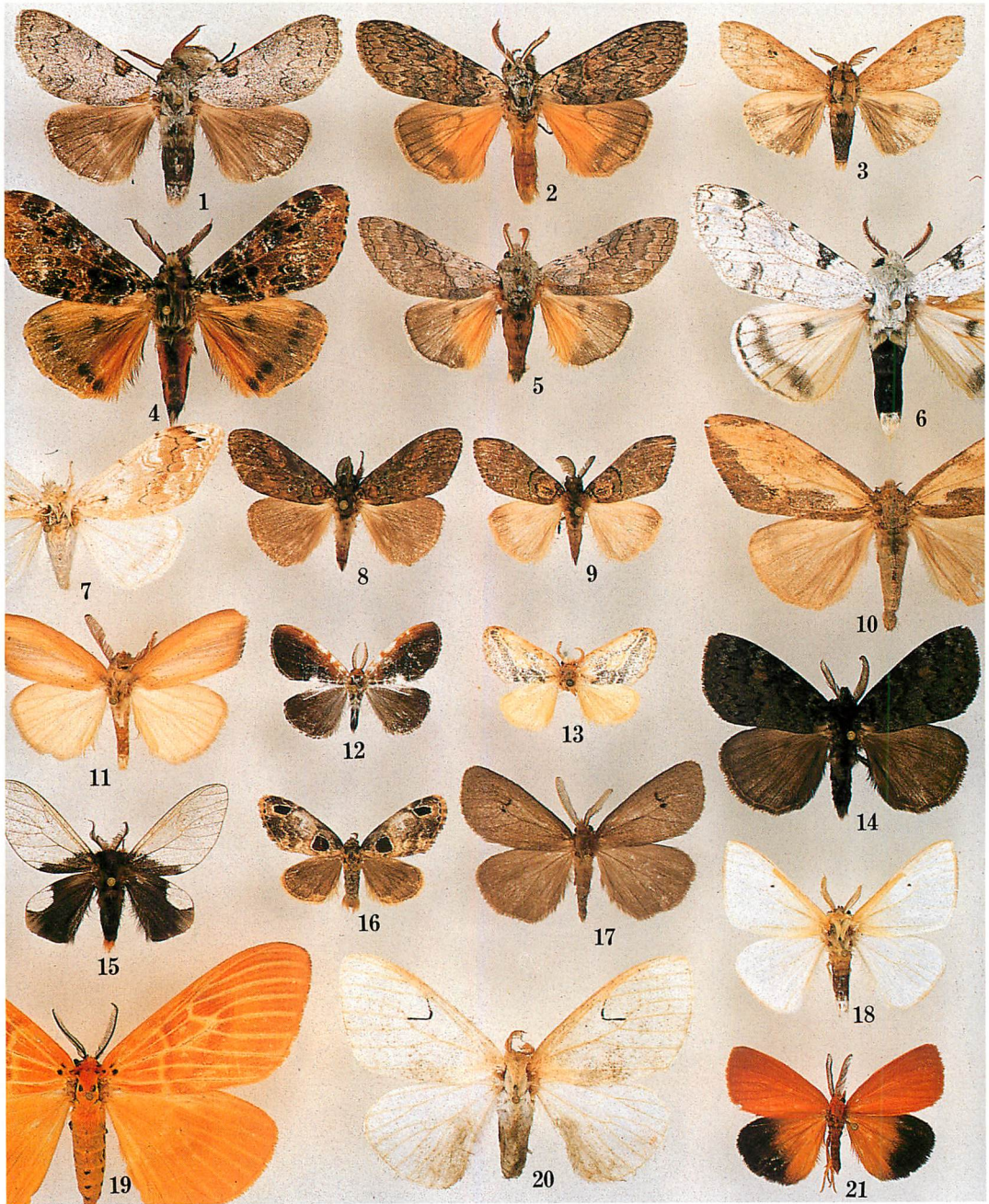


Plate 54

1. *Calliteara postfusca* 2. *C. strigata* 3. *C. angulata* 4. *C. complicata* 5. *C. grotei* 6. *C. cinctata* 7. *Dasychira dudgeoni*, ♀ 8. Ditto, ♂ 9. *D. mendosa*, ♂ 10. Ditto, ♀ 11. *D. pennatula* 12. *Daplasa variegata seminigra* 13. *D. irrorata* 14. *Neocifuna tenebrosa* 15. *Perina nuda* 16. *Medama diplaga* 17. *Laelia exclamationis* 18. *Arctornis cygna* 19. *Cispa punctifascia* 20. *Arctornis l-nigrum* 21. *Aroa pyrrochroma*



