

## The types of Flatidae (Homoptera) in the Stockholm Museum described by Stål, Melichar, Jacobi and Walker

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Lectotypes and paralectotypes are designated for species of flatid planthoppers described by Stål, Melichar, Jacobi and Walker. The location of other syntypes known to exist is given. The genitalia of lectotype males are illustrated.

Ent. scand.



NEW SYNONYMY (junior synonym first), as follows: *Colgaroides circumcincta* Jacobi = *Colgaroides acuminata* (Walker); *Mesophylla inclinata* Melichar = *Phylliana serva* (Walker); *Copsyrna leucophaea* Stål = *Bythopsyrna tineoides* (Olivier); *Hypsiphanta minax* Jacobi = *Euphanta munda* (Walker); *Euphanta obscura* Jacobi = *Euryphantia tristis* (Kirkaldy); *Idume plicata* Melichar = *Idume deducta* (Walker); *Phrommia rubescens* Stål = *Flatida floccosa* (Guérin-Ménéville).

NEW COMBINATIONS (previous combination first), as follows: *Poeciloptera cereris* Stål = *Cromna sinensis* (Walker); *Paratella fusconigra* Melichar = *Sephena fusconigra* (Melichar); *Phyllyphanta hyalinata* Stål = *Colgar peracuta* (Walker); *Paratella modesta* Melichar = *Sephena modesta* (Melichar); *Delostenopium rubripes* Jacobi = *Euphanta rubripes* (Jacobi); *Microflata stictica* Melichar = *Mimophantia stictica* (Melichar).

NEW STATUS: *Melicharia alba* (Melichar) not a variety of *Melicharia deducta* (Melichar); *Lawana inornata* (Melichar) not a variety of *Lawana candida* (Fabricius); *Cerynia maria lutescens* Melichar not a variety of *Cerynia maria* (White); *Melicharia pallida* (Melichar) not a synonym of *Melicharia lactifera* (Walker).

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### INTRODUCTION

This article is number X in a series reporting on historical types of Flatidae. The type species described by Stål, Melichar, Jacobi and Walker that are deposited in the Stockholm Museum were examined in connection with my research on flatids in New Guinea and Southeast Asia. The types are of considerable historical importance because Stål and Walker described species at the same period of time without careful regard to each other's published work, or reciprocal examination of type specimens. Likewise, Melichar did not have access to the type specimens in the British Museum during the preparation of his monographic revision of the family. Synonymy was to be expected.

Stål's descriptions were based mostly on specimens collected in Southeast Asia by Hjalmar Kin-

berg during the 1851-1853 voyage of the Swedish frigate *Eugenie* under command of C.A. Virgin, and collections made by Carl Semper during 1859-1865 in the Philippine Islands. The labels used for the Semper collection do not give exact localities, but most specimens were from Luzon, with a few from Cebu and Mindanao.

It was of interest to find some specimens that had been collected during 1854-1862 by Alfred Russell Wallace in Indonesia and New Guinea. These specimens were originally acquired by William Wilson Saunders, who passed them in part to Francis Walker and C. Stål for naming. Later, some specimens were obtained by the British Museum by purchase from Stevens or donation by Saunders. A few specimens found their way to the Stockholm Museum, perhaps by purchase from

Stevens, or possibly obtained by Stål from Saunders during his visit to England in 1862.

Melichar examined the flatids deposited in the Stockholm Museum during the preparation of his monograph published in 1901, 1902. Usually, Melichar accurately recorded the disposition of type material that he studied, or upon which his new species were based. The specimens that Melichar obtained from Stockholm can be recognized by the small square pink labels attached to the pin (Per Lindskog pers comm).

The flatids collected by Dr. E. Mjöberg's Swedish Expedition to Australia, 1910–1913, were studied by Arnold Jacobi. Syntypes of the new species were deposited in the Stockholm Museum, except the parts of series that were retained in the Dresden Museum.

The authenticity of syntypes was verified by comparison of label data with information published in the original descriptions. Because the labels frequently provided historical information not given in the original publication, I have recorded the labels precisely by the following format: (1), (2), (3), etc., indicate the sequence of original labels on the pin from top to bottom. A slash (/) shows the separation of printed or written lines on each label. Lastly, a red label with my hand printed lectotype or paralectotype designation is attached to each specimen.

Many species of Flatidae can be identified accurately only by using diagnostic characters of the male genitalia. Therefore, male specimens were dissected and the genitalia illustrated wherever possible. The dissected male was designated as the lectotype when such syntype existed.

The synoptic names of museums used in this article are as follows:

Berlin Museum	Museum für Naturkunde der Humboldt Universität zu Berlin, Deutsche Demokratische Republik.
British Museum	British Museum (Natural History), London, England.
Brussels Museum	Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium.
Copenhagen Museum	Zoologisk Museum, University of Copenhagen, Denmark.
Dresden Museum	Staatliches Museum für Tierkunde, Dresden, Deutsche Demokratische Republik.
Genova Museum	Museo Civico di Storia Naturale, "Giacoma Doria", Genova, Italy.

Hamburg Museum	Zoologisches Institut und Zoologisches Museum, Universität Hamburg, West Germany.
Oxford Museum	University Museum, Oxford, England.
Paris Museum	Museum National d'Histoire Naturelle, Paris, France.
Stockholm Museum	Naturhistoriska Riksmuseet, Stockholm, Sweden.
Victoria Museum	Museum of Victoria, Abbotsford, Australia.
Vienna Museum	Naturhistorisches Museum Wien, Vienna, Austria.

## CATALOGUE

The following listing of the types is arranged in alphabetical sequence by the species name. Following each name is the author reference and the original generic combination in parentheses ( ). The most recent status of the name as given in the Metcalf (1957) Catalogue is indicated in brackets [ ]. New combinations, new synonymy and changed status of names resulting from my research are given where applicable.

### *aeminata* Melichar, 1902, p. 39 (*Euphanta*)

Holotype ♀ — (1) Ins/Ovalau (2) Schmette (3) 83 (4) small square pink label (5) Typus (red label).

The holotype agrees closely with New Guinea and Australian specimens known to me as *Poeciloptera munda* Walker (1851:455). Minor differences exist in size, tegmina, shape of the head, and the metatibial spines which are 1:7 not 1:8. Study of a male specimen from Fiji is needed to determine the status of this species.

### *aegrota* Melichar, 1902, p. 105 (*Nephesa*)

Lectotype ♂, by present designation — (1) Palawan (2) Collectio/Haglund (3) *aegrota*/det. Melichar (4) 225. (Dissected).

Paralectotype ♀ — (1) Ins. Philipp (2) Semper (3) *Nephesa/aegrota* (pink label) (4) Typus (red label).

The lectotype genitalia are illustrated (Fig. 25). Three paralectotypes (1 ♂, 2 ♀) are in the Paris Museum.

### *aegrota* Melichar, 1902, p. 155 (*Dascalina*)

Lectotype ♀, by present designation — (1) Cape York (2) Thorey (3) 4 (pink label) (4) small square pink label (5) Typus (red label).

Paralectotype ♀ — (1) Cape York (2) Thorey (3) Paratypus (red label).

The lectotype is the specimen illustrated by Melichar (1902: pl. VII, fig. 16). The paralectotype is not spread. The similarity in markings and structure of the body and tegmina suggest to me that either *alternans* Melichar (1902:155) or *contorta* Melichar (1902:156) may be conspecific with *aegrota* and represent the opposite sex.

**alba** Melichar, 1902, p. 86 (*Ormenis deducta* var.) [*Melicharia*] = *Melicharia alba* (Melichar), STAT.N.

Lectotype ♂, by present designation — (1) Java/Mellb. (2) 136 (3) small square pink label (4) Typus (red label) (5) *Nephesa/deducta* W. (6) *Ormenis/deducta* Walk./var *alba*. (Dissected).

The aedeagus of the lectotype is illustrated (Fig. 22). *Melicharia alba* is a good species distinct from *Nephesa deducta* Walker (1857b:161), as shown by the configuration of the aedeagus, and its metatibia character state of 2 preapical spines. Three syntypes of *alba* from Ceylon in the Genova Museum are misidentified specimens of *Melicharia obtusangula* Distant (1912:463).

**albata** Stål, 1854, p. 247 (*Flata*) [*Cerynia*]

Lectotype ♀, by present designation — (1) Malac-/ca (2) Kinb. (3) illegible label (4) 8 (5) small square pink label (6) Typus (red label).

The tegmina have a pair of dusky pigment bands along the apical margin, and a strongly marked black pigment band arising obliquely from the apex of the clavus. The oblique band is similar in several related species that vary in coloration of the tegmina, and may have the apical bands or not.

**albicosta** Melichar, 1902, p. 77 (*Ormenis*) [*Anaya*]

Holotype ♀ — (1) Ins./Nicobar (2) M. Haan (3) 102 (4) small square pink label (5) Typus (red label).

The white costal margins that contrast sharply with the otherwise dark fuscous tegmina give a distinctive pattern not seen in other species of *Anaya*. The species is probably endemic to Nicobar Island. A study of the genitalia of a male is needed to determine relationships with other species of the genus in Southeast Asia.

**alternans** Melichar, 1902, p. 155 (*Dascalina*)

Holotype ♂ — (1) Rockham/pton (2) Thorey (3) 5 (4) small square pink label (5) Typus (red label). (Dissected).

The genitalia of the holotype are illustrated (Fig. 3). The citation of a female by Melichar in the original description was a lapsus. The specimen illustrated by Melichar (1902: pl. VII, fig. 15) represents the holotype.

**argiolus** Stål, 1855, p. 191 (*Poeciloptera*) [*Flata stellaris* (Walker)]

Holotype (no abdomen) — (1) Argiolus/Stål Typ. (2) Typus (red label) (3) *Poec. stellaris*/Walk. (4) 44 (5) small square pink label.

The specimens is similar to others known to me from Southern India. The synonymy with *stellaris* Walker (1851:453) given in the Metcalf Catalog (1957) is probably correct.

**bistriguttata** Stål, 1863, p. 591 (*Nephesa*, as *bistriguttata*) [*Neocromna*]

The type specimen is apparently lost. The original description was based on a male, Insulae Aru, W.W. Saunders collection. This specimen is not in the Stockholm Museum, although types of other species of *Nephesa* described at the same time as *bistriguttata* are present; namely, *cicatricosa*, *gemmifera* and *guttulata*. Melichar (1902) did not record seeing a type of this species from Stockholm. There are other specimens of *bistriguttata* from Aru Island collected by Wallace that are in the Oxford and British Museums, but all specimens I have examined are females.

**cereris** Stål, 1854, p. 247 (*Poeciloptera*, as *Cereris*) [*Phyllyphanta sinensis* (Walker)] = *Cromna sinensis* (Walker), COMB. N.

Holotype ♂ — (1) China (2) Kinb. (3) *Poec. sinensis*/Walk (M) (4) 60 (5) small square pink label (6) Typus (red label). (Dissected).

The holotype genitalia are illustrated (Fig. 16). This species was listed correctly by Metcalf (1957) as a junior synonym of *Poeciloptera sinensis* Walker (1851:451). However, *sinensis* does not belong to the genus *Phyllyphanta*, but is a species congeneric with *Cromna acutipennis* Walker (1857a:85).

**cicatricosa** Stål, 1863, p. 592 (*Nephesa*) [*Neomelicharia consociata* (Walker)]

Holotype ♂ — (1) Ins./Buru (2) Stevens (3) Typus (red label). (Dissected).

The holotype genitalia are illustrated (Fig. 18). Comparison of the genitalia characters with those of *Poeciloptera consociata* Walker (1862:314) showed that the synonymy given by Metcalf (1957) is correct. The original description cited Ins. Batschian as the locality, which is a name used interchangeably with Ins. Buru on the label.

**cingulata** Melichar, 1901, p. 211 (*Flata*) [*Flatida*]

Holotype ♀ — (1) Ins. Philipp (2) Semper (3) Type (white label) (4) 15 (5) small square pink label (6) Typus (red label).

The holotype represents a syntype of *Phromnia subguttata* Stål (1870:771) described as variety b. The margins of the tegmina, except along the clavus, are narrowly black. This margin contrasts sharply with the ochraceous color of the membrane. To ascertain the identity of the male sex of *cingulata*, I dissected Philippine specimens having the tegmina margined in black, and showing a range of green, faded green and ochraceous color. Most of the specimens had the type of aedeagus shown in Figure 27. However, a few specimens had the distinctive apical process of the aedeagus found in *subguttata* (Fig. 23). A male specimen from Mindanao, Haglund Collection, determined as *subguttata* Stål by Melichar, was misidentified. This specimen's genitalia are shown in Figure 27.

**circumcincta** Jacobi, 1928, p. 21 (*Colgaroides*) = *Colgaroides acuminata* (Walker), SYN. N.

Lectotype ♂, by present designation — (1) Kimberly/district (2) N.V. Austr./Mjöberg (3) nov (4) Paratypus (red label). (Dissected).

Paralectotypes 1♂, 5♀ — Same labels as the lectotype, except (3) jan, febr or nov, and (4) typus, cotypus or paratypus, respectively.

The lectotype genitalia are illustrated (Fig. 8). Other paralectotypes (2♂♂, 1♀) are in the Dresden Museum. The characters of the genitalia are the same as found in a series of specimens from Australia which I have determined as *Poeciloptera acuminata* Walker (1851:460).

**consputa** Stål, 1870, p. 776 (*Atracis*(*Uxantis*)) [*Uxantis*]

Lectotype ♂, by present designation — (1) Ins. Philipp (2) Semper (3) Type (white label) (4) Typus (red label) (5) 2 (6) *Atracis/consputa*/Stål.

Paralectotype ♀ — (1) Ins. Philipp (2) Paratypus (red label).

The genitalia of the lectotype were inadvertently lost during preparation of a dissection. The paralectotype has been damaged by museum pests.

**contorta** Melichar, 1902, p. 156 (*Dascalina*)

Holotype ♂ — (1) Austral/boreal (2) Thorey (3) 6 (4) small square pink label (5) Typus (red label). (Dissected).

The genitalia of the holotype are illustrated (Fig. 1). The holotype also was illustrated by Melichar (1902: pl. IX, fig. 18).

**elongata** Melichar, 1902, p. 162 (*Uxantis*)

Lectotype ♀, by present designation — (1) Ins. Philipp (2) Type (white label) (3) 44 (4) small square pink label (5) Typus (red label).

Only one of the two syntypes cited in the original description was found. The lectotype appears to be the specimen illustrated by Melichar (1902: pl. VIII, fig. 20).

**erosipennis** Stål, 1858, p. 451 (*Phalaenomorpha*) [*Atracis*]

The holotype of this species was not found. The description was based on a female from Ceylon. The specimen cited by Melichar (1902) as a "type" is in the Vienna Museum, but is a female bearing a label reading Plason, Andamanen, 1878.

**errudita** Melichar, 1902, p. 118 (*Paratella*)

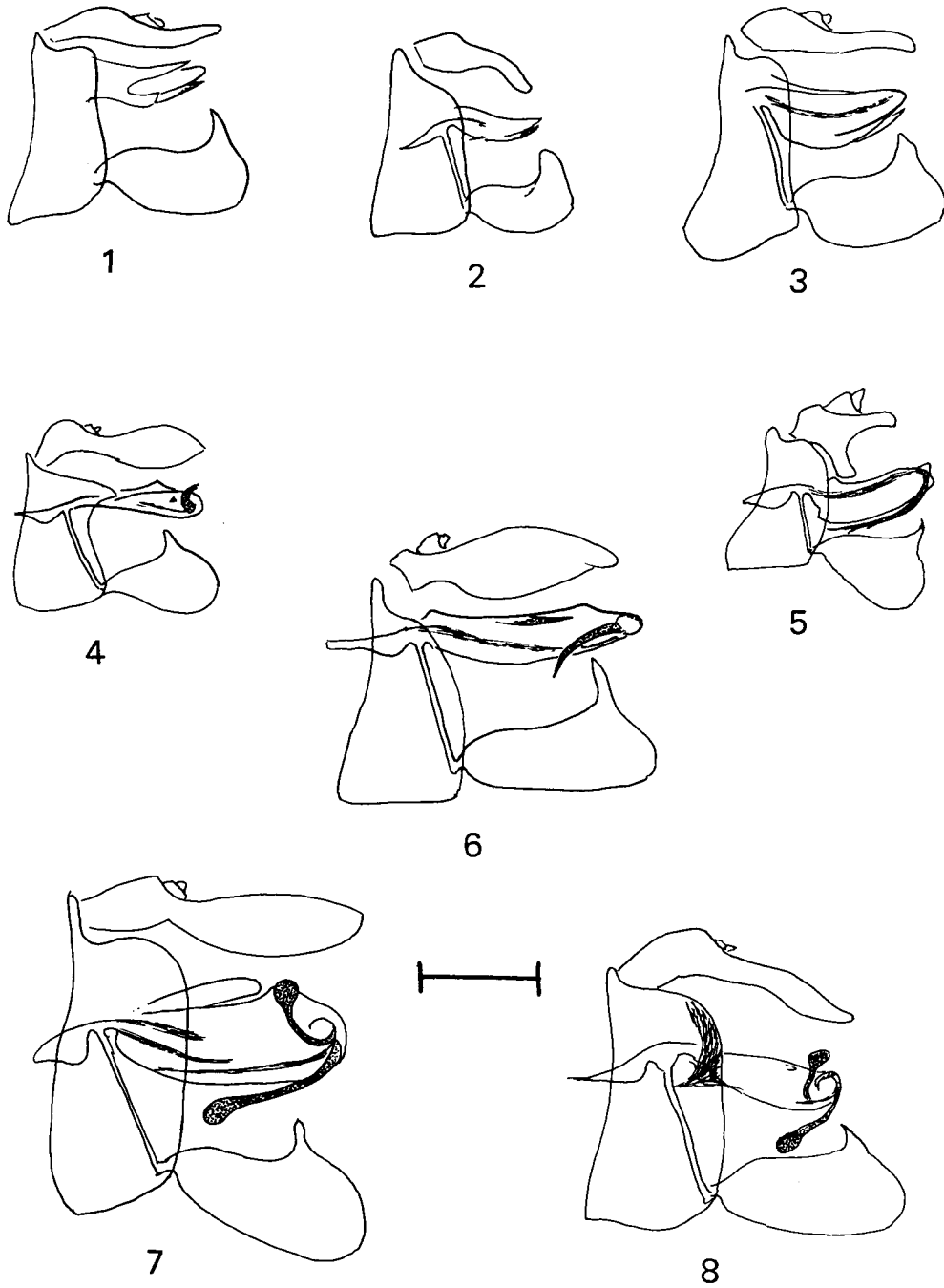
Paralectotypes 2♀♀, by present designation — (1) Nov./Guinea (2) Stål (3) 98 (4) Typus (red label) and (1) Nov./Guinea (2) 56 (3) Paratypus.

The paralectotypes in the Stockholm Museum represent an undescribed species of *Paratella*. The lectotype male in the Brussels Museum has been designated to preserve the name *Paratella errudita* Melichar. A paralectotype female is in the Hamburg Museum.

**fimbriolata** Stål, 1854, p. 247 (*Poeciloptera*) [*Salurnis marginella* (Guérin-Ménéville)]

Holotype ♀ — (1) Malac/ca (2) Kinb. (3) Typus (red label) (4) Poec. fimbriolata/Stål (5) *Ricania/marginella*/Guer. M. (6) Phylliphanta (sic!)/marginella/Sign.

The holotype is the same as *Ricania marginella* Guérin-Ménéville (1829: pl. 59, fig. 6) with respect to the shape of the head and presence of 4



Figs. 1-8. Left lateral view of male genitalia. — 1. *Dascalina contorta* Melichar. — 2. *Dascalina vivida* Jacobi. — 3. *Dascalina alternans* Melichar. — 4. *Paratella modesta* Melichar. — 5. *Microflata stictica* Melichar. — 6. *Massila viridiana* Jacobi. — 7. *Cromna frontalis* Melichar. — 8. *Colgaroides circumcincta* Jacobi. — Scale = 0.5 mm.

longitudinal carinae on the mesonotum. The synonymy given by Metcalf (1957) is acceptable.

**frontalis** Melichar, 1902, p. 59 (*Cromna*) [*Colgaroides acuminata* (Walker)]

Lectotype ♂, by present designation — (1) Rockham/pton (2) Thorey (3) Allotypus (red label). (Dissected).

Paralectotype ♀, by present designation — (1) Rockham/pton (2) Thorey (3) 90 (4) small square pink label (5) Typus (red label).

The lectotype genitalia are illustrated (Fig. 7). A paralectotype male in the Brussels Museum has same characters of the genitalia. Distant (1910) placed *frontalis* as a junior synonym of *Poeciloptera acuminata* Walker (1851:460) and study of types confirmed this status.

**funerula** Melichar, 1902, p. 72 (*Ormenis*) [*Farona*]

Lectotype ♀, by present designation — (1) Malacca/Perak (2) Seliza/vidua Stål (3) Collectio/Haglund (4) Typus (red label) (5) *funerula*/det. Melichar.

Paralectotype ♀ — (1) Malacca/Perak (2) Collectio/Haglund (3) Allotypus (red label) (4) *funerula*/det. Melichar.

Both syntypes are females. Melichar lapsed in recording a male in the original description. One syntype was glued down on a card with the genital segment concealed. I remounted the specimen to reveal the female sex.

**fusconigra** Melichar, 1902, p. 121 (*Paratella*) = *Sephena* s. lat., COMB. N.

Holotype ♀ — (1) Austral/boreal (2) Thorey (3) Type (white label) (4) Typus (red label) (5) *Ricania/cyane-scens*? Le Guilleu (6) *Paratella/fusconigra*/n.sp.

The holotype belongs to an undescribed genus in the *Sephena* complex of genera.

**gemmifera** Stål, 1863, p. 592 (*Nephesa*) [*Neome-licharia erubescens* (Walker)]

Holotype ♂ — (1) Ins/Buru (2) Stevens (3) Type (white label) (4) *gemmifera*/Stål (5) 78 (6) Typus (red label). (Dissected).

The locality name of Buru on the label was used interchangeably with the name Batschian used in the original description. The holotype genitalia are illustrated (Fig. 19). Comparison of the genital characters of *gemmifera* with those of *Poeciloptera erubescens* Walker (1862:313) confirmed the synonymy given by Metcalf (1957).

**granulosa** Stål, 1870, p. 774 (*Salurnis*)

Holotype ♂ — (1) Ins. Philipp (2) Semper (3) Type (white label) (4) Typus (red label) (5) N.S./*granulosa*/Stål (6) 40. (Dissected).

The holotype genitalia are illustrated (Fig. 9). This species is the type of *Salurnis* Stål (1870).

**guttulata** Stål, 1863, p. 591 (*Nephesa*) [*Neome-licharia*]

Lectotype ♀, by present designation — (1) Ins./Buru (2) Stevens (3) *guttulata*/Stål (4) Typus (red label).

This specimen is undoubtedly a part of the Batschian (=Buru) material of Wallace from the W. W. Saunders Collection. Melichar (1902) considered the Stockholm specimen to be Stål's type. The male syntype cited by Stål in the original description has not been found.

**hyalinata** Stål, 1859, p. 282 (*Phyllyphanta*) = *Colgar peracuta* (Walker), COMB. N.

Lectotype ♀, by present designation — (1) Moreton/Bay (2) Stevens (3) *Cromna/peracuta* W (4) 85.

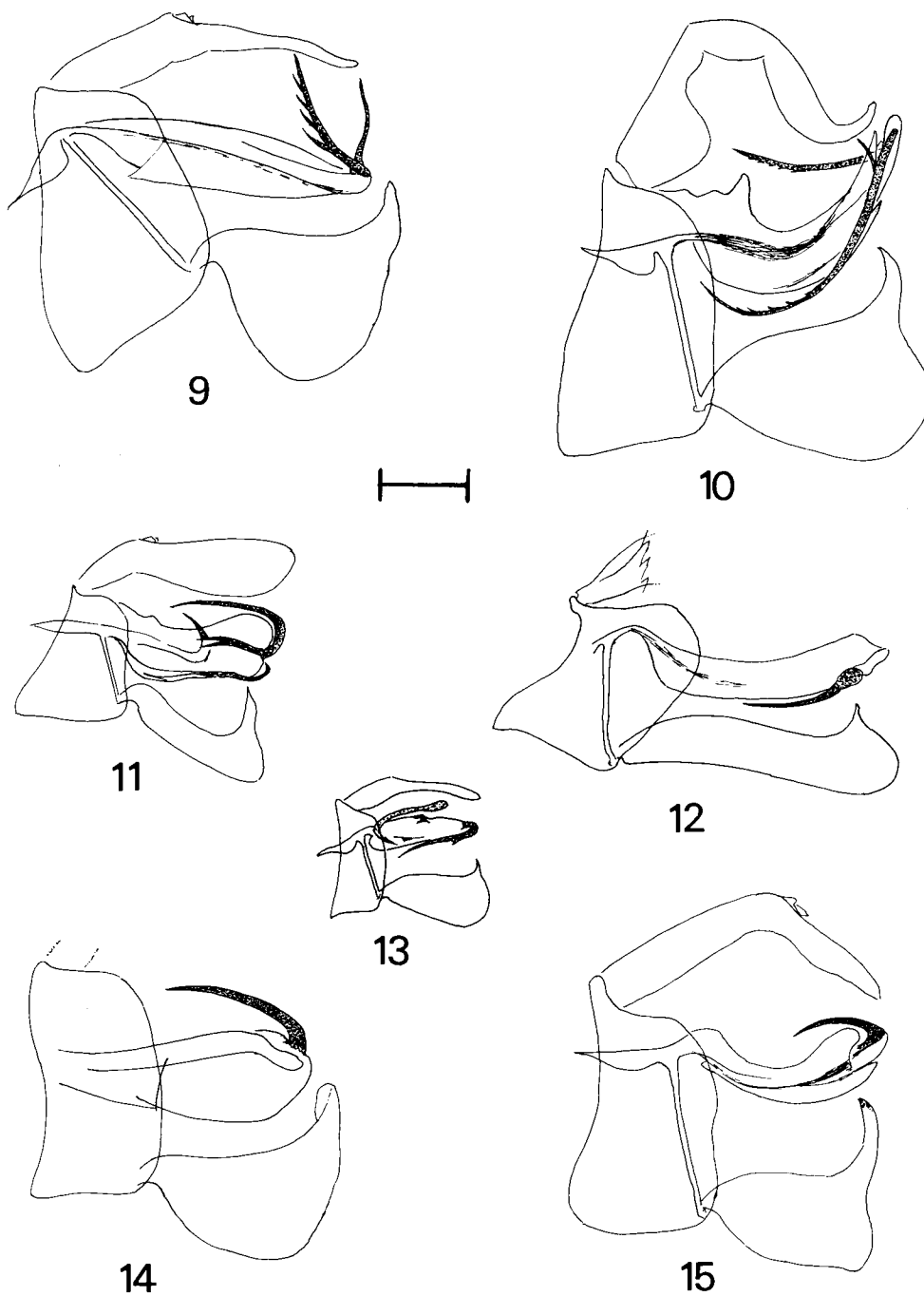
Paralectotype ♀, by present designation — (1) Nov./Holl. (2) Stål (3) 86 (4) small square pink label.

The small median projection on the posterior margin of sternum VII of the female enabled recognition of this species as *peracuta*. Melichar attributed the name to Signoret in litt, which may explain why Stål (1859) merely referred to "*P. hyalinatae*." I have designated the lectotype and paralectotype to preserve the status of *hyalinata* as a junior synonym of *Cromna peracuta* Walker (1858:120), as originally listed by Melichar (1902). Metcalf (1957) retained the name as a valid species of *Phyllyphanta* in error.

**inaequalis** Walker, 1858, p. 74 (*Elidiptera*) [*Atracis*]

Paralectotype ♀, by present designation — (1) Sarawak (2) Stevens (3) *Elidiptera/inaequalis*/W. (M.) (4) 148 (5) small square pink label.

The paralectotype is considered to be one of the syntypes from the Wallace collection named by Walker, and later disposed by Stevens. The lectotype male is in the British Museum. Melichar (1902) lapsed in citing a type male in the Stockholm Museum, as the specimen he saw was a female.



Figs. 9–15. Left lateral view of male genitalia. — 9. *Salurnis granulosa* Stål. — 10. *Mesophylla inclinata* Melichar. — 11. *Uxantis siccifolia* Stål. — 12. *Phalaenomorpha nietneri* Stål. — 13. *Phyllyphanta patruelis* Stål. — 14. *Cerynia tentella* Melichar. — 15. *Copsyrra leucophaea* Stål. — Scale = 0.5 mm.

**inclinata** Melichar, 1902, p. 53 (*Mesophylla*) [*Phylliana*] = *Phylliana serva* (Walker), SYN. N.

Lectotype ♂, by present designation — (1) Ins. Philipp (2) Semper (3) 30/7 (4) 77 (5) small square pink label (6) Typus (red label). (Dissected).

Paralectotype ♀ — (1) Ins. Philipp. (2) Semper (3) Paratype (red label) (4) Flata/serva?/Walk.

