Types of Flatidae. XV. A review of types in the Musée royal de l'Afrique Centrale, Tervuren (Homoptera, Fulgoroidea)

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Types of Flatidae in the Musée royal de l'Afrique Centrale were reviewed. These data were compared with data from types of pertinent African species in other depositories. New synonymies, junior synonym listed first, are : *Cryptoflata dynastes* Fennah = *Decipha sarpedon* (Fennah), *Conflata* Schmidt = *Flatidissa* Melichar, *Conflata viridis* Schmidt = *Flatidissa furcigera* (Haglund); *Gyaria cottus* Fennah = *Gyaria walkeri* Stål; *Lawana viridis* Synave = *Cryptoflata angulata* Jacobi; *Leptoflata* Lallemand = *Phlebopterum* Stål; *Ormenis impunctata* Schmidt = *Ulundia madagascariensis* (Signoret), *Phylliana leto* Fennah and *P. sciron* Fennah = *Phylliana correcta* (Melichar); *Phyma basipunctata* Schmidt = *Flatopsis nivea* (Signoret) Removed from synonymy as junior synonyms of *Caesonia bellula* Stål are *Pseudophantia ruwndiensis* Synave and *P. straeleni* Lallemand & Synave. Both are good species in *Pseudophantia* Lallemand and Synave. New combinations, original combination given first, are : *Cryptoflata angulata* Jacobi, *C. bianor* Fennah, *C. sarpedon* Fennah, *C. theano* Fennah = all transferred to *Decipha*, *Leptoflata seydeli* Lallemand = *Phlebopterum seydeli* (Lallemand) New status as subspecies, not aberrations as described, are : *Flatida neavei ochracea* (Synave); *Flatida pallida olivacea* (Synave), *Flatida pallida rufescens* Synave, *Flatida pallida semimarginata* Synave.

Types de Flatidae. XV. Une revue des types du Musée royal de l'Afrique centrale, Tervuren (Homoptera, Fulgoroidea). - Les types de Flatidae du Musée royal de l'Afrique centrale sont revus Ces données sont comparées à celles des types d'autres espèces africaines, conservés par ailleurs. Les nouvelles synonymies, le synonyme le plus récent cité d'abord, sont : *Cryptoflata dynastes* Fennah = *Decipha sarpedon* (Fennah); *Conflata* Schmidt = *Flatidissa* Melichar; *Conflata viridis* Schmidt = *Flatidissa furcigera* (Haglund), *Gyaria cottus* Fennah = *Gyaria walkeri* Stål; *Lawana viridis* Synave = *Cryptoflata angulata* Jacobi; *Leptoflata* Lallemand = *Phlebopterum* Stål, *Ormenis impunctata* Schmidt = *Ulundia madagascariensis* (Signoret), *Phylliana leto* Fennah and *P. sciron* Fennah = *Phylliana correcta* (Melichar); *Phyma basipunctata* Schmidt = *Flatopsis nivea* (Signoret). Sont relevés de synonymie avec *Caesonia bellula* Stål, *Pseudophantia ruwndiensis* Synave et *P straeleni* Lallemand & Synave Tous deux sont de bonnes espèces de *Pseudophantia* Lallemand & Synave. Les nouvelles combinaisons, la combinaison originale citée d'abord, sont : *Cryptoflata angulata* Jacobi, *C bianor* Fennah, *C. sarpedon* Fennah, *C. theano* Fennah = tous transferrés au genre *Decipha*, *Leptoflata seydeli* Lallemand = *Phlebopterum seydeli* (Lallemand). Le statut de sous-espèce, et non plus d'aberration, est attribué à *Flatida neavei ochracea* (Synave); *Flatida pallida olivacea* (Synave); *Flatida pallida rufescens* Synave, *Flatida pallida semimarginata* Synave.

Key words . Homoptera, Flatidae, types, review, new synonymies.new combinations, new statutes, Afrotropical

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INTRODUCTION

Type-specimens of Flatidae in the Musée royal de l'Afrique centrale [Congo Belge], Tervuren, were examined in connection with my research on African flatids. The flatids in the museum were collected mostly during faunistic research in the National Parks of Central Africa

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Species of Flatidae in Africa named before the appearance of Metcalf's Catalog (1957) were described especially by Walker (1851), Stål (1866), Karsch (1890), Melichar (1902), Schmidt (1906), Distant (1910), Jacobi (1915) and Lallemand (1931). Publications of Fennah (1955) and Synave (1954) appeared at about the time the catalog was published or shortly thereafter. Both of the latter authors utilized male genitalia in their research, and added significantly to knowledge of the African Flatidae.

My research on the types in the Tervuren Museum revealed considerable synonymy Results on the taxonomic status of types and various synonymies are published at this time in advance of a monographic revision of African Flatidae in preparation.

METHODS

To help preserve the historical record, original collection data are transcribed exactly as given on labels, except that the heading "Musée du Congo" present on all labels has been omitted.

Some additional data on paratypes deposited in the "Institut royal des Sciences naturelles" in Brussels (IRSNB) are included, and cross-referenced according to numbers assigned by Synave (1980).

Present understanding of speciation in Flatidae is largely based on a knowledge of characters of the male genitalia. However, many historical type specimens were unique females. In such cases it was necessary to select a representative male specimen for morphometrical measurements, genitalia study, and illustration of taxonomic characters. A blue plesiotype label was attached to these specimens. The term plesiotype has no status under taxonomic rules, but specimens so labeled are accurately identified as having special status in relation to my published data. Future workers should have no trouble with positive identification of these study materials.

MEASUREMENTS

To provide comparable data, all measurements are reported in mm according to the following standard format : Length : Overall; v (vertex), f (frons); p (pronotum); m (mesonotum); t (tegmen); pcl (postclaval sutural margin); t (tegmen). Width: v (vertex), f (frons); t (tegmen). These measurement parameters were illustrated by Medler (1989).

The hind leg spine formula gives sequence of metatibial lateral spine (s), metatibial apical spines, metatarsal I basal spines.

ALPHABETICAL LIST OF TYPES

Species names are listed in alphabetic sequence. Each name is followed by its original generic combination, author and reference. Subsequent change to the generic name currently valid is given also. Taxonomic notes provide information on synonymy or change in status of names where applicable. An index of species is given in table 1.

Table 1 : Index of species (numbers refer to pages of this contribution)

basipunctata

Phyma basipunctata Schmidt, 1906 : 209; *Lawana basipunctata* Metcalf, 1957 : 205; *Flatopsis nivea* var. *basipunctata* Schmidt, 1924 : 295; Metcalf, 1957 : 220; *Flatopsis* f. *basipunctata* Synave, 1956: 208.

Holotype ♀ - Madagascar : Montane d'Ambre.

The holotype belongs to the genus *Flatopsis* Melichar. A review of the literature cited in Metcalf's Catalog (1957) indicated that this species was wrongly retained in *Lawana* Distant while being treated at the same time as a new variety of *Flatopsis nivea* Signoret.

Synave's (1956) key to species of *Flatopsis* utilized the absence or presence of black spots on the tegmina to separate *nivea* Signoret, *nivea* f. *nigropunctata* Stål, and *nivea* f. *basipunctata* Schmidt. No differences in genitalia were found in males with variable patterns of black spots as given in Synave's key.

At this time, *Phyma basipunctata* Schmidt is considered to be a junior synonym of *Flatopsis nivea* (Signoret), sensu Melichar and authors. NEW SYNONYMY. Determination of the valid status of *Phyllyphanta nivea* Signoret (1860) requires designation of a lectotype and knowledge of the male genitalia.

berenice

Cryptoflata berenice Fennah, 1958a : 161; *Decipha berenice* (Fennah), Medler, 1988 : 138.

Holotype ♂ - Banana a Weka, VII.1948, A.T. Maree. Paratypes 2 ♂ - Moanda, 25.VIII.1920, H. Schouteden; Uele, Bambesa, 10.X.1933, J.V. Leroy.

Measurements from holotype - Length : overall 14.0; v 0.17; f 1.66; p 0.91; m 3.15; t 10.29; pcl 3.65. Width : v 1.08; f 1.37; t 5.81. Hind leg spine formula : 2:6:7.

Male genitalia were figured by Fennah (1958a, fig. 101).

bianor

Cryptoflata bianor Fennah, 1958a : 160.

Holotype ♂ (headless) - Uele Entre Buta et Titule, 6.III.1938, J. Vrydagh.

Measurements (partial, without head or pronotum) - Length : m 2.82; t 10.29; pcl 3.49. Width : t 5.31. Hind leg spine formula : 2:7:7.

Male genitalia were figured by Fennah (1958a, fig. 100). The tegmina have 3 longitudinal veins arising from the basal stem. This is a key character used by Medler (1988) to exclude species from the genus *Cryptoflata*.

Decipha bianor (Fennah), NEW COMBINATION.

bimaculata

Phromnia bimaculata Schmidt, 1912 : 362; *Flatida bimaculata* (Schmidt), Metcalf, 1957 : 29.

Lectotype ♀, here designated - Bumputu, 6.X.1905, Waelbroeck. Plesiotype ♂ Mongati a l'Este de Kinshasa, 11.X.1968, P. M. Elsen. The syntype ♀ from Kassai, Lodima, was not examined.

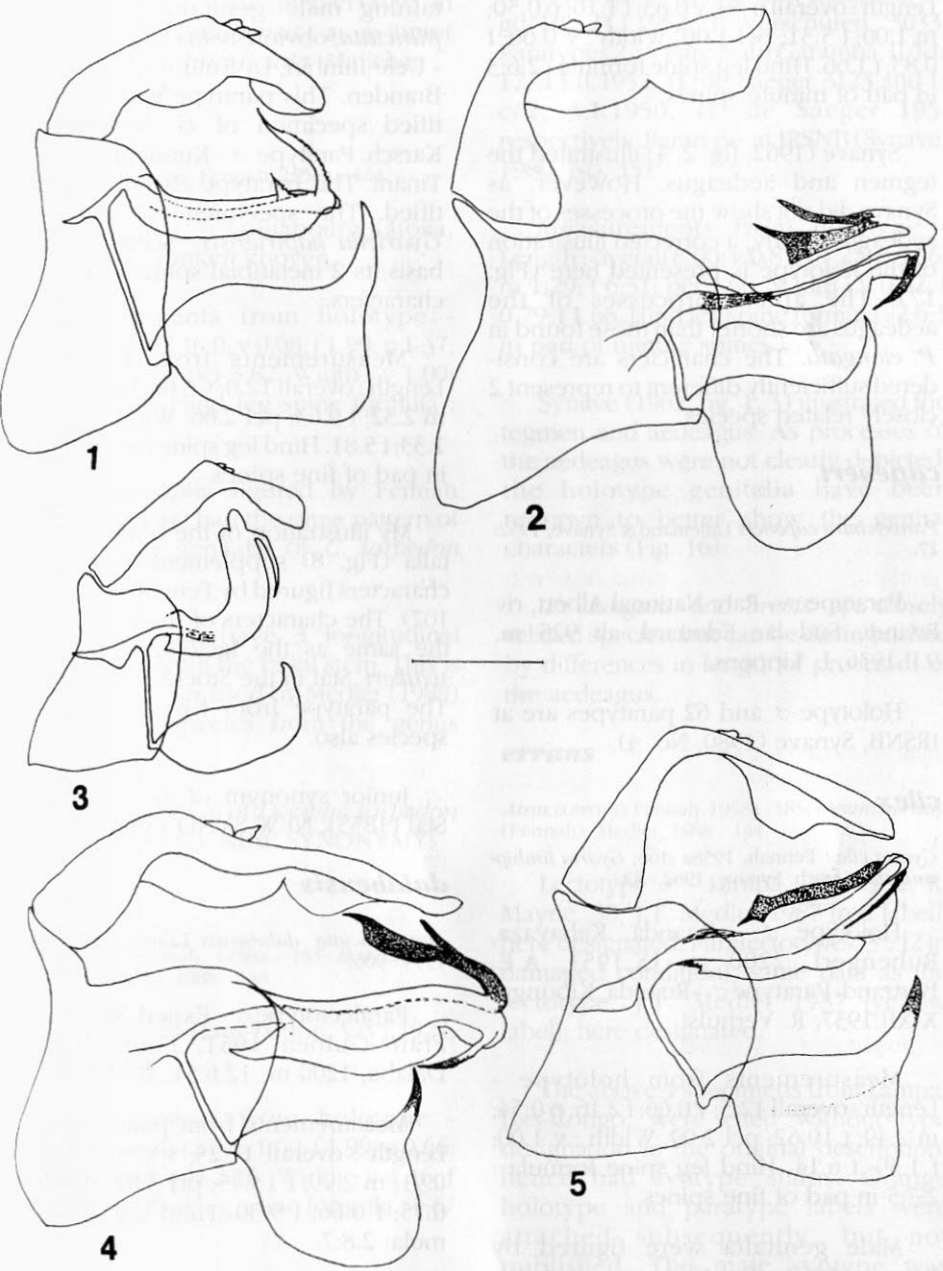
Measurements from plesiotype and lectotype - Length : overall 18.00, 22.00; v 0.54, 0.54; f 1.83, 1.99; p 0.83, 1.16; m 3.32, 3.65; t 16.10, 18.59; pcl 3.65, 4.15. Width : v 0.79, 0.83; f 0.66, 0.75; t 8.96, 10.62. Hind leg spine formula : 2:9:8, 2:8:7.

The plesiotype genitalia are illustrated (Fig. 5) to help in determination of this species.

brevis

Paracalauria brevis Synave, 1962 : 81.

Holotype ♂ - Parc Garamba, II/hc/4



Figs. 1-5.- Left lateral view of male genitalia. (1) *Conflata viridis* Schmidt, holotype; (2) *Phromnia pallida* ab. *rufescens* Synave, holotype; (3) *Leptoflata seydeli* Lallemand, holotype; (4) *Phromnia neavei ochracea* Synave, holotype; (5) *Phromnia bimaculata* Schmidt, plesiotype. Scale bar = 1 mm.

26.VII.1951, J. Verschuren. Paratype ♀ - same label as holotype.

Measurements from holotype - Length : overall 6.50; v 0.83; f 1.16; p 0.50; m 1.00; t 5.31; pcl 1.00. Width : v 0.66; f 0.83; t 1.66. Hind leg spine formula : 2:6:3 in pad of minute spines.

Synave (1962, fig. 2, 4) illustrated the tegmen and aedeagus. However, as Synave did not show the processes of the aedeagus clearly, a corrected illustration of the holotype is presented here (Fig. 17). The apical processes of the aedeagus are shorter than those found in *P. elongata*. The characters are considered sufficiently different to represent 2 closely related species.

capeneri

Paroxychara capeneri Lallemand & Synave, 1952: 27.

Paratype ♂ - Parc National Albert, riv Rwindi, Sud lac Edouard, alt 925 m, 9.II.1936, L. Lippens.

Holotype ♂ and 62 paratypes are at IRSNB, Synave (1980, No. 4).

cilex

Gyaria cilex Fennah, 1958a :166; *Gyaria limbipunctata* Karsch, Synave, 1962 : 82.

Holotype ♂ - Ruanda, Kabayaza, Ruhengeri, 2200 m, IX.1951, A.E. Bertrand. Paratype ♂ - Ruanda, Kibungu, X-XII.1937, R. Verhulst.

Measurements from holotype - Length : overall 12.5; v 0.66; f 2.16; p 0.54; m 2.49; t 10.62; pcl 2.99. Width : v 1.00; f 1.49; t 6.14. Hind leg spine formula : 2:7:5 in pad of fine spines.

Male genitalia were figured by Fennah (1958a, fig. 106).

cottus

Gyaria cottus Fennah, 1958a : 167.

Holotype ♂ - Kivu, Mulungu, 1938, A 303, Hendrickx. Paratype ♀ - Same labels as the holotype. This paratype was received with attached microvial containing male genitalia of *G. limbipunctata*, obviously in error. Paratype ♀ - Uele-Itimbiri, La Kulu, 1932, J. Vanden Branden. This paratype was a misidentified specimen of *G. limbipunctata* Karsch. Paratype ♂ - Kundelungus, Mme Tinant. This paratype also was misidentified. The specimen is assigned to *Gyariella kapiriensis* Schmidt on the basis its 2 metatibial spines and genital characters.

Measurements from holotype - Length : overall 12.0; v 0.66; f 1.99; p 0.66; m 2.32; t 9.63; pcl 2.66. Width : v 0.95; f 1.33; t 5.81. Hind leg spine formula : 1:7:8 in pad of fine spines.

My illustration of the holotype genitalia (Fig. 8) supplements the genital characters figured by Fennah (1958a, fig. 107). The characters of the genitalia are the same as the lectotype of *Gyaria walkeri* Stål in the Stockholm Museum. The paratype from Kivu is the same species also.

Junior synonym of *Gyaria walkeri* Stål (1855), NEW SYNONYMY.

dalabensis

Flatina liciata dalabensis Lallemand & Synave, 1954 : 906.

Paralectotype ♀ - Exped. Mus. G. Fry, Franz-Guinea 1951, Fouta Djallon, Dalaba, 1200 m, 12.6.51, Bechyne

Measurements from paralectotype - Length : overall 17.25; v 0.50; f 1.66; p 0.91; m 2.99; t 13.45; pcl 3.82. Width : v 0.75; f 0.66; t 9.30. Hind leg spine formula: 2:8:7.

The genitalia of the lectotype ♂ of *dalabensis* in the Muséum National d'Histoire Naturelle, Paris, were figured by Medler (1993, in press). Characters of

the aedeagus are the same as *liciata* Melichar figured by Lallemand & Synave (1954, fig. 2) and Medler (1988, fig. 1). As the lack of tegminal markings did not justify subspecies status, Medler (1993, in press) treated *dalabensis* as a junior synonym of *Flatina liciata* Melichar.

dynastes

Cryptoflata dynastes Fennah, 1958a : 164.

Holotype ♂ - Luluabourg,Katoka, 1939, R.P.N. Vankerckhoven.

Measurements from holotype - Length : overall 16.0; v 0.08; f 1.99; p 1.37; m 2.99; t 12.45; pcl 3.82. Width : v 1.00; f 1.66; t 6.97. Hind leg spine formula : 2:7:8.

Male genitalia figured by Fennah (1958a, fig. 104) had the same pattern of characters as genitalia of *C. sarpedon* Fennah

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The tegmina have 3 longitudinal veins arising from the basal stem. This is the key character used by Medler (1988) to exclude species from the genus *Cryptoflata.*

Junior synonym of *Decipha sarpedon* (Fennah) (1958a), NEW SYNONYMY.

echo

Atracis echo Fennah, 1958a : 183; *Betracis echo* (Fennah), Medler, 1988 : 144.

Holotype ♂ - Haut-Lopori, V-VI.1927, J. Ghesquiere.

Measurements from holotype - Length : overall 12.0; v 1.00; f 1.99; p 0.66; m 2.82; t 9.63; pcl 2.16. Width : v 1.16; f 1.54; t 3.98. Hind leg spine formula : 1:6/7:6.

Male genitalia were figured by Fennah (1958a, fig. 121).

elongata

Paracalauria elongata Synave, 1962 : 79.

Holotype ♂ - Parc Natn Garamba, II/gd/10, 24.I.1952, J. Verschuren, 3033. Paratypes 2 ♀ - Parc Natn Garamba, II/fd/17, 13.II.1952, H. de Saeger 3123,and I/c/2, 3.I.1950, H. de Saeger 195, respectively Paratype at IRSNB (Synave, 1980, No. 15).

Measurements from holotype - Length : overall 8.00; v 0.87; f 1.25; p 0.46; m 1.29; t 6.31; pcl 1.66. Width : v 0.62; f 0.79; t 1.66. Hind leg spine formula : 2:6:3 in pad of minute spines.

Synave (1962, fig. 1, 3) illustrated the tegmen and aedeagus. As processes of the aedeagus were not clearly depicted, the holotype genitalia have been redrawn to better show the genital characters (Fig. 16).

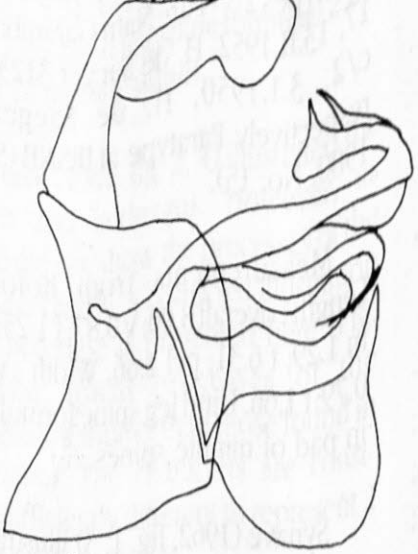
P. elongata and *brevis* are closely related species, but can be distinguished by differences in length of processes of the aedeagus.

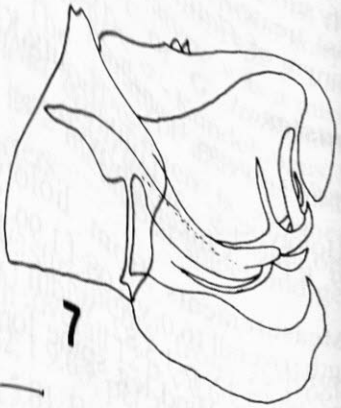
errans

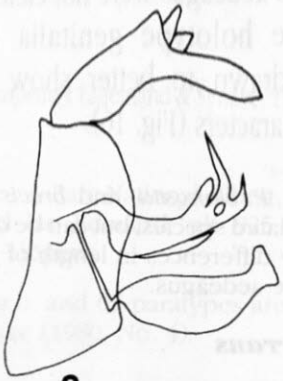
Atracis errans Fennah, 1958a : 185; *Uysanus errans* (Fennah), Medler, 1988 : 144.

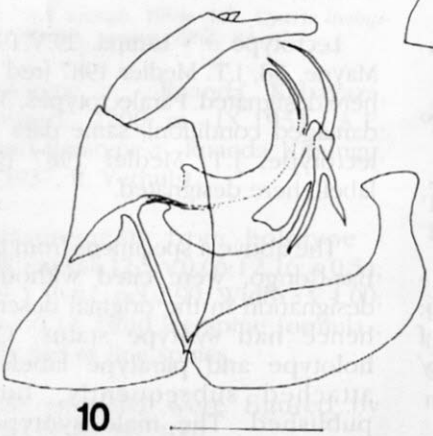
Lectotype ♂ - Lampa, 29.V.1952, R. Mayne, 58, J.T. Medler 1987 [red label]; here designated. Paralectotypes, 3 ♀ [2 in damaged condition], same data as the lectotype, J.T. Medler 1987 [yellow label]; here designated.

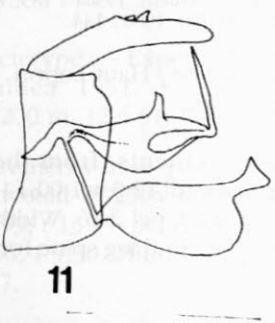
The above 4 specimens from Lampa, Bas-Congo, were cited without type designation in the original description; hence had syntype status. Orange holotype and paratype labels were attached subsequently, but not published. The male syntype was designated lectotype to fix the identity of the species as that illustrated by Fennah (1958a, fig. 123).











Figs. 6-11.- Left lateral view of male genitalia. (6) *Phromnia pallida semimarginata* Synave, holotype; (7) *Atracis errans* Fennah, plesiotype; (8) *Gyaria cottus* Fennah, holotype; (9) *Gyaria longispina* Synave, holotype; (10) *Gyaria maynei* Schmidt, lectotype; (11) *Eugyaria viridis* Synave, holotype. Scale bar = 1 mm.

Measurements from lectotype and paralectotype - Length : overall 18.00, 22.00; v 1.16, 1.33; f 2.49, 2.82; p 1.00, 1.00; m 3.15, 3.82; t 4.81, 5.96; pcl 1.33, 2.32. Width : v 1.08, 1.08; f 1.49, 1.70; t 2.32, 2.99. Hind leg spine formula : 1:6:6; 1:5:6.

The genitalia of the lectotype preserved in a glass microvial consisted of gummy and fragmented parts when received for study. Genitalia of a male specimen, Luki, V-VI, 1952, R.M. 58, R. Mayne, that had same characters as the lectotype were illustrated (Fig. 7). A blue plesiotype label was attached to this specimen.

The female genitalia have not been described. Apices of valvulae III with 3-3 large teeth (2 paralectotypes) or 3-4 large teeth (1 paralectotype); posterior ventral margin of segment VII with median blunt protrusion not seen in related species.

eumaeus

Atracis eumaeus Fennah, 1958a : 186; *Uysanus eumaeus* (Fennah), Medler, 1988 : 144.

Holotype ♂ - Elisabethville, 1933, A. Timmermans.

Measurements - Length : overall 19.0; v 1.04; f 2.82; p 1.00; m 3.65; t 15.27; pcl 4.15. Width : v 1.00; f 1.66; t 6.64. Spine formula : [hind legs missing].

Male genitalia were figured by Fennah (1958a, fig. 124).

henkei

Ityraea henkei Schmidt, 1906: 206.

Lectotype ♀ - Congo belge, Kassai; here designated.

Measurements - Length : overall 21.5; v 0.83; f 1.33; p 1.16; m 3.49; t 18.26; pcl 5.15. Width : v 0.66; f 0.33; t 9.96. Hind leg spine formula : 2:12:6.

A second syntype was originally retained in Schmidt's collection in the Stettin Museum. This collection was later transferred to the Warsaw Museum. Status of the specimen is unknown.

ignota

Ityraea ignota Jacobi, 1943 : 8.

Lectotype ♂, - Congo belge, Eala, VIII.36, J. Ghesquiere. Paralectotypes 1 ♂, 1 ♀ - Eala, II and VIII.36, Ghesquière; here designated.

Measurements from lectotype - Length : overall 16.5; v 0.66; f 1.25; p 0.75; m 2.74; t 14.44; pcl 4.32. Width : v 0.46; f 0.62; t 8.13. Hind leg spine formula : 2:12:5.

The aedeagus of the lectotype was figured by Synave (1954, fig. 8).

impunctata

Ormenis impunctata Schmidt, 1906 : 210; *Chaetormenis impunctata* Melichar, 1923 : 74; *Panormenis impunctata* Lallemand, 1950 : 94; Metcalf, 1957 : 355.

Holotype ♀ - Madagascar Amber-Gebirge.

Measurements - Length : overall 6.0; v 0.21; f 0.66; p 0.25; m 1.16; t 4.98; pcl 1.16. Width : v 0.58; f 0.66; t 2.66. Hind leg spine formula : 2:7:8.

Melichar (1923) included this species in his new genus *Chaetormenis*. Lallemand's (1950) assignment to *Panormenis* Melichar was in error, along with later authors. Fennah (1958) determined that *Chaetormenis* was a junior synonym of *Ulundia* Distant, type species of which is *Elidiptera madagascariensis* Signoret. The holotype of *Ormenis impunctata* and holotype of *Elidiptera madagascariensis* are conspecific.

Ormenis impunctata Schmidt is here disposed as the junior synonym of *Ulundia madagascariensis* (Signoret) (1860), NEW SYNONYMY.

kapiriensis

Gyariella kapiriensis Schmidt, 1924 : 297.

Holotype ♀ - Kapiri, IX.1912, Miss. Agric. Plesiotype Kundelungus, Mme Tinant (misidentified paratype of *Gyaria cottus* Fennah).

Measurements plesiotype ♂ and holotype - Length : overall 9.50, 10.5; v 0.58, 0.62; f 1.70, 1.66; p 0.46, 0.46; m 1.83, 1.83; t 7.80, 8.80; pcl 2.66, 2.66. Width : v 0.83, 0.79; f 1.16, 1.33; t 4.32, 4.65. Hind leg spine formula : 2:8:6; 2:7:8/9 in pad of small spines.

Apices of valvulae III with 7 large teeth aligned in an irregular row.

leto

Phylliana leto Fennah, 1958a : 156.

Holotype ♀ - Uvira, IX.1927, C. Seydel. Paratype - Mayidi, 1945, Rev. P. Van Eyen.

Measurements from holotype - Length : overall 11.0; v 0.25; f 1.49; p 0.54; m 1.99; t 9.30; pcl 2.82. Width : v 1.00; f 1.37; t 4.81. Hind leg spine formula : 2:6:9.

Male genitalia were figured by Fennah (1958a, fig. 97). The genitalia are the same as *Phylliana correcta* Melichar figured by Medler (1986b, fig. 6).

The shallow convexity at the anterior margin of the head as seen in dorsal view helps distinguish this species.

Junior synonym of *Phylliana correcta* (Melichar) (1902), NEW SYNONYMY.

longispina

Gyaria longispina Synave, 1962 : 83.

Holotype ♂ - Congo belge II/f 1139, 25.I.1951, H. De Saeger. Paratypes - 263 specimens, Congo belge, Parc National Garamba, H. De Saeger. Paratypes (98) at IRSNB, Synave (1980, No. 32).

Measurements from holotype - Length : overall 11.25; v 0.66; f 1.99; p 0.58; m 2.49; t 9.79; pcl 2.66. Width : v 0.91; f 1.33; t 5.48. Hind leg spine formula : 1:7:2 in pad of fine hairs.

The illustration of the holotype genitalia (Fig. 9) supplements the figure of the aedeagus given by Synave (1962, fig. 5).

maynei

Gyaria maynei Schmidt, 1924 : 295.

Lectotype ♂ - Albertville, XII.1918, R. Mayne; here designated. Paralectotype - Albertville, XII.1918, R. Mayne, Edm Schmidt, determ. 1923; here designated.

I believe that both of the above specimens have syntype status, as the original publication reads "Typen im

Stettiner Museum und im Musée du Congo Belge." It is not known if syntype(s) exist in the Schmidt collection now in the Warsaw Museum.

Measurements from lectotype and paralectotype - Length : overall 13.5, 15.0; v 0.50, 0.58; f 1.87, 1.99; p 0.62, 0.66; m 2.49, 2.66; t 11.62, 12.78; pcl 3.15, 2.66. Width : v 0.95, 1.04; f 1.49, 1.62; t 6.64, 7.30. Hind leg spine formula : 1:6:8; 1:6/7:7.

The lectotype genitalia are illustrated (Fig. 10).

miranda

Atracis miranda Fennah, 1958a : 181; *Betracis miranda* (Fennah), Medler, 1988 : 137.

Holotype ♂ - Uele Dingila, 20.VI.1933, H.J. Bredo.

Measurements from holotype - Length : overall 16.0; v 1.12; f 2.82; p 0.91; m 3.49; t 12.28; pcl 1.99. Width : v 1.33; f 1.83; t 5.31. Hind leg spine formula : 1:7:8.

Male genitalia were figured by Fennah (1958a, fig. 119).

mithras

Afrodascalia mithras Fennah, 1958a : 174.

Holotype ♂ - Eala, VIII.1936, J. Ghesquiere. Paratype Basongo, VII.1921, Dr. H. Schouteden.

Measurements from holotype - Length : overall 12.5; v 0.58; f 2.08; p 0.87; m 2.82; t 9.96; pcl 1.99. Width : v 0.95; f 1.58; t 3.57. Hind leg spine formula : 1:5:6.

The holotype genitalia were figured by Fennah (1958a, fig. 112).

Both specimens had been dissected when received for study. The genitalia in the microvial attached to the paratype consisted of fragmented parts, but pieces appeared similar to processes of the holotype figured by Fennah.

neaera

Afrormenis neaera Fennah, 1958a : 170.

Holotype ♂ - Dilolo, IX-X.1933, H. De Saeger. Paratypes 2 ♂, 3 ♀ - Elisabethville, Kapiri, Katanga, Kahunga, Lubudi.

Measurements from holotype - Length : overall 10.75; v 0.25; f 1.25; p 0.50; m 2.32; t 8.96; pcl 3.15. Width : v 1.49; f 1.83; t 3.65. Hind leg spine formula: 2:8:8.

Male genitalia were figured by Fennah (1958a, fig. 110).

Afrormenis neaera superficially appears similar to *Ulundia madagascariensis* (Signoret), but the taxa can be separated easily by the following key characters :

Tegmen with veins R, S, and M arising from basal stem, apex without reticulated network of small crossveins, 2 submarginal veins ..... *Ulundia madagascariensis*

Tegmen with veins R + S, and M arising from basal stem, apex with reticulated network of crossveins, no submarginal veins ..... *Afrormenis neaera*

ochracea

Phromnia neavei ab. *ochracea* Synave, 1954 : 35; *Flatida neavei* var. *ochracea* (Synave), Metcalf, 1957 : 44.

Holotype ♂ - Parc Upemba, Kabwoe-sur-Muya, 11.V.1948, 1325 m. Paratypes 3 ♀ - same data as holotype. Paratypes 2 ♀ -same data as holotype, at IRSNB, Synave (1980, No. 35).

Measurements from holotype - Length : overall 24.0; v 0.83; f 1.83; p 0.83; m 3.65; t 17.60; pcl 5.81. Width : v 0.83; f 0.75; t 9.96. Hind leg spine formula : 2:7:6.

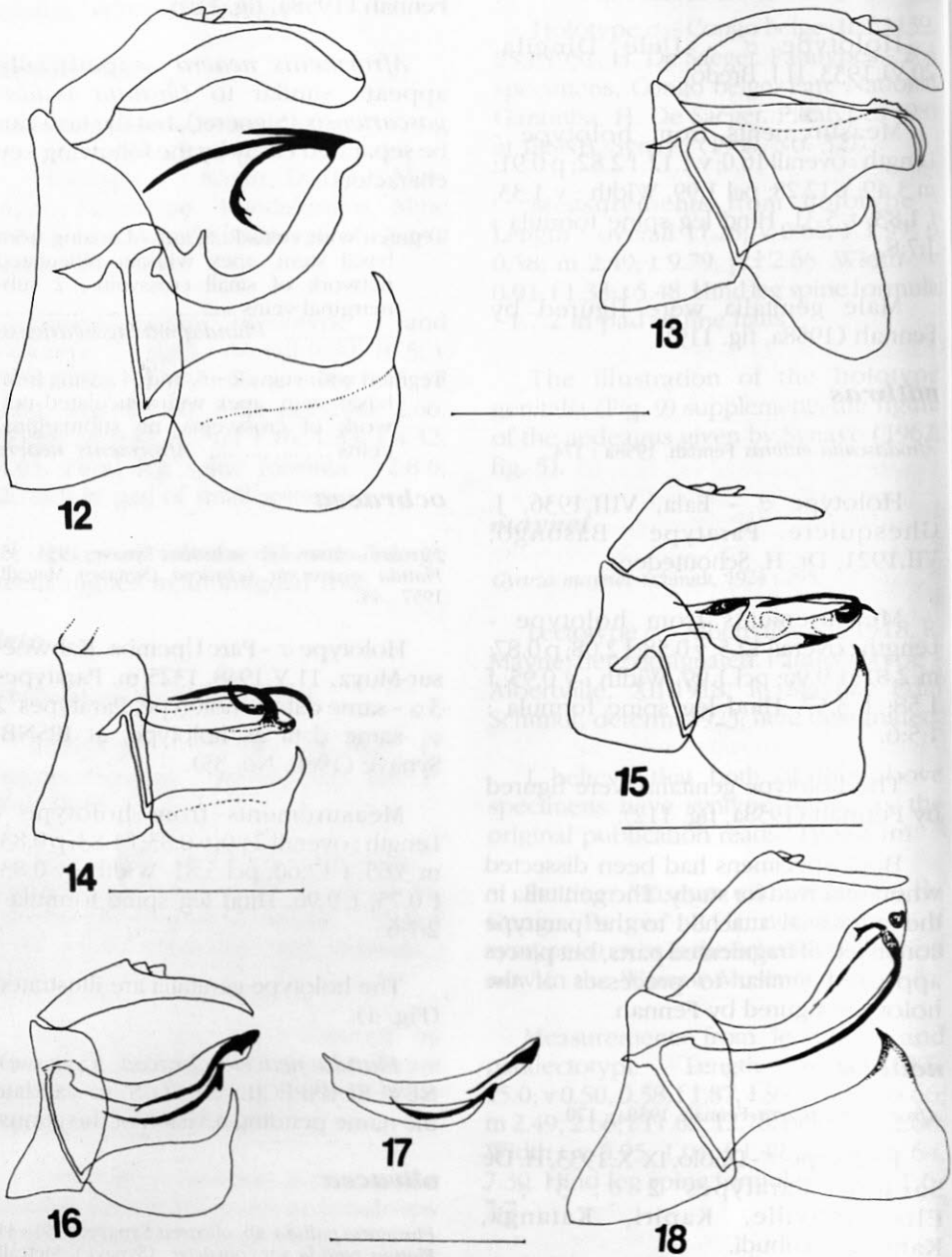
The holotype genitalia are illustrated (Fig. 4).