Plate 55

1. *Pida apicalis* 2. *P. decolorata* 3. *Mardara irrorata* 4. *M. plagidotata* 5. *M. calligramma*
 6. *Heracula discivitta* 7. *Numenes siletti*, ♀ 8. *Ditto*, ♂ 9. *N. patrana*, ♂ 10. *Ditto*, ♀ 11.
Lymantria concolor, ♀ 12. *Ditto*, ♂ 13. *L. bivittata*, ♂ 14. *Ditto*, ♀ 15. *L. mathura*, ♀ 16.
Ditto, ♂ 17. *L. marginata*, ♂ 18. *Ditto*, ♀

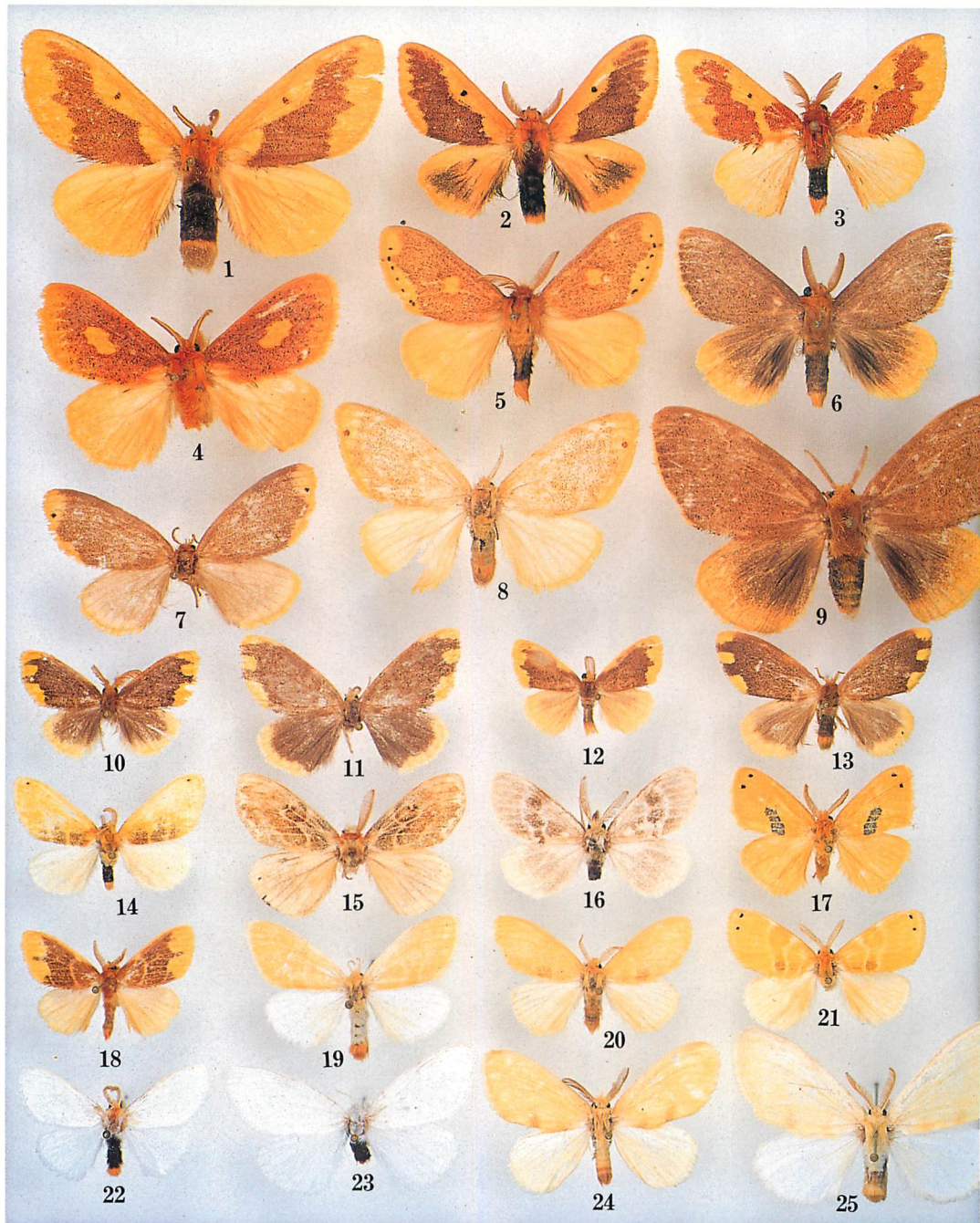


Plate 56

1. *Euproctis varia*, ♂ 2. Ditto, ♀ 3. *E. staudingeri* 4. *E. plagiata* 5. *E. marginata* 6. *E. uniformis*, ♂ 7. *E. sp. 1*, ♀ 8. Ditto 9. *E. uniformis*, ♀ 10. *E. subnotata*, ♂ 11. Ditto, ♀ 12. *E. scintillans*, ♂ 13. Ditto, ♀ 14. *E. sp. 2*, ♂ 15. *E. bipartita*, ♂ 16. *E. seitzii*, ♂ 17. *E. sp. 3*, ♂ 18. *E. basalis*, ♂ 19. Ditto, ♀ 20. *E. sp. 5*, ♂ 21. *E. sp. 4*, ♂ 22. *E. divisa*, ♂ 23. Ditto, ♀ 24. *E. sp. 6*, ♂ 25. Ditto, ♀



Plate 57

1. *Euproctis* sp. 7, ♂ 2. Ditto, ♀ 3. *E. postica*, ♂ 4. Ditto, ♀ 5. *E. plana*, ♂ 6. *E. inconcisa*, ♀ 7. *Pantana visum* 8. *Himala argentea* 9. *Dendrolimus himalayanus* 10. *Gastropacha sikkima* 11. *Euthrix decisa* 12. *Kunugia fulgens fulgens* 13. *Andraca angulata*, ♂ 14. Ditto, ♀ 15. *Penicillifera lectea* 16. *Bombyx huttoni* 17. *Sesquiluna mirifica* 18. *S. affinis*

