

**TYPES OF FLATIDAE. XX.
LECTOTYPE DESIGNATIONS AND TAXONOMIC NOTES
ON SPECIES IN THE MNHN PARIS. PART 2.
[HOMOPTERA, FULGOROIDEA]**

PAR

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RÉSUMÉ

L'auteur examine les spécimens types des espèces de Flatidae décrites par Melichar et désigne des lectotypes. Les genitalia des holotypes et des lectotypes sont figurés. Les synonymies nouvelles suivantes sont proposées (synonyme junior en premier) : Caesonia pinax Fennah = Phantia rufula Jacobi ; Chopardana Lallemand = Paranotus Karsch ; Chopardana lineata Lallemand = Paranotus rufilineus (Walker) ; Cryptoflata vuattouxi Synave = Cryptoflata parvula Melichar ; Flatoides planatus Melichar = Uysanus vagans (Melichar) ; Flatina dalabensis Lallemand & Synave et Flatina intransita Lallemand = Flatina liciata Melichar. Les nouvelles combinaisons suivantes sont également proposées : Atracis obscura Melichar est transféré dans le genre Stalania, Cryptoflata boulardi Synave et Cryptoflata lamabokensis Synave sont transférés dans le genre Decipha Medler.

Mots-clés : Homoptera, Fulgoroidea, Flatidae, désignations de lectotypes, nouvelles synonymies, nouvelles combinaisons, MNHN Paris.

The first report by MEDLER (1986b) was concerned with Melichar type specimens from New Guinea and Southeast Asia. My second report on type specimens of Flatidae in the Paris Museum applies particularly to Afrotropical and Neotropical species named by Melichar, and to limited extent, type specimens of Karsch, Lallemand, Synave and Zia.

Prior to visiting the Museum National d'Histoire Naturelle in 1988 I prepared a check list of all syntypes published by Melichar as being deposited in the Paris Museum. Nearly all type specimens in my check list were located during a personal search of the collection. Results of my study of the specimens, especially morphometric data and depiction of the male genitalia, are given in this report.

My procedure for examining genitalia was slightly modified from that used by earlier workers. The aedeagus was not « dissected » after the genital capsule was cleared with NaOH. Loss of detached parts was avoided by storing intact genitalia in glycerine in a microvial attached to the pin.

To provide comparable data, all morphometrical measurements are reported in mm according to the following standardized 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). The hind leg spine formula gives sequence of metatibial lateral spine (s): metatibial apical spines: metatarsal I basal spines. The measurement parameters on the tegmen were illustrated by Medler (1991, Fig. 1).

To help preserve the historical record, information from type specimens was recorded exactly as given on labels, with (1), (2), (3), etc. indicating the sequence of labels on pin from top to bottom. Most labels have a heading of « Museum Paris » which has been omitted from the data presentation.

Most of the depository museums are identified by acronyms and abbreviations, as follows :

BRNO Moravian Land Museum, Brno, Czechoslovakia.
 BUDA Hungarian Natural History Museum, Budapest, Hungary.
 HAMB Zoologischen Museum Hamburg, Germany.
 IRSN Institut Royal des Sciences Naturelles, Brussels, Belgium.
 MNHN Museum National d'Histoire Naturelle, Paris, France.
 MRAC Musée Royal de l'Afrique Centrale, Tervuren, Belgium.
 NRS Naturhistoriska Riksmuseet, Stockholm, Sweden.
 WIEN Natural History Museum, Vienna, Austria.
 ZMHU Zoologisches Museum der Humboldt-Universität, Berlin, Germany.

Names are listed alphabetically, followed by original generic combination, date, author, reference and subsequent synonymy or different generic name combination.

In pertinent cases the label data and measurements are supplemented with taxonomic notes.

angulata, *Cryptoflata*, Jacobi, 1915, p. 169; MEDLER, 1986a, p. 107, fig. 4; *Decipha angulata*. MEDLER, 1988b, p. 138.

PARALECTOTYPE ♂ — (1) Afrique orient anglaise VOI. Alluaud & Jeannel Mars 1911, 600 m, St. 60 — (2) Flata/angulata Jac./A. Jacobi determ. — (3) A. Jacobi Cotypus. Measurements from paralectotype : Length : overall 13.0 mm ; v 0.17 ; f 1.83 ; p 0.83 ; m 2.99 ; t 10.62 ; pcl 3.82. Width : v 1.00 ; f 1.83 ; t 6.64. Hind leg spine formula : 2 : 7 : 7.

The paralectotype genitalia had the same characters as those of the lectotype illustrated by MEDLER (1986a, fig. 4). A helpful recognition character of the species is the slightly elevated and acute sutural angle of the tegmen, but the male genitalia should be relied on for accurate determination.

This species is found throughout East Africa. Specimens were examined from Uganda, Kenya, Tanzania, Mozambique, Rwanda, Zambia and eastern Zaire. Usually specimens in collections were misidentified as *Cryptoflata unipunctata*.

angulatum, *Phleboterum*, Melichar, 1902, p. 3, pl. I, fig. 20; MEDLER, 1992, p. 178, fig. 7.

LECTOTYPE ♂ — (1) Madagascar/ Ivondro/ Ch. Alluaud 1900, designated by MEDLER (1992, fig. 7) along with body measurements and illustration of genitalia. A paralectotype female from Loucoube is at HAMB. The syntype cited from St. Marie was not found.

angustata, *Cyarda*, Melichar, 1902, p. 135; SYNAVE, 1956, p. 217.

LECTOTYPE ♀, here designated — (1) Madagascar/Tamatave/Ch. Alluaud 1900 — (2) Type — (3) Cyarda/angustata/Melichar det 1908 (sic). PARALECTOTYPE ♀ — (1) Sainte-Marie-de/Madagascar/Coll. Noualhier 1898 — (2) Type.

Measurements from lectotype : Length : overall 12.25 mm ; v 1.00 ; f 1.49 ; p 0.58 ; m 1.66 ; t 9.96 ; pcl 2.49. Width : v 1.00 ; f 1.16 ; t 1.99. Hind leg spine formula : 2 : 7 : 9.

A male has not been found in collections examined.

bicoloripes, *Latois*, Karsch, 1890, p. 68; MEDLER, 1990, p. 106, fig. 14.

PLESIOTYPE ♂ — (1) Madagascar/Prov. d'Analalava/Maromandia/R. Decary 1923, designated by Medler (1990).

The lectotype ♀ is at ZMHU.

The plesiotype measurements and illustration of its genitalia were published by MEDLER (1990, fig. 14).

binotata, *Flatina*, Melichar, 1901, p. 216; MEDLER, 1990, p. 107.

PLESIOTYPE ♂ — (1) Kisangani/Congo/19.IV.1971/Donskoff rec.

Measurements from plesiotype and holotype ♀ (Berlin-Humboldt). Length : overall 12.0, 14.0 mm ; v 0.50, 0.50 ; f 1.33, 1.49 ; p 0.75, 0.75 ; m 2.32, 2.49 ; t 10.96, 11.62 ; pcl 2.66, 2.99. Width : v 0.62, 0.66 ; f 0.50, 0.75 ; t 6.47, 7.47. Hind leg spine formula : 2 : 8 : 6 ; 2 : 8 : 6.

The plesiotype genitalia are illustrated (Fig. 3).

boulardi, *Cryptoflata*, Synave, 1978, p. 602, fig. 36-39. Here transferred to *Decipha* Medler, NEW COMBINATION.

Holotype ♂, La Maboké, République Centrafricaine, 17.IV.1972, M. Boulard.

The species is known also by 4 ♀♀ collected at La Maboké in 1969-70 that were identified *C. unipunctata* Oliv. by Synave. Their lengths averaged 17.1, range 16.5-17.5 mm. This size is in

the upper range among species in *Decipha*, which resemble each other closely, but can be separated by using characters of the male genitalia such as figured by Synave. The genus is easily recognized by the following key character:

Tegmen with 3 longitudinal veins (R, S, M) arising from node of basal stem *Decipha* Medler
Tegmen with 2 longitudinal veins (R, S + M) arising from node of basal stem. . . *Cryptoflata* Melichar

breviceps, *Flatoides*, Melichar 1902, p. 214, pl. VIII, fig. 11.

A syntype ♂ cited from Tamatave was not found at MNHN. I am informed by P. Lauterer that a syntype ♂ from Madagascar is in Melichar's collection at BRNO.

comorensis, *Chaetormenis*, Synave 1956, p. 214, fig. 14-15; SYNAVE, 1980, p. 3, No. 7. Here transferred to *Ulundia* Distant, **NEW COMBINATION**.

LECTOTYPE ♂, here designated — (1) Marozzi/Grande Comoro — (2) 3.52/R.P. — (3) Institut Scientifique/Madagascar/15 — (4) Type — (5) H. Synave det. 1955/*Chaetormenis/comorensis*/n. sp.

PARALECTOTYPES — 2 specimens with same labels as lectotype, at IRSN (SYNAVE, 1980, No. 7).

Measurements from lectotype. Length: overall 6.0 mm; v 0.29; f 0.91, p 0.37; m 1.16; t 4.98; pcl 1.49. Width: v 0.83; f 1.04; t 1.99. Hind leg spine formula: 2: 8: 8.

Lateral and dorsal views of the aedeagus are illustrated (Fig. 19a, b). The left lateral view supplements Synave's original figure.

corrugatus, *Atracodes*, Melichar, 1902, p. 225.

HOLOTYPE ♂ — (1) Madagascar [no locality data] — (2) det. corrugatus.

Measurements from holotype: Length: overall 10.0 mm; v 0.83; f 1.91; p 0.58; m 1.33; t 7.14; pcl 1.83. Width: v 0.66; f 1.00; t 2.32. Hind leg spine formula: 3: 5: 7.

The genitalia are illustrated (Fig. 11).

This specimen is not congeneric with *Atracodes indutus* Melichar that was described from St. Thomas Island. A new genus will be required for proper disposition of the Madagascar species.

costalis, *Atracis*, Melichar, 1902, p. 185.

HOLOTYPE ♀ — (1) Madagascar/I. Sainte-Marie/R. Oberthur 1898 — (2) Type — (3) Flat. A/costalis/Melich. **PLESIOTYPE** ♂ — (1) Ile Sainte-Marie — (2) forêt de Kalalao — (3) III.60, Andria R. Measurements from plesiotype and holotype. Length: overall 10.0 mm, 11.0 mm; v 1.00, 1.00; f 1.49, 1.49; p 0.58, 0.66; m 1.66, 1.66; t 7.97, 8.96; pcl 2.16, 2.82.

Width: v 0.87, 0.91; f 1.00, 1.00; t 2.82, 2.99. Hind leg spine formula: 1: 5: 7, 1: 5: 7. The plesiotype genitalia are illustrated (Fig. 9).

dalabensis, *Flatina liciata*, Lallemand & Synave, 1954, p. 906, fig. 2; *Flatina liciata dalabensis*, SYNAVE, 1980, p. 9, No. 29. Not considered a valid subspecies of *Flatina liciata* Melichar, **NEW SYNONYMY**.

LECTOTYPE ♂, here designated — (1) Exped. Mus. G. Frey/Franz Guinea 1951/W. Afr. leg. Bechyne — (2) Fouta Djallon/Dalaba 1 200 m/26.6.51 — (3) IFAN/1953 — (4) Type [red label] — (5) H. Synave det 1953/*Flatina liciata* Mel/dalabensis n. sp.

PARALECTOTYPE ♀, IRSN (Synave, 1980, No. 29) — (1) Fouta Djallon/Dalaba 1 200 m/11.6.51 — (2) Exped. Mus. G. Frey/Franz Guinea 1951/W. Afr. leg. Bechyne — (3) IFAN 1953 — (4) RISNB/IG 23, 285 — (5) Paratype [red label].

Measurements from lectotype and paralectotype (IRSN).

Length: overall 15.0, 18.0; v 0.55, 0.83; f 1.66, 1.83; p 0.83, 1.00; m 2.82, 3.32; t 12.78, 15.44; pcl 3.32, 4.15. Width: v 0.62, 0.79; f 0.66, 0.83; t 8.13, 9.96. Hind leg spine formula: 2: 8: 7; 2: 8: 5.

The lectotype genitalia are illustrated (Fig. 4). The paired apical processes of the aedeagus have similar configuration to those shown for *Flatina liciata* by LALLEMAND & SYNAVE (1954, Fig. 2) and MEDLER (1988b, fig. 1). On the basis of its genital characters, this color variant does not have subspecies status.

The paralectotype ♀ at IRSN was erroneously cited as holotype, and the species erroneously treated as a junior synonym of *Phromnia rubrotincta* Haglund by MEDLER (1988b, p. 124).

distanti, *Flatoides*, MELICHAR, 1902, p. 202; *Flatoidessa distanti*, MELICHAR, 1923, p. 115.

PARALECTOTYPE ♀ — (1) Madagascar/Sikora 338-94 — (2) 16 — (3) *Flatoides/Distanti* ♀/Brongniart. The lectotype ♂ is at WIEN. Also, I am informed by Paul Lauterer that a ♂ and ♀ from Madagascar are in Melichar's collection at BRNO.

Measurements from paralectotype. Length: overall 18.00; v 1.16; f 2.49, p 1.00; m 2.32; t 13.94; pcl 3.65. Width: v 0.83; f 1.49; t 6.31. Hind leg spine formula: 2: 6: 9.

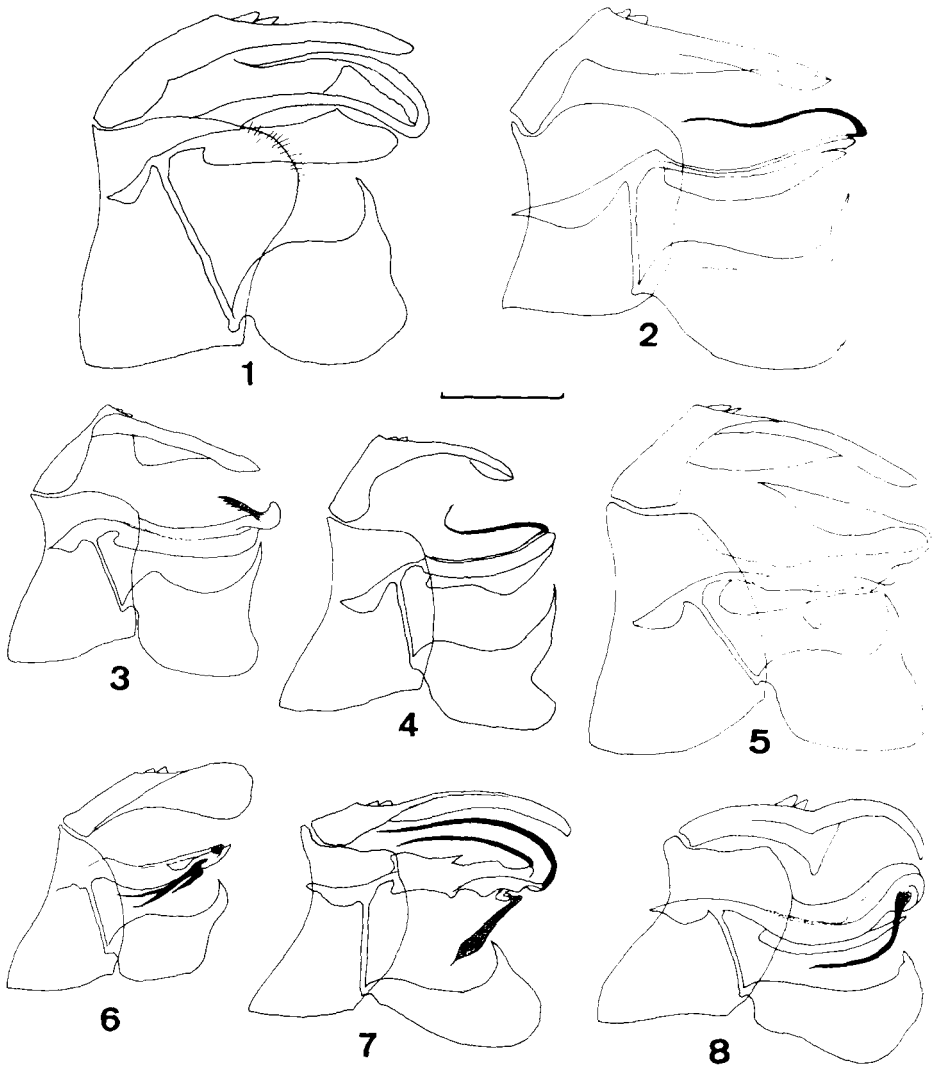


Fig. 1-8, left lateral view of male genitalia. — 1, *Ityraea patricia* Melichar. — 2, *Ityraea rubescens* Lallemand & Synave. — 3, *Flatina binotata* Melichar. — 4, *Flatina dalabensis* Lallemand & Synave. — 5, *Flatina elegantula* Lallemand. — 6, *Perinetella nigroflava* Synave. — 7, *Flata tortrix* Guérin-Ménéville. — 8, *Atracis obscura* Zia. Scale bar = 1 mm.

elegantula, *Flatina*, Lallemand, 1949, p. 331; SYNAVE, 1980, p. 5, No. 14; MEDLER, 1988b, p. 124, fig. 4.

LECTOTYPE ♂, here designated — (1) Guinée/Serdou — (2) Type — (3) *Flatina/elegans* (sic) Lalle/V. Lallemand det. **PARALECTOTYPE** ♀ — Same labels as lectotype, IRSN.

Measurements from lectotype and paralectotype. Length: overall 16.75, 18.0; v 0.91, 0.91; f 1.66, 1.66; p 0.95, 0.83; m 2.49, 2.66; t 13.62, 15.27; pcl 3.49, 3.82. Width: v 0.66, 0.83; f 0.50, 0.83; t 7.97, 9.13. Hind leg spine formula: 2: 7: 7; 2: 8: 6.

The lectotype genitalia are illustrated (Fig. 5).

A ♂ from Guinée: Ziela, 17 Mars '57, labeled *Flatina* n. sp., det. H. Synave 1960, has genitalia the same as the lectotype.

emota, *Dascalia*, MELICHAR, 1902, p. 152; *Flatoidinus emotus*, MELICHAR, 1923, p. 117.

LECTOTYPE ♂, here designated — (1) Bresil/coll. G. Fallou, 259-95 — (2) Bresil — (3) *Dascalia/emota*/Melichar det 1902. **PARALECTOTYPES** ♂, ♀. — (1) Bresil/Coll G. Fallou 259-95 — (2) 35, 195, respectively — (3) Bresil. The lectotype is positioned on a card so that its frons is concealed. The postclaval suture also is unsuited for measurement.

Measurements from lectotype and paralectotype. Length : overall 8.0, 9.5 ; v 0.50, 0.66 ; f ..., 1.49 ; p 0.58, 0.66 ; m 1.49, 1.74 ; t 6.14, 7.30. Width : v 0.91, 1.08 ; f ..., 1.49 ; t 2.49, 3.32. Hind leg spine formula : 1 : 6 : 7 ; 1 : 6 : 7.

The lectotype genitalia are illustrated (Fig. 21).

Melichar's assignment of this species to the genus *Flatoidinus* was incorrect. It belongs to an undescribed new genus that resembles *Dascalia* Stål in head shape but differs in characters of the tegmina and male genitalia.

fowleri, *Adexia*, Melichar, 1901, p. 230.

LECTOTYPE ♀, here designated — (1) Bogota/201-62 — (2) 201/62 — (3) Type — (4) *Adexia* Fowler.

Measurements from lectotype. Length : overall 24.00 ; v 0.17 ; f 1.16, p 0.50 ; m 2.82 ; t 13.62 ; pcl 3.32. Width : v 1.16 ; f 1.45 ; t 6.97. Hind leg spine formula : 2 : 6 : 8.

gibbosa, *Atracis*, Melichar, 1902, p. 186.

HOLOTYPE ♀ — (1) Madagascar/Sikora 338-94 — (2) 30 — (3) Type — (4) *Flatoides/gibbosus/Brongniart* — (5) *Atracis/gibbosus/Melichar/Type*.

Measurements from holotype. Length : overall 15.25 ; v 1.16 ; f 1.99, p 0.83 ; m 2.49 ; t 12.45 ; pcl 3.98. Width : v 1.00 ; f 1.49 ; t 4.32. Hind leg spine formula : 1 : 6 : 8.

This species belongs in an undescribed new genus near *Porophloeus*, according to MEDLER (1988, p. 144).

intransita, *Flatina liciata* var., Lallemand, 1942, p. 70. A junior synonym of *Flatina liciata* Melichar, **NEW SYNONYMY**.

LECTOTYPE ♀, here designated — (1) Côte d'Ivoire/Danane/janv. 1939 — (2) 1938-39/L. Chopard — (3) Type (red label) — (4) *Flatina liciata/var intransita Lalle/Lallemand det.*

Measurements from lectotype. Length : overall 16.5 ; v 0.71 ; f 1.58, p 0.91 ; m 2.99 ; t 13.28 ; pcl 3.98. Width : v 0.66 ; f 0.75 ; t 8.13. Hind leg spine formula : 2 : 7 : 6.

Species of *Flatina* show considerable variation in color patterns, particularly red markings on the thorax and tegmina. A study of color variants of *liciata*, including comparisons of male genitalia, did not reveal differences in character states that supported subspecies status of the named variants.

lamabokensis, *Cryptoflata*, Synave, 1978, p. 602, fig. 33-35. Here transferred to *Decipha* Medler, **NEW COMBINATION**.

HOLOTYPE ♂ — La Maboké, République Centrafricaine, 17.IV.1972, M. Boulard.

Measurements from holotype. Length : overall 11.0 ; v ... ; f 1.99, p 0.83 ; m 2.49 ; t 12.45 ; pcl 3.98. Width : v 1.00 ; f 1.49 ; ft 4.32. Hind leg spine formula : 1 : 6 : 8.

The overall length of *D. lamabokensis* females is approximately 12 mm. This smaller size helps distinguish the species from larger females of *D. bouldardi* that measure 16.5-17.5 mm. Both species were collected at La Maboké.

latifrons, *Euryprosthilus*, Karsch, 1890, p. 67 ; MEDLER, 1990, p. 111, fig. 16.

PLESIOTYPE ♂ — (1) Madagascar/Region du Sud-Est/Fort Dauphin/Ch. Alluaud 1901 — (2) Sept 01. The genitalia illustrated by MEDLER (1990, fig. 16) is that of the plesiotype, not a lectotype as stated in error. The lectotype is a ♀ at ZMHU.

lauta, *Atracis*, Melichar, 1902, p. 190, pl. IX, fig. 1.

PLESIOTYPE ♂ — [Panama], Canal Zone, Barro Colorado, 17/18.VIII.1977, Coll H. Wolda, Bishop Museum. The holotype ♀ from Bogota that Melichar recorded at MNHN was not found. However, the holotype's illustration (MELICHAR, 1902, fig. 1) shows distinctive markings which enabled selection of a similarly marked specimen for study of the male genitalia.

Measurements from plesiotype. Length : overall 16.0 ; v 1.16 ; f 2.49, p 0.83 ; m 2.99 ; t 12.45 ; pcl 2.32. Width : v 1.16 ; f 1.99 ; t 5.31. Hind leg spine formula : 1 : 6 : 8.

The plesiotype genitalia are illustrated (Fig. 14).

Species assigned to *Atracis auctorum* in the New World require disposition in a replacement genus not yet named.

leucophaea, *Atracis*, Melichar, 1902, p. 193.

HOLOTYPE ♀ — (1) [Panama], Chiriqui/coll G. Fallou 259-95 — (2) Chiriqui — (3) Type — (4) *Atr. leuco/phaeus/Melichar*.

Measurements from holotype. Length : overall 16.0 ; v 1.16 ; f 2.49, p 1.00 ; m 2.99 ; t 13.28 ; pcl 3.15. Width : v 0.91 ; f 1.66 ; t 5.96. Hind leg spine formula : 1 : [concealed] : 10.

Valvulae III teeth slender, elongate, 5 on ventral surface, 2 positioned dorsally.

Atracis leucophaeus and *A. lauta* are congeneric. They need disposition in a replacement genus for *Atracis auctorum* in the New World.

lineata, *Chopardana*, Lallemand, 1942, p. 70; SYNAVE, 1980, p. 9, No. 30. A junior synonym of *Paranotus rufilineus* (Walker), **NEW SYNONYMY**.

LECTOTYPE ♀, here designated — (1) Côte d'Ivoire/Kouibly/dec 1938 - - (2) 1938-39 L. Chopard — (3) Type (red label) — (4) *Chopardana/lineata/Lallemand* det 1942. **PARALECTOTYPE** ♀ IRSN — Guinee française, Kankan.

Measurements from lectotype: Length: overall 9.0 mm; v 0.17; f 1.16; p 0.58; m 1.74; t 7.30; pcl 2.32. Width: v 0.79; f 1.16; t 4.32. Hind leg spine formula: 2: 7: 14.

longiceps, *Porophloeus*, Melichar, 1902, p. 173.

HOLOTYPE ♂ — (1) Madagascar/Diego Suarez 12/Ch. Alluaud 1893 — (2) Type — (3) *Flatoides/longiceps/Melichar* det. 1902.

Measurements from holotype. Length: overall 11.0; v 1.33; f 2.28; p 0.71; m 1.91; t 7.80; pcl 2.82. Width: h 0.83; f 1.33; t 2.82. Hind leg spine formula: 2: 6: 8.

The holotype genitalia are illustrated (Fig. 12).

marcidus, *Porophloeus*, Melichar, 1902, p. 172.

LECTOTYPE ♂, here designated — (1) Madagascar/Antanambe Mocquerys Coll Noualhier 1898 — (2) Type — (3) *Flat./marcidus/Melichar* det 1902. **PARALECTOTYPE** ♂ — (1) Madagascar/Diego Suarez/Ch. Alluaud 1893 — (2) Type.

Measurements from lectotype and paralectotype. Length: overall 12.0, 12.0; v 1.45, 1.33; f 2.49, 2.41; p 0.66, 0.66; m 2.08, 1.99; t 8.96, 9.63; pcl 3.98, 3.65. Width: v 1.25, 1.16; f 1.49, 1.66; t 3.65, 3.32. Hind leg spine formula: 2: 5: 6; 2: 5: 7.

The lectotype genitalia are illustrated (Fig. 13).

media, *Ormenis*, MELICHAR, 1902, p. 89; *Anormenis media*, MELICHAR, 1923, p. 69.

PARALECTOTYPES ♂ — (1) Colombia/Coll. Noualhier 1898 — (2) small square green label; 3 ♀ — Same labels as the lectotype, with 1 specimen having Melichar's hand written determination label « *Ormenis media*. » The lectotype ♂ from Bogota is at NRS.

Measurements from paralectotypes ♂, ♀. Length: overall 8.5, 10.0; v 0.21, 0.29; f 0.95, 1.00; p 0.33, 0.42; m 1.49, 1.99; t 6.97, 7.97; pcl 2.82, 2.99. Width: v 0.91, 1.00; f 1.00, 1.16; t 3.15, 3.32. Hind leg spine formula: 2: 6: 7; 2: 6: 7.

The paralectotype genitalia are illustrated (Fig. 15).

The syntypes at MNHN have an orange stramineous appearance because of the strongly orange color of the veins. The syntypes at NRS are green as given in the original description. All syntypes have a conspicuous black spot adjacent to the claval apex.

melanoneura, *Adexia*, Melichar, 1901, p. 231.

LECTOTYPE ♀, here designated — Guyane Franc./St. Laurent/Melinon — (2) 330/62 — (3) Type — (4) *Adexia/melano/neura*. A paralectotype [without locality label and abdomen missing] coll Signoret, is at WIEN. Also, I am informed by P. Lauterer that a syntype ♀ from Surinam is in Melichar's collection at BRNO. I have not yet seen a male for study of the genitalia.

Measurements from lectotype. Length: overall 22.0; v 0.25; f 1.66; p 0.83; m 2.99; t 19.26; pcl 5.15. Width: v 1.00; f 1.16; t 9.96. Hind leg spine formula: 2: 7: 7.

mendax, *Atracis*, Melichar, 1902, p. 194; *Uysanus mendax*, MEDLER, 1988b, p. 133, fig. 18, 22.

HOLOTYPE ♂ — (1) Lolodorf — (2) Cameroun/Conradt 109-96 — (3) Type — (4) *Flatoides/A. mendax/Melich.* MEDLER (1988b) lapsed in citing a holotype ♂ at MRAC.

Measurements from holotype. Length: overall 19.5; v 1.49; f 2.99; p 1.04; m 3.49; t 15.11; pcl 3.32. Width: v 1.00; f 1.66; t 6.81. Hind leg spine formula: 1: 7: 8.

The holotype genitalia are illustrated (Fig. 10). Female genitalia were figured by MEDLER (1988b, fig. 22).

mycenis, *Afrophantia*, Fennah, 1958b, p. 536, fig. 30; MEDLER, 1988b, p. 142.

HOLOTYPE ♂ — (1) Ile aux serpents/Dakar, Senegal/XI.45. A. Villiers — (2) Type (red label) — (3) *Afrophantia/mycenis* Fenn/Type/det R. G. Fennah. **PARATYPES** 2 ♂, 3 ♀ — (1) Ile aux Serpentes/Dakar, Senegal/XI.45 A. Villiers — (2) Paratype (red label). As the holotype is carded in a position that conceals the frons, I have used a paratype for measurements.

Measurements from paratype male. Length: overall 4.5; v 0.17; f 0.66; p 0.33; m 0.83; t 3.49; pcl 0.17. Width: v 0.50; f 0.66; t 2.16. Hind leg spine formula: 2: 6: 4.

In addition to records from West Africa, specimens have been determined from several localities in South Africa. Also, drawings of a female from Mombo 10/2 906, German E.

Africa, titled as *Paraphantia lurida* sp. n. (unpublished name), were found in the personal sketchbook of R. G. Fennah that I examined in the Natural History Museum, London. The female specimen used for the sketches was not found.

nebulosa, *Atracis*, Melichar 1902, p. 180, pl. IX, fig. 11 ; *Uysanus nebulosus*, SYNAVE, 1963, p. 464 ; *Diastracis nebulosa*, MEDLER, 1988b, p. 139.

Syntypes from Congo cited at MNHN were not found. Also, 3 syntypes from Kamerun, Lolodorf, deposited by Melichar in « Berlin » were not found. I am informed by Paul Lauterer that a syntype ♂ from Kamerun is in Melichar's collection at BRNO.

If Melichar's citation of « Berlin » actually referred to the Deutsches Entomologisches Institute, Berlin-Dahlem, then the syntypes may be difficult to locate. The Berlin collections were dispersed during World War II, later transferred to the Akademie der Wissenschaften DDR, and perhaps deposited in the Institut für Pflanzenschutzforschung, Abt. Taxonomie der Insekten, Eberswalde-Finow. The syntypes are not present in the Zoological Museum of the Humboldt-University (authority of Dr. Jürgen Deckert, letter of 2.06.1988 to the author).

nigroflava, *Perinetella*, Synave, 1956, p. 212, fig. 9-11 ; SYNAVE, 1960, p. 11.

LECTOTYPE ♂, here designated — (1) Perinet — (2) Institut Scientifique Madagascar — (3) Type [red label] — (4) H. Synave det 1955/*Perinetella* nov./*nigroflava* nov. **PARALECTOTYPES** — 2 specimens with same labels as lectotype, at IRSN (SYNAVE, 1980, No. 37).

Measurements from lectotype. Length : overall 14.0 ; v 0.42 ; f 5.64. Hind leg spine formula : 2 : 7 : 10. The lectotype was positioned on a card so that the frons was concealed. Also, the pcl margins of the tegmina were damaged and not measurable.

The lectotype aedeagus is illustrated (Fig. 6) to supplement the original figure of SYNAVE (1956, fig. 11).

nimbaensis, *Cryptoflata*, Synave, 1963, p. 463, fig. 11-13 ; SYNAVE, 1980, p. 11, No. 39.

LECTOTYPE ♂, here designated — (1) Type [red label] — (2) Ziela U.V./20.II.57 — (3) Nimba (Guinée)/Lamotte. Amiet/Vanderplaetsen/XII.56 - V.57 — (4) H. Synave det. 1961/*Cryptoflata/nimbaensis* n. sp. **PARALECTOTYPE** ♂ — Same labels as lectotype, except 31 Mars 1957, IRSN (SYNAVE, 1980, No. 39).

Measurements from lectotype. Length : overall 12.0 mm ; v 0.08 ; f 1.58, p 0.83 ; m 2.82 ; t 9.79 ; pcl 2.99. Width : v 1.08 ; f 1.45 ; t 5.48. Hind leg spine formula : 2 : 7 : 8.

The genitalia of a paralectotype ♂ at IRSN is illustrated (Fig. 17).

obscura, *Atracis*, Zia, 1935, p. 534, fig. 5 ; *Staliana obscura* MEDLER, 1988a, p. 18.

HOLOTYPE [head and abdomen missing] — (1) Tonkin/reg de Hoa-Binh/A. De Cooman 1926 — (2) Type — (3) *Atracis/obscura*, n. sp./Yonyon *Zia* det. PLESIOTYPE ♂, — Tonkin/reg de Hoa-Binh/A. de Cooman, 1926.

Measurements from plesiotype. Length : overall 15.0 mm ; v 0.83 ; f 1.83, p 0.66 ; m 2.66 ; t 11.45 ; pcl 3.32. Width : v 1.08 ; f 1.45 ; t 5.15. Hind leg spine formula : 1 : 6 : 12.

The plesiotype genitalia are illustrated (Fig. 8).

parva, *Meulona*, Zia, 1935, p. 530, fig. 3.

HOLOTYPE ♀ — (1) Tonkin/reg de Hoa-Binh/A. de Cooman/1926. — (2) Type — (3) *Meulona/parva* n. sp.

Measurements from holotype. Length : overall 9.0 mm ; v 0.21 ; f 1.00, p 0.42 ; m 1.83 ; t 7.14 ; pcl 2.16. Width : v 0.83 ; f 1.04 ; t 2.32. Hind leg spine formula : 1 : 9 : 12.

parvula, *Cryptoflata*, Melichar 1902, p. 21.

LECTOTYPE ♂, here designated — (1) Soudan Fr./Kayes/G. Massiou 1899. **PARALECTOTYPE** ♂ — Same label as lectotype.

Measurements from lectotype. Length : overall 9.5 mm ; v 0.13 ; f 1.49, p 0.83 ; m 2.16 ; t 8.30 ; pcl 1.99. Width : v 0.83 ; f 1.16 ; t 4.65. Hind leg spine formula : 2 : 7 : 8.

The lectotype genitalia are illustrated (Fig. 18).

patricia, *Ityraea*, Melichar 1901, p. 201.

LECTOTYPE ♂, here designated — (1) Zanguebar/Mhonda-Ouzigpua/A. Hacquard Mis ap/1879 1st Trim. 1880 — (2) 1284/81. **PARALECTOTYPES** 1 ♂, 6 ♀ — Same locality label as the lectotype. Two ♀ syntypes have a determination label « *Ityraea patricia* » in Melichar's handwriting. Paratypes from Deutsch-Ost Africa are also at BUDA.

Measurements from lectotype and paralectotype. Length : overall 22.5, 25.0 ; v 0.66, 0.83 ; f 1.83, 1.83 ; p 1.00, 1.00 ; m 3.49, 3.98 ; t 6.81, 7.47 ; pcl 1.99, 2.32. Width : v 1.00, 1.16 ; f 0.50, 0.54 ; t 3.65, 3.98. Hind leg spine formula : 2 : 10 : 5 ; 2 : 11 : 5.

The lectotype genitalia are illustrated (Fig. 1).

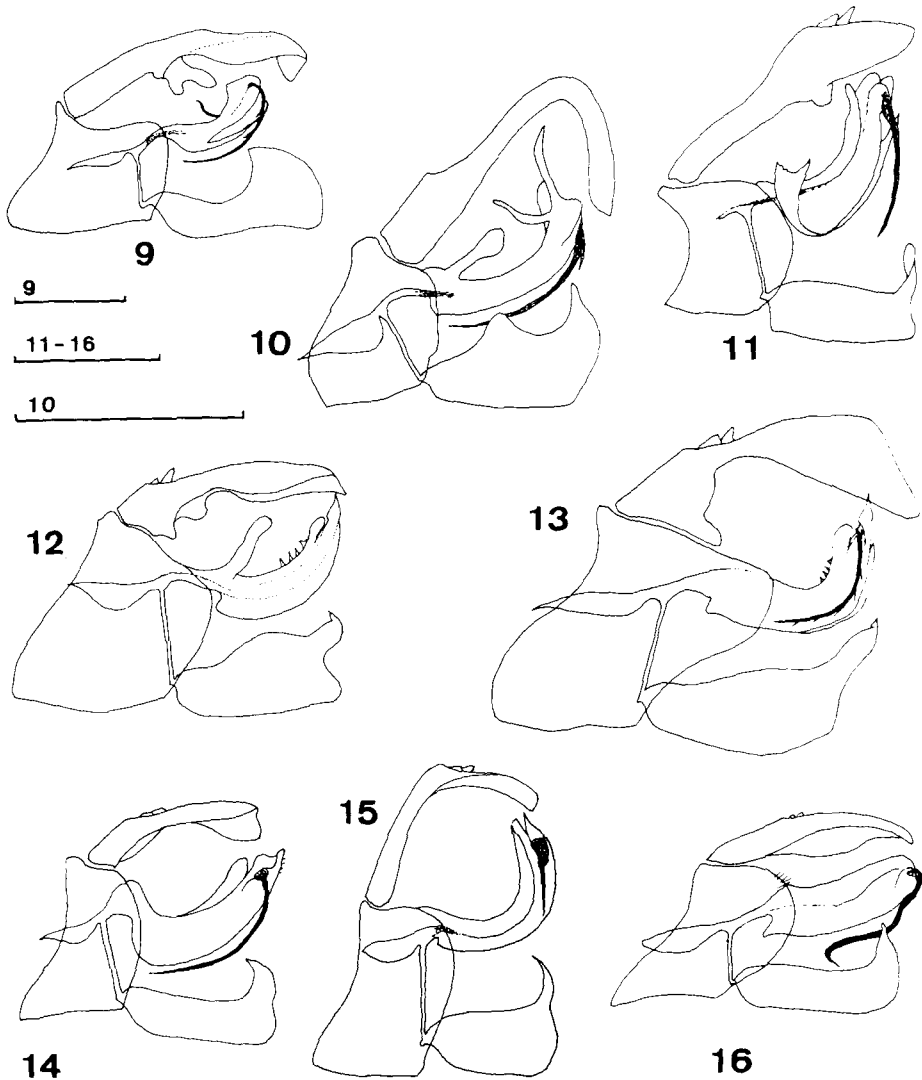


Fig. 9-16, left lateral view of male genitalia. — 9, *Atracis costalis* Melichar. — 10, *Atracis mendax* Melichar. — 11, *Atracodes corrugatus* Melichar. — 12, *Porophloeus longiceps* Melichar. — 13, *Porophloeus marcidus* Melichar. — 14, *Atracis lauta* Melichar. — 15, *Ormenis media* Melichar. — 16, *Flatoides turbatus* Melichar. Scale bar = 1 mm.

pinax, *Caesonia*, Fennah, 1958b, p. 534, fig. 1-4; MEDLER, 1988b, p. 137; *Phantia pinax*, LINNAVUORI, 1973, p. 131, fig. 77. A junior synonym of *Phantia rufula* Jacobi, **NEW SYNONYMY**.

HOLOTYPE ♂ — (1) Zagnanado/8-14.V.1950/Dahomey — (2) IFAN 1950/Dahomey/8-14-V/A. Villiers. — (3) Type [red label] — (4) *Caesonia/pinax* Fenn/Type/det R. G. Fennah. Measurements from holotype. Length: overall 5.5; v 0.33; f 2.41. Hind leg spine formula: 1 : 6 : 8. The holotype was carded in a position that did not allow measurement of the frons. The dissected parts of the holotype genitalia were mounted permanently on a cover glass at the time original drawings were made by Fennah. The preparation has deteriorated and now is in poor condition.

Caesonia pinax Fennah is a junior synonym of *Phantia rufula* Jacobi, 1915, p. 168; based on comparison of genitalia figured by FENNAH (1958a, Fig. 29) and *rufula* genitalia figured by MEDLER (1986, fig. 11).

planatus, *Flatoides*, Melichar, 1902, p. 211. A junior synonym of *Uysanus vagans* (Melichar), 1902, p. 184. **NEW SYNONYMY**.

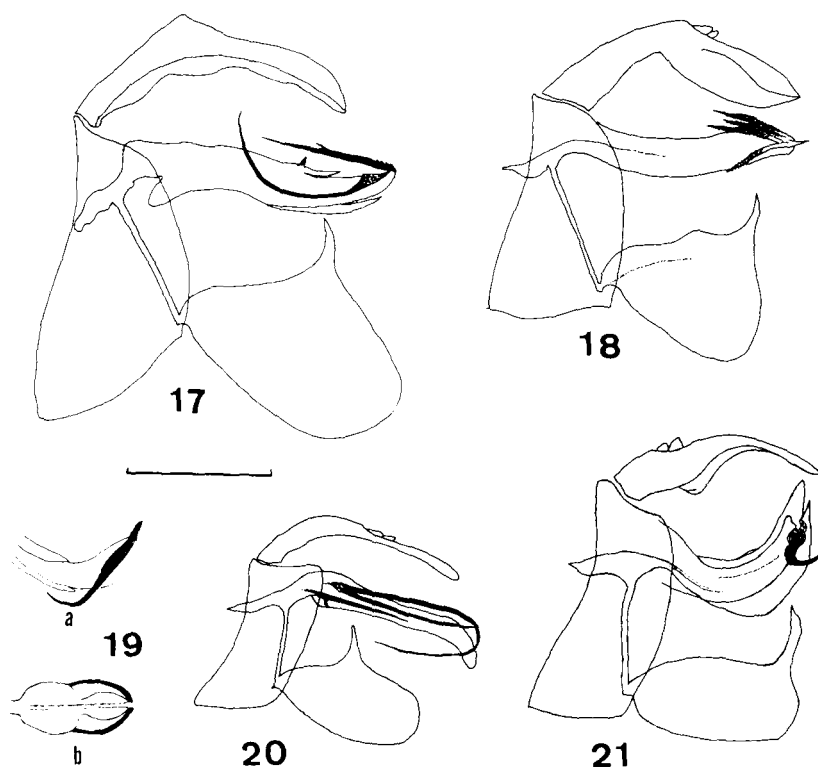


Fig. 17-21, left lateral view of male genitalia. — 17, *Cryptoflata nimbaensis* Synave. — 18, *Cryptoflata parvula* Synave. — 19, *Chaetormenis comorensis* Synave: a, left lateral view of aedeagus; b, dorsal view of aedeagus. — 20, *Phaedolus varians* Synave. — 21, *Dascalía emota* Melichar. Scale bar = 1 mm.

HOLOTYPE ♀ — (1) Gabon/Coll. Noualhier 1898 — (2) Type — (3) Flatoïdes/planatus/Type Melichar.

Measurements from holotype. Length : overall 21.0 mm ; v 1.16 ; f 2.74, p 0.95 ; m 3.49 ; t 16.10 ; pcl 1.66. Width : v 1.08 ; f 1.83 ; t 7.64. Hind leg spine formula : 2 : 6 : 7.

rubescens, *Ityraea*, Lallemand & Synave, 1954, p. 905, fig. 1 ; SYNAVE, 1980, p. 13, No. 45.

LECTOTYPE ♂, here designated — (1) Exped. Mus. G. Frey/Franz Guinea 1951/W. Afr. leg. Bechyne — (2) Fouta Djallon/Dalaba 1 200 m/9.6.51 — (3) IFAN/1953 — (4) Type (red label) — (5) H. Synave det 1953/*Ityraea/rubescens* sp. n. PARALECTOTYPE ♀ — same labels as lectotype, IRSN (SYNAVE, 1980, No. 45).

Measurements from lectotype and paralectotype (IRSN). Length : overall 22.0, 26.0 ; v 0.91, 1.33 ; f 1.83, 2.08 ; p 0.83, 1.00 ; m 3.49, 4.32 ; t 18.26, 20.42 ; pcl 4.32, 4.98. Width : v 0.79, 1.00 ; f 0.50, 0.66 ; t 9.96, 12.45. Hind leg spine formula : 2 : 16 : 5 ; 2 : 14 : 5.

The lectotype genitalia are illustrated (Fig. 2).

rufipes, *Carthaeomorpha*, Melichar 1902, p. 34.

PARALECTOTYPE ♂, — (1) Colombia/Santa Marta/Fontanier 1853 — (2) 6/13 (round green label) — (3) *Carthaeomorpha/rufipes* (Melichar handwriting). The lectotype ♂ from Colombia is at NRS.

Measurements from paralectotype. Length : overall 12.0 ; v 0.33 ; f 1.54, p 0.54 ; m 2.32 ; t 9.46 ; pcl 3.15. Width : v 1.08 ; f 1.49 ; t 5.64. Hind leg spine formula : 2 : 6 : 7.

The genitalia seen without dissection have the same configuration of apical processes as the lectotype. The ventral process extends basad 0.75 mm.

signoreti, *Flatoïdes*, Melichar, 1902, p. 200, pl. VIII, fig. 4 ; *Flatoïdessa signoreti*, MELICHAR, 1923, p. 115.

LECTOTYPE ♀, here designated — (1) Madagascar/Goudot 86-39 — (2) 86/39 (round label) — (3) *Flatoïdes/signoreti*/Brongniart. PARALECTOTYPE ♀ — (1) Madagascar/Côte Est/Grandidier 1573-92 — (2) *Flatoïdes/signoreti*/Brongniart.

Measurements from lectotype and paralectotype (♀, ♀). Length : overall 24.0, 24.0 ; v 2.99, 3.15 ; f 4.32, 4.32 ; p 1.33, 1.33 ; m 3.49, 3.15 ; t 17.26, 17.26 ; pcl 3.32, 3.65. Width : v 1.33, 1.33 ; f 2.16, 2.08 ; t 6.64, 5.96. Hind leg spine formula : 2 : 6 : 11 ; 2 : 6 : 11.

The 3 Madagascar syntypes of *F. signoreti* listed by Melichar were 2 ♀♀ at MNHN and one (♂) at ZMHU. The lectotype has distinctive black markings such as illustrated by Melichar. The paralectotype does not have dark markings. Both specimens have similar morphological characters, including distinctive file-like margins of valvulae III that are characteristic of the genus *Flatoidessa*.

MEDLER (1990, p. 116) reported on the specimen at ZMHU. On the basis of its genitalia characters and hind leg spine formula, the specimen was considered to be a misidentification of *Flatoides incriminata* (Schmidt).

tortrix, *Flata (Phalaenomorpha)* [sic], Guérin-Méneville, 1856, p. 181 ; *Pseudoflatoides tortrix*, METCALF, 1938, p. 401 ; *Phalaenomorpha tortrix*, MEDLER, 1988a, p. 18.

LECTOTYPE ♂ here designated — (1) Type — (2) Cuba/Coll. Guérin-Méneville/ex Coll. A. Salle 1897 — (3) 4 — (4) *Phalaenomorpha/tortrix* Guér./Voy. Sagra (type)/Cuba. **PARALECTOTYPE** ♂ — (1) Type — (2) Cuba/Coll. Guérin-Méneville/ex Coll. A. Salle 1897 — (3) 90 — (4) *Phalaenomorpha/tortrix* Guér./var. (type) Cuba.

The above specimens are valid syntypes. Therefore, the citation of a holotype in the Naples Museum by Medler (1988a) was erroneous, and is here corrected to read paralectotype ♀.

Measurements from lectotype. Length : overall 14.0 ; v 1.08 ; f 2.49, p 1.00 ; m 2.49 ; t 11.62 ; pcl 1.16. Width : v 0.83 ; f 1.33 ; t 4.32. Hind leg spine formula : 2 : 7 : 9.

The lectotype genitalia are illustrated (Fig. 7).

turbatus, *Flatoides*, Melichar, 1902, p. 215 ; *Flatoidessa turbata*, MELICHAR, 1923, p. 115.

HOLOTYPE ♂ — (1) Madagascar/Tamatave/Ch. Alluaud 1900 — (2) Type — (3) *Flatoides/turbatus*/Melich.

Measurements from holotype. Length : overall 12.5 ; v 0.75 ; f 1.83, p 0.66 ; m 2.16 ; t 9.96 ; pcl 2.49. Width : v 0.79 ; f 1.33 ; t 4.65. Hind leg spine formula : 2 : 6 : 6.

The holotype genitalia are illustrated (Fig. 16).

This species belongs in an undescribed genus that differs from *Flatoidessa* in characters of the head, tegmina and genitalia.

undulatus, *Flatoides*, Melichar 1902, p. 210 ; *Paraflatoides undulatus*, MELICHAR, 1923, p. 118.

Syntypes of this species were not found at MNHN. According to the original description, *F. undulatus* was based on 6 ♂ and 5 ♀ at BUDA and numerous examples at MNHN. Only Antongil-Bay was given as the collecting locality. Added to the species description were names of 4 varieties, *bimaculatus*, *divisus*, *festivus*, and *punctulatus*, each without data on specimens or their depository.

Syntypes found at BUDA were labeled only as *undulatus*. None were found labeled with a varietal name.

Research on genital characters of *undulatus* variants revealed a complex of species. In event that different marking patterns described by Melichar can be associated with different species, then it will be necessary to determine the validity of Melichar's varietal names in relation to such markings.

unispinosa, *Ormenis*, Schmidt, 1906, p. 212 ; *Chaetormenis unispinosa*, MELICHAR, 1923, p. 74 ; *Ormenis unispinosa*, MEDLER, 1992, p. 182, fig. 6.

PLESIOTYPE ♂, Mocambique, Prov. du Gorongoza, forêt d'Inhanconde, 350 m d'alt., G. Vasse 1907, designated by MEDLER (1992, p. 182) along with measurements and illustration of genitalia.

The holotype ♀ is at HAMB.

vanderplaetseni, *Cryptoflata*, Synave, 1963, p. 461, fig. 8-10 ; *Decipha vanderplaetseni*, MEDLER, 1988b, p. 138.

LECTOTYPE ♂, here designated — (1) Type [red label] — (2) Ziele U.V./18 Feb. — (3) Nimba (Guinée)/Lamotte, Amiet/Vanderplaetsen/XII 56 — V 57 — (4) H. Synave det. 1961/*Cryptoflata/vanderplaetseni*/n. sp. **PARALECTOTYPE** ♀, same labels as lectotype except 30-31 Mars 57.

Measurements from lectotype and paralectotype. Length : overall 13.0, 14.0 ; v 0.17, 0.17 ; f 1.66, 1.66 ; p 1.00, 0.95 ; m 3.32, 3.49 ; t 10.62, 11.79 ; pcl 3.65, 3.65. Width : v 1.16, 1.25 ; f 1.37, 1.54 ; t 6.14, 6.31. Hind leg spine formula : 2 : 8/7 : 8 ; 2 : 7 : 7.

varians, *Phaedolus*, Synave, 1956, p. 211, fig. 7 ; SYNAVE, 1980, p. 14, No. 52.

LECTOTYPE ♀, here designated — (1) Institut/Scientifique/Madagascar — (2) Sandrangato — (3) Type (red label) — (4) H. Synave det., 1955/*Phaedolus/varians* n. sp. **PARALECTOTYPES** 5 ♂ — (1) Madagascar/Diego-Suarez/Ch. Alluaud 7/1893 ; **PARALECTOTYPES**, 6 specimens at IRSN (SYNAVE, 1980, No. 52).

Measurements from paralectotype and lectotype. Length : overall 7.5, 8.5 ; v 0.25, 0.25 ; f 1.00, ... ; p 0.33, 0.33 ; m 1.49, 1.66 ; t 6.47, 6.64 ; pcl 1.00, 1.99. Width : v 1.00, 1.00 ; f 1.33, 1.25 ; t 2.49, 2.99. Hind leg spine formula : 2 : 6 : 7 ; 2 : ... The lectotype was carded in a position that partially concealed the frons and hind legs.

The paralectotype genitalia are illustrated (Fig. 20). Further study may show that the lectotype is not conspecific with paralectotypes from Diego Suarez.

vuattouxi, *Cryptoflata*, Synave, 1965, p. 1315, fig. 4-6 ; SYNAVE, 1980, p. 15, No. 56 ; MEDLER, 1988b, p. 138. Junior synonym of *Cryptoflata parvula* (Melichar), **NEW SYNONYMY**.

LECTOTYPE ♂, here designated — (1) Type [red label] — (2) Lamto (Toumodi)/Côte d'Ivoire/R Cu P/25.6.63 — (3) H. Synave det., 1964/*Cryptoflata/vuattouxi* n. sp. **PARALECTOTYPE** ♀ — same labels as lectotype except PNB 33. **PARALECTOTYPE**, 1 specimen, PNB 52, at IRSN (SYNAVE, 1980, No. 56).

Measurements from lectotype and paralectotype. Length : overall 10.5, 13.0 ; v 0.21, 0.17 ; f 1.49, 1.83 ; p 0.66, 1.00 ; m 2.32, 3.15 ; t 8.63, 10.96 ; pcl 2.66, 3.32. Width : v 0.91, 1.12 ; f 1.25, 1.54 ; t 4.98, 6.47. Hind leg spine formula : 2 : 7 : 8 ; 2 : 7 : 8.

zielensis, *Cryptoflata*, Synave, 1963, p. 460 ; *Decipha zielensis*, MEDLER, 1988b, 130 ; *Decipha dominicensis* (Melichar), MEDLER, 1992 Wien, in press.

LECTOTYPE ♂, here designated — (1) Type [red label] — (2) Ziela U.V./28-29 Mars 57 — (3) Nimba (Guinee)/Lamotte, Amiet/Vanderplaetsen/XII.56 - V.57 — (4) H. Synave det. 1961/*Cryptoflata/zielensis* n. sp. Paralectotype ♂ — same labels as lectotype except 19 Mai. Measurements from lectotype. Length : overall 16.0 mm ; v 0.17 ; f 1.83, p 1.16 ; m 3.49 ; t 12.45 ; pcl 4.32. Width : v 1.33 ; f 1.49 ; t 7.64. Hind leg spine formula : 2 : 7 : 8.

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