

A REVIEW OF THE SRI LANKAN FLATIDAE (HOMOPTERA: FULGOROIDEA)

JOHN T. MEDLER

B. P. Bishop Museum, Honolulu, Hawaii 96817, USA

ABSTRACT. Taxa of the fulgorid family Flatidae (Homoptera) occurring in Sri Lanka are reviewed. Thirty species are recorded under 18 genera. Keys, descriptions, illustrations and collection data are presented. One new genus *Scarpuna* Medler, with *Scarpantina modesta* Distant as the type species, is described. New synonymies are (junior synonym followed by senior synonym): *Flata pallidior* Melichar = *Flatida marginella* (Olivier); *Scarpanta latipennis* Kirby = *Danavara tennentina* (Walker); *Colobesthes taprobana* Kirkaldy = *Pulastya acutipennis* (Kirby); *Paranotus maculosus* Distant = *Planata limbata* (Distant); *Hilavrita trimaculata* Distant = *Hilavrita fatua* (Melichar); *Ormenis conformis* Melichar = *Melicharia bisecta* (Kirby); *Ormenis fuscata* Melichar = *Ketumala nigropunctata* (Kirby); *Satapa tuberculosa* Distant = *Satapa sicula* Distant; *Bochara nebulosa* Distant = *Bochara parva* (Kirby); *Atracis latifasciata* Melichar = *Cerfennia emersoniana* (Walker); *Atracis clypeata* Distant = *Cerfennia erosipennis* (Stål); *Atracis greeni* Distant = *Cerfennia erosipennis* (Stål); *Atracis haragamensis* Distant = *Cerfennia erosipennis* (Stål); *Atracis consanguinea* Distant = *Cerfennia munita* (Melichar); *Atracis facialis* Distant = *Cerfennia munita* (Melichar); *Phalaenomorpha nietneri* Stål = *Cerfennia perplexa* (Walker); *Atracis atkinsoni* Distant = *Cerfennia perplexa* (Walker); *Atracis conspurcata* Melichar = *Cerfennia perplexa* (Walker); *Atracis subtilis* Melichar = *Gaja inconspicua* (Kirby); *Gaja definitiva* Distant = *Gaja inconspicua* (Kirby); *Gaja facialis* Distant = *Gaja inconspicua* (Kirby).

Key words: Homoptera, Flatidae, taxonomy, Sri Lanka, distribution.

Introduction

This review of Sri Lanka Flatidae is based on historical collections of Kirby (1891), Melichar (1903), Distant (1912), and the Smithsonian Insect Project collections in Sri Lanka made in relation to Biosystematic Studies of the Insects of Sri Lanka (formerly known as Ceylon) established in 1969.

Kirby (1891) listed 12 new species of Sri Lankan flatids. Original data from labels on type specimens in Green Collection at BMNH are presented, with the exception that the present day country name Sri Lanka is used instead of Ceylon.

Melichar (1903) listed 9 genera, 27 species, including *Ormenis fatua* sp. n.

Distant (1912) listed 21 genera, 51 species, including 13 new species. Dichotomous keys were provided for the genera.

Krombein (1980) published information on project objectives and operations of the Smithsonian Insect Project. The Smithsonian collectors recorded on labeled specimens are as follows: D. W. Balasuriya, D. M. Davies, D. R. Davis, F. E. Dietz, E. G. Dabrera, E. Ekis, S. Fasook, P. Fernando, C. Gams, G. F. Hevel, M. Jayawee, L. Jayawickrema, P. R. Karunaratne, S. Karunaratne, V. Kulasejare, K. V. Krombein, D. H. Messersmith, J. L. Petty, W. H. Rowe, T. Wijesinhe, G. L. Williams, and S. L. Wood.

This publication recognizes 18 genera, 30 species. Data are recorded from original labels attached to type specimens. Where primary types are known only from females, a plesiotype male specimen may be used for illustration of genitalia. Such specimens bear my blue plesiotype label. This term has no status under nomenclatural rules, but the label identifies the specimen in relation to published data, and enables accurate examination by a future worker. Morphometric measurements are recorded in mm according to the fol-

lowing format: Length: overall; v (vertex); f (frons); p (pronotum); m (mesonotum); t (tegmen); pcl (postclaval sutural margin). Width: v (vertex); f (frons); t (tegmen). The spine formula gives sequence of metatibial lateral spines(s): metatibial apical spines; metatarsal I basal spines.

Depository Museums

Codens sensu Arnett, et al. (1993) are used to specify museums that loaned specimens for examination, as follows:

BMNH	The Natural History Museum, London, England.
BPBM	Bernice P. Bishop Museum, J. Linsley Gressitt Center For Research in Entomology, Honolulu, HI, 96819.
CASC	California Academy of Sciences, San Francisco, CA, 94118.
HNHM	Hungarian Natural History Museum, Budapest, Hungary.
MMBC	Moravian Land Museum, Department of Entomology, Brno, Czech Republic.
MNHG	Museum d'Histoire Naturelle, Geneva, Switzerland.
MNHN	Museum National d'Histoire Naturelle, Paris, France.
MZLU	Lund University, Museum of Zoology and Entomology, Helgonavagen 3, Sweden.
NHMW	Naturhistorisches Museum, 3 Zoologische Abteilung, Postfach 417, Wien, Austria.
NHRS	Museum of Natural History, Stockholm, Sweden.
OXUM	Oxford University Museum, Oxford, England.
ZMHB	Museum fur Naturkunde der Humboldt-Universitat, Berlin, Germany.
USNM	United States National Museum of Natural History, Smithsonian Institution, Washington, DC, 20560

Check List of Genera and Species

Tribe Phromniini

1. Genus *Flatida* White
 1. *deltotensis* (Kirby)
 2. *marginella* (Olivier)
2. Genus *Danavara* Distant
 1. *tennentina* (Walker)

Tribe Ceryniini

3. Genus *Hansenia* Kirkaldy
 1. *glauca* (Kirby)

Tribe Scarpantini

4. Genus *Scarpuna* Medler
 1. *modesta* Distant

Tribe Flatini

5. Genus *Flata* Fabricius
 1. *ferrugata* (Fabricius)
 2. *stellaris* (Walker)

Tribe Phyllyphantini

6. Genus *Lasura* Medler
 1. *separata* Medler

7. Genus *Pulastya* Distant.1. *acutipennis* (Kirby)2. *dubia* (Kirby)

Tribe Lawanini

8. Genus *Cromna* Walker1. *albopunctata* (Kirby)

Tribe Ormenisini

9. Genus *Planata* Medler1. *limbata* (Distant)10. Genus *Anaya* Distant1. *conflicta* (Melichar)2. *proxima* (Melichar)11. Genus *Melicharia* Kirkaldy1. *sinhalana* Kirkaldy12. Genus *Hilavrita* Distant1. *fatua* (Melichar)2. *obliqua* Distant13. Genus *Ketumala* Distant1. *bisecta* (Kirby)2. *farinosa* Distant3. *nigropunctata* (Kirby)4. *sinuata* Distant

Tribe Selizini

14. Genus *Gomeda* Distant1. *abdominalis* (Kirby)15. Genus *Satapa* Distant1. *sicula* Distant

Subfamily Flatoidinae

16. Genus *Bochara* Distant1. *parva* (Kirby)17. Genus *Cerfennia* Stål1. *emersoniana* (Walker)2. *erosipennis* (Stål)3. *munita* (Melichar)4. *perplexa* (Walker)5. *nalandensis* (Distant)18. Genus *Gaja* Distant1. *inconspicua* (Kirby)**Key to the genera of Sri Lankan Flatidae**

1. Tegmina positioned more or less flat, costal margin often undulate; clypeus directed horizontally; usually veins R+S, M; one metatibial lateral spine, rarely 2 spines.
Subfamily FLATOIDINAE16
- Tegmina positioned vertically, costal margin evenly curved; clypeus not horizontal; usually vins R, S, M; one or 2 metatibial lateral spines. Subfamily FLATINAE.
..... 2

2. Claval vein A2 and base of clavus strongly elevated and heavily pustulate; postclaval sutural margin convexly raised; pronotum postocular eminence conical; specimen usually colored brown or black; size small. Tribe Selizini15
- Claval vein A2 and base of clavus not elevated in conjunction with strongly raised claval sutural margin; pronotum postocular eminence absent, ridgelike or conical; specimen rarely all brown or black; size variable. 3
3. Tegmen very wide, paraboloid, apical margin widely convex; costal margin strongly convex from base, broader than the radial area, precostal margin wider than costal cell; veins R,S,M; without postocular eminence; size large (Tribe Phromniini)4
- Antennal segment II strongly tubular, more elongate than segment I; tegmen more or less elongate triangular, apical margin truncate, sinuate, or narrowly convex; size variable.5
4. Antennal segment II not tubular, only slightly longer than segment I. Very wide costal cell; veins R,S,M; without postocular eminence; size large ... 1. *Flatida* White
- Tegmen moderately wide, costal margin evenly convex from base; precostal margin and cell C about the same width; veins R,S,M; no postocular eminence; 2 metatibial spines.2. *Danavara* Distant
5. Without metatibial lateral spines (Tribe Ceryniini). 3. *Hansenia* Kirkaldy
- With 1 or 2 metatibial lateral spines6
6. Head not conical; pronotum postocular eminence a sharp ridge, tegmen apical margin truncate or sinuate, postclaval sutural angle right angled, acutely produced or convex (Tribe Ormenisini). 11
- Without combination of listed characters.7
7. Vertex flat, twice wider than long, truncated anteriorly; frons without median longitudinal carina. Tegmen apically without submarginal line of crossveins; postclaval margin uplifted angularly (Tribe Scarpantina)4. *Scarpuna* Medler
- Not as described 8
8. Pronotum with sharply raised median longitudinal carina; tegmen apex with several weak irregular lines of crossveins, sutural angle usually angulate, tegmen veins R, R, M arising from basal stem, claval veins not forming Y-stem; 2 metatibial lateral spines (Tribe Flatini) 5. *Flata* Fabricius
- Not as described 9
9. Tegmen with R+S, M veins arising from basal stem; postclaval sutural margin meeting apical margin at right angle (Tribe Phyllyphantini)10
- Head narrowly conical, pronotum postocular eminence a sharp ridge. Tegmen with R,S,M veins arising (Tribe Lawanini). 8. *Cromna* Walker
10. 1 metatibial lateral spine; precostal margin twice wider than costal cell6. *Lasura* Medler
- 2 metatibial lateral spines; precostal margin narrower than costal cell, which is obliquely reticulately veined. 7. *Pulastya* Distant
11. Pronotum without elevated median carina, often with pair of longitudinal red stripes; tegmen sutural and apical margins meeting at sharp right angle; claval veins without Y-stem. 9. *Planata* Medler
- Not as described.12
12. Color green or stramineous.13
- Color brown or black.14

13. Frons length:width ratio about equal; tegmen sutural and apical margins convex, membrane apically with strong diagonal crease. 10. *Anaya* Distant
 -- Vertex shorter than pronotum. Tegmen apical margin more or less truncate; costal angle evenly convex, sutural angle approximately right angled; 2 transverse lines of apical cross. 11. *Melicharia* Kirkaldy
 14. Tegmen with single transverse line of apical cross veins 12. *Hilavrita* Distant
 -- 2 metatibial lateral spines 13. *Ketumala* Distant
 15. Head obtusely pointed, frons longer than broad. Tegmen apical margin uniformly convex (Tribe Selizini). 14. *Gomeda* Distant
 -- Frons about as long as broad. Tegmen apical margin sinuate; costal membrane granulose. 15. *Satapa* Distant
 16. Vertex not longer than wide; pronotum with nipplelike postocular eminence 16. *Bochara* Distant
 -- Vertex as long as or longer than wide. Tegmen veins R+S, M arising from basal stem 17
 17. Vertex elongated. Pro/mesonotum strongly elevated convexly above horizontal plane of head; pronotum without postocular eminence. vein A1 zigzag or looped, connected to vein A2 by thick crossvein 17. *Cerfennia* Stål
 -- Vertex longer than broad 18. *Gaja* Distant

Family FLATIDAE Spinola

Flatoides Spinola 1839: 205; Flatidae Metcalf 1957: 2.

Subfamily FLATINAE Melichar

Flatina Melichar 1901: 179; Flatinae Metcalf 1957: 19.

Tribe PHROMNIINI Melichar

Phromniaria Distant 1906: 397; Phromniini Metcalf 1957: 21.

1. Genus Flatida White

Poeciloptera (Flatida), White, 1846: 26, subg. nov. Type species: *Poeciloptera* (Flatida) *tricolor* White, 1846, monobasic.

Phronima Stål, 1862: 68. gen. n. Type species: *Cicada limbata* Fabricius, designated by Distant, 1906. *Flatida* Metcalf, 1957: 26, catalog.

Diagnosis: Vertex about same width as raised anterior margin of pronotum; frons united with vertex, continuously convex from clypeus to transverse thick intergenal carina, lateral margins ridgelike, strongly concave between antennae; ocelli absent. Antennal segment I extensible well beyond lateral margins of frons, segment II much longer than I. Pronotum anterior margin deeply sulcate medially, disc quadrangular, raised, tricarinate nearly to posterior margin, without postocular eminence.

Tegmen about twice longer than wide, apical margin oval convex, precostal margin twice wider than costal cell, longitudinal veins with numerous biurcations apically, submarginal line of crossveins apically. Size large, length usually about 25 mm.

Distribution: Sri Lanka, Oriental and Ethiopian Regions.

1.1 *Flatida deltotensis* (Kirby)

Phronima deltotensis Kirby, 1891: 155. Lectotype: ♀, Sri Lanka: Deltota, BMNH.

Flatida deltotensis: Melichar, 1903: 88, Sri Lanka: Colombo, Kandy.

Flatida deltotensis: Metcalf, 1957: 30, catalog.

Specimens examined:

BMNH: Lectotype: ♀, Sri Lanka: Deltota, 90-115, Green coll.

1.2 *Flatida marginella* (Olivier)

Fulgora marginella Olivier, 1791: 575.

Flatida marginella pallidior Melichar, 1901: 206, var. n. Lectotype ♂, S. Sri Lanka, det Melichar, HNHM. Melichar, 1903: 88, Sri Lanka: Hangarankette, Kelgalle, Negambo, Paradeniya, Puttalam.

Flatida marginella: Metcalf, 1957: 40, catalog.

Flatida marginella var *pallidior*: Metcalf, 1957: 43, catalog.

Flatida marginella pallidior: Medler, 1993: 41, fig. 8, type data.

Diagnosis: Habitus illustration by Distant, 1906: 398, fig. 205 (Phromnia); Tegmen costal margin red. Measurements, (*pallidior*) 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 small spines. Lectotype ♂ genitalia shown by Medler, 1993e: 41, fig. 8.

Specimens examined:

BMNH: Sri Lanka: (*ornata*), Tenasserim; (*rubicunda*) Mergui

HNHM: S. Sri Lanka, Lectotype ♂, paralectotype ♀.

USNM: Sri Lanka: Ratnapura District: Weddagala, 2 mi S, Sinharaja Jungle, ♀, 8-12.II.1977, K.V.Krombein, et al.

2. Genus *Danavara* Distant

Danavara Distant, 1906: 404, gen. n.; Type species: *Poeciloptera tennentina* Walker, 1858b, original designation.

Danavara, Metcalf, 1957: 63, catalog.

Diagnosis: Vertex anterior margin truncate; lateral margins of frons parallel, not indented; pronotum postocular eminence strongly ridged; tegmen margin convex, costal cell twice wider than precostal margin, postclaval and apical margins convex, tegmen pale yellowish green, irregularly dusted with white wax covering black spots and specks. Holotype ♂ genitalia illustrated by Medler, 1990a: 162, fig. 4. Metatibial spines 2:7:8.

Habitus illustrations by Tennant, 1861: 433, fig. 1; Kirby, 1891: 153, pl. 6, fig. 9; Melichar, 1901: 241, pl. 2, fig. 5; Distant, 1906: 404: fig. 208. The tegmen shown in Fig. 9 is a reproduction from Kirby's 1891 illustration.

Distribution: Sri Lanka, Oriental Region.

2.1 *Danavara tennentina* (Walker)

Poeciloptera tennentina Walker, 1858b: 111, sp. n., Holotype: ♂, Sri Lanka, [no locality], BMNH.

Scarpanta latipennis: Kirby, 1891: 153, pl. VI, fig. 9, sp. n.; Holotype: ♂, Sri Lanka: Kandy, BMNH.

Danavara latipennis: Metcalf, 1957: 64, catalog.

Danavara tennentina: Metcalf, 1957: 64, catalog.

Danavara tennentina: Medler, 1990: 162, fig. 4, type data.

Danavara latipennis: Medler, here design., jr syn of *tennentina*.

Danavara tennentina: Medler, here design., sr syn of *latipennis*.

Specimens examined:

BMNH: *Danavara tennentina*, holotype ♂, Sri Lanka: (no locality), Medler, 1990: 162, type data. *D. latipennis*, holotype ♂, Sri Lanka: Kandy.

Taxonomic note: The two species assigned to this genus are known to me only from the holotypes cited above.

Tribe CERYNIINI Schmidt

Ceryniaria Distant 1906: 407, Division.

Ceryniini, Schmidt 1912: 96; Tribe.

Ceryniini, Metcalf 1957: 94, catalog

3. Genus *Hansenia* Kirkaldy

Hansenia Kirkaldy, 1902, p. 53, gen. n. Type species: *Poeciloptera glauca* Kirby, 1891, p.154, pl VI, fig. 14, original designation.

Adelidoria Metcalf, 1957, p.118, catalog [error].

Hansenia Fennah, 1960, p 175, nomenclature data.

Hansenia Kirkaldy, 1961, Bull. Zool Nomenclature 18:236. Official List Name No. 1415.

Diagnosis: Head vertex/frons narrow, lateral margins laminate ridgelike, antennae slender, elongate, extending beyond lateral margins of frons; segments I and II equal; pronotum without postocular eminence; tegmen apical margin rounded; strong submarginal line of crossveins; color uniformly dark brown, heavily dusted with white wax; costal and apical margins contrasting light brown; Hind leg tibial spines 2.

Illustration by Melichar, 1901: 229, fig. 3; Distant, 1906:411, fig. 212. Male genitalia illustrated by Singh-Pruthi, 1925: 217, pl. 27, fig. 225, and Datta, 1979: 9, figs 1-3.

Host Plant: Various species of *Eugenia*,

Distribution: Sri Lanka.

3.1 *Hansenia glauca* (Kirby)

Poeciloptera glauca Kirby, 1891: 154, pl. VI, fig. 14, sp. n.; Holotype: ♀, Sri Lanka: Nepitia, BMNH.

Hansenia kirbyi Melichar, 1901 [1902]: 229, pl.II, fig. 3, sp. n., Sri Lanka: Peradeniya.

Hansenia glauca: Distant, 1906:411, Pundaluoya.

Adelidoria glauca: Metcalf, 1957: 119, catalog.

Hansenia glauca: Fennah, 1990:175.

Specimens examined: *H. glauca*:

BMNH: Sri Lanka: Holotype: ♀, Nepitia; Green Coll.,90-115; Peradeniya, ♂, ♀, Kirkaldy Coll., 1912-513; Peradeniya, 1600 ft, ♀, 14.V.1906, B. Fletcher Coll.; Colombo, 2 ♂, ♀, 17.I.1908, G. Meade-Waldo; Kandy, ♀, Jan.1928, J.J.Joicey; Kanneliya, ♂, 20.V.1953, J.W.S.Pringle.

BPBM: Sri Lanka: Arakawila: 55 km NE of Colombo, ♂, ♀, 1.III.1971, J.& M. Sedlacek.

CASC: Sri Lanka: Kandy, ♀, Koebele Coll. ,

MNHN: Sri Lanka: Kandy, ♂, 1902, M. Maindron.

MZLU: Sri Lanka: Peradeniya, ♂, 29.I.1920, leg. Uzel. Sri Lanka: Sabaragamuwa Prov., Deerwood, Kuruwita, ♂, 18-21.II.1962, Brinck-Andersson Lund Exped.; W.Prov., Labugama, 24 mls ESE Colombo, ♂, ♀, 9.III.1962, Brinck-Andersson Lund Expedition.

OXUM: Sri Lanka: Kandy, about 1600 ft., ♂, 19.I.1908, G.B.Longstaff.

USNM: Kandy District: Gannoruwa Timber Reserve, ♀, 4.VI.1976, K.V.Krombein, et al.; Kandy, Peak View Motel, 1800 ft (549 m), ♂, 7-14.I.1970, Davis & Rowe; Kandy

Reservoir, Jungle, 1800 ft (549m), ♂ 3♀, 29.III.1975, S.& P.B.Karunaratne; ♂, 4.VI.1976, K.V. Krombein, et al.; Kandy, Udawattakele, 2100 ft (640 ♂), ♀, 9-13.II.1975, K.V.Krombein, et al; Laxapana, Flower Pot, 3,000 ft (914 ♂), 5 ♂, 15 ♀, 13.III.1973, Bauman & Cross; Maskeliya Oya, Norton Bridge, 3,000 ft (914 ♂), 2 ♀, 13.III.1973, Bauman & Cross; Ratnapura District: Gilimale, ♀, 17-18.V.1975, S.L.Wood & J.L.Petty.

H. kirbyi:

BMNH: Sri Lanka: Paradeniya, ♀, II.1900, Kirkaldy coll.

HNHM: Sri Lanka: lectotype ♂, Paradeniya, 29.I.1902, Uzel, det. Melichar; Paradeniya, 2 ♂, det. Melichar; Paradeniya, 2♂, I.1902, Uzel, det Melichar, Henaratgoda, ♂, 17.II.1902, Uzel, typus, det. Melichar.

MMBC: Sri Lanka: Peradeniya, ♀, 1902, [without head, pronotum and abdomen] cited by Melichar.

ZMHB: Sri Lanka: lectotype ♂, Nietner 5071, design. Medler, 1986b:49.

H. pulverulenta:

HNHM: Sri Lanka: Colombo, 3♀, 1902, Biro, det Melichar.

NHMW: Sri Lanka: Paradeniya, paralectotype ♀

NHRS: Sri Lanka: 7 specimens, det. Melichar.

Taxonomic note: Confusion existed for many years in the application of generic and specific names for this genus and species. Kirkaldy (1903) claimed that the concept of the genus *Hansenia* was rightfully his, although Melichar (1901) [1902] apparently obtained publication priority. *Hansenia kirbyi* Melichar, 1901: 229, sp. nov., was described from specimens obtained from Kirkaldy and ZMHB: Lectotype: ♀, Sri Lanka, Nietner. Fennah (1960) produced evidence that Kirkaldy's publication appeared in January 1902, and predated Melichar's 1901 publication that actually appeared about June 1902. Fennah accordingly requested ICZN ruling on the date of *Hansenia* Melichar 1902 (1901).

A ruling by the International Commission of Zoological Nomenclature, Opinion 598, placed *Hansenia* Kirkaldy, 1902, on the Official List of Generic Names, No. 1415. Kirkaldy (1913:23) recorded *Hansenia kirbyi* from Borneo: Pontianak, Muir. Without doubt, the Borneo record is erroneous. Two voucher specimens in the Bishop Museum are misidentified specimens of *Bythopsyrna tineoides* (Olivier).

All known published records apply to Sri Lanka. However, the Bishop Museum collection has a unique female specimen from Ethiopia: Addis Abeba (sic!) 2750-3000m, 19.II.1971, J.J.H & M. Sedlacek Colls.

Tribe SCARPANTINI Melichar

Scarpantini Melichar, 1923: 36.

Scarpantina Metcalf, 1957:143.

4. Genus *Scarpuna* Medler, gen. nov.

Type species: *Scarpantina modesta* (Distant), here designated.

Diagnosis: Vertex anterior margin slightly convex, frons longer than wide, wider apically; pronotum with postocular ridge. Tegmen costal cell wider than precostal mar-

gin, veins R, S, M; submarginal line of apical crossveins, apical margin with inter-veinal black dashes; black spot in claval apex; costal angle convex, sutural margin at right angle.

Habitus illustration given by Distant, 1906: fig. 221. Plesiotype male genitalia shown in fig. 22.

Measurements: ♀ OXUM, plesiotype ♂ BMNH: Length: overall 15.5, 15.0; v 0.42, 0.33; f 1.58, 1.49; p 0.71, 0.66; m 2.82, 2.99; t 13.3, 13.0; pcl 3.32, 4.0. width: v 1.08, 1.25; f 1.33, 1.33; t 8.6, 60.

Hind leg spine formula: 1:6:7, 1:6:8.

4.1 *Scarpantina modesta* (Distant)

Scarpantina modesta Distant, 1906: 423, sp. n. Holotype ♂, S. India, Trevandrum, BMNH.

Scarpantina bimaculata Distant, 1906: 422, fig. 221, sp. n., Lectotype ♀, S. India, Trevandrum, BMNH.

Scarpantina bimaculata: Metcalf, 1957: 145, catalog.

Scarpantina modesta: Metcalf, 1957: 145, catalog.

Scarpantina bimaculata, Medler, 1990: 166, design. jr. syn. of *S. modesta*.

Scarpantina modesta: Medler, 1990: 174, design. sr. syn. of *S. modesta*.

Planata modesta: Medler, 1999: 32, comb. [error]

Specimens examined:

BMNH. Sri Lanka: Kanneliy, Plesiotype ♂, 20.V.1953, J. W. Pringle: puncturing young 6 ft. saplings of "badulla."

OXUM. Sri Lanka: Bagutella, ♀, Templeton coll.

Tribe FLATINI Schmidt

Flataria Distant, 1906: 413.

Flatini Schmidt 1912: 97.

Flatini Metcalf 1957: 1.

5. Genus *Flata* Fabricius

Flata Fabricius, 1798: 511, 517, gen. n. Type species: *Cicada ocellata* Fabricius, designation by Spinola, 1839: 421 = *Poeciloptera stellaria* Walker, 1861, new n. for *Cicada ocellata* Fabricius 1775, homonym of *Cicada ocellata* DeGeer, 1773. Metcalf, 1957: 154, catalog.

Diagnosis: Frons convex, narrow dorsal margin delimited by slightly convex antero-dorsal transverse intergenal carina; median carina of frons connected to dorsal transverse carina, lateral margin not raised, antennal segment I shorter than II; margins of frons and pronotum mostly parallel, usually produced anteriorly at diverging angle; vertex reduced to narrow ledge parallel to anterior margin of pronotum, strong ridgelike median carina extending from frons across pro- and mesonotum to scutellum; strongly raised on pronotum, almost crestlike. Pronotum lateral margin carinate, carina extending latero-ventrally nearly to postocular ridge. Mesonotum moderately humped anteriorly, 3 longitudinal carinae. Tegmen with 3 longitudinal veins arising from basal stem, irregular array of crossveins apically, usually weak but distinct alignment forming submarginal line from claval apex to terminus of C + R stem; Cu once forked, the branches joining postclaval submarginal line. Apex of clavus without A1 + A2 Y-stem. female pregenital segment VII with median concave notch on margin, ovipositor adapted for piercing, valvulae III with teeth in row on ventral margin. Two metatibial lateral spines. Size medium.

Distribution: Sri Lanka; Oriental Region.

Key to species

- Tegmen without spots 1. *Flata ferrugata* Fabricius
 Tegmen with numerous red, orange or black spots 2. *Flata stellaris* (Walker)

5.1 *Flata ferrugata* Fabricius

Flata ferrugata Fabricius, 1803: 50, sp. n.; Holotype: ♀, Sri Lanka: Tranqubar, ZMUC; *Flata ferrugata*: Metcalf, 1957: 167 catalog; *Flata ferrugata*: Medler, 1996: 45, Borneo.

Male genitalia of *ferrugata* shown in fig. 14.

Specimens examined:

BMNH: Sri Lanka: Batalagoda, 2 ♂, 1.I.1960, light trap, CIE NO. 16934; Putlam, ♀, 90-115, Green coll.; Trinomali, Oopah Est, ♀, 17.VI.07, B.Fletcher; no data, ♂, 1910-149, G.W. Bury.

BPBM ex USNM: Badulla District: Hasalaka, 5 mi E Mahiyangana, 200 ft (61 m), BL, ♂ ♀, 16.XI.1974, C.Gans, P.Fernando, S.Farook.

USNM: Anuradhapura District: Balaya, Wewa nr. Padaviya, 150 ft (45 m), ♂, 4-5.XI.1970, O.S.Flint, Jr.; Hunuwilagama, Wilpattu, Wildlife Soc. Bungalow, 200 ft (61 m), 4 ♂ 5 ♀, 10-19.III.1970, Davis & Rowe; Padaviya, beyond L.B. Spill, 180 ft (55 m), 2 ♂, 8.XI.1970, O.S.Flint, Jr.; Padaviya, Antiquities Site, BL, ♂, 20-23.VII.1978, K.V.Krombein, et al.; Anuradhapura, BL, ♂, 9-16.IX.1975, D.M.Davis, et al. Amparai District: Ekgel, Aru Tank, 2 ♂, 9.VI.1976, K.V.Krombein, et al.; Inginiyagala, 250 ft (76 m), BL, 3 ♂ 21-24.XI.1976, G.F.Hevel, et al.; Badulla District: Hasalaka, 5 mi E Mahiyangana, 200 ft (61 m), BL, ♂, ♀, 16.XI.1974, C.Gans, et al.; Ella, 2 ♂, 28.V.1974, Gans & Prasanno; Hambantota District: Badagiriya Tank, 6.5 mi N Hambantota, 75 ft. (75 ft (23 m), ♀, 27.X.1970, O.B.Flint; Palatupana Tank, BL, ♀, 3-4.II.1975, K.V.Krombein, et al. Jaffna District: Chundikkulam Sanct, 25 ft (8 m), BL, 7.XI.1976, G.F.Hevel, et al. Kalutara District: Agalawatta, light trap, 2 ♀, 27.VII.1975, S. Karunaratne, et al.; Kandy District: Hasalaka, 1000 ft, BL, 3 ♂ 30-31.III.1973, Baumann & Cross; Mahaiyawa, BL, ♂, 15.XI.1974, C. Gans, et al.; Mannar District: Kondchi Vijeya Dev, light, ♂, 19-20.IX.1979, T. Wijesinhe, et al.; Mannar, 8 mi SE, 15 ft. (5 m), ♂, 6.XI.1976, G.F.Hevel, et al.; Matale District: Kibissa, 0.5 mi W of Sigiriya, jungle, BL, 2 ♂ ♀, 28.VI-28.4.VII.1978, K.V.Krombein, et al. Moneragala District: Mau Ara, 10 mi E Udawalawa, 100 m, BL, ♂, 2 ♀, 24-26.IX.1977, K.V.Krombein, et al.; Monaragala, ♂, 6.VI.1975, S.L.Wood & J.L.Petty. Puttalam District: Puttalam, 9 mi. E, BL, ♂, 5 ♀, 19.VI.1975, S.L.Wood & J.L.Petty. Ratnapura District: Panamure, 500 ft (152 m) ♂, 15-21.X.1970, O.S.Flint, Jr.; Sinharaja Jungle, 2 mi S Weddagala, 470 m, BL, ♂, 22.IX.1977, K.V. Krombein, et al.; Uda Walawe, 300 ft, (91 m), BL, 2 ♂ 2 ♀, 1.VIII.1973, G. Ekis. Uggalkaltota, Irrigation Bungalow, 350 ft, (106 m), ♀, 31.I-8.II.1970, Davis & Rowe. Polonnaruwa District: Polonnaruwa, BL, 2 ♂ ♀, 4.V.1980, W.N.Matis, et al. Trincomalee District: China Bay, 200 ft (61 m), BL, 2 ♂ 2 ♀, 9-11.XI.1976, 2 ♀, G.F.Hevel, et al.

5.2 *Flata stellaris* (Walker)

Poeciloptera stellaris Walker, 1851: 453, sp. n.; Holotype (no abdomen), Africa (no locality), BMNH.

Cryptoflata flavoguttata Melichar, 1902: 21 sp. n.; Lectotype ♀, Sri Lanka, ZMHB.

Cryptoflata ocellata Melichar, 1903: 89, Sri Lanka: Manuwale, Paradeniya.

Flata ocellata: Distant, 1906: 428, fig. 225, habitus illustration.

Flata stellaris: Metcalf, 1957: 174, catalog.

Flata stellaris var. *flavoguttata*: Metcalf, 1957: 177, catalog.

Flata stellaris: Medler, *flavoguttata*, new status, here design. Plesiotype male genitalia Fig 15, from voucher specimen in USNM

Specimens examined:

BMNH: Medler, 1990:161, Holotype (*stellaris*): no abdomen, Africa.

BPBM ex USNM: Hambantota District: Yala National Park, sea level, ♂ ♀, 3.VIII.1973, G. Ekis.

NHRS: (*ocellata*) Sri Lanka: P. de Galles, ♀, coll Haglund, det Melichar.

USNM: SRI LANKA: Anuradhapura District: Anuradhapura, BL, ♀, 9-16.IX.1975, D.M.Davies, et al.; Cheddkulam, Malaratu Oya, ♀, 15-16.VI.1875, D.H.Messersmith, et al.; Hunuwilagma, Wilpattu, Wildlife Soc. Bungalow, 200 ft (61 m), 2 ♂ 3 ♀, 10-19.III.1970, Davis & Rowe; BL, ♀, 28.X-3.XI.1976, G.F.Hevel, et al.; Padaviya, Antiquities site, BL, ♀, 20-23.VII.1978, K.V.Krombein, et al. Galle District: Kanneliya, ♀, 22-24.V.1975, S.L.Wood & J.L.Petty; Kanneliya Jungle, BL, ♂, 11-16.I.1975, K.V. Krombein, et al.; Kanneliya, 200 ft (61 m), BL, ♂, 15-17.X.1976, G.F.Hevel, et al.; Kanneliya, Sinharaja Jungle, BL, ♂, 13-16.VII.1978, K.V.Krombein, et al. Hambantota District: Palatupana, 10 ft (3 m), ♂, 22-25.X.1970, O.S.Flint, Jr.; Palatupana Tank, ♀, 3-4.II.1975; Palatupana, WLNPS Bungalow, 0-15 m, white light, ♂, 27-29.IX.1977, K.V.Krombein, et al.; Yala National Park, sea level, 2 ♂, ♀, 3.VIII.1973, G.Ekis. Kalutara District: Agalawatta, BL, ♂, 27.VIII.1975, Y.M.Huang, et al. Kandy District: Buwlikada, BL, ♀, 10.I.1977, K.V.Krombein, et al.; Kandy, ♀, 23.XI.1974, C.Gans, et al.; Hasalaka, 1000 ft (305 m), BL, 2 ♀, 30-31.III.1973, Bauman & Cross; Peradeniya, Upper Hantane Hill, 2300 ft (701 m), ♂, 12-16.I.1970, Davis & Rowe; Teldeniya, 1400 ft (428 m), BL, ♀, 18-20.XI.1976, G.F.Hevel, et al.; Udawattakele, BL, ♂, 26-29. VIII. 1975, D.M.Davies, et al.; 1700 ft (518 m), BL, ♂ ♀, 30.V.1976, K.V. Krombein, et al.; 2100 ft (640 m), BL, 2 ♀, 4-5.X.1976, G.F.Hevel, et al.; Udawattakelle Sanc., 2100 ft (640 m), ♀, 10-23.I.1970, Davis & Rowe; malaise trap, ♀, 1-3.X.1973, K.V. Krombein, et al.; 510-580 m, BL, ♂, 14-16.X.1977, ♀, 2-5.XI.1977, K.V. Krombein, et al.; 1800 ft (549 m), BL, ♀ 21-22.IX.1980, K.V.Krombein, et al.; Mannar District: Kondachchi, Vijeya Dev, BL, 2 ♂, 19-20.IX.1979, T.Wijesinhe, et al.; Wilpattu Natl Park, 0.5 mi NE Kokmotte, 50-100 ft (15-30 m), white light, ♂, X.1978, K.V.Krombein, et al. Matara District: Deniyaya, BL, ♀, 9-10.X.1975, D.M.Davies, et al. Matale District: Kibissa, 0.5 mi W of Sigiriya, jungle, BL, ♂, 28.VI-4.VII.1978, K.V.Krombein, et al.; Naula, 3 mi E, ♀, 15.VI.1975, S.L.Wood & J.L.Petty; Sigiriya, 800 ft (244 m), 2 ♀, 25.XI.1974, C.Gans, et al. Moneragala District: Monaragala, 2 ♂, 6.VI.1975, S.L.Wood & J.L.Petty; BL, ♂, 5-6.IX.1975, D.M.Davies, et al. Ratnapura District: Gilimala, Lumber Mill, 115 ft (35 m), BL, ♀, 20-25.X.1976, G.F.Hevel, et al.; Uggalkaltota, Irrigation Bungalow, 350 ft (106 m), 3 ♂ ♀, 31.i-8.II.1970, Davis & Rowe; Uggalkaltota, BL, 2 ♂ ♀, 23-26.VI.1978, K.V.Krombein, et al. Trincomalee District: Kantalai, 6 mi SW, BL, ♀, 23-26.VII.1978, K.V.Krombein, et al.; Trincomalu, China Bay Ridge Bungalow, 0-100 ft (0-30 m), BL, ♂, 12-15.V.1976; ♂, 1.I.1977, K.V.Krombein, et al.

ZMHB: (*flavoguttata*) Lectotype ♀, Sri Lanka: Nietner.

Tribe PHYLLYPHANTINI Melichar

Phyllyphantini, Melichar, 1923: 42, subtribe; Metcalf, 1957: 180, Phyllyphantina, catalog; Medler, 1991a: 27 Phyllyphantini, tribe; Medler, 1992: 1, Phyllyphantini, revision.

6. Genus *Lasura* Medler

Lasura Medler, 1992: 17, gen. n.; Type species: *Lasura separata* Medler, monobasic.

Diagnosis: Head obtusely conical, anterior margin without sharp carina, frons narrowed dorsally. Tegmen costal cell at bulla twice wider than precostal area. Postclaval sutural margin extended at angle, meeting apical margin at sharp angle, tegmen apex marked with marginal black dashes.

Color grass green. Vertex, frons, sutural margin of tegmen, and male genitalia illustrated by Medler, 1992, figs 27-30. Characters of the male genitalia are diagnostic. Length: 9.0 - 10.25 mm. Hind leg spine formula 1:7:9 or 1:8:9.

Distribution: Sri Lanka, S. India, Thailand.

6.1 *Lasura separata* Medler

Lasura separata Medler, 1992: 17, figs 27-30, sp. n.; Holotype: ♂, Sri Lanka: Hunuwilagama, near Wilpattu, Hevel, et al., USNM.

Specimens examined: Medler, 1992: 17, Sri Lanka records:

BPBM ex USNM: Chundikkulam Sanct., Hunuwilagama.

USNM: Holotype: ♂, Hunuwilagama, near Wilpattu; Allotype ♀, Olaithoduvai; Paratypes, Hunuwilagama, Mannar Isl., Puttalam.

7. Genus *Pulastya* Distant

Pulastya Distant, 1906: 417, gen. n.; Type species: *Phyllyphanta acutipennis* Kirby, original designation.

Pulastya: Metcalf, 1957: 201, catalog.

Pulastya: Medler, 1992: 27, revision.

Diagnosis: Only genus in the tribe with R and S+M longitudinal veins arising from the basal stem of tegmen as shown in Fig. 8.

Distribution: Sri Lanka, India

Key to species

- Anterior margins of head and pronotum bluntly rounded; pronotum median carina not ridgelike *Pulastya acutipennis* (Kirby)
 Anterior margins of head and pronotum somewhat pointed; pronotum median carina sharply ridgelike *Pulastya dubia* (Kirby)

7.1 *Pulastya acutipennis* (Kirby)

Phyllyphanta acutipennis Kirby 1891: 156, pl. 6, fig. 6, sp.n.; Lectotype: ♂, Sri Lanka: Pundaloya, BMNH.

Phyllyphanta cornutipennis Melichar, 1902: 55, fig. 10.

Pulastya acutipennis: Distant, 1906: 417, fig. 217, Kandy, Maskeliya, Myitta, Tenasserim.

Colobesthes taprobana Kirkaldy, 1908: 13, sp. n.; Type: Sri Lanka, Dodanduwa, 8.iv.1907, not found.

Colobesthes taprobana: Metcalf, 1957: 152, catalog.

Pulastya acutipennis: Metcalf, 1957: 201, catalog.

Pulastya cornutipennis: Metcalf, 1957: 201, catalog.

Pulastya acutipennis: Medler, 1992: 27, figs 37-40, type data, revision.

Colobesthes taprobana: Medler, 1992: 28, note re ?synonymy.

Colobesthes taprobana: Medler, jr syn of *acutipennis*, here designated, syn. n.

Diagnosis: Habitus illustrations by Kirby 1891, pl. 6, fig. 6, Melichar, 1902, pl. 3, fig. 10, and Distant, 1906, fig. 217. Lectotype ♂ genitalia illustrated by Medler, 1992, fig. 37. Length 12.5-14.0 mm. Hind leg spine formula 2:6:6 - 2:6:8.

Specimens examined:

BMNH. Lectotype ♂, Sri Lanka: Pundaloya, 90-115, Green coll. Paralectotypes ♂, ♀, Pundaloya, 90-115, Green coll; ♀,

Pundaloya, 92.6, Atkinson Coll.

BPBM ex USNM: Gilimale, ♂ ♀, 17-18.V.1975, S.L.Wood & J.L.Petty.

USNM: Medler, 1992: 27: Colombo, Enselwatte, Inginiyagala, Kanneliya, Kanneliya Forest, Mirigama Scout Camp, Teldeniya, Uygalkaltota.

USNM: New records: Ratnapura District, Gilimale, 5♂, 3♀, 17-18.v.1975, S.L.Wood & J.L.Petty; Kandy District, Udawattekelle, ♂ 4 ♀, 30.x, 3-16.xi.1966, J.F.G. & T.Clarke.

7.2 *Pulastya dubia* (Kirby)

Phyllyphanta dubia Kirby 1891: 157, sp. n. Holotype ♀, Sri Lanka: Putlam, Green coll, 90-115,

BMNH. Plesiotype ♂, Sri Lanka: Inginiyagala, USNM.

Pulastya acutipennis: Metcalf, 1957: 201. catalog, syn error.

Pulastya dubia: Medler, 1992: 28, fig 36, revision.

Diagnosis: Plesiotype ♂ genitalia illustrated by Medler, 1992a, fig 36. Length: 11.75-12.25 mm. Hind leg spine formula: 2:6:6.

Specimens examined:

BMNH: Holotype: ♀, Sri Lanka: Putlam, 90-115, Green coll. Medler, 1992a: 28. Alutnuwara, Putlam.

BPBM ex USNM: Sigiriya, 800 ft (244 m), ♂, 13-14.xi.1976; Palatupana, ♀, 3.II.1975.

USNM: Medler, 1992: 28. Hasalaka Circuit Bungalow, Inginiyagala, Palatupana, Sigiriya, Yala National Park.

Subtribe LAWANINI Melichar

Lawanini Melichar, 1923: 36, subtribe.

Lawanina Metcalf, 1957: 202 catalog, subtribe.

Lawanini Medler, 1991: 29, tribe.

8. Genus *Cromna* Walker

Cromna Walker, 1857a: 85, gen. n. Type species: *Cromna acutipennis* Walker, monobasic.

Cromna, Metcalf, 1957: 188, catalog. Medler 1996: Borneo, fig 54 *sinensis* head

Diagnosis: Head conical; lateral margins of frons strongly carinate, flared outward basally; lateral triangular remnants of vertex posterior to strong intergenal transverse carina. Pronotum triangular, strongly raised longitudinal median carina and sharp lateral carinae curving from interior margin to near postocular eminence; mesonotum tricarinate. Tegmen with 3 longitudinal veins arising from basal stem; middle of disc with or without tangled knot of crossveins derived from branches of vein M; apical margin truncate, meeting postclaval sutural margin at acute angle; irregular segments of lines of apical crossveins not forming contiguous submarginal line; C and M cells reticulated, Cu not forked, terminating at apex of clavus; very short Y-stem in apex of clavus. Size medium.

Habitus illustration by Kirby, 1891, fig. 5, and Distant, 1906:415, fig. 215. Plesio-type ♂, Gilimale BPBM ex USNM, genitalia shown in fig 13. Measurements. Length 15 mm: v 1.00; f 2;16; p 0.83; m 2.66; t 12.0. Width: v 1.08; f 1.33; t 8.0. Hind leg spine formula: 2:7:7.

Distribution: Sri Lanka, SE Asia.

8.1 *Cromna albopunctata* (Kirby)

Phyllyphanta albopunctata Kirby, 1891: 156, pl. VI, fig.5, sp. n.; Holotype ♀, Sri Lanka: Kandy, Green collection, 90-115, BMNH,

Phyllyphanta albopunctata: Metcalf, 1957: 182, catalog.

Cromna albopunctata: Medler, 1992: 4, comb.

Specimens examined:

BMNH: Sri Lanka:Kandy, holotype ♀, Green coll.,90-115. Kandy, ♂, X-1906; Yatiyantota, ♀ [no data].

BPBM ex USNM: Ratnapura District: Gilimale, ♂, ♀, 17-18.V.1975, Wood & Petty.

NHRS: Sri Lanka: ♀, [no data].

NHMW: Andamanen, ♂, Pòst II 1878.

USNM: Sri Lanka: Colombo District: Mirigama Scout Camp, ♀, 8-9.VII.1978, BLT, Krombein, et al.; Kandy District: Udawattekella, ♂, 4♀, 30.X-16.XI.1966, J. & T. Clarke; Ratnapura District: Gilimale, 5 ♂, 3 ♀, 17-18.V.1975, Wood & Petty.

Tribe ORMENISINI Medler

Ormmenisini Medler, 2001: 350 (status n.).

9. Genus *Planata* Medler

Planata Medler, 1999: 32, gen. n.; Type species: *Ormenis taeniata* Schmidt, original designation.

Diagnosis: Head shorter than pronotum, frons length/width equal, dorsal half with median longitudinal carina, dorsal margin rounded onto dorsum of head, frons replacing vertex, posterior margin delimited by transverse intergenal carina; pronotum postocular eminence slightly rounded, not ridged. Tegmen with 3 longitudinal veins (R,S,M) arising from basal stem, apex truncate, apical margin meeting sutural margin at right angle, subapical line of crossveins slightly irregular, continuous from R+C to claval apex; Much branching of terminal veins in subapical area, claval veins wih short Y-stem. Length: 9-10 mm. Metatibial spines 2:7:8.

Habitus illustration by Distant, 1916: 129, fig. 94; Genitalia of holotype illustrated by Medler 1990: fig. 38. The configuration of genital characters is similar to the pattern found in *Walena* Medler, 1999:35, except the style differs.

Distribution: Sri Lanka, SE Asia.

Taxonomic note: Distant assigned new species from Sri Lanka to *Paranotus* Karsch, a genus with distribution in Africa. Any resemblance in the *Ormenis*-like head and longitudinal red lines on the dorsum shown by *Paranotus rufilineus* Walker is superficial.

9.1 *Planata limbata* (Distant)

Paranotus limbatus Distant, 1912: 467, sp. n.; Holotype ♂, Sri Lanka: Horton Plains, BMNH.

Paranotus maculosus Distant, 1912: 468, sp. n. Holotype:♀, Sri Lanka: Pattipola, BMNH.

Paranotus limbatus: Metcalf, 1957: 123, catalog.

Paranotus maculosus: Metcalf, 1957:123, catalog.

Melicharia limbatus: Medler, 1990: 172, fig 38., comb.

Melicharia maculosus: Medler, 1990: 172, jr. synonym of *limbatus*.

Planata limbata: Medler, 1999: 33, comb.

Specimens examined:

BMNH: Sri Lanka: Namunukuli, 2-1910.

MZLU: Sri Lanka: Central Prov.; Horton Plains, 7600 ft (2316 m), 11 mls SSE Nuwara-Eliya, ravine with stream, ♂, 9-20.III.1962, Lund Univ. Exp.; Knuckly Mts., 15 mls NE Kandy, veg. at small stream, ♀, 11.III.1962, Lund Univ. Exped; E. Prov., Madura Oya, 15 mls NNW Bibile, dry veg. by stream, ♂, 13.III.1962, Lund Univ. Exped.

10. Genus *Anaya* Distant

Anaya Distant, 1906: 447, gen. n. Type species: *Flatoides mesochlorus* Walker, 1851, original designation.

Anaya, Metcalf, 1957: 439, catalog.

Diagnosis: Tegmen with submarginal line; no forking in the submarginal area and practically none in area basad of the line. A crease or pseudoline extending from claval apex, but there are no crossveins in the crease. Veins R and S arise together from basal stem, sometimes origin is difficult to see because of pustules obscuring detail and the displacement of vein S by bulla. Valvulae III of ♀ with heavy teeth. Anal plate narrow.

Taxonomic note: Distant's diagnosis of this genus erroneous in several aspects. The tegmen venation is not 2 subapical lines. The type shows one subapical line and a pseudoline. The pseudoline actually is a "crease" that crosses apex of tegmen obliquely along with submarginal line.

Distribution: Sri Lanka, Oriental Region.

10.1 *Anaya conflicta* (Melichar)

Ormenis conflicta Melichar, 1902: 83, sp. n.; Holotype ♀, Sri Lanka: Trincomale, 600/53, A. Humbert, MHNG.

Melicharia obtusangula Distant, 1912:463, sp. n., lectotype ♂, southern India: Trevandrum, design by Ghauri, 1973: 543, fig. 8, BMNH.

Melicharia lactifera Walker, Metcalf, 1957:323, catalog syn. error.

Melicharia conflicta: Metcalf, 1957: 325, catalog.

Melicharia obtusangula: Metcalf, 1957: 325, catalog.

Melicharia conflicta: Ghauri, 1973: 543, fig 2, lectotype data.

Melicharia obtusangula: Ghauri, 1973: 543, fig 8, type data.

Melicharia obtusangula: Medler, 1990: 176, type data.

Melicharia conflicta: Medler 1993: 38, fig 17, type data.

Anaya conflicta: Medler, 2003: 593, fig 4, comb.

Diagnosis: Head not produced; pronotum without postocular eminence. Tegmen uniformly faded green, stramineous, veins white, R,S,M veins. Tegmen illustration, Medler, 2003, fig 4, shows apical angles rounded, apical margin with linear arrangement of veins, continuous line of subapical crossveins, and oblique inner crease extending from claval apex. Male genitalia shown by Ghauri, 1973, fig 8 (as *obtusangula*), and Medler, 1993, fig. 17.

Measurements: Holotype ♀, plesiotype ♂. Length: overall 9.0, 7.5 mm; v 0.46 0.17; f 1.16, 1.16; p 0.50, 0.33; m 2.16, 1.66; t 7.97, 6.47; pcl 1.99, 1.99. Width: v 0.83, 0.83; f 1.08, 1.00; t 4.15, 3.98. Hind leg spine formula: 2:6:8, 2:6:10.

Specimens examined:

BMNH: Colombo, ♀, Hakgala, ♀, Paradeniya, ♂. Lectotype ♂ India: Trivandrum, Atkinson coll, Medler, 1990:176.

MHNG: Sri Lanka: Trincomalia, Holotype ♀.

MZLU: Sri Lanka: W. Province, Beruwala, ♂, 7 ♀; S. Province, Telwatatta Sanctuary, ♀. Lund Univ Exped.

USNM: Amparai District, Gel Oya Nat. Park, ♂, 23.XI.1976, BLT, Hevel, et al; Inginiyagala, ♂, 21-24.XI.1976, BLT, Hevel, et al. Kandy District, Kandy, ♀, 23.xi.1974, Gans, et al; Kandy, Peak View Motel, ♀, 7-14.I.1970, 1800 ft. Davis & Rowe; Rajapihilla, Mawatha, ♀, 31.X.1966, J. & T. Clarke; Udawattekelle, ♂, J. & T. Clark. Matale District, Bandarapola, ♂, 12.V.1974, Gans & Prasanna.

10.2 *Anaya proxima* (Melichar)

Ormenis proxima Melichar 1902: 83, sp. n.; Holotype ♀, Sri Lanka, (no locality), Felder, det Melichar, NHMW.

Anaya proxima: Metcalf, 1957: 441, catalog.

Anaya proxima: Medler, 1987: 536, type data.

Anaya proxima: Medler, 1993: 41, fig 15, Sri Lanka: Pattipola, plesiotype ♂ design.

Anaya proxima: Medler, 2003: 596, type data.

Diagnosis: Tegmen apex truncate, costal and sutural angles convex, configuration similar, subapical line of crossveins extending from R+C to claval apex. Holotype: valvulae III with 3 large teeth; plesiotype measurements and illustration of male genitalia given by Medler, 1993e: 41, fig 15.

Measurements: Plesiotype ♂. Length: overall 7.5 mm.; 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.

Specimens examined:

HNHM: Plesiotype ♂, ♀, Pattipola, 2,000 m, 1902, Biro, det Melichar, Medler, 1993e: 41, fig 15.

NHMW: Holotype ♀, Sri Lanka, 1861, Felder coll., Medler, 1987: 536;

11. Genus *Melicharia* Kirkaldy

Melicharia Kirkaldy, 1900: 294, gen. n. Type species: *Melicharia sinhalana* Kirkaldy, new n. for *Poeciloptera quadrata* Kirby 1891 not *Poeciloptera quadrata* Walker 1851.

Ormenis Melichar, 1902: 64 [error].

Melicharia: Metcalf, 1957: 320, catalog.

Melicharia: Medler, 1999: 30, combinations.

Diagnosis: Frons convex, margined dorso-posteriorly by transverse intergenal carina next to pronotum, median longitudinal carina extending nearly full length of frons; vertex displaced, triangular remnants concealed beneath anterior margin of pronotum; pronotum lateral carinae ending vertically to nearly reach conical postocular eminence; longitudinal carina weak or absent on disc of pro- and mesonotum. Tegmen apical margin slightly convex, costal margin narrowly convex, sutural angle about a right angle; strong marginal line from claval apex to costal margin, submarginal area narrow, terminal veins distad and basad of submarginal line with few forks, diagonal wale of costal angle weak or absent, longitudinal veins R,S,M arising from basal stem, vein S1 simple, vein Cu once

forked, both branches joining postclaval submarginal line; ovipositor adapted for piercing, Two metatibial lateral lines. Size small.

Male genitalia of *sinhalana* is shown in fig. 20 .

Distribution: Sri Lanka, Oriental Region.

11.1 *Melicharia sinhalana* Kirkaldy

Melicharia sinhalana Kirkaldy, 1900: 295, new n. for *Poeciloptera quadrata* Kirby, 1891: 154, pl. VI, fig. 8, sp. nov., not *quadrata* Walker, 1851. Holotype: ♀, Sri Lanka: Putlam, Green coll, 90-115, BMNH.

Melicharia sinhalana: Metcalf, 1957: 325, catalog.

Specimens examined:

BMNH: Holotype: ♀, Sri Lanka: Putlam, 90-115, Green Coll.

USNM: Sri Lanka: Galle District: Kanneliya Forest, ♀, 17.V.1974, BLT, Gams & Petty; Kanneliya Jungle, ♂ ♀, 11-16.I.1975, BLT, K.V.Krombein, et al. Kalutara District: Morapitiya, nr Agalawatta, ♂ 2♀, 13-14.X.1976, G.F.Hevel, et al. Kandy District: Kirivan Ellya, Sigira-Alle, 3000 ft (914 m), ♀, 28.IX.1970, O.S.Flint, Jr.; Udawattekelle, 3♂, ♀, 3-4.x.-13.XI,1966, J. & T. Clarke. Kegalle District: Kitulgala, Bandarakele Jungle, ♂, 17-18.III.1979, K.V.Krombein, et al. Matale District Enelwatta, above 2500 ft (762 m), ♀, 19-20.x.1975, G.F.Hevel, et al.

12. Genus *Hilavrita* Distant

Hilavrita Distant 1906: 432, gen. n. Type species: *Hilavrita trimaculata* Distant, original designation.

Junior synonym of *Ormenis fatua* Melichar, here designated;

Hilavrita, Metcalf, 1957: 371, catalog.

Diagnosis: Color pruinose; body dusted with dirty-colored waxy powder, which obscures teg veins. Tegmen with patterns of black smooth round spots, veins R,S,M, arising from basal stem, often obscured basally by pustules; apical margin truncate or oblique, pcl angle wide, C angle acute; subapical line of crossveins, about 20 terminals [OR Apical margin straight, angles similar; about 28 terminals apically]; sternite VII with distinct concave notch on posterior margin; valvulae III triangular, about 4 prominent teeth on dorsal margin. Smooth black spot near bulla and clavus is diagnostic.

Distribution: Sri Lanka, Oriental Region.

Key to species

Tegmen apical margin truncate; terminal veins ca 36..... *H. fatua* (Melichar)

Tegmen apical margin oblique; terminal veins ca 22*H. obliqua* Distant

12.1 *Hilavrita fatua* (Melichar)

Ormenis fatua Melichar, 1903: 90, sp. n.; Lectotype: ♂, Sri Lanka: Putalan (sic!), HNHM.

Hilavrita fatua: Distant, 1906: 433, comb.

Hilavrita trimaculata Distant, 1906: 433, fig. 227, sp. n.; Lectotype: ♂, Sri Lanka: (no locality), Green coll; BMNH;

Hilavrita fatua: Metcalf, 1957: 372, catalog.

Hilavrita trimaculata: Metcalf, 1957: 372, catalog.

Hilavrita trimaculata: Medler, 199a: 182, fig. 49, lectotype data.

Hilavrita trimaculata: Medler, here design, jr syn of *H. fatua*, syn. n.

Diagnosis: Characteristic dark brown spots of tegmina shown in habitus illustration of Distant, 1906: 433, fig. 227; corium reticulations reaching apical submarginal line;

margin of sternite VII with shallow U-shaped notch; measurements, and illustration of paralectotype ♂ genitalia by Medler, 1990, fig. 49. Measurements of length recorded by Melichar, ♀ 7 mm, ♂ 6 mm:

Male genitalia is shown in fig 16.

Taxonomic note: The lectotype ♂ of *Ormenis fatua* Melichar from Puttalam is the same species as the lectotype ♂ of *Hilavrita trimaculata* Distant from Sri Lanka, precise locality unknown.

The male syntype cited at Budapest by Melichar in original publication was not found. The location of a syntype in Kirkaldy collection is unknown.

Specimens examined:

BMNH: (*trimaculata*) Lectotype: ♂, Paralectotypes, 2 ♂, 4 ♀, Sri Lanka: Green coll., 95-221; Paralectotype ♀, 49, paralectotype ♂ genitalia.

HNHM: (*fatua*) paralectotype ♀, Pundaloya, VIII.1898, coll Kirkaldy.

USNM: SRI LANKA: Kandy District: Laksapana, 1200 ft (366 m), ♀, 23-29.IX.1970, ♀, O.S.Flint, Jr.; Kegalle District: Kitulgala, ♂, 31.V.1975, S.L.Wood & J.L.Petty; Ratnapura District: Kukula Ganga, 1000 ft (305 m), BL, ♂, 16.IV.1973, Baumann & Cross.

12.2 *Hilavrita obliqua* Distant

Hilavrita obliqua Distant, 1912: 464 sp. n. Lectotype: ♂, Sri Lanka: Hambantota, Fletcher, BMNH.

Hilavrita obliqua: Metcalf, 1957: 372, catalog.

Hilavrita obliqua: Medler, 1990: 175, fig. 45, lectotype data.

Diagnosis: Tegmen elongate, apical margin strongly oblique.

Lectotype: Genitalia illustrated by Medler, 1990: 175, fig. 45. Length: 7.5 mm. Hind leg spine formula: 2:8:9.

Male genitalia of *obliqua* is shown in fig. 17.

Specimens examined:

BMNH: Lectotype: ♂, Sri Lanka: Hambantota, 17.x.1908, T.B.Fletcher; paralectotype ♀, Sri Lanka: [no locality], T.B.Fletcher.

USNM: Sri Lanka: Anaradhapura District, Wildlife Society Bungalow, Hunuwilagama, Wilpatu, 200 ft. ♀, 10-19.III.1970, Davis & Rowe. Kandy District, 5 mi NW Mahiyangama, ♀, 30.III-9.IV.1971, P. & P. Spangler. Ratnapura District, Panamure, 50 ft., ♀, 15-21.X.1970, O.S.Flint Jr.

13. Genus *Ketumala* Distant

Ketumala Distant, 1906: 446, gen. n.; Type species: *Seliza bisecta* Kirby, original designation.

Ketumala, Metcalf, 1957: 436, catalog.

Diagnosis: *Ketumala* specimens usually have dark brown/black appearance. May consist of 2 complexes difficult to separate. Color overall is dark brown to black; light to darker shades.

Head truncated, or nearly so, margin shallow convex; frons ratio length to width about 1:1; frons/vertex no margin between; note the slight projection anteriorly due to median carina. This projection does not show as much in *Ormenis* forms. Transverse in-

tergenal carina hidden by pronotum margin; vertex raised medially, depressed on each side.

Postocular eminence small conelike.

Tegmen pcl rectangular, 18 terminals on apical margin. Veins R,S,M, narrow submarginal area, origin of vein S may be obscured by cluster of pustules, S vein with fork, subapical line forms narrow marginal area, wider area at cl apex; disc with heavy reticulations, which extend to subapical line; apex of tegmen can be convex, rounded at both angles, or truncate oblique, costal angle slightly obtuse, sutural angle slightly acute. Cu is forked. S is forked. One submarginal, wider area at cl apex; pcl margin projected from cl apex straight, or only slightly convex. Metatibial lateral spines 2.

Female genitalia segment III oval with spines along margin; or triangular with few spines apically; margin without a median notch.

Distribution: Sri Lanka; India.

Key to species

1. Frons in lateral view with curvature. Tegmen with distinct white line along claval suture; apical margin uniformly convex..... 13.1 *Ketumala bisecta* Kirby
- Tegmen without white line 2
2. Tegmen apical margin undulate..... 13.2 *Ketumala farinosa* Distant
- Tegmen apical margin convex 3
3. Tegmen not elongated, 1 submarginal line of apical crossveins..... 13.3 *Ketumala nigropunctata* (Kirby)
- Tegmen elongated, narrow submarginal cell. 13.4 *Ketumala sinuata* Distant

13.1 *Ketumala bisecta* (Kirby)

Seliza bisecta Kirby, 1891: 152, pl. V, fig. 5, sp. n. Holotype: ♀, Sri Lanka: Putlam, Green Coll.BMNH.

Ormenis conformis Melichar, 1902: 73, sp n.; holotype ♂, Sri Lanka: Trincomalia, Humbert, det Melichar, MHNG.

Ketumala bisecta: Distant, 1906:446, fig. 238, comb.

Melormenis conformis: Metcalf, 1957: 332, catalog, error.

Ketumala bisecta., Metcalf, 1957: 437, catalog.

Ketumala bisecta: Ghauri, 1971: 637, lectotype, error.

Ormenis conformis: Medler, 2003: 594.; fig. 6, jr syn of *Ketumala bisecta*, Kirby, syn n.

Diagnosis: In lateral view, frons curvature oval. The species does not have typical *Seliza* characters (other than dark color). Tegmen with distinctive white line along claval suture. Habitus figure by Kirby, 1891: 152, pl. 5, fig. 5, and Distant, 1906: 446, fig. 238. Length: 7 -8 mm. Hind leg spine formula 2:7:8. Measurements and male genitalia shown by Medler, 2003, fig 6, as *conformis*.

Male genitalia of *bisecta* is shown in fig. 18.

Specimens examined:

BMNH: Holotype ♀, Sri Lanka: Putlam, 20-115, Green coll. Sri Lanka: Dudanduwa, ♂, 8.IV.1907, T.B. Fletcher. Sri Lanka: Uva P. Madulsina, ♀, 23.xii.1908, T.B.Fletcher. Sri Lanka: Galgamuwa, ♂, 2 ♀, VII.1902; Kalawewa, ♂, 12-14.IV.1953, J.Pringle; Habaram, ♂, X.1906, Distant coll; Trincomali, ♂ 4 ♀, 8-22.VI.1907, Bainbrgge-Fletcher; Uhara, ♂, ♀, 13.vi.1953, dry jungle, J.W.S.Pringle; Vavunia N.P., ♀, 23.IX.1963, M. Speight, Univ. London Expedition.

BPBM ex USNM: Kanneliya, ♂, 22-24.V.1974, S.L.Wood & J.L.Petty; Kanneliya Jungle, ♀, 15-17.X.1976, 200 ft (61 m), BLT, G.F.Hevel, et al.; Hanuwilagma, Wilpattu, Wildlife Soc. Bungalow, 200 ft (61 m), ♂, 10-19.III.1970, Davis & Rowe; Padaviya, Irrigation Bungalow, ♀, 27.ii-9.iii.1970, 180 ft (55 m), Davis & Rowe.

MHNG: Sri Lanka: Trincolmalie, ♂, 600/53, A. Humbert.

MZLU: Sri Lanka: E. Province, Kuchkhaveli, 20 mi NW Trincomlee, ♂, 9-10.II.1962, Loc 60; Madura Oya, 15 mi, NNW Bibile, ♀, 13.VII.1962, loc 138; S. Province, Polhunawa, 5.5 mls ESE Ambalangoda, ♀, 26.I.1962, loc 23; Central Province, 20 mls E. Kandy, ♂, 12.III.1962, stream, loc 135; NW Prov, Swamps 10 mls E Puttalam, ♀, 2.II.1962, loc 45: Lund Univ Exped.

OXUM: Sri Lanka: Colombo, Mt. Lavinia, ♂, 8.I.1908, G.E.Longstaff.

USNM: Sri Lanka: Amparai District, Ekgal Aru Sanctuary, Jungle, 2 ♀, 9-16.III.1979, 2 ♀, Malaise trap, K.V.Krombein, et al.; Gal Oya Nat. Park, 5 mi SW Inginiyagala, 300 ft (91 m), ♂, ♀, 23/XI.1976, BLT, Hevel, et al.; Anuradhapura District: Hanuwilagama, Wilpattu, Wildlife Soc. Bungalow, 200 ft (61 m), 3 ♂ ♀, 10-19.III.1970, Davis & Rowe; Padaviya, Antiquities Site, ♀, 20-23.VII.1978, K.V. Krombein, et al.; Padaviya, Irrigation Bungalow, 180 ft (55 m), ♂ ♀, 27.II-9.III.1970, Davis & Rowe; Galle District: Kanneliya Jungle, ♀, 13-16.VIII.1972, Krombein & Karunaratne; Kanneliya Jungle, 300 ft (91 m), ♂ 28.VII.1973, G.Ekis; Kanneliya Jungle, Udugama, 400 ft. (122 m), ♂, 6-12.X.1973, BLT; Kanneliya Forest, ♂, ♀, 16-17.V. 1974, C.Gans & Prasanna; Hambantota District: Palatupana, 10 ft (3 m), ♂, 22-25.X.1970, O.S.Flint; Yala Nat. Park, sea level, 2 ♂ ♀, 3.VIII.1973, G.Ekis; Jaffna District: Chundikkulam Sanctuary, 25 ft (8 m), ♂, ♀, 7.XI.1976, BLT, Hevel, et al.; Kandy District: Hasalaka Circuit Bungalow, ♀, 30-31.V.1975, Messersmith, et al.; Mannar District: Madhu Road, Irrigation Canal, 50 ft (15 m), ♀, 23.III.1970, Davis & Rowe; Matale District: Kibissa, 0.5 mi W of Sigiriya, jungle, ♂ ♀, 28.VI-4.VII.1978, BLT, Krombein, et al.; Sigiriya, ♀, 18.VI.1975, Messersmith, et al.; Sigiriya, 800 ft (244 m), ♂, 14.XI.1976, BLT, Hevel, et al.; Ratnapura District: Udawalawa, 100 m, ♂, 1.X.1977, BLT, Krombein, et al.; Uggalkaltota, 500 ft (152 m), 2♀, 10-14.x.1970, O.S.Flint,Jr; Uggalkaltota, Irrig Bungalow, ♂, 31.I-8.II.1970, Davis & Rowe; Trincomalee District: China Bay, 200 ft (61 m), ♂, 9-11.XI.1976, BLT, Hevel, et al.; China Bay Ridge Bungalow, 0-100 ft (90-30m), ♂, 13-17.V.1976, Krombein, et al.; Kantalai, 6 mi SW, ♂, ♀, 23-26.VII.1978, BLT, Krombein, et al.; Vavuniya District: Parayanalankulam Irrigation Canal, 25 mi NW Medawachchiya, 100 ft (30 m), ♀, 20-25.III.1970, Davis & Rowe.

Taxonomic note: The unique ♀ recorded in Kirby's original description of *Seliza bisecta* was cited by Distant, 1906: 446, as the holotype when he erected the genus *Ketumala*. Syntypes were not recorded in Kirby's original description; therefore, lectotype and paralectotype designations by Ghauri, 1971:637, were invalid.

13.2 *Ketumala farinosa* Distant

Ketumala farinosa Distant, 1912: 466, sp. n. Lectotype: ♀, Sri Lanka, Hambantota, BMNH.

Ketumala farinosa: Metcalf, 1957: 437 (catalog);

Ketumala farinosa: Medler, 1990: 169, lectotype and paralectotype data. PLESIOTYPE Male from Sri Lanka: Kandy, USNM No. 250

Genitalia is shown in fig 19.

Specimens examined:

BMNH: Lectotype ♀, Sri Lanka, Medler, 1990: 169; Paralectotype ♀, Sri Lanka: Hambantota, 4.X.1908, T.B.Fletcher. Sri Lanka: Colombo, ♀, 13.V.1945, Howard; Kalawewa, ♂, 6.V.1953, Pringle; Kandy, ♂, 2.I.1910, ♀, VII.1902 (no other data); Paradeniya, ♂, VI.1910, ♂, VIII.1910, ♀, V.1911; Putlam, ♀, 90-115, Green coll.; Wellawaya, ♂, 21.1986, Williams; 2 ♀, XI.05 (no other data).

BPBM ex USNM: Ratnapura District: Uda Walawa, 300 ft (91 m), ♂, ♀, 1.VIII.1973, BLT, G.Ekis.

USNM: Sri Lanka: Anuradhapura District: Hanuwilagama, Wilpattu, Wildlife Soc. Bungalow, 200 ft (61 m), ♂, 10-19.III.1970, Davis & Rowe; Kandy District: Hasalaka 1000 ft (305 m), ♀, 30-31.III.1973, BLT, Baumann & Cross; Kandy, Peak View Motel, 1800 ft (549 m), ♂, 15-24.I.1970, Davis & Rowe; Ratnapura District: Panamure, 500 ft (152 m), 2 ♀, 15-21.X.1970, O.S.Flint, Jr.; Singharaja Forest, 600 ft (182 m), Malaise trap, ♀, 5.VIII.1973, G. Ekis; Uda Walawa, 300 ft (91 m), ♂, 1.VIII.1973, BLT, G.Ekis; Uggalkaltota, 350 ft (106 m), Irrig. Bungalow, ♀, 31.I-8.II.1970, Davis & Rowe; Trincomalee District: China Bay, 200 ft (61 m), ♂, 9-11.XI.1976, BLT, Hevel, et al.

13.3 *Ketumala nigropunctata* (Kirby)

Seliza nigropunctata Kirby 1891: 152, sp. n.; Holotype: ♀, Sri Lanka: Putlam, Green Coll, BMNH.

Ormenis fuscata Melichar, 1902: 73. sp. n.; lectotype ♀, Sri Lanka, MMBC.

Ormenis fuscata: Distant, 1906: 443, jr syn of *Seliza nigropunctata*, ? syn. n.

Seliza nigropunctata: Metcalf, 1957: 408, catalog.

Ketumala nigropunctata: Ghauri, 1971: 637, figs 9-10, comb n.

Ormenis fuscata: Medler, 2003: 596, jr. synonym of *Seliza nigropunctata*, syn.confirmed.

Ketumala nigropunctata: Medler, here designated, comb. n.

Specimens examined:

BMNH: Sri Lanka, (*nigropunctata*), holotype ♀, Putlam, Green coll.

MMBC: Sri Lanka, (*fuscata*), lectotype ♀, no specific locality.

Taxonomic note: Not to be confused with *Anaya nigropunctata* Distant, with Oriental distribution.

13.4 *Ketumala sinuata* Distant

Ketumala sinuata Distant, 1912: 466 sp. n.; holotype ♂, Sri Lanka: Weligama, Fletcher, BMNH.

Ketumala sinuata: Metcalf, 1957: 438, catalog.

Ketumala sinuata: Medler, 1990: 181, fig. 55, type data.

Diagnosis: Distant wrote, "allied to *bisecta*; more elongate tegmen, more sinuate before apex, paler in color." Holotype genitalia Medler, 1990:181, fig 55.

Measurements from holotype ♂. Length: 8.0; v 0.29; f 0.95; p 0.37; m 1.66; t 5.48. Width: v 0.79; f 1.08; t 2.99. Spine formula: 2:6:7.

Specimens examined:

BMNH: Holotype: ♂, Weligama, Fletcher, Medler, 1990: 181, fig. 55.

USNM: Sri Lanka: Anuradhapura District: Hanuwilagama, Wilpattu, Wildlife Soc. Bungalow, 200 ft (61 m), ♀, 10-19.III.1970, Davis & Rowe; Kandy District: Mahiyangana, 5 mi NW, ♀, 30.III.-9.IV.1971, P. & P.Spangler; Ratnapura District: Panamure, 500 ft (152 m), 2 ♀, 15-21.x.1970, O.S.Flint, Jr.

Tribe SELIZINI Melichar

Selizaria Distant 1906:440 (division);
 Selizini Melichar, 1923: 86 (Tribe);
 Selizini Metcalf, 1957: 403 (catalog)

14. Genus *Gomeda* Distant

Gomeda Distant, 1906: 443, gen. n.; Type species: *Phalaenomorpha abdominalis* Kirby, original designation.

Gomeda: Metcalf, 1957: 420 (catalog).

Diagnosis: Habitus illustration by Distant, 1906: 44, fig 236. The tegmen shown in fig. 10 is reproduced from Distant, fig 236.

Distribution: Sri Lanka

14.1 *Gomeda abdominalis* (Kirby)

Phalaenomorpha abdominalis Kirby 1891: 151, pl. 5, fig. 16, sp. n.; Lectotype: ♂, Sri Lanka: Green coll, here designated, BMNH.

Ormenis abdominalis: Melichar, 1902:75, comb.

Gomeda abdominalis: Distant, 1906: 444, fig 236, comb.

Gomeda abdominalis: Metcalf, 1957, catalog.

Specimens examined:

BMNH: Lectotype ♂, Sri Lanka:[no locality]; Paralectotypes, Pundaloya, 2 ♀, Green coll, 90-115.

15. Genus *Satapa* Distant

Satapa Distant, 1906: 426, gen. n.; Type species: *Satapa sicula* Distant, original designation.

Satapa: Metcalf, 1957: 179, catalog.

Diagnosis: Habitus illustration by Distant, 1906: 426, fig 224, and Distant, 1916: 1916: 118, fig. 88. Tegmen fig. 10 is reproduced from Distant, fig. 224.

Male genitalia of *sicula* is shown in fig. 21.

Distribution: Sri Lanka

15.1 *Satapa sicula* Distant

Satapa sicula Distant, 1906: 426, fig. 224, sp. n.; holotype ♀, Sri Lanka: Puttalam, BMNH.

Satapa tuberculosa Distant, 1914: 421, sp. n.; holotype ♀, India: Coimbatore, BMNH.

Satapa sicula: Metcalf, 1957: 179, catalog.

Satapa tuberculosus: Metcalf, 1957: 179, catalog.

Satapa sicula, Medler: 1990: 181, type data.

Satapa tuberculosa: Medler, 1990: 183, type data, design. jr syn of *sicula*

Specimens examined:

BMNH: Sri Lanka: Puttalam, holotype ♀, Distant coll.; Putlam, ♀, 90-115 Green coll.; Maha Illupalama, ♀, VII.1912, J.C.Fryer; Vavunia, N.P., ♀, 23.IX.1963, M. Speight, London Univ. Exped.

MZLU: Sri Lanka: N. Prov., Paraiyanalankulua, ♀, 15.II.1962, Lund Univ. Exped.

USNM: Sri Lanka: Mannar District: Mannar, 4 mi NW, ♂, 3.XI.1976, 100 ft (30 m), BL, Hevel, et al.; Olaithoduvai, 10 mi of Mannar, ♀, 4-5.XI.1976, 0-50 ft (0-15 m), BL, Hevel, et al.

Subfamily FLATOIDINAE Melichar

Flatoidinae Melichar 1902: 131,

Flatoidesaria, Distant 1906: 449, Flatoidinae, Metcalf 1957: 465, catalog.

15. Genus *Bochara* Distant

Bochara Distant, 1906: 463, gen. n.; Type species: *Phalaenomorpha parva* Kirby, 1891, original designation;

Bochara: Metcalf, 1957: 513, catalog.

Diagnosis: Frons narrow, with median carina on dorsal half, dorsal margin slightly undulate; vertex disc depressed, with median longitudinal carina; pronotum without postocular eminence. Tegmen, narrow, elongated; R+S, M veins arising from basal stem, vein C interrupted apically by R and S veins terminating at costal margin; subapical line of crossveins arising at cl apex. Female valvulae III with 4-5 thick short spines, anal plate oval, the apex folded over valvulae. Length: 8.5-10.5 mm. Metatibial spines 2.

Habitus illustrations of *nebulosa* (Distant, 1906, fig 252) and *parva* (Distant 1906, fig. 251). Vertex as broad as long, lateral margins of frons nearly parallel, finely ridged. Tegmen shape shown by Distant, 1906, fig 251, is reproduced in fig. 11. veins darker than pale ochraceous membrane, R + S, M venation, elongated Y-stem in clavus apex. Lengths: 8.5 mm.- 10.5 mm. Metatibial spines 1:6:8.

Distribution: Sri Lanka.

16.1 *Bochara parva* (Kirby)

Phalaenomorpha parva Kirby 1891: 151 sp. n.; Holotype ♂, Sri Lanka, Pundaloya, Green coll. BMNH.

Atracis parva Melichar, 1902: 195, pl 6, fig. 6, Pundoluoja [sic], Kirkaldy coll., not found.

Bochara parva: Distant: 1906: 463, fig. 251.

Bochara nebulosa: Distant, 1906: 464, fig. 252, sp. n.;, Lectotype ♀, Sri Lanka, Maskeliya, Distant coll. BMNH.

Bochara nebulosa: Metcalf, 1957:514, catalog.

Bochara parva: Metcalf, 1957: 514, catalog.

Bochara nebulosa: Medler, 1990: 175, type data.

Bochara nebulosa: Medler, here design, jr syn of *parva*, Syn n.

Bochara parva: Medler, here design, sr synonym, Syn n.

Specimens examined:

BMNH: (*parva*) Holotype: ♂, *Phalaenomorpha/parva*, Sri Lanka, Pundaloya, Green Coll/90-115. (*nebulosa*) Lectotype: ♀, paralectotype ♀, Sri Lanka: Maskeliya, X-05, Distant coll..

Taxonomic note: Both *B. parva* Kirby and *B. nebulosa* Distant are known from type specimens in BMNH. The ♀ from Pundaloya in Kirkaldy's collection that was recorded by Melichar, 1902: 195, was not found and may be lost. No specimens were collected during the USNM Sri Lanka Expeditions. There is a possibility that *Bochara* was a monotypic genus that is now extinct. *B. parva* sensu Melichar, 1902, pl. VI, fig. 6, atypical, and appears to be *Gaja* sp.

17. Genus *Cerfennia* Stål

Flatoides (Cerfennia) Stål, 1870: 774, subg. nov. Type species: *Cerfennia philippinus* Stål, 1870, monobasic.

Rabocha Melichar, 1923: 109, gen. nov. Type species: *Rabocha philippina* Melichar, 1923, original designation.

Cerfennia, Metcalf, 1957: 473, catalog.
Rabocha: Metcalf, 1957: 473, catalog.

Diagnosis: Frons elongate, widened above eyes, vertex longer than wide, anterior margin obtuse, longitudinal median sulcus. Pronotum without postocular eminence, in lateral view strongly upcurved from head. Tegmen precostal margin more or less undulate, width at bulla 2-5 times width of costal cell, R+S and M veins arising from basal stem. Clavus anal vein 1 strongly undulate, connected to sutural margin by several crossveins. Valvulae III elongate, the apex narrowed and pointed or slightly widened and truncated, fitted with gradated array of 4-8 large to small teeth. Length: 14-18 mm. Metatibial spine 1.

Distribution: Sri Lanka, SE Asia.

Taxonomic note: This genus is rarely collected in Sri Lanka. Specimens were not found in the Smithsonian collections. Based on study of the literature I have recognized 14 species of *Cerfennia* named from Sri Lanka by Stål, Walker, Distant and Melichar. Twelve species are represented only by type females. Authors relied in large part on differences in tegminal markings for species descriptions. This character is extremely variable, and needs support from characters of male and female genitalia for valid classification of taxa. Future collections of male specimens and study of genital characters are necessary for satisfactory knowledge of taxa comprising this genus.

Key to species

- 1. Tegmina with saddlelike cross band 17.1..... 17.1 *emersoniana* Walker
- Tegmina without markings or saddlelike crossband 2
- 2. Costal margin strongly sinuate 17.2 *erosipennis* Stål
- Costal margin not sinuate 3
- 3. Tegmina without conspicuous spots or lines 17.3 *munita* Melichar
- Tegmina heavily marked with spots or lines 4
- 4. Tegmina with elongated lines 17.4 *perplexa* Walker
- Tegmina with spots only 17.5 *nalandensis* Distant

17.1 *Cerfennia emersoniana* (Walker)

Elidiptera emersoniana Walker, 1858b: 73, sp. nov. Holotype: ♀, Sri Lanka, [no locality], BMNH.
Atracis latifasciata Melichar 1902: 187, pl. 9, fig. 14, sp. nov.; Holotype: ♀, Sri Lanka: Kandy, MMBC;
Atracis emersoniana: Metcalf, 1957:482, catalog.
Atracis latifasciata: Metcalf, 1957:482, catalog, jr. syn., (error).
Staliana emersoniana: Medler, 1988:18, comb.
Staliana latifasciata: Medler, 1988:18, comb.
Staliana emersoniana., Medler, 1990: 141, type data.
Staliana latifasciata: Medler, 2003:350, type data.
Cerfennia latifasciata: Medler, jr. syn., here desig.
Cerfennia emersoniana: Medler, sr. syn, here design.

Diagnosis: Habitus illustrations, Melichar (1902:187, fig 14), Distant (1906:451, fig 241). Tegmen fig. 1 is reproduced from Melichar's fig. 14. Tegmen with basal saddlelike marking, heavily dusted with white wax, tegmen venation and markings may be obscured, costal margin undulate, line of subapical crossveins not well developed. Valvulae III narrow, elongate, apex with 6 -8 small to large gradated teeth. Length: 16 mm. Hind leg spine formula: 1:6:6.

Found on lichen-covered trunks of trees.

Specimens examined:

BMNH: *emersoniana* holotype ♀, Sri Lanka [no locality]. *emersonia*, Medler, 1990:141, type data.

MMBC: *latifasciata* holotype ♀, Kandy, VIII.1897, Kirkaldy coll., det Melichar.

Taxonomic note: According to Distant, 1906: 453, *emersoniana* and *consanguinea* have similar morphology, but considerable diversity in tegminal markings. Possibly 2 distinct species or only varietal forms of one species, but data too dissimilar for arrangement without further knowledge.

17.2 *Cerfennia erosipennis* (Stål)

Phalaenomorpha erosipennis Stål, 1858:451, sp.n., holotype ♀ Sri Lanka [not found], NHRS.

Atracis greeni Distant, 1912: 469, sp. n., holotype ♂, Sri Lanka: Peradeniya, BMNH

Atracis haragamensis Distant, 1912: 469 sp. n.; Holotype: ♀, Sri Lanka, Haragam, BMNH.

Atracis clypeata Distant, 1914: 422 sp. n. holotype ♀, Sri Lanka, BMNH.

Atracis clypeata: Metcalf, 1957:481, catalog.

Atracis erosipennis: Metcalf, 1957:483, catalog.

Atracis greeni: Metcalf, 1957:485, catalog.

Atracis haragamensis: Metcalf, 1957:485, catalog.

Atracis erosipennis: Medler 1986c:326, note on type.

Staliana clypeata: Medler, 1988:18, comb.

Staliana erosipennis: Medler:1988:18. comb.

Staliana greeni: Medler:1988:18, comb

Staliana haragamensis: Medler, 1988:18, comb.

Staliana clypeata: Medler, 1990:166, type data.

Staliana greeni: Medler, 1990:170, type data.

Staliana haragamensis: Medler, 1990:171, type data.

Cerfennia clypeata: Medler, here design, jr. syn.

Cerfennia greeni: Medler, here design, jr. syn.

Cerfennia haragamensis: Medler, here design, jr. syn.

Cerfennia erosipennis: Medler, here design, sr. synonym.

Diagnosis: Habitus illustration Fig 96 by Distant, 1916:133 used for reproduction of tegmen fig. 2. Tegmen undulate, precostal margin at bulla 3X wider than costal cell, markings poorly developed; Anal plate ovoid, valvulae III narrow, elongated, apex convex with 6-8 small to large marginal teeth,. Length: 15 mm. Hind leg spine formula: 1:6:7.

Specimens examined:

BMNH: *clypeata* Holotype ♀, Sri Lanka, no locality, coll. Fryer, Medler, 1990a: 166. Specimen is faded and may be teneral.

greeni, holotype ♂, Peradeniya, Distant coll.

haragamensis, holotype ♀, Haragam, Distant coll. Tegmina are glued on holotype in reverse position.

17.3 *Cerfennia munita* (Melichar)

Atracis munita Melichar, 1902: 189, sp. n; holotype: ♀, Sri Lanka: Kandy, MMBC.

Atracis consanguinea Distant, 1906: 453, fig. 242, sp. n; Lectotype: ♀, Sri Lanka: Nipitia, BMNH;

Atracis facialis Distant, 1912: 468, sp. n.; lectotype: ♀, Sri Lanka: Wellawaya, BMNH

Atracis consanguinea: Metcalf, 1957: 481, catalog.

Atracis facialis: Metcalf, 1957:484, catalog.

Atracis munita: Metcalf, 1957:490, catalog.

Staliana consanguinea: Medler, 1988:18, comb.

Staliana facialis: Medler, 1988:18, comb.
Staliana munita: Medler, 1988:18, comb.
Staliana consanguinea: Medler, 1990:166, type data.
Staliana facialis: Medler, 1990: 169, type data.
Cerfennia consanguinea: Medler, here design., jr. syn.
Cerfennia facialis: Medler, here design., jr. syn.
Cerfennia munita: Medler, here design., sr. synonym.

Diagnosis: Tegmen markings poorly developed. Valvulae III narrow, elongated, apex convex with 6-8 small to large teeth, anal plate ovoid. Length: 15 mm. Hind leg spine formula: 1:6:7. Habitus illustration of *munita* not available. Habitus of *consanguinea* shown by Distant:1905, fig 242, used for tegmen reproduction fig. 3.

Specimens examined:

BMNH: 1903: 92, Kandy. BMNH: *facialis*, lectotype ♀, paratypes, 2 ♀, Wllawaya, Distant coll.

MMBC: *munita*, Holotype ♀, Kandy, Kirkaldy coll.;

17.4 *Cerfennia perplexa* (Walker)

Elidiptera perplexa Walker, 1858a: 39, sp. n. Holotype ♀, Sri Lanka, (no locality): BMNH.
Phalaenomorpha nietneri Stål, 1858: 452, sp. n.; Lectotype ♂, Sri Lanka, [no locality]: NHRS.
Atracis conspurcata Melichar, 1902: 191, pl. IX, fig. 9, sp. n.; Holotype ♀, Sri Lanka, Markwood, NHMW.
Atracis conspurcata Melichar, 1902: 191, pl. IX, fig. 9, habitus illustration, sp. nov.; Holotype: ♀, Sri Lanka: Markwood (unknown collector), NHMW;
Atracis conspurcata: Melichar, 1903: 92, Sri Lanka: Colombo, Haputale, Udugama;
Atracis atkinsoni Distant, 1912: 468, sp. n. Holotype ♀, [no abdomen], Sri Lanka: Pundaloya, BMNH.
Atracis atkinsoni: Metcalf, 1957:480, catalog.
Atracis conspurcata: Metcalf, 1957:481, catalog.
Atracis nietneri: Metcalf, 1957:490, catalog.
Atracis perplexa: Metcalf, 1957:492, catalog.
Atracis nietneri: Medler, 1986c:331, fig 12, type data.
Atracis conspurcata: Medler, 1987b:535, type data.
Staliana atkinsoni: Medler, 1988:18, comb.
Staliana conspurcata: Medler, 1988:18, comb.
Staliana nietneri: Medler, 1988:18, comb.
Staliana perplexa: Medler, 1988:18, comb.
Staliana perplexa: Medler, 1990:154, type data.
Staliana atkinsoni: Medler, 1990: 166, type data.
Cerfennia atkinsoni: Medler, jr. syn, here design., comb n.
Cerfennia conspurcata: Medler, jr. syn, here design., comb n.
Cerfennia nietneri: Medler, jr. syn, here design., comb. n.
Cerfennia perplexa: Medler, sr. syn, here design., syn. n.

Diagnosis: Tegmen illustration Fig. 4 is reproduction from habitus figure of *nietneri* by Melichar, 1902: 192, fig. 13. Tegmen of *conspurcata* not strongly undulate, precostal margin at bulla 5 X wider than costal cell; veins R+S, M arising from basal stem; subapical line of crossveins arising from claval apex, tegmen without black line. Lectotype ♂ genitalia illustrated by Medler, 1986b, 331, fig 12. As lectotype anal segment was damaged, intact genitalia of ♂ from ZMHB is shown (fig.12). Valvulae III elongate, narrow, apex slightly widened, with 4-8 gradated array of strong teeth, anal plate ovoid. Measurements: Length: 16.0; v 1.16; f 2.16; p .50; t 11.5; pcl 0.83. Width: v 0.91; f 1.41; t 5.0. Spine formula: 1;6;6. 1:6:9.

Specimens examined:

BMNH: *nietneri*, ♂, Sri Lanka: Pundaloya, Green coll, BM 90-115, det. *nietneri* Distant. *perplexa*, holotype ♀, Sri Lanka, [no locality]; CASC: Kandy, ♀ [no data].

NHRS: *nietneri*, lectotype ♂, Sri Lanka, [no locality]; At some prior time the lectotype abdomen detached and re-attached to body upside down. Recognizable syntype from Dohrn collection not found.

NHMW: *conspurcata*, holotype ♀, Markwood; *nietneri*, ♀, Markwood, det. *nietneri* Melichar.

ZMHB: *nietneri*, ♂, Sri Lanka, [no locality]; Mus. Colombo, ♀, [no data], det. *nietneri* Melichar.

17.5 *Cerfennia nalandensis* (Distant)

Atracis nalandensis Distant, 1914: 423, sp. n., lectotype ♀, Sri Lanka: Nalanda, BMNH.

Atracis nalandensis: Metcalf, 1957:490, catalog

Staliana nalandensis: Medler, 1988:18, comb.

Staliana nalandensis: Medler, 1990: 174, type data.

Cerfennia nