Types of Flatidae (Homoptera) XIX. Lectotype designations and taxonomic notes on species in the Budapest Museum, Part 2.

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Abstract – Type specimens of Flatidae in the Hungarian Natural History Museum (Budapest) were examined in connection with research on species named by Brancsik and Melichar. The genital characters of 19 holotype, lectotype or plesiotype males are illustrated. New synonymy: *Melicharia obtusangula* DISTANT, a junior synonym of *Ormenis conflicta* Melichar. New combination: *Flatoides serenus* Melichar transferred to *Dendrona* Melichar. With 19 figures.

INTRODUCTION

This article is my second report on Melichar types of Flatidae in the Hungarian Natural History Museum, Budapest. In addition to about 50 Melichar types, information is given on 3 type specimens of Brancsik and 1 of Schmidt. This work gives special attention to new knowledge on the male genitalia of historical types. Therefore, male lectotypes are designated wherever possible and their genitalia illustrated. In cases where the holotype or the syntypes were exclusively females, a representative male was selected for illustration of genitalia. This male was labeled plesiotype and serves as a reference specimen for future workers.

Me as ure ments - To provide comparable morphometric data, all 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 parameters of tegmen measurements were illustrated by MEDLER (1991b, fig. 1).

The number of black-tipped spines on the hind leg are indicated by formula; namely, the sequence of metatibial lateral spine (s): metatibial apical spines: metatarsal I basal spines; e.g., 1:5:7, 2:6:8, etc.

Data on labels are transcribed without changes in original spelling. If necessary, any change from old to new name is shown in brackets [].

ALPHABETICAL LIST OF TYPES

Type specimens are listed alphabetically by specific name followed by the original generic name-combination, author and reference to original publication. A subsequent generic name combination or change in status of a name is given, if applicable.

acuminata, Carthaea, MELICHAR, 1902, p. 32; Hesperophantia acuminata, MELICHAR, 1923, p. 53. – Paralectotype female, S. America, Surinam; here designated. A syntype male from Brazil is in the Stockholm Museum.

albata, Ormenis, MELICHAR, 1902, p. 88, pl. IV, fig. 15; Hansenia albata, METCALF, 1957, p. 280. – Lectotype male, Peru, Callanga, here designated. A female from Peru, Vilcanota, bears a blank typus label, but is not a syntype because the locality was not cited in the original description. – Measurements from lectotype.

Length: overall 13.25; v 0.17; f 1.33; p 0.50; m 3.32; t 11.62; pcl 4.15. Width: v 1.58; f 1.95; t 6.14. Hind leg spine formula: 2:6:10. – The tegmen was figured by MELICHAR. The lectotype genitalia are illustrated (Fig. 13).

albomaculata, Dascalia, MELICHAR, 1902, p. 150, pl. VII, fig. 4; Leptodascalia albomaculata, MELICHAR, 1923, p. 102. – A syntype from Bahia, Brazil, cited in the original description was not found in the Budapest Museum. However, a syntype from Bahia is in the Copenhagen Museum.

arcuatus, Flatoides elegans var., MELICHAR, 1902, p. 204, pl. VIII, fig. 8; Flatoidessa vicina arcuata, MELICHAR, 1923, p. 115. – Lectotype female, Madagascar, Antongil Bay, MOCQUERYS. The external appearance of the subspecies was illustrated by MELICHAR (1902). I was informed by PAVAL LAUTERER that a syntype female is in MELICHAR's collection at Brno. – Measurements from lectotype. Length: overall 16.0; v 1.49; f 2.49; p 0.83; m 2.49; t 12.45; pcl 1.99. Width: v 0.83; f 1.49; t 4.98. Hind leg spine formula: 2:6:8.