The lectotype genitalia are illustrated (Fig. 10). A paralectotype male is in the Paris Museum. Both specimens have the same characters of the genitalia as *Poeciloptera serva* Walker (1851:464).

**indigena** Melichar, 1902, p. 86 (*Ormenis*) [*Melicharia fuscomarginata* (Melichar)]

Lectotype ♀, by present designation — (1) Ins. Philipp (2) Semper (3) 25 (pink label) (4) small square pink label (5) Typus (red label) (6) *indigena*/det. Melichar.

Only one of the two syntypes was found. The lectotype appears to differ from *Ormenis fuscomarginata* Melichar (1902:78). Later study of the male genitalia may show that the synonymy given by Metcalf (1957) is not correct.

**inornata** Melichar, 1902, p. 47 (*Phyma candida* var.) [*Lawana*] = *Lawana inornata* (Melichar), STAT. N.

Lectotype ♂, by present designation — (1) Timor (2) Collectio/Haglund (3) Paratype (red label). (Dissected).

Paralectotype ♂ — (1) Timor (2) Collectio/Haglund (3) Typus (red label).

The genitalia of the lectotype (Fig. 24) show that *inornata* is a good species rather than a variant of *Flata candida* Fabricius (1798:518). Other males from Timor were dissected to confirm the species status of *inornata*.

**leucophaea** Stål, 1870, p. 772 (*Copsyrna*) [*Bythopsyrrna*] = *Bythopsyrrna tineoides* (Olivier), SYN. N.

Lectotype ♂, by present designation — (1) Ins. Philipp (2) Semper (3) Paratypus (red label). (Dissected).

Paralectotypes — ♀ (1) Ins. Philipp (2) Semper (3) Type (white label) (4) Typus (red label) (5) *Copsyrna*/leucophaea/Stål; ♀ (1) Ins. Philipp (2) Semper (3) Type (white label) (4) Paratypus (red label); ♀ (1) Ins. Philipp (2) Semper (3) Paratypus (red label) (4) leucophaea/Stål.

The lectotype genitalia are illustrated (Fig. 15). The markings and color pattern of the lectotype, along with characters of the male genitalia, are the same as found in numerous specimens from

Indonesia, Borneo and the Philippines that have been determined as *Fulgora tineoides* Olivier (1791:576). Type specimens of *tineoides* have not been found, and may not exist.

**longipennis** Melichar, 1902, p. 103 (*Nephesa*)

Holotype ♀ — (1) Malac-/ca (2) Staudinger (3) 29 (4) Typus (red label).

The holotype tegmina are tattered apically to the extent that configuration of the costal and sutural angles cannot be known. Otherwise the holotype is similar in size and markings to specimens of *Poeciloptera truncaticornis* Spinola (1839:429) sensu Melichar (1902). There is need to examine the type of *truncaticornis* before speculation on the possible status of *longipennis* as the junior synonym.

**lutescens** Melichar, 1901, p. 220 (*Cerynia maria* var.) = *Cerynia maria* subsp. *lutescens* Melichar, STAT. N.

Lectotype ♀, by present designation — (1) India/Or. (2) Staudinger (3) 10 (4) small square pink label (5) Typus (red label) (6) *Cerynia/maria*/v. *lutescens*.

Several color variants of *Poeciloptera maria* White (1846:25) have been given varietal names. Specimens that have the tegminal bullae colored pink and have poorly developed dusky pigment bands on the apical margins are known as *lutescens*. I have dissected specimens with widely different color patterns only to find a remarkable uniformity in characters of the male genitalia. However, *lutescens* is retained as a subspecies of *maria* pending a revision of *Cerynia*.

**minax** Jacobi, 1928, p. 19 (*Hypsiphanta*) = *Euphanta munda* (Walker), SYN. N.

Lectotype ♂, by present designation — (1) Broome (2) N.V. Austr./Mjöberg (3) juni (4) Typus (red label) (5) Paratypus (red label).

Paralectotype ♂ — Kimberly/district (2) N.V. Austr./Mjöberg (3) nov (4) Typus (red label) (5) *minax*/A. Jacobi determ/1909.

The two male syntypes cited by Jacobi were examined. The specimen designated as the lectotype is intact, whereas the paralectotype lacks the terminal abdominal segments. The types are indistinguishable externally from *Poeciloptera munda* Walker (1851:455). As *Hypsiphanta* Jacobi (1928) is a monobasic genus, it becomes the junior synonym of *Euphanta* Melichar (1902).



**minuta** Melichar, 1902, p. 38 (*Siphanta*)  
= *Siphanta granulicollis* (Stål, 1859:282), synonymy by Fletcher (1985).

Holotype ♀ — (1) St. Helena. (2) Typus (3) small square pink label (4) Typus (red label) (5) *Siphanta/minuta*/Mel.

The locality label "St. Helena" was considered by Melichar (1902) to be an island in the South Atlantic Ocean. Fletcher (1985) concluded that the label actually refers to an island in Moreton Bay, near Brisbane, Queensland, Australia.

**modesta** Melichar, 1902, p. 122 (*Paratella*)  
= *Sephena* s. lat., COMB. N.

Lectotype ♂, by present designation — (1) Austral boreal (2) Thorey (3) Type (white label) (4) 89 (5) Typus (red label). (Dissected).

The lectotype genitalia are illustrated (Fig. 4). The lectotype belongs to an undescribed genus in the *Sephena* complex of genera. A paralectotype of *modesta* in the Vienna Museum is a misidentified specimen of *Massila unicolor* Walker (1862:315).

**nietneri** Stål, 1858, p. 452 (*Phalaenomorpha*, as *Nietneri*) [*Atracis*]

Lectotype ♂, by present designation — (1) Ceylon (2) Stål (3) 143 (4) small square pink label (5) Typus (white label) (6) Typus (red label). (Dissected).

The lectotype genitalia are illustrated (Fig. 12), except for the anal segment that is missing. The female specimen in the Vienna Museum cited as a "type" by Melichar bears the date 1886, and therefore is excluded as a syntype. A male and female specimen in the Berlin Museum each bear Melichar's correct determination label. The male was dissected and showed the anal segment elongate, reaching the apex of the aedeagus.

**nigrifrons** Stål, 1870, p. 773 (*Siscia*)

Lectotype ♀, by present designation — (1) Ins. Phillipp (2) Semper (3) Typus (red label) (4) N.G./nigrifrons/Stål.

Paralectotype ♀ — (1) Ins. Phillipp (2) Semper (3) Type (white label) (4) nigrifrons/Stål (5) 53 (6) Paratypus (red label).

The tegminal pattern and distinctive appearance of the front is shown in the illustration of Melichar (1902: pl. III, figs. 1, 1a, and 1b).

**obscura** Jacobi, 1928, p. 20 (*Euphanta*)  
= *Euryphantia tristis* (Kirkaldy), SYN. N.

Holotype (no abdomen) — (1) Yarra-/bah (2) Queensl./Mjöberg (3) Typus (red label) (4) *Euphanta/obscura*/Jac./A. Jacobi determ.

Although without abdomen, the holotype is undoubtedly the male specimen cited by Jacobi in the original description. The holotype belongs to the genus *Euryphantia* Kirkaldy (1906). Fletcher (1980) distinguished two species of *Euryphantia* in Australia on characters of the male genitalia and distribution patterns. As *obscura* and *tristis* each have northern distribution, I am placing *obscura* as the junior synonym of *tristis* Kirkaldy (1907:101).

**optata** Melichar, 1902, p. 49 (*Phyma*) [*Lawana*]

A female specimen from Malacca, Perak, with Melichar's determination label is in the Stockholm Museum. The specimen is excluded as a syntype because the locality was not cited in the original description. The lectotype male of *optata* is in the Paris Museum.

**pallida** Melichar, 1902, p. 91 (*Ormenis*) [*Melicharia lactifera* (Walker)] = *Melicharia pallida* (Melichar), STAT. N.

Holotype (no abdomen) — (1) Darj. (2) 73 (pink label) (3) Typus (red label).

The holotype is not a synonym of *Poeciloptera lactifera* Walker (1851:450) as listed by Metcalf (1957). Characters of the tegmina differ in the two species. The tegmen of the holotype was illustrated by Melichar (1902: pl. IV, fig. 23).

**partita** Melichar, 1902, p. 138 (*Seliza*)

Holotype ♀ — (1) Darj. (2) 68 (3) small square pink label (4) Typus (red label).

The holotype was illustrated by Melichar (1902: pl. VII, fig. 18). Knowing the status of this species requires correct association of a male with the holotype, and a study of its genitalia.

**patruelis** Stål, 1859, p. 283 (*Phyllyphanta*) [*Siphanta*]

Holotype ♂ — (1) Manilla (2) Kinb. (3) 69 (4) small square pink label (5) Paratypus (red label). (Dissected).

The holotype genitalia are illustrated (Fig. 13). The specimen from Batavia which was recorded

by Melichar (1902) is a female bearing a red typus label. However, this specimen is excluded from paralectotype designation as only Manilla was cited in the original publication.

**philippinus** Stål, 1870, p. 775 (*Flatoides* (*Cerfennia*)) [*Cerfennia*]

Holotype ♂ — (1) Ins. Philipp (2) Semper (3) Type (white label) (4) *Flatoides/philippinus*/Stål (5) Typus (red label). (Dissected).

The holotype genitalia are illustrated (Fig. 28). The tegmen of the holotype does not show the degree of darkening between the costa and radius that was illustrated by Melichar (1902: pl. IX, fig. 16). However, fuscous pigmentation is intensified among the pustules on the bulla and basally in the clavus.

**plicata** Melichar, 1902, p. 28 (*Idume*)  
= *Idume deducta* (Walker), SYN. N.

Lectotype ♂, by present designation — (1) Sarawak (2) Stevens (3) Type (white label) (4) 93 (5) Typus (red label). (Dissected).

The lectotype genitalia are illustrated (Fig. 21). Ghauri (1973) also illustrated the aedeagus of *plicata*. The characters shown are the same as those found in *Nephesa deducta* Walker (1857b:161). The dorsal sickle shaped process at the apex of the aedeagus is a distinctive character of *deducta*, along with one preapical metatibial spine. A paralectotype female is in the Vienna Museum.

**principalis** Stål, 1865, p. 159 (*Flatoides*) [*Cerfennia*]

Holotype ♀ — (1) Ligor/Malacca (2) Stevens (3) 137 (4) small square pink label (5) Typus (white label) (6) Typus (red label).

The fuscous pattern on the tegmina of the holotype has faded somewhat from that shown by Melichar (1902: pl. IX, fig. 6) but the basal band crossing the bulla can be seen. Stål cited the source of the specimen as "Mus. Holm." and the original label confirms acquisition from Stevens.

**pruinosa** Walker, 1858, p. 75 (*Elidiptera*) [*Atracis*]

Paralectotype ♀, by present designation — (1) China/bor. (2) Stevens (3) 147 (4) small square pink label (5) *Elidiptera/pruinosa* W.

The lectotype male and paralectotypes (1 ♂, 2 ♀) are in the British Museum. The paralectotype female in the Stockholm Museum appears to be one of the syntypes listed by Walker in the original description. It is the specimen cited as a male in error by Melichar (1902).

**reversa** Melichar, 1902, p. 155 (*Dascalina*)

Holotype (no abdomen) — (1) Mus. Payk (2) Cap (3) 149 (4) small square pink label (5) Typus (red label).

Melichar stated that the specimen originated in Australia "without question." However, I associate the holotype with forms in the South African fauna that are not congeneric with *Dascalina* in Australia.

**rubescens** Stål, 1870, p. 771 (*Phromnia*) [*Flatida*]  
= *Flatida floccosa* (Guérin-Ménéville), SYN. N.

Lectotype ♂, by present designation — (1) Manilla (2) Thorey (3) Paratypus (red label) (4) *rubescens*/♂ Stål. (Dissected).

Paralectotypes — ♀ (1) Manilla (2) Thorey (3) Allotypus (red label) (4) *rubescens*/♀ Stål; ♀ (1) Ins. Philipp (2) Semper (3) Paratypus (red label) (4) *Phromnia/rubescens*/♀ Stål.

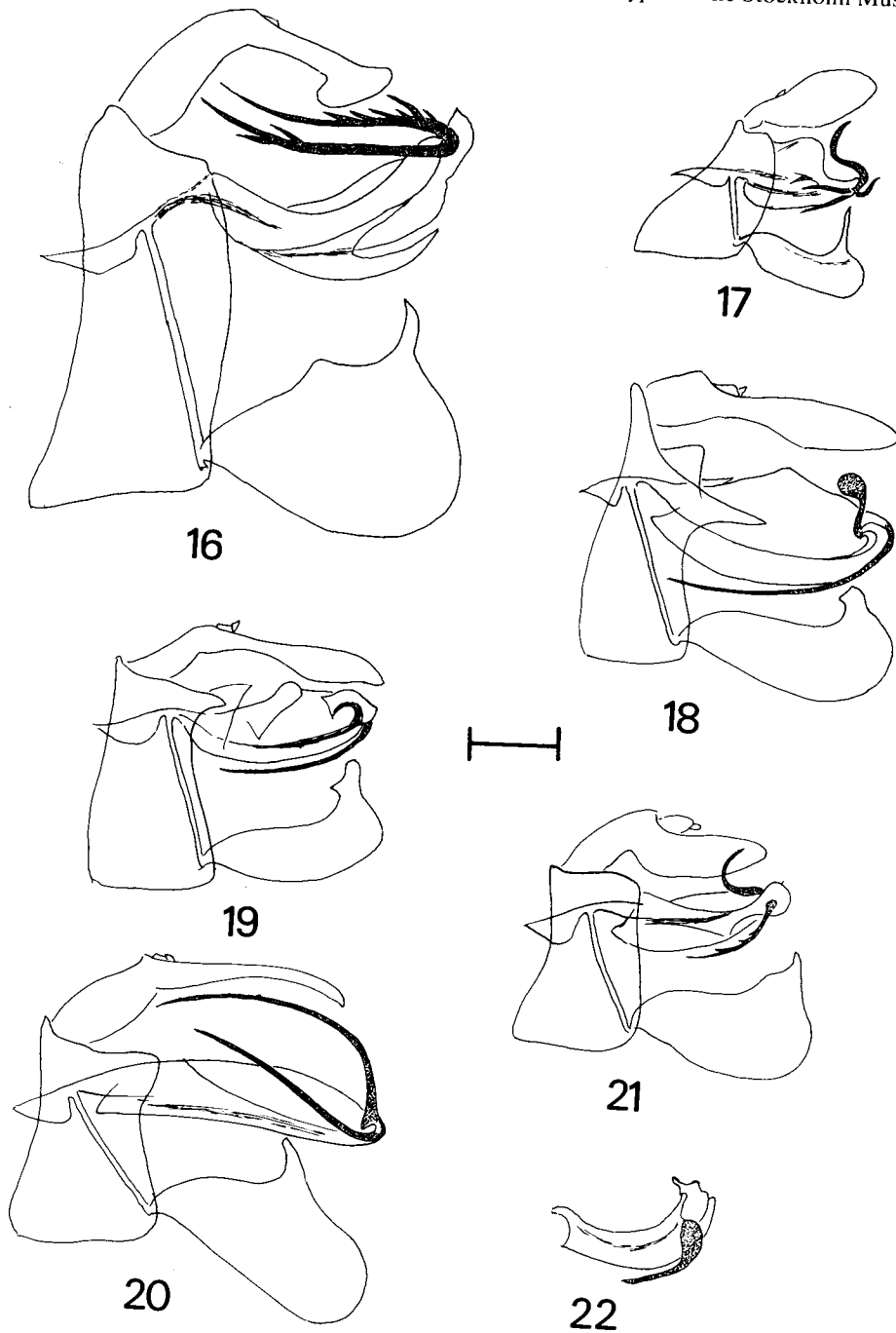
The genitalia of the lectotype are illustrated (Fig. 26). The genital characters are the same as those of *Flata floccosa* Guérin-Ménéville (1829: pl. 58, fig. 8) known from Indonesia and Borneo. The morphology of the front, pattern of tegminal markings, and male genitalia are the same in specimens that otherwise differ widely in the extent of bleaching of red pigmentation of the tegmina.