Flatida neavei ochracea (Synave), NEW SUBSPECIES STATUS, to validate the name pending revision of the genus.

olivacea

Phromnia pallida ab. *olivacea* Synave, 1954 : 34; *Flatida pallida* var. *olivacea* (Synave), Metcalf, 1957 : 47.

Holotype ♂ - Ganza, pres river Kamandula, affl. dr. Lukoka, 12-18.VI.1949. Paratypes, 179 ♂ & ♀ -



Figs. 12-18.- Left lateral view of male genitalia. (12) *Lawana viridis* Synave, holotype; (13) *Paroxychara phrixus* Fennah, plesiotype; (14) *Pseudophantia straeleni* Lallemand & Synave, holotype; (15) *Pseudophantia rwindensis* Lallemand & Synave, lectotype; (16) *Paracalauria elongata* Synave, holotype; (17) *Paracalauria brevis* Synave, holotype, aedeagus only; (18) *Apolexis tshiaberimuenis* Synave, paratype. Scale bar = 1 mm.

Ganza, Lukorami, Lufira, Mukana and Kankunda, various dates 1947 and 1949. Paratypes (67) at IRSNB, Synave (1980, No. 41).

Measurements from holotype - Length : overall 20.5; v 0.91; f 1.83; p 0.91; m 3.82; t 17.43; pcl 3.65. Width : v 0.83; f 0.83; t 9.79. Hind leg spine formula : 2:8:7.

Flatida pallida olivacea (Synave), NEW SUBSPECIES STATUS, to validate the name pending revision of the genus.

ornata

Phromnia angolensis ornata Synave, 1954 : 35; *Flatida angolensis ornata* (Synave), Metcalf, 1957: 29.

Holotype ♂ - Ganza, pres river Kamandula, affl. dr. Lukoka, 12-18.VI.1949. Paratypes 66 ♂ & ♀ - Same locality as the holotype. Paratypes (25) at IRSNB, Synave (1980, No. 3).

Measurements from holotype - Length : overall 19.0; v 0.83; f 1.66; p 1.00; m 3.32; t 16.27; pcl 3.65. Width : v 0.75; f 0.66; t 9.30. Hind leg spine formula : 2:8:6.

phoronis

Gyaria phoronis Fennah, 1958a : 165.

Holotype ♂ - Kisantu, 1932, R.P. Vanderyst.

Measurements from holotype - Length : overall 9.5; v 0.58; f 1.58; p 0.50; m 1.99; t 7.97; pcl 2.16. Width : v 0.71; f 1.00; t 4.48. Hind leg spine formula : 1:7:8.

The holotype had measurements that were were slightly less than those of the lectotype male of *Gyaria maynei* Schmidt. The black spot at the apex of the clavus distinguishes *phoronis* from *maynei* which lacks the spot. The two species are closely related with respect to genital characters.

The male genitalia of *phoronis* were figured by Fennah (1958a, fig. 105).

phrixus

Paroxychara phrixus Fennah, 1958a : 150; *Neocalauria phrixus* (Fennah), Synave, 1957 : 4.

Lectotype ♀, - Haut-Uela, Aru, 7.VII.1925, L. Burgeon, "Holotype"; here designated. . Paralectotypes 2 ♀, - Haut-Uela, Aru, 7.VII.1925, L. Burgeon, "Paratype"; here designated.

As all known syntypes were female, a plesiotype - Congo Belge, Park National Garamba, Inimvua, 16.V.1952, H. De Saeger, det. H. Synave 1961, was selected.

Only 3 of 4 syntypes cited by Fennah in the original description were found at Tervuren. Fennah neglected to record the holotype, but a holotype label was attached to the syntype designated above as the lectotype.

Measurements from plesiotype and lectotype - Length : 4.75, 5.25; v 0.50, 0.50; f 0.75, [obscured]; p 0.33, 0.37; m 0.83, 0.83; 3.65, 3.98; pcl 0.50, 0.50. Width : v 0.50, 0.54; f 0.58, [obscured]; t 1.83, 1.91. Hind leg spine formula : each 2:8:4 in pad of fine hairs.

The tegmen, head and thorax were illustrated by Fennah (1958a, fig. 91). Synave (1957, fig. 3, 4) also showed the tegmen and head. The plesiotype genitalia are illustrated (Fig. 13).

rufescens

Phromnia pallida ab. *rufescens* Synave, 1954 : 34; *Flatida pallida* var. *rufescens* (Synave), Metcalf, 1957 : 47.

Holotype ♂ - (1) Congo belge P.N.U./ Ganza 860 m/ 20-

25.VI.1949/Mis G.F. de Witte 2708; (2) H. Synave det 1953/ Phromnia/ pallida/rufescens ab. n. Paratypes 2 ♀ -

Ganza, lot 2708; Mukana, 1,810 m, lot 258a. Paratype ♀, Ganza, lot 2708, at IRSNB, Synave (1980, No. 42).

Measurements from holotype male and paratype (ex IRSNB) Length : overall 20.0, 22.0; v 0.83, 0.83; f 1.99, 1.99; p 1.00, 1.08; m 3.82, 4.15; t 17.26, 19.50; pcl 3.65, 4.50. Width : v 0.91, 1.00; f 0.91, 1.00; t 7.97, 10.75. Hind leg spine formula : [segments missing]; 2:10:7.

The holotype genitalia are illustrated (Fig. 2).

Flatida pallida rufescens (Synave), NEW SUBSPECIES STATUS, to validate the name pending revision of the genus.

rwindiensis

Pseudophantia rwindiensis Lallemand & Synave, 1952 : 29 : *Caesonia rwindiensis* (Lallemand & Synave), *Caesonia bellula* Synave, 1962 : 90.

Holotype ♂ - Park National Albert, camp Rwindi, Sud Lac Edouard, alt 1,000 m, 25.IV.1936, L. Lippens. Paratype ♂ - same data as lectotype, at IRSNB, Synave (1980, No. 47).

Measurements from holotype ♂ - Length : overall 8.0; v 0.58; f 1.08; p 0.37; m 1.49; t 6.14; pcl 1.66. Width : v 0.58; f 0.83; t 3.32. Hind leg spine formula : 2:8:5.

Synave (1962, fig. 9) figured the tegmen. The holotype genitalia (Fig. 15) have not been illustrated previously.

P. rwindiensis is a valid taxon, not synonymous with *Caesonia bellula* (Stål) as proposed by Synave, based on my study of the type specimen in the Stockholm Museum. I suspect that all authors after Stål have been confused about the true identity of *C. bellula* because Melichar (1901, fig. 13) misidentified the species and illustrated a specimen that actually represents *Pseudophantia* Lallemand and Synave.

sannio

Afrodascalia sannio Fennah, 1958a : 176.

Holotype ♀ - Kivu, Kavumu a Kabunga, km 82, Mingazi,

VIII-X.1951, H. Bomans.

Measurements - Length : overall 12.5; v 0.50; f 1.99; p 0.83; m 2.66; t 13.28; pcl 1.66. Width : v 1.16; f 1.83; t 3.98. Hind leg spine formula : 1:5:5.

The head, pronotum and tegmen were illustrated by Fennah (1958a, fig. 113).

sarpedon

Cryptoflata sarpedon Fennah, 1958a : 163.

Holotype ♂ - Eala, XI.1935, J. Ghesquière.

Measurements from holotype - Length : overall 12.0; v 0.50; f 1.66; p 1.00; m 2.66; t 9.96; pcl 3.15. Width : v 1.00; f 1.33; t 5.64. Hind leg spine formula : 2:7:7.

Male genitalia were figured by Fennah (1958a, fig. 103).

The tegmina have 3 longitudinal veins arising from the basal stem. This is a key character used by Medler (1988) to exclude species from the genus *Cryptoflata*.

Decipha sarpedon (Fennah), NEW COMBINATION.

sciron

Phylliana sciron Fennah, 1958a : 156.

Holotype ♂ - Eala, XII.1936, J. Ghesquiere. The holotype is teneral and distorted by having been crushed.

Measurements - Length : overall 11.5; v 0.33; f 1.33; p 0.58; m 2.32; t 8.63; pcl

3.15. Width : v 0.83; f 1.16; t 5.15. Hind leg spine formula : 2:7:7.

Characters of the male genitalia were figured by Fennah (1958a, fig. 96).

Fennah described *sciron* as "exactly similar" to *P. correcta* Melichar in colouration and all external features. However, he used apical areoles and genitalia characters to distinguish the holotype from other Eala material that he attributed to *correcta*. Genital characters of *correcta* sensu Fennah (1958, fig. 95) are the same as those of the lectotype of *Phylliana correcta* illustrated by Medler (1986b, fig. 6). Genital characters of *sciron* differed from *correcta* only by presence of a deeply convex lobe at the middle of the anal segment. After study of additional material, including specimens collected by Ghesquiere at Eala, I concluded that Fennah's figure of the anal segment of *sciron* is abnormal because of the crushed condition of the holotype.

Junior synonym of *Phylliana correcta* (Melichar) (1902), NEW SYNONYMY.

segnis

Exomella segnis Fennah, 1958a : 173; *Afrexoma segnis* (Fennah), Fennah, 1976 : 314, a replacement name for *Exomella* Fennah, which was preoccupied.

Holotype ♂ - Elisabethville, Miss. Agricole.

Measurements - Length : overall 9.0; v 0.29; f 1.33; p 0.50; m 1.83; t 7.97; pcl 2.49. Width : v 0.83; f 1.20; t 2.82. Hind leg spine formula : 2:5:8.

The head, tegmen and genitalia were illustrated by Fennah (1958a, Fig. 111).

The holotype was received without attached microvial; consequently, the genitalia illustrated by Fennah are presumed lost. Close examination of the pin gave no evidence that a vial had ever been attached.

seguyi

Juba seguyi Synave, 1954 : 46.

Holotype ♀ - Ganza, pres riv Kamandula, affl dr Lukoka, 860 m, 12-18.VI.1949, 2684a. Paratype ♀ - Kankunda, sous-affl rive dr. Lufira, 1,300 m, 13-19.XI.1947, lot 972a (not seen).

Measurements from holotype - Length : overall 11.5; v 1.00; f 1.83; p 0.54; m 2.32; t 8.63; pcl 2.16. Width : v 1.12; f 1.49; t 3.49. Hind leg spine formula : 2:7 : [obscured].

Juba seguyi and *Juba plagosa* (Distant) are closely related taxa in Central and South Africa. Both species names are based on female holotypes. Synave (1957) figured the vertex of *seguyi* (fig. 10) along with that of *plagosa* (fig. 8), and also illustrated the aedeagus of *plagosa* (fig. 14). It is not known at this time if *plagosa* sensu Synave validly represents *plagosa* Distant. Other specimens are known that have a large bulbous process at the base of the aedeagus instead of the relatively small slender process shown by Synave. Further study is needed to properly associate these males with their respective female holotypes.

semimarginata

Phromnia pallida .ab. *semimarginata* Synave, 1954 : 34; *Flatida pallida* var. *semimarginata* (Synave), Metcalf, 1957 : 47.

Holotype ♂ - Ganza, 20-25.VI.1949, lot 2758a. Paratype Ganza, lot 2751a. Paratype ♂, Ganza, at IRSNB, Synave (1980, No 43).

Measurements from holotype - Length : overall 21.0; v 0.66; f 1.83; p 0.83; m 3.32; t 15.77; pcl 3.32. Width : v 1.00; f 1.83; t 9.63. Hind leg spine formula : 3:8:7.

The holotype genitalia are illustrated (Fig. 6).

Flatida pallida semimarginata (Synave), NEW SUBSPECIES STATUS, to validate the name pending revision of the genus.

seydeli

Leptoflata seydeli Lallemand, 1931 : 302.

Holotype ♂ - Elisabethville, V.1926, Ch. Seydel.

Measurements - Length : overall 11.0; v 0.66; f 1.49; p 0.42; m 1.83; t 9.13; pcl 2.99. Width : v 1.33; f 1.54; t 4.81. Hind leg spine formula : 1:5:9.

The holotype genitalia are illustrated (Fig. 3). Genital characters resemble those of *Phlebopterum angulinum* Schmidt, except that the ventral process arising apically from the aedeagus differs. This process is less than half the length of the aedeagus in *seydeli* and nearly as long as the aedeagus in *angulinum*.

Phlebopterum seydeli (Lallemand), NEW COMBINATION.

Leptoflata seydeli Lallemand was the monobasic type species of *Leptoflata* Lallemand (1931). Consequently, the genus becomes a junior synonym upon transfer of its type species to *Phlebopterum* Stål (1854). NEW SYNONYMY.

soaemis

Cryptoflata soaemis Fennah, 1958a : 159.

Holotype ♂ - K 245 de Kindu, 29.VII.1912, L. Burgeon.

Measurements - Length : overall 13.0; v 0.33; f 1.83; p 1.08; m 3.32; t 10.29; pcl 3.32. Width : v 1.16; f 1.66; t 5.96. Hind leg spine formula : 2:7:8.

Male genitalia were figured by Fennah (1958a, fig. 99). This species is closely related to *Cryptoflata unipunctata* (Olivier), but distinguished by the different configuration of processes at apex of the aedeagus.

squalidus

Flatoides squalidus Fennah, 1955 : 442; *Betracis squalidus* (Fennah), Medler, 1988 : 144.

Holotype ♂ - Ruanda Mt. Mbude, S. du lac Luhondo, 29.I.1953 : Basilewsky.

Measurements - Length : overall 19.0; v 0.91; f 2.49; p 0.71; m 2.99; t 10.62; pcl 2.99. Width : v 1.16; f 1.66; t 4.15. Hind leg spine formula : 1:6:8.

The holotype genitalia were figured by Fennah (1955, fig. 11).

straeleni

Pseudophantia straeleni Lallemand & Synave, 1952 : 29; *Caesonia bellula* Synave, 1962 : 90.

Holotype ♂ - Sud lac Edouard, riv. Rwindi, alt 1,000 m, 9.II.1936, L. Lippens.

Measurements - Length : overall 7.50; v 0.50; f 1.00; p 0.33; m 1.33; t 6.31; pcl 1.83. Width : v 0.62; f 0.83; t 3.32. Hind leg spine formula : 2:8:[missing].

The head and pronotum were figured by Lallemand & Synave (1952, fig. 9). The holotype genitalia that are illustrated (Fig. 14) have not been figured previously.

This taxon is a valid genus and species, not a junior synonym of *Caesonia bellula* (Stål). As the species is congeneric with *Pseudophantia rwindiensis*, discussion of the invalid synonymy presented for that species also applies to *straeleni*.

theano

Cryptoflata theano Fennah, 1958a : 162.

Holotype ♂ - Haut-Uele, Moto, 1924, L. Burgeon.

Measurements - Length : overall 14.0; v 0.37; f 1.83; p 1.00; m 2.99; t 11.62; pcl 3.98. Width : v 1.16; f 1.49; t 6.31. Hind leg spine formula : 2:7:7.

Male genitalia were figured by Fennah (1958a, fig. 102).

The tegmina have 3 longitudinal veins arising from the basal stem. This is a key character used by Medler (1988) to exclude species from the genus *Cryptoflata*.

Decipha theano (Fennah), NEW COMBINATION.

tshiaberimuensis

Apolexis tshiaberimuensis Synave, 1963 : 30.

Holotype ♀ - Parc National Albert, Tshiaberimu, riv Talya nord 2340 m, 23.III.1954 : Vanschuytbroeck & H. Synave. Paratype ♀ - Tshiaberimu, same labels as holotype. Paratype ♀; Kivu, Territ. Mwenga, S-O Itombwe, Lulko, 2380 m, 23.I.1952, N. Leleup.

Measurements from holotype - Length : overall 8.00; v 0.50; f 1.33; p 0.58; m 1.33; t 5.81; pcl 1.16. Width : v 0.71; f 1.00; t 3.32. Hind leg spine formula : 1:10:8.

Only the tegmen was illustrated by Synave (1963, fig. 44).

Additional material that I considered to represent this species consisted of 1 ♂, 4 ♀, Kivu Mts. Nyamukubi, and Tshibinda, XI.1932, L. Burgeon; and 1 ♀, Kivu, Mulungu, 1939, Hendrickx. Unlike the green colored holotype, all specimens are strongly stramineous. Perhaps this color was induced by aging or method of preservation. The specimens from Kivu were examined but not named by Fennah (1958a, p 151), and were later designated as paratypes of *tshiaberimuensis* by Synave (1963 : 29). As pointed out by Synave, this is a high altitude species collected at 2,340-2,600 m.

The genitalia of the only available male, a specimen from Mts. Nyamukubi, are illustrated (Fig. 18). Confirmation of this determination requires collection of green colored males and examination of their genital characters.

viridis

Conflata viridis Schmidt, 1912 : 364.

Holotype ♂ - Mayumbe, Cabra.

Measurements - Length : overall 19.0; v 0.54; f 1.49; p 0.66; m 2.66; t 14.28; pcl 1.99. Width : v 0.75; f 1.00; t 9.13. Hind leg spine formula : 2:7:5.

Although the holotype was in a teneral condition with tegmina considerably bleached and semitransparent, placement in the genus *Flatidissa* was easily done by using Medler's (1988) key to West African genera.

The holotype genitalia that are illustrated (Fig. 1) have the same characters as *F. furcigera* shown by Medler (1988, fig. 9).

Junior synonym of *Flatidissa furcigera* (Haglund) (1899), NEW SYNONYMY.

Along with the synonymy of its monobasic type species, *Conflata* Schmidt (1912) falls as a junior synonym of *Flatidissa* Metcalf (1952), NEW SYNONYMY.

viridis

Lawana viridis Synave, 1954 : 38.

Holotype ♂ - Ganza, 860 m, 20-25,VI.1949, lot 2708a.

Paratypes, 45 ♂ & ♀ - Garamba Parc, at IRSNB, Synave (1980, No. 55).

Measurements from holotype - Length : overall 13.5; v 0.42; f 1.83; p 1.00; m 2.99; t 10.62; pcl 3.49. Width : v 1.00; f 1.41; t 6.31. Hind leg spine formula : 2:7:7.

The illustration of the holotype genitalia (Fig. 12), which supplements the illustration of the aedeagus published by Synave (1954, fig. 15), shows the same characters as *Cryptoflata angulata* Jacobi that were illustrated by Medler (1986, fig. 4).

Junior synonym of *Cryptoflata angulata* Jacobi (1915), NEW SYNONYMY. *Decipha angulata* (Jacobi), NEW COMBINATION.

viridis

Eugyaria viridis Synave, 1962 : 88.

Holotype ♂ - Parc Garamba, II/f/1, 9.I.1951, 1067, J. Verschuren. Paratypes (45) - Parc Garamba, various dates and collectors. Paratypes (119) at IRSNB, Synave (1980, No. 55).

Measurements from holotype - Length : overall 8.50; v 0.50; f 1.49; p 0.42; m 1.66; t 6.97; pcl 1.99. Width : v 0.66; f 1.08; t 3.65. Hind leg spine formula : 2:8:8.

The aedeagus and tegmen were illustrated by Synave (1962, fig. 6, 8). My illustration of the holotype genitalia (Fig. 11) supplements the figure of the aedeagus published by Synave.

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