Melichar (1923) replaced *elegans* with *Flatoides vicina* Signoret (1860) without knowledge of the male genitalia of either species. The synonymy may or may not be correct depending upon future study of male genitalia.

basalis, Flata rubra var., MELICHAR, 1901, p. 210; Flatida rosea basalis, METCALF, 1957, p. 48. – The syntype from Nossi-Bé cited by MELICHAR in the original description was not found in the Budapest Museum.

bimaculatus, Flatoides undulatus var., MELICHAR, 1902, p. 210, pl. VIII, fig. 13; Paraflatoides bimaculatus, MELICHAR, 1923, p. 118. – Lectotype male, Madagascar, Antongil Bay, Mocquerys; here designated. – Measurements from lectotype. Length: overall 12.5; v 1.04; f 1.83; p 0.66; m 1.83; t 9.30; pcl 1.33. Width: v 0.83; f 1.00; t 3.98. Hind leg spine formula: 2:7:6. – The lectotype was illustrated by Melichar. The lectotype genitalia are illustrated (Fig. 1).

biplagiatus, Flatoides, Brancsik, 1893, p. 254, pl. 10, fig. 5; Melichar, 1902, pl VIII, fig. 15; Flatosaria biplagiatus, Melichar, 1923, p. 113. – Holotype female, Madagascar, Nossibé, Brancsik. – This species was illustrated by both Brancsik and Melichar. A male was not available for study of genitalia.

breviceps, Flatoides, MELICHAR, 1902, p. 214, pl. VIII, fig. 11; Flatoidessa breviceps, MELICHAR, 1923, p. 115. – The syntype recorded from Antongil Bay was not found in the Budapest Museum. I was informed by P. LAUTERER that a male and female syntype from Madagascar are in MELICHAR's collection in the Brno Museum.

coerulescens, Ormenis, MELICHAR, 1902, p. 88; Anormenis coerulescens, MELICHAR, 1923, p. 69. – Holotype female, Brasil, Espírito Santo, MICHAELIS. – Measurements from holotype. Length: overall 10.0; v 0.17; f 1.00; p 0.58; m 1.99; t 8.80; pcl 2.16. Width: v 1.08; f 1.29; t 4.65. Hind leg spine formula: 2:6:8.

conflicta, Ormenis, MELICHAR, 1902, p. 83; Melicharia lactifera (WALKER), DISTANT, 1906, p. 432. – Plesiotype male, Ceylon, Paradna, conflicta det. MELICHAR. – Measurements from plesiotype. Length: overall 7.5; v 0.17; f 1.16; p 0.33; m 1.66; t 6.47; pcl 1.99. Width: v 0.83; f 1.00; t 3.98. Hind leg spine formula: 2:6:10. – The holotype female from Trincomale cited in the Geneva Museum was not found (HAUSER, personal communication). Therefore, the male specimen from Paradna bearing MELICHAR's determination label is here designated as plesiotype and the genitalia illustrated (Fig. 17).

This species is *Melicharia conflicta* (MELICHAR), not *Melicharia lactifera* (WALKER), sensu METCALF (1957). It is a senior synonym of *Melicharia obtusangula* DISTANT, syn. n.

conspersus, Flatoides, Brancsik, 1893, p. 254, pl. X, fig. 4; Melichar, 1902, p. 202, pl. IX, fig. 4; Flatoidessa conspersa, Melichar, 1923, p. 115. – Holotype female, Madagascar, Nossibé, Brancsik. – The holotype was illustrated by both Brancsik and Melichar. A male for genitalia study was not recognized in available material.

crocea, Flata rubra var., MELICHAR, 1901, p. 210; Flatida rosea var. crocea, METCALF, 1957. p. 48. – Lectotype male, paralectotype female, Madagascar, Antongil-Bay, MocQUERYS, inornata var. crocea, det. MELICHAR, here designated. – Measurements from lectotype. Length: overall 26.0; v 0.83; f 1.66; p 1.33; m 4.48; t 22.41; pcl 3.32. Width: v 1.41; f 0.54; t 13.45. Hind leg spine formula: 2:9:5. – The lectotype genitalia are illustrated (Fig. 7). Retained as a valid trinomial name pending future revision of the genus.

curvilineata, Lichena dealbata var., Melichar, 1902, p. 169. – The syntype male recorded from Madagascar was not found in the Budapest Museum. Lichena dealbata curvilineata Melichar is retained as a subspecies pending revision of the genus.

cyrtus, Flatoides, MELICHAR, 1902, p. 211; Flatosaria cyrtus, MELICHAR, 1923, p. 113. – Lectotype male, paralectotype female, Madagascar, Antongil Bay, Mocquerys; here designated. – Measurements from lectotype and paralectotype. Length: overall 17.0, 19.0; v 1.83, 1.99; f 3.32, 3.49; p 1.08, 1.16; m 2.82, 3.15; t 12.45, 13.28; pcl 2.66, 3.65. Width: v 1.00, 1.16; f 1.78, 2.03; t 4.98, 6.97. Hind leg spine formula: 2:6:9, 2:6:9. – The lectotype genitalia are illustrated (Fig. 2).