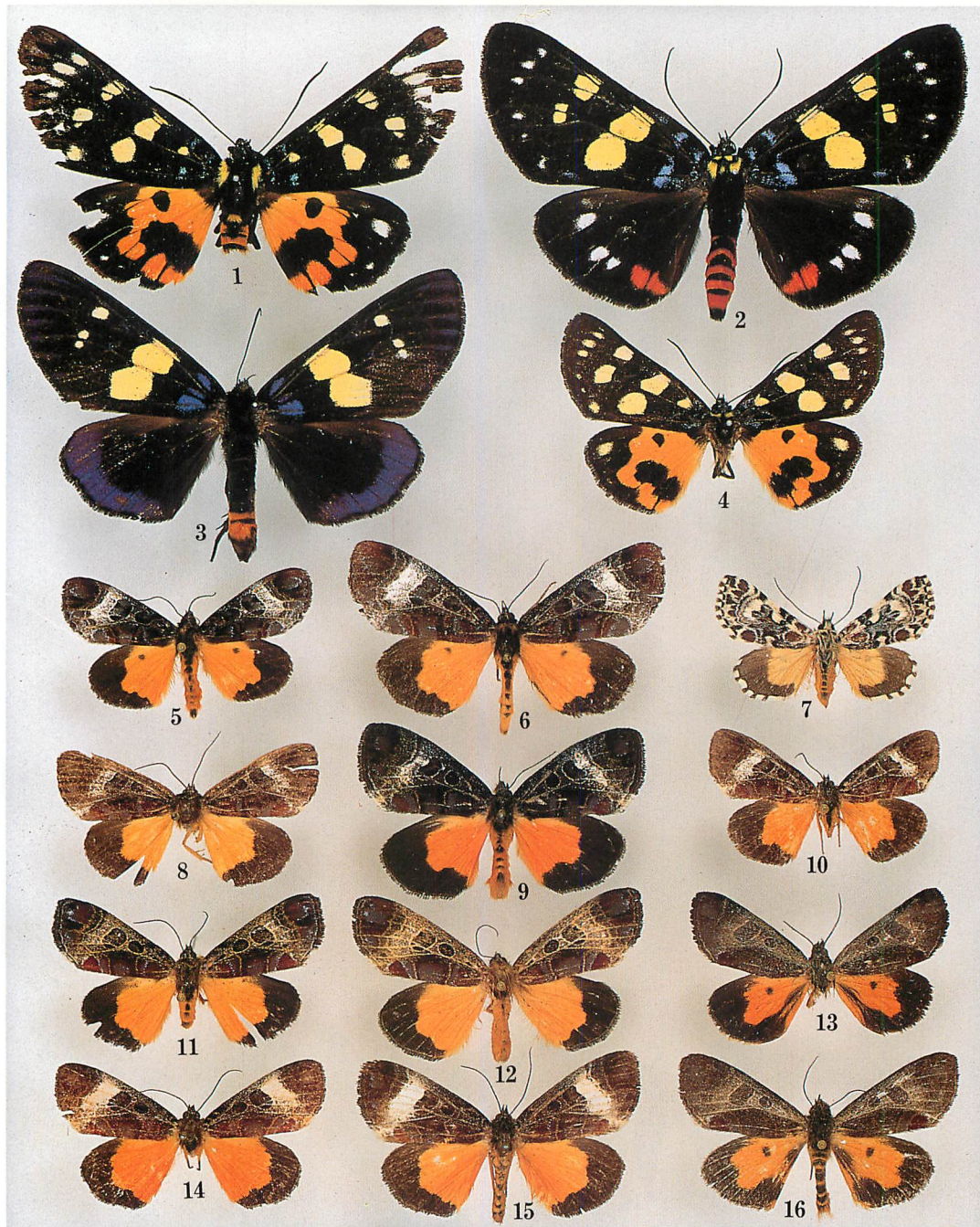


Plate 58

1. *Episteme maculatrix* 2. *E. adulatrix* 3. *Exsula victrix* 4. *Chelonomorpha austeni* 5. *Sarbanissa catacoloides*, ♂ 6. Ditto, ♀ 7. *S. tricycla* 8. *S. sp.*, ♂, C. Nepal 9. Ditto, ♀, Sikkim 10. Ditto, ♂, Sikkim 11. *S. subalba*, ♂ 12. Ditto, ♀ 13. *S. bala*, ♂ 14. *S. transiens*, ♂, Malaya 15. Ditto, ♀, Thailand 16. *S. bala*, ♀