**rubripes** Jacobi, 1928, p. 21 (*Delostenopium*)  
= *Euphanta rubripes* (Jacobi), COMB. N.

Lectotype ♀, by present designation — (1) Kimberley/district (2) N.V. Austr./Mjöberg (3) nov (4) Typus (red label) (5) *Delostenopium/rubripes*/Jac./A. Jacobi detrm.

Paralectotype ♀ — Same labels as the lectotype.

The lectotype is congeneric with *Euphanta munda* (Walker) with respect to the tricarinate front and tegminal characters. *Delostenopium* Jacobi (1928) becomes a junior synonym of *Euphanta* Melichar (1902) as *rubripes* is the type of a monobasic genus. However, the status of *rubripes* as a species will not be known until a male is associated with the female lectotype, and the genitalia studied.



Figs. 16–22. Left lateral view of male genitalia. — 16. *Poeciloptera cereris* Stål. — 17. *Flatoides subrufescens* Walker. — 18. *Nephesa cicatricosa* Stål. — 19. *Nephesa gemmifera* Stål. — 20. *Paratella umbrimargo* Melichar. — 21. *Idume plicata* Melichar. — 22. *Ormenis alba* Melichar, aedeagus. — Scale = 0.5 mm.

**ruficeps** Melichar, 1902, p. 39 (*Euphanta*)

Holotype ♀ — (1) Australia (2) 15 (3) small square pink label (4) Typus (red label).

The metatibial spine formula of 1:7 and the greater intensity of red pigmentation appears to differentiate the holotype from closely related species in the genus *Euphanta*. However, the species will be known after a revisional study of the various taxa is made, utilizing the characters of the male genitalia.

**siccifolia** Stål, 1870, p. 776 (*Atracis (Uxantis)*) [*Uxantis*]

Holotype ♂ — (1) Ins. Phillipp (2) Semper (3) Type (white label) (4) Typus (red label) (5) *Atracis/siccifolia*/Stål. (Dissected).

The holotype genitalia are illustrated (Fig. 11). The left tegmen is damaged and mostly lost.

**sobrina** Stål, 1855, p. 191 (*Poeciloptera*) [*Cryptoflata*]

The type specimen is lost, being represented only an empty needle with a label written by a former curator reading "*Poeciloptera sobrina* Stål (Typus) missing" (Per Lindskog, personal communication). Metcalf (1957) placed this species in *Cryptoflata*. As there are several species of this genus in West Africa that are known only by characters of the male genitalia, a positive recognition of *sobrina* is impossible.

**stali** Melichar, 1902, p. 8 (*Aflata*, as *Ståli*)

Lectotype ♀, by present designation — (1) Adelaide (2) Stål (3) Type (white label) (4) 99 (5) small square pink label (6) *Aflata/stali* n. sp. (7) Typus (red label).

Paralectotype ♀ — (1) Adelaide (2) Stål (3) Paratypus (red label).

The lectotype appears to be the specimen illustrated by Melichar (1902: pl. VII, figs. 3, 3a). Paralectotypes (2 ♀ ♀) are in Berlin Museum. The male genitalia of this species were illustrated by Fletcher (1979).

**stictica** Melichar, 1902, p. 10 (*Microflata*)

= *Mimophantia stictica* (Melichar), COMB. N.

Lectotype ♂, by present designation — (1) Austral/boreal (2) Thorey (3) Type (white label) (4) 107 (5) small square pink label (6) Typus (red label) (7) *Microflata/stictica*/n. sp. (Dissected).

The lectotype genitalia are illustrated (Fig. 5). The genitalia of this species was figured similarly by Fletcher (1979). A paralectotype female is in the Paris Museum. *Microflata* Melichar (1902) is monobasic. As *stictica* properly belongs in *Mimophantia* Matsumura (1900), *Microflata* becomes the junior synonym. This confirms synonymy proposed by Jacobi (1915:168) which has been ignored subsequently.

**subguttata** Stål, 1870, p. 711 (*Phromnia*) [*Flatida*]

Lectotype ♂, by present designation — (1) Ins. Phillipp (2) Semper (3) Type (white label) (4) Typus (red label) (5) *Phromnia/subguttata*/Stål. (Dissected).