decolorata, *Lichena dealbata* var., MELICHAR, 1902, p. 169. Lectotype male, paralectotypes 2 males, Madagascar, Antongil Bay, Mocquerys; here designated. – Measurements from lectotype. Length: overall 24.0; v 14.50; f 4.57; p 1.33; m 3.49; t 19.09; pcl 3.82. Width: v 1.20; f 1.99; t 9.13. Hind leg spine formula: 2:6:8. – The lectotype genitalia are illustrated (Fig. 11).

Lichena dealbata decolorata MELICHAR is retained as a subspecies pending revision of the genus.

delegatus, Flatoides, MELICHAR, 1902, p. 216, pl. IV, fig. 28.; Phalaenomorpha delegatus, JACOBI, 1915, p. 178. – Paralectotype female, S. America, Bolivia; here designated. – The head and pronotum of this species were illustrated by MELICHAR. I was informed by P. LAUTERER that a male and a female syntype from Peru are in MELICHAR's collection in the Brno Museum. A study of the genitalia of the syntype male is needed to determine the correct status of this species.

divisus, Flatoides undulatus var., MELICHAR, 1902, p. 210; Paraflatoides divisus, MELICHAR, 1923, p. 118. – A syntype recorded from Antongil Bay was not found in the Budapest Museum.

dorsimaculata, *Lichena dealbata* var., MELICHAR, 1902, p. 169, pl. VI, fig. 2. – Holotype female, Madagascar, Antongil Bay, Mocquerys. – Measurements from holotype. Length: overall 28.0; v 2.66; f 4.73; p 1.49; m 3.82; t 21.58; pcl 4.32. Width: v 1.25; f 2.24; t 10.79. Hind leg spine formula: 2:6:8. – The subspecies was illustrated by MELICHAR.

Lichena dealbata dorsimaculata (MELICHAR) is retained as a subspecies pending revision of the genus.

elegans, Flatoides, MELICHAR, 1902, p. 203, pl. IV, fig 27, pl VIII, fig 5; Flatoides vicina (SIGNORET), MELICHAR, 1902, p. 203; Flatoidessa vicina, MELICHAR, 1923, p. 115. – Lectotype male, paralectotypes 2 males, Madagascar, Antongil Bay, Mocquerys; here designated. I was informed by P. Lauterer that male and female syntypes are also in MELICHAR's collection at the Brno Museum. – Measurements from lectotype. Length: overall 12.5; v 1.33; f 2.24; p 0.66; m 2.49; t 9.13; pcl 1.49. Width: v 0.75; f 1.20; t 3.98. Hind leg spine formula: 2:5:8. – The species was illustrated by MELICHAR. The lectotype genitalia are illustrated (Fig. 5).

The synonymy proposed by MELICHAR requires confirmation based on study of the male genitalia of E. vicina.

fasciata, Lichena dealbata var., MELICHAR, 1902, p. 169, pl. VI, fig. 1. – Holotype female, Madagascar, Antongil Bay, Mocquerys. – Measurements from holotype. Length: overall 29.0; v 2.91; f 5.15; p 1.83; m 3.98; t 21.58; pcl 4.15. Width: v 1.49; f 2.49; t 9.96. Hind leg spine formula: 2:6:9.

Lichena dealbata fasciata MELICHAR is retained as a subspecies pending future revision of the genus.

festivus, Flatoides undulatus var., MELICHAR, 1902, p. 210; Paraflatoides festivus, MELICHAR, 1923, p. 118. – A syntype from Antongil-Bay was not found in the Budapest Museum.

fulgida, Cerynia, Melichar, 1901, p. 221; Medler, 1991a, p. 30, fig. 23. – Paralectotype male, S. Celebes, Bua-Kraeng, 5,000 ft, Feb. 1896, H. Fruhstorfer, Budapest Museum; lectotype male and paralectotype male, Vienna Museum, designated by Medler (1991a).

MELICHAR neglected to name the depository for syntypes, but specimens in Budapest and Vienna museums are considered valid, as label data are the same as given in the original description.

fuscus, *Porophloeus*, Melichar, 1902, p. 171. – Holotype male, Madagascar, Antongil Bay, Mocquerys. – Measurements from holotype. Length: overall 21.0; v 2.45; f 4.23; p 1.00; m 3.32; t 14.94; pcl 4.98. Width: v 1.66; f 1.99; t 5.96. Hind leg spine formula: 1:6:9. – The holotype genitalia are illustrated (Fig. 12).

guttifera, *Flatopsis*, Melichar, 1902, p. 51, pl. IV, fig. 9. – Lectotype male, paralectotypes male, 2 female, Madagascar, Antongil Bay, Mocquerys; here designated. – Measurements from lectotype. Length: overall 11.0; v 0.50; f 1.66; p 0.50; m 2.16; t 8.96; pcl 3.49. Width: v 0.95; f 1.16; t 4.65. Hind leg spine formula: 2:7:8. – The species was illustrated by Melichar. The lectotype genitalia are illustrated (Fig. 9).

haenschi, Doria, Schmidt, 1904, p. 356; Doriana haenschi, METCALF, 1957, p. 114. – Lectotype male, paralectotype female, Balzapamba, Ecuador, R. HAENSCH S, here designated. A paralectotype female in the Genova Museum was recorded by MEDLER (1986a). – Measurements from lectotype and paralectotype. Length: overall 18.0, 20.0; v 0.33, 0.29; f 1.66, 1.66; p 0.79, 0.83; m 3.15, 3.49; t 15.77, 18.26; pcl 4.32, 4.65. Width: v 1.33, 1.41; f 1.54, 1.83; t 7.47, 8.63. Hind leg spine formula: 2:7:8, 2:7:9. – The lectotype genitalia are illustrated (Fig. 19). Dorsal and apico-ventral processes on the right and left sides of the aedeagus are asymmetrical.

handlirschi, Flatoides, Brancsik, 1893, p. 254, pl. 10, fig 3; Porophloeus handlirschi, Melichar, 1902, p. 170, pl. IX, fig. 19. – Lectotype female, Madagascar, Nossi-Bé, coll. Brancsik; paralectotype female, Madagascar, Antongil Bay, Mocquerys; here designated. – This species was figured by both Brancsik and Melichar.

hyalinipennis, Flatoides, Signoret, 1860, p. 198; Flatoidessa hyalinipennis, Melichar, 1923, p. 115. – The original description was based on a female in Signoret's collection. This syntype has not been found. – Plesiotype male, Madagascar, Baly Bay, Signoret collection, Brancsik collection, here designated. – Measurements from plesiotype. Length: overall 14.00; v 1.33; f 2.16; p 0.83; m 2.16; t 10.79; pcl 3.32. Width: v 0.87; f 1.33; t 3.98. Hind leg spine formula: legs missing. – The plesiotype genitalia are illustrated (Fig. 6).

Impressus, Flatoides elegans var., Melichar, 1902, p. 204; pl. VIII, fig 2; Flatoidessa vicina impressa, Melichar, 1923, p. 115. – Lectotype female, paralectotype female, Madagascar, Antongil Bay, Mocquerys; here designated. I was informed by P. Lauterer that a syntype female is in the Brno Museum. – Measurements from lectotype. Length: overall 17.0; v 1.45; f 2.57; p 0.83; m 2.99; t 12.78; pcl 1.66. Width: v 0.91; f 1.49; t 5.15. Hind leg spine formula: 2:5:8. – The species was illustrated by Melichar.

The combination Flatoidessa vicina impressa by MELICHAR (1923) requires confirmation by study of male genitalia.

laevis, Ormenis, MELICHAR, 1902, p. 84; Ormenoides laevis, MELICHAR, 1923, p. 73. – Lectotype male, paralectotype female, S. America, Surinam; here designated. – Measurements from lectotype: Length: overall 7.50; v 0.13; f 0.91; p 0.33; m 1.49; t 6.47; pcl 1.66. Width: v 0.83; f 1.08; t 2.99. Hind leg spine formula: [legs missing]. – The lectotype genitalia are illustrated (Fig. 18).

lineola, Lichena dealbata var., MELICHAR, 1902, p. 169. – Lectotype female, Madagascar, Antongil Bay, Mocquerys; here designated. The syntype male recorded in the original description was not found in the Budapest Museum. – Measurements from lectotype. Length: overall 27.0; v 2.49; f 4.32; p 1.41; m 3.65; t 20.09; pcl 3.08. Width: v 1.33; f 2.32; t 9.96. Hind leg spine formula: 2:6:8.

Lichena dealbata lineola MELICHAR is retained as a subspecies pending revision of the genus.

lurida, Sephena, MELICHAR, 1902, p. 128; Lecopia lurida, MEDLER, 1991a, p. 13. – Lectotype male, Sulawesi, Bua-Kraeng, designated by MEDLER (1991a, p. 13).

maculatum, *Phlebopterum*, MELICHAR, 1902, p. 2, pl. IV, fig. 4; *Miniscia maculata*, MEDLER, 1991a, p. 23, fig. 16. – Holotype female, Sulawesi, Toli-Toli.

MEDLER (1991a) designated maculatum as type species of Miniscia MEDLER.

marmoratus, Flatoides, MELICHAR, 1902, p. 205, pl. VIII, fig. 17; Dendrona marmorata, MELICHAR, 1923, p. 116. – Holotype female, Madagascar, Antongil Bay, Mocquerys. – Measurements from lectotype: Length: overall 15.0; v 1.33; f 2.49; p 0.83; m 2.16; t 11.62; pcl 3.32. Width: v 1.08; f 1.58; t 4.65. Hind leg spine formula: 2:5:8. – The species was figured by MELICHAR.

nigropunctula, Ormenis, MELICHAR, 1908, p. 9. – Holotype male, E. Africa, Moschi, KATONA. The sutural angles and apical margins of the tegmina are missing. – Measurements from holotype. Length: overall 6.0; v 0.17; f 0.83; p 0.33; m 1.33; t 5.48; pcl [lost]. Width: v 0.54; f 0.83; t 2.66. Hind leg spine formula: 2:8:8. – The holotype genitalia are illustrated (Fig. 14).

The genus Ormenis STAL is restricted to the New World. African species originally placed in Ormenis were listed by METCALF (1957) in Chaetormenis; namely, fuscula MELICHAR, madagascariensis SIGNORET and unispinosus SCHMIDT. Still to be disposed are Ormenis biskrensis LETHIERRY, O. mendax MELICHAR, and O. nigropunctula MELICHAR.

nossibeanus, Flatoides, MELICHAR 1902, p. 201; Flatoidessa nossibeana, MELICHAR, 1923, p. 115. – Holotype female, Madagascar, Nossi-Bé, Brancsik. – A headless specimen with the same labels as the holotype,

but without abdomen, is excluded as a syntype because only a single female was specified in the original description.

pallidior, Flata marginella var., MELICHAR, 1901, p. 205; Flatida marginella var. pallidior, METCALF, 1957, p. 43. – Lectotype male, paralectotype female, S. Ceylon, FRUHSTORFER, pallidior det. MELICHAR; here designated. A depository was not specified in the original description. Specimens in the Budapest Museum are the only examples seen from Ceylon that carry MELICHAR's determination label. – Measurements from lectotype. Length: overall 24.0; v 0.58; f 1.99; p 1.16; m 3.82; t 19.92; pcl 3.32. Width: v 1.00; f 0.62; t 11.62. Hind leg spine formula: 2:9:3 in pad of fine spines. The lectotype genitalia are illustrated (Fig. 8).

Flatida marginella pallidior (MELICHAR) is retained as a subspecies pending revision of the genus.

partita, *Phyma optata* var., Melichar, 1902, p. 49; *Lawana optata* var. *partita*, Melichar, 1923, p. 49; *Lawana partita*, Medler, 1986c, p. 166. – Paralectotype male, S. Java, 1500' 1897, Fruhstorfer; here designated. The lectotype male from Sumatra is in the Paris Museum (Medler 1986c).

patricia, Ityraea, Mellichar, 1901, p. 201; Ityraea nigrocincta (Walker), Medler, 1990a, p. 151. – Paralectotypes male, 2 females, Deutsch-O.-Afrika [German East Africa]; here designated. This taxon was cataloged as a valid species by Metcalf (1957). However, both Synave (1954, p. 30), and Medler reported no discernible differences in male and female genitalia among type specimens of patricia and nigrocincta.