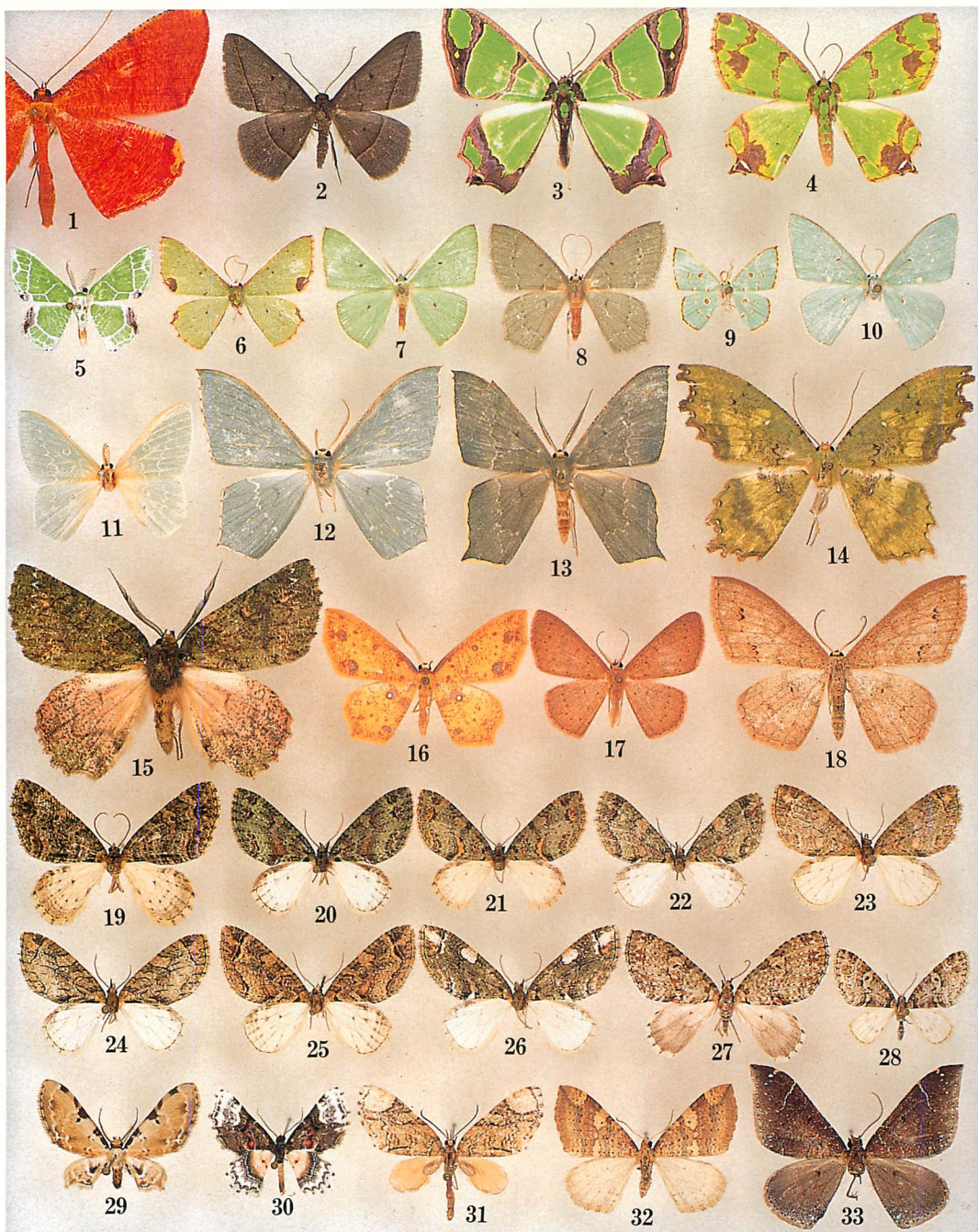


Plate 59

1. *Eumelea biflavata assamensis* 2. *Noreia vulsipennis* 3. *Agathia antitheta* 4. *A. lycanaria*
5. *Uliocnemis castalaria* 6. *Spaniocentra lyra* 7. *Comibaena tenera* 8. *Chlorissa arcana* 9. *Comostola subtilaria demeritaria* 10. *C. leucosticta* 11. *Hemistola flavicosta* 12. *H. grandis* 13. *Gelasma inaptaria* 14. *Paramaxates taiwana* 15. *Dindica subrosea* 16. *Synegiodes histrionaria* 17. *Anisodes obstataria imbuta* 18. *Scopula moorei* 19. *Trichopteryx virens*
20. *Trichopterygia adiopa* 21. *T. fulvifasciata* 22. *T. nepalensis* 23. *T. placida* 24. *T. melanogramma* 25. *T. harutai* 26. *T. albipunctata* 27. *T. superba* 28. *T. micradelpha* 29. *Brabira artemidora pallida* 30. *Macrohastina gemmifera* 31. *Sauris ignobilis* 32. *Idiotephria occidentalis* 33. *Xenortholitha falcata*

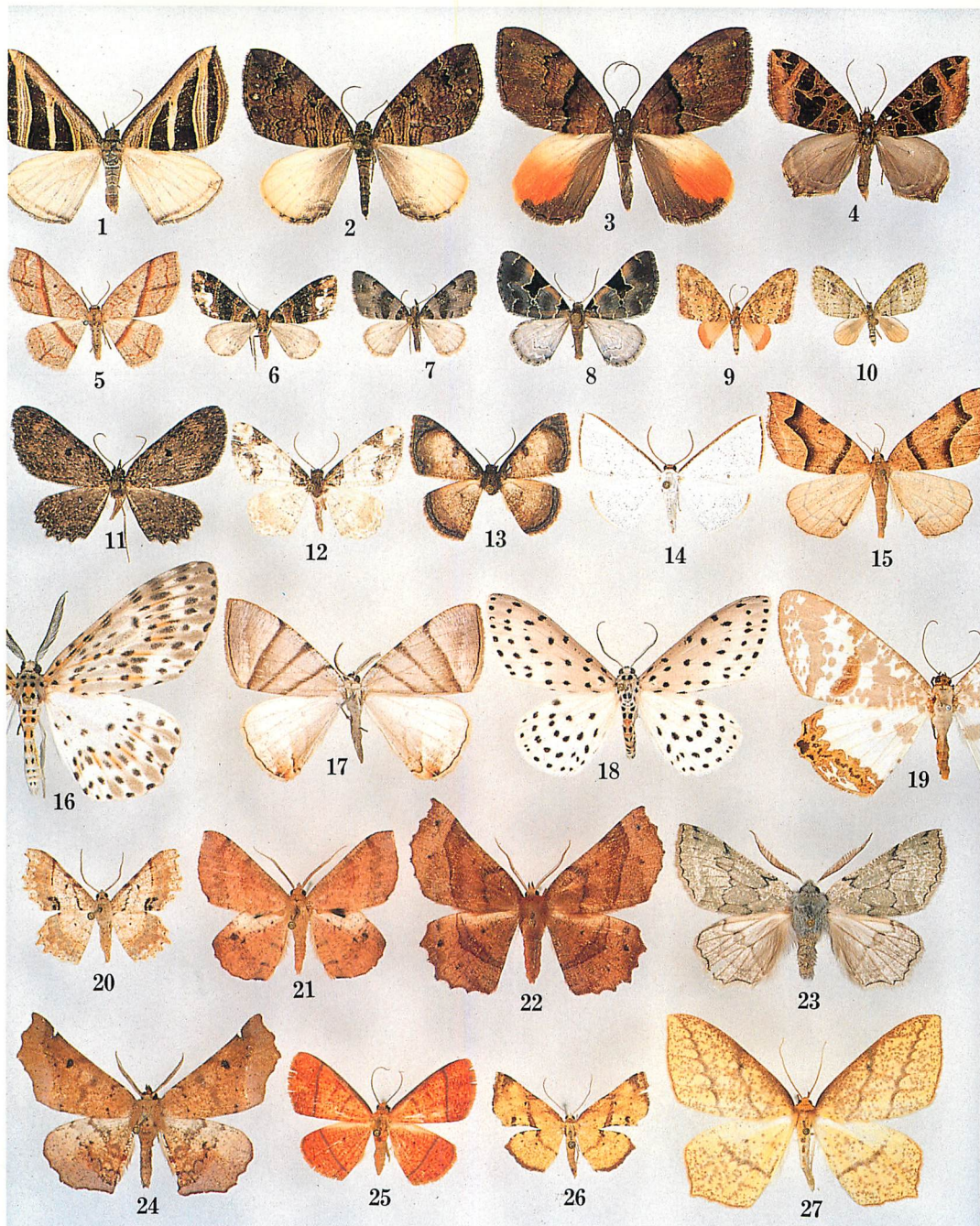


Plate 60

1. *Scotopteryx duplicata* 2. *Trichoplites lateritiata* 3. *Photoscotisia miniosata* 4. *Hysterrura protagma* 5. *Hydreliia subobliquaria* 6. *Perizoma seriata* 7. *P. plumbeata* 8. *Gagitodes olivacea* 9. *Chloroclystis papillosa* 10. *Ch. rubroviridis* 11. *Collix leuciota* 12. *Ligdia coctata* 13. *Hydatocapnia marginata* 14. *Swannia marmarea* 15. *Anonychia diversilinea* 16. *Metapercniia ductaria* 17. *Myrteta planaria* 18. *Xenoplia foraria* 19. *Erebabraxas metachromata* 20. *Calletaera subexpressa* 21. *Hyperythra lutea ennomaria* 22. *Mimochroa albifrons* 23. *Planociampa augustinei* 24. *Garaeus albipuncta* 25. *Scardamia metallaria* 26. *Corymica deducta caustlomaria* 27. *Sirinopteryx undulifera*

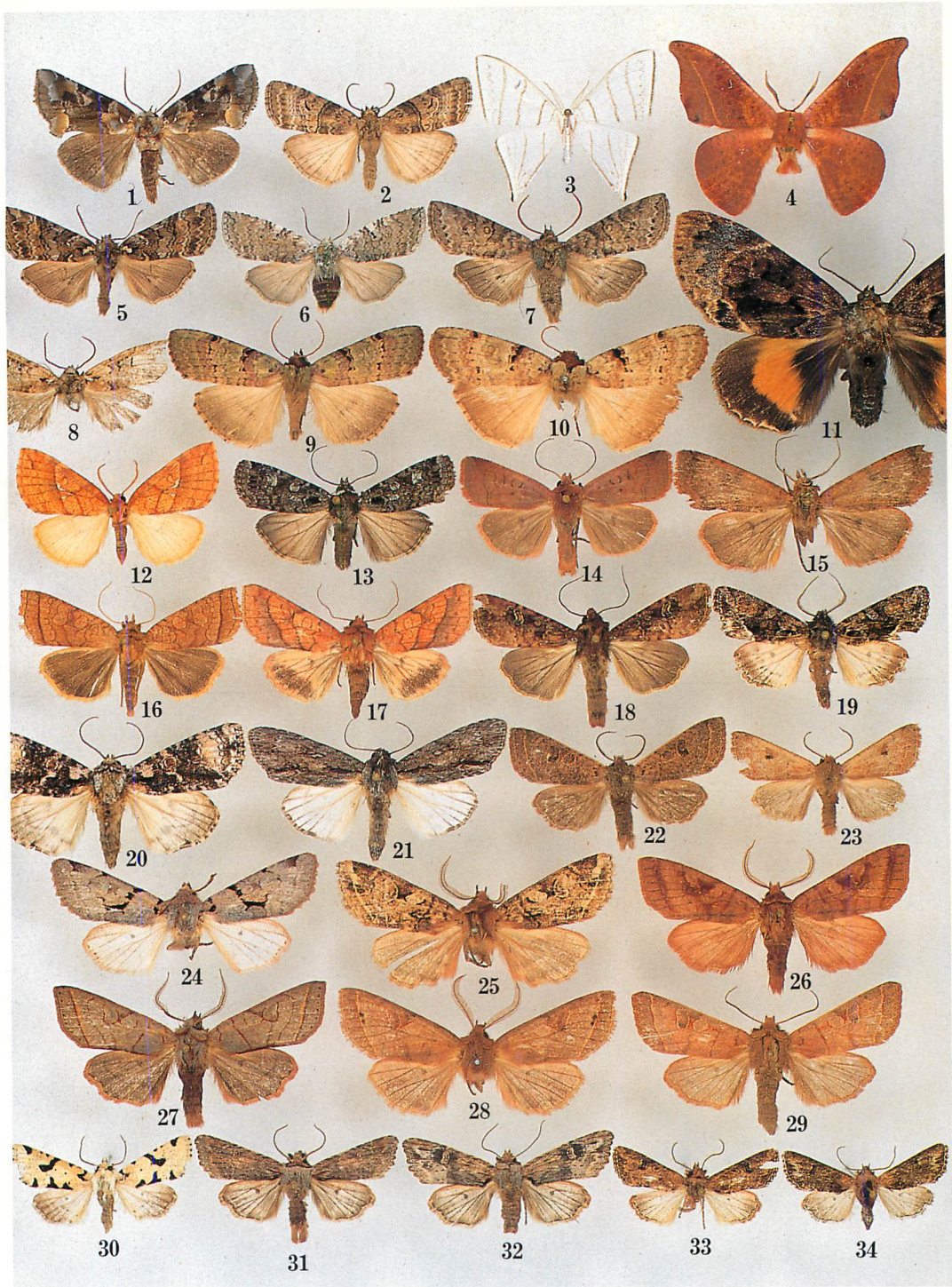


Plate 61

1. *Thyatira violacea nigricans* 2. *Isopsestis cuprina* 3. *Ditrigona regularis* 4. *Oreta extensa* 5. *Epipsestis dubia* (W. Nepal) 6. *E. albicosta* 7. *Demopsestis formosana mahendrai* 8. *Epipsestis dubia* 9. *Stenopsestis a. alternata* 10. *S. a. bryki* (Myanmar) 11. *Trisuloides luteifascia* 12. *Spica luteola* 13. *Perissandria sikkima* 14. *Diarsia tincta* 15. *D. hoenei* 16. *Xestia curviplena* 17. *Pyrrhia umbra* 18. *Apospasta sikkima* 19. *Xylopolia fulvireniforma* 20. *Craniophora harmandi* 21. *Triaena denticulata* 22. *Orthosia harutai* 23. *O. nepalensis* 24. *O. subcarnipennis* 25. *Harutaegrapha fusciculata* (N. India) 26. *H. castanea* 27. *H. caerulea* 28. *H. bipuncta* (N. India) 29. *H. pallida* 30. *Orthosia nigralba* 31. *Crate-restra subterminata*, ♂ 32. Ditto, ♀ 33. *Lithopolia confusa*, ♂ 34. Ditto, ♀



Plate 62

1. *Aletia modesta* 2. *A. dharma* 3. *A. bicolorata* 4. *A. legraini* 5. *A. nainica* 6. *Leucania yu* 7. *L. venalba* 8. *L. irregularia* 9. *Eupsilia strigifera* 10. *Xylena tatajana* (Taiwan) 11. *X. apicimacula* 12. *X. nepalina* 13. *Elwesia diplostigma* 14. *Rhynchaglaea taiwana* 15. *Xanthia melonina* 16. *Lophoterges taiwana semialba* 17. *Agrochola albirena* 18. *Nyctycia angustipennis* 19. *N. shelpa* 20. *Dichoniopsis leucosticta* 21. *Oroplexia luteifrons* 22. *Chandata partita* 23. *Meganephria splendida* 24. *Lophotyna khumbuensis* 25. *Euplexidia inexotica* 26. *Anodontodes rotunda* 27. *Amphipyra cupreipennis* 28. *Paroligia hastata* 29. *Euplexia discisignata* 30. *Perigea albomaculata* 31. *Hadjina cupreipennis* 32. *Arcilasisa sobria* 33. *Feliniopsis siderifera* 34. *F. albarenalis* 35. *Dipterygina indica*



Plate 63

1. *Langia zenzeroides zenzeroides* 2. *Thamnoecha uniformis* 3. *Degmaptera mirabilis* 4. *Cecohenena scotti lutea* 5. *Rhagastis hayesi* 6. *Dictyoploca simla* 7. *Rhagastis velata* 8. *Macroglossum corythus*

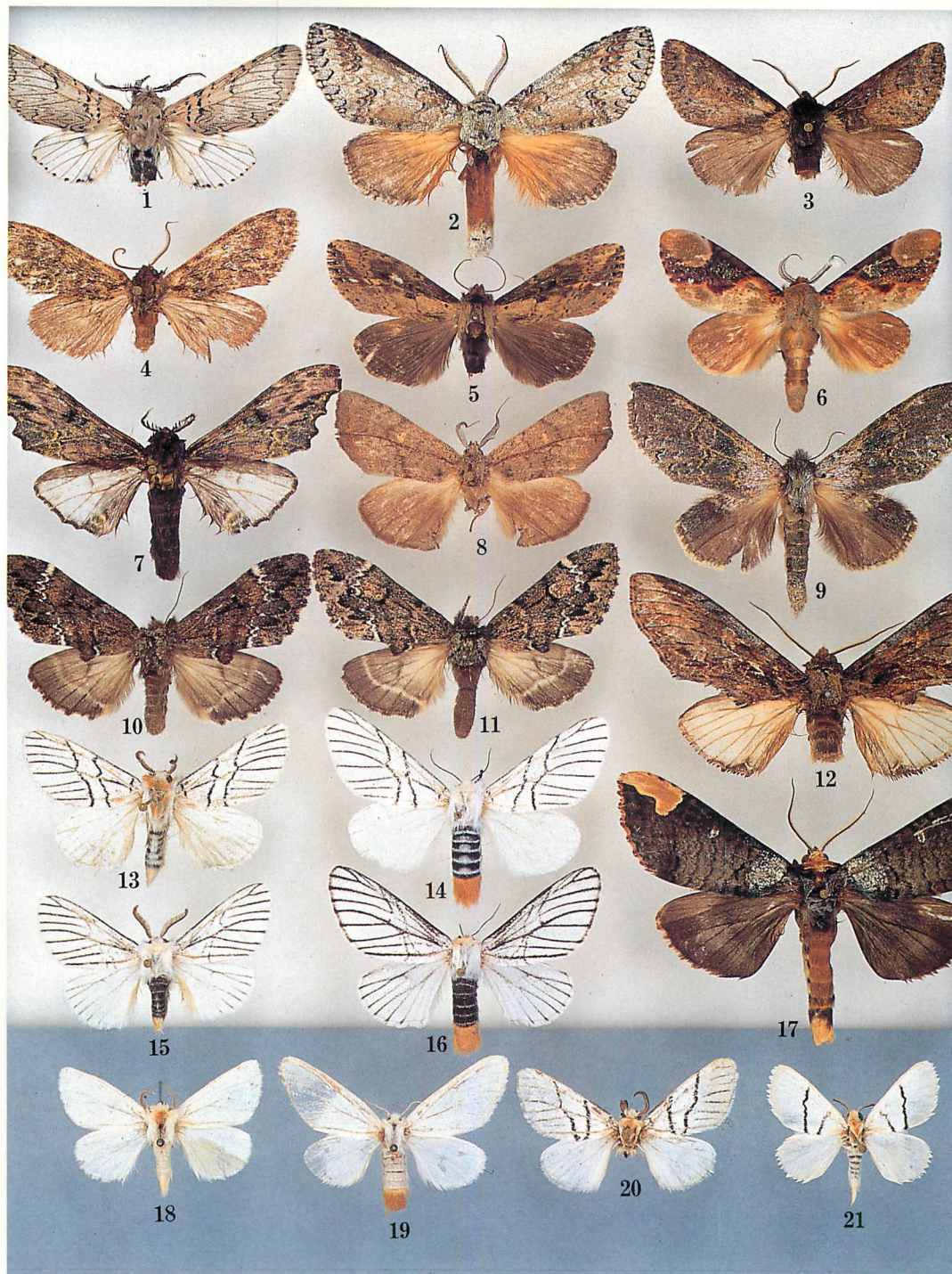


Plate 64

1. *Cerura menciana basirectilinea* 2. *Pseudofentonia argentifera* 3. *Neodrymonia vinacea* 4. *Pheosiopsis flavicincta* 5. *Ramesa bhutanica* 6. *Formofentonia orbifer* 7. *Zaranga pannosa* 8. *Omichlis rufotincta* 9. *Stauropus sikkimensis* 10. *Odontosina mahendra* 11. *Ditto* 12. *Rachiades siamensis* (Thailand) 13. *Gazalina chrysolopha*, ♂ 14. *Ditto*, ♀ 15. *G. apsara*, ♂ 16. *Ditto*, ♀ 17. *Phalera goniophora* 18. *Gazalina purificata*, ♂ (Taiwan) 19. *Ditto*, ♀ (Taiwan) 20. *G. chrysolopha*, ♂ 21. *G. transversa*