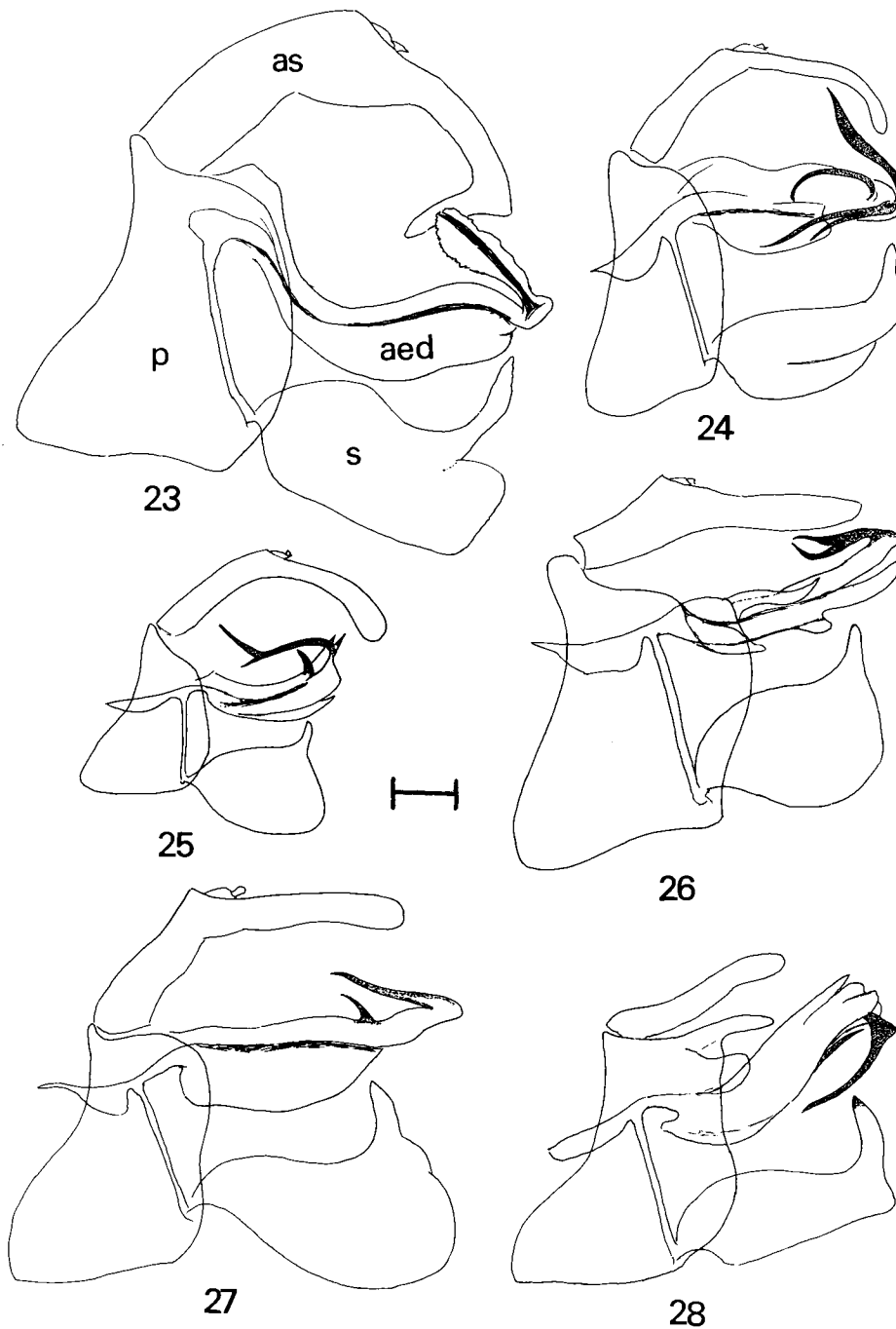
Paralectotypes — ♂ (1) Ins. Phillipp (2) Semper (3) *Phromnia/subguttata*/Stål (4) Paratypus (red label); ♂ (1) Ins. Phillipp (2) Semper (3) Type (white label) (4) Allotypus (red label); ♂ (1) Ins. Phillipp (2) Semper (3) 14 (4) Small square pink label (5) Paratypus (red label); ♂ (1) Manilla (2) Thorey (3) Paratypus (red label); ♀ (1) Ins. Phillipp (2) Semper (3) Paratypus (red label) (4) *Phromnia/subguttata*/Stål; ♀ (1) Ins. Phillipp (2) Semper (3) Paratypus (red label); ♀ (1) Ins. Phillipp (2) Semper (3) 26 (4) small square pink label (5) Paratypus (red label); ♀ (1) Manilla (2) Thorey (3) Paratypus (red label) (4) *subguttata*/Stål; no abdomen (1) Ins. Phillipp (2) Semper (3) Paratypus (red label).

The lectotype genitalia are illustrated (Fig. 23). The lectotype is without a thin black margin on the tegmina, and most of the paralectotypes similarly lack the black margin. However, several specimens have a recognizable thin black margin. Stål's original description included varieties b and c. A syntype of variety b was selected by Melichar (1901) as the holotype of *Phromnia cingulata*. I did not find a representative of variety c among the Stål syntypes of *subguttata* designated as paralectotypes. Varieties b and c were differentiated principally on the basis of the black margined tegmina, which does not appear to be an infallible character to distinguish *subguttata* and *cingulata*.

**subrufescens** Walker, 1870, p. 141 (*Flatoides*) [*Uxantis*]

Lectotype ♂, by present designation — (1) Mysol (2) Stevens (3) 145 (4) small square pink label. (Dissected).

The lectotype genitalia are illustrated (Fig. 17). The Wallace specimens from Morty, Mysol and New Guinea that were found in the Stockholm, Victoria and British Museums are considered to be valid syntypes. The male in the Stockholm Museum is designated as the lectotype because the only other male in the Victoria Museum is



Figs. 23–28. Left lateral view of male genitalia. — 23. *Phromnia subguttata* Stål. — 24. *Phyma inornata* Melichar. — 25. *Nephesa aegrota* Melichar. — 26. *Phromnia rubescens* Stål. — 27. *Flata cingulata* Melichar. — 28. *Cerfennia philippinus* Stål. — aed = aedeagus, as = anal segment, p = pygofer, s = style. — Scale = 0.5 mm.

damaged. All specimens in the British Museum are females. The lectotype was cited by Melichar (1902) as a type.

**tenella** Melichar, 1901, p. 221 (*Cerynia maria* var.)

The male specimen named by Melichar as var. *tentella* was dissected, and the genitalia are illustrated (Fig. 14). This specimen bears labels, as follows: (1) Darjee-ling (2) 9 (3) small square pink label (4) Paratypus (red label) (5) *Cerynia/v. tenella*.

**umbrimargo** Walker, sensu Melichar, 1902, p. 121 (*Paratella*); misidentified, not *Poeciloptera umbrimargo* Walker, 1858, p. 115.

= *Paratella subcincta* Distant, 1910, p. 333, a replacement name for *umbrimargo* sensu Melichar.

Lectotype ♂ of *subcincta* Distant (Melichar's misidentified specimen), by present designation — (1) Nov/ Guinea (2) 57. (Dissected).

The lectotype genitalia are illustrated (Fig. 20). The lectotype of *subcincta* Distant does not have the distinct submarginal vein and characters of the genitalia that are found in *umbrimargo* Walker.

**variata** Melichar, 1902, p. 137 (*Seliza*)

Holotype ♀ — (1) Java (2) Meller/borg (3) 106 (4) small square pink label (5) Typus (red label).

The holotype was illustrated by Melichar (1902: pl. VII, fig. 8). Study of the genitalia of a male will be necessary to determine the status of this species.

**vidua** Stål, 1854, p. 248 (*Poeciloptera*) [*Seliza*]

Holotype ♀ — (1) Malac/ca (2) Kinb. (3) *vidua* (4) 64 (5) small square pink label (6) Typus (white label) (7) Typus (red label).

This species is type of the genus *Seliza* Stål (1854). The tegmen of the holotype was illustrated by Melichar (1902: pl. VII, fig. 11). It will be necessary to associate the holotype with a male and utilize the genitalia for an understanding of the species in Southeast Asia.

**viridicana** Jacobi, 1928, p. 22 (*Massila*)

Holotype ♂ — (1) Ma/landa (2) Queensl./Mjöberg (3) Typus (red label) (4) *Massila/viridicana*/Jac./A. Jacobi determ. (Dissected).

The genitalia are illustrated (Fig. 6). The tegmen illustrated by Jacobi (1928, fig. 12) helps in recognition of the species.

**vivida** Jacobi, 1928, p. 22 (*Dascalina*)

Lectotype ♂ — (1) Kimberley/district (2) N.V. Austr./Mjöberg (3) jan (4) Typus (red label) (5) *Dascalina/vivida* Jac./A. Jacobi determ. (Dissected).

The lectotype genitalia are illustrated (Fig. 2). A paralectotype female is in the Dresden Museum.

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