proxima, Ormenis, Melichar, 1902, 83; Anaya proxima, Melichar, 1923, p. 98. – Plesiotype male, Ceylon, Pattipola, 2,000, Bíró, det. Melichar, here designated. Medler (1987) reported on the holotype female from Ceylon in the Vienna Museum. – Measurements from plesiotype. Length: overall 7.5; v 0.25; f 1.00; p 0.33; m 1.33; t 6.14; pcl 2.49. Width: v 0.71; f 0.95; t 2.82. Hind leg spine formula: 2:7:7. – The plesiotype genitalia are illustrated (Fig. 15).

punctonervosus, Flatoides, MELICHAR, 1902, p. 216, pl. IX, fig. 17; Phalaenomorpha punctonervosus, METCALF, 1957, p. 519. – Holotype male, Brazil, Espírito Santo, FRUHSTORFER. – Measurements from holotype. Length: overall 12.50; v 0.66; f 1.66; p 0.75; m 2.32; t 9.96; pcl 2.66. Width: v 1.08; f 1.49; t 4.81. Hind leg spine formula: 2:6:9. – The species was illustrated by MELICHAR. The holotype genitalia are illustrated (Fig. 3).

punctulatus, Flatoides undulatus var., MELICHAR, 1902, p. 210; Paraflatoides punctulatus, MELICHAR, 1923, p. 118. – A syntype from Antongil-Bay was not found in the Budapest Museum.

punctuliger, Flatoides, MELICHAR, 1902, p. 215; Phalaenomorpha punctiliger, METCALF, 1957, p. 519. – A female syntype from Espírito Santo was not found in the Budapest Museum. A male syntype is in the Stockholm Museum.

reversa, *Uxantis*, Melichar, 1902, p. 164, pl. VII, fig. 21; Medler, 1986b, p. 115; *Atracis reversa*, Medler, 1988, p. 18. – Plesiotype male, Sumatra, Montes Battak, Fruhstorfer, here designated. The male syntype was not found during my personal search in 1988, but the collection contained a male from Sumatra that enabled study of genital characters. – Measurements from plesiotype. Length: overall 11.00; v 0.33; f 1.16; p 0.50; m 1.66; t 8.30; pcl 2.16. Width: v 0.71; f 1.00; t 3.65. Hind leg spine formula: 1:5:6. – This species was illustrated by Melichar. The plesiotype genitalia are illustrated (Fig. 10).

ricanoides, Ormenis ricanoides var., MELICHAR, 1902, p. 94; Ormenis testacea var. varicosa (WALKER), METCALF, 1957, p. 298. – Paralectotypes, 2 females, Brazil, Espírito Santo; here designated. A male syntype is in the Hamburg Museum.

serenus, Flatoides, MELICHAR, 1902, p. 207, pl. VIII, fig. 9; Flatoidessa serenus, MELICHAR, 1923, p. 115. – Holotype female, Madagascar, Antongil Bay, Mocquerys. – Measurements from holotype: Length: overall 12.0; v 1.00; f 1.83; p 0.66; m 2.16; t 9.30; pcl 1.99. Width: v 1.00; f 1.29; t 3.82. Hind leg spine formula: 2:5:6. – The holotype was illustrated by MELICHAR (1902).

It superficially resembles species assigned to *Flatoidessa* by MELICHAR, but it does not belong in that genus. Based on genitalia characters and the reticulated network of cross veins in the precostal margin the species is here transferred to *Dendrona* Melichar. *Dendrona serena* (MELICHAR), comb. n.

speciosa, Ityraea, MELICHAR, 1901, p. 202; Ityraea nigrocincta (WALKER), MEDLER, 1990a, p. 151. – Paralectotypes, 6 females, Deutsch-O. Afrika [Tanzania], Tanga; here designated.

This taxon was cataloged as a valid species by METCALF (1957). MEDLER (1990a) treated speciosa as a junior synonym of nigrocincta because no differences were found in male and female genitalia among type specimens.

superba, Flata, MELICHAR, 1901, p. 206; Flatida superba, METCALF, 1957, p. 50. – Paralectotype male, Sierra Leone; here designated. The lectotype male in the Berlin-Humboldt Museum was designated by MEDLER (1990b).

A male from Sierra Leone, det. superba by MELICHAR, is a misidentified specimen of Flatida pallida var. limbata (FABRICIUS).

undulatus, Flatoides, MELICHAR, 1902, p. 210; Paraflatoides undulatus, MELICHAR, 1923, p. 118. – Lectotype male, paralectotypes male, 2 females, Madagascar, Antongil Bay, Mocquerys; here designated. – Measurements from lectotype and paralectotype. Length: overall 13.0, 13.0; v 1.16, 1.16; f 1.99, 2.16; p 0.75, 0.75; m 1.83, 1.83; t 10.13, 9.96; pcl 1.33, 1.16. Width: v 0.95, 1.00; f 1.04, 1.25; t 3.98, 3.32. Hind leg spine formula: 2:6:6, 2:6:7. – The lectotype genitalia are illustrated (Fig. 4).

viridana, Ormenis, MELICHAR, 1902, p. 91, pl. IV, fig. 21; Leptormenis viridana, MELICHAR, 1923, p. 66. – Lectotype male, paralectotypes male, female, Brazil, Espírito Santo, FRUHSTORFER, paralectotype, Rio de Janeiro, 16.8.98; here designated. – Measurements from lectotype. Length: overall 9.00; v 0.17; f 1.12; p 0.42; m 1.99; t 7.30; pcl 2.66. Width: v 1.04; f 1.25; t 4.15. Hind leg spine formula: 2:6:8. – The tegmen was illustrated by MELICHAR. The lectotype genitalia are illustrated (Fig. 16).

viridis, *Phlebopterum*, Melichar, 1902, p. 4, pl. 1, fig. 11; *Phlebopterum viride*, Metcalf, 1957, p. 127. – Lectotype female, paralectotypes 2 females, Madagascar, Antongil Bay, Mocquerys; here designated. – Measurements from the lectotype. Length: overall 10.0; v 0.66; f 1.41; p 0.50; m 1.49; t 8.63; pcl 2.66. Width: v 1.08; f 1.49; t 4.65. Hind leg spine formula: 2:6:10. – This species was illustrated by Melichar.

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References

Brancsik, K. (1893): Beiträge zur Kenntniss Nossibés und dessen Fauna nach Sendungen und Mittheilungen des Herrn P. Frey. – Jahresh. Nat. Ver. Trencs. 15-16: 202-258, pl. 10-11.

DISTANT, W. L. (1906): Rhynchota. Heteroptera-Homoptera. – The Fauna of British India, including Ceylon and Burma 3: 397-464.

JACOBI, A. (1915): Kritische Bemerkungen über die Flatinae (Rhynchota Homoptera). – D. Ent. Z. 1915: 157-178.

MEDLER, J. T. (1986a): Types of Flatidae (Homoptera) II. Lectotype designations and taxonomic notes on species in the Genova Museum. – Annali Mus. Civ. Storia Nat. Genova 85: 299-306.

MEDLER, J. T. (1986b): Types of Flatidae (Homoptera) III. Lectotype designations and taxonomic notes on species in the Budapest Museum. – Folia ent. hung. 46 (2): 111-116.

MEDLER, J. T. (1986c): Types of Flatidae (Homoptera) VI. Lectotype designations and taxonomic notes on species in the M. N. H. N., Paris. – Rev. Franc. Ent. (N. S.) 7 (4): 163-168.

MEDLER, J. T. (1987): Types of Flatidae (Homoptera) IV. Lectotype designations and taxonomic notes on species in the Vienna Museum. – Ann. Naturhist. Mus. Wien 88/89B: 535-539.

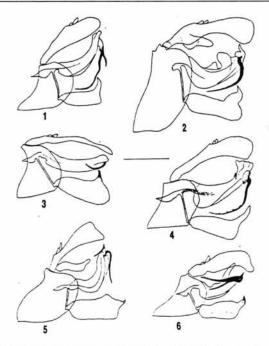
MEDLER, J. T. (1988): Types of Flatidae (Homoptera) XII. Taxonomic notes on Guérin-Méneville types in the Naples Museum, with illustrations of male genitalia of plesiotypes for the respective species. – Boll. Lab. Entomol. Agrar. Filippo Silvestri 43: 11-20.

MEDLER, J. T. (1990a): Types of Flatidae (Homoptera) XIV. Walker and Distant types in the British Museum.
- Oriental Insects 244: 127-195.

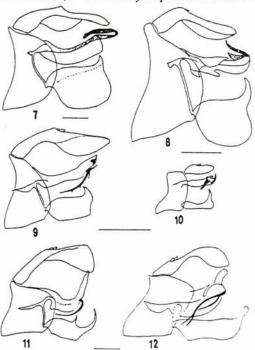
- MEDLER, J. T. (1990b): Types of Flatidae XIII, lectotype designations and taxonomic notes on African species in the Zoological Museum of the Humboldt-University Berlin. – D. Ent. Z., N. F. 37: 105-118.
- MEDLER, J. T. (1991a): Flatidae of Sulawesi, with notes on some related Philippine and Indomalayan species (Homoptera, Fulgoroidea). – Oriental Insects 25: 1-43.
- MEDLER, J. T. (1991b): Review of Paratella Melichar and Taparella Medler in New Guinea, with descriptions of new species (Homoptera: Flatidae). – Bishop Mus. Occ. Pap. 31: 106-121.
- MELICHAR, L. (1901): Monographie der Acanaloniiden und Flatiden (Homoptera). Ann. Naturhist. Hofmus. Wien 16: 178-258.
- MELICHAR, L. (1902): Monographie der Acanaloniiden und Flatiden (Homoptera) (Fortsetzung). Ann. Naturhist. Hofmus. Wien 17: 1-123, Pl. I-IX.
- MELICHAR, L. (1908): Nove rody a druhy Homopter z vychodni Afriky. Cas. Ceské Spol. Ent. 5: 1-15, figs 1-5.
- MELICHAR, L. (1923): Homoptera, fam. Acanaloniidae, Flatidae et Ricaniidae. Genera Insectorum 182: 1-185, 2 pl.
- METCALF, Z. P. (1957): General Catalogue of the Homoptera, Fasc. IV, Part 13, Flatidae. North Carolina State College, Raleigh, N. C., 565 pp.
- SCHMIDT, E. (1904): Neue und bemerkenswerthe Flatiden des Stettiner Museums. Stett. Ent. Zeit. 65: 354-381.
- SIGNORET, V. (1860): Faune des Hemiptères de Madagascar. 1re partie. Homoptères. Ann. Soc. Ent. Fr. 8: 177-206, pl 4-5.
- SYNAVE, H. (1954): Flatidae. Expl. Parc Natn. Upemba Miss. G.F. de Witte 32: 21-47.

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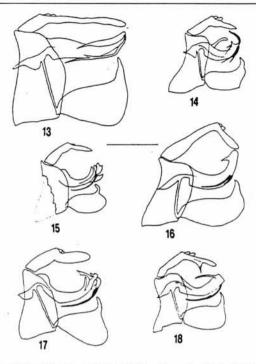
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Figs 1-6. Left lateral view of male genitalia of: 1 = Flatoides bimaculatus MELICHAR, 2 = Flatoides cyrtus MELICHAR, 3 = Flatoides punctorervosus MELICHAR, 4 = Flatoides undulatus MELICHAR, 5 = Flatoides elegans MELICHAR, 6 = Flatoides hyalinipennis SIGNORET. Scale bar = 1 mm



Figs 7-12. Left lateral view of male genitalia of: 7 = Flata crocea Melichar, 8 = Flata pallidior Melichar, 9 = Flatopsis guttifera Melichar, 10 = Uxantis reversa Melichar, 11 = Lichena decolorata Melichar, 12 = Porophloeus fuscus Melichar. Scale bar = 1 mm



Figs 13-18. Left lateral view of male genitalia of: 13 = Ormenis albata MELICHAR, 14 = Ormenis nigropunctula MELICHAR, 15 = Ormenis proxima MELICHAR, 16 = Ormenis viridana MELICHAR, 17 = Ormenis conflicta MELICHAR, 18 = Ormenis laevis MELICHAR. Scale bar = 1 mm

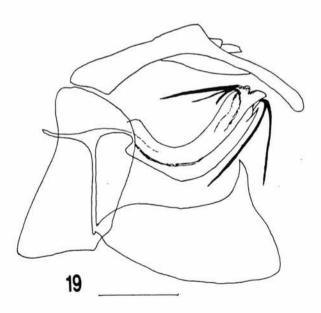


Fig. 19. Left lateral view of male genitalia of Doria haenschi SCHMIDT. Scale bar = 1 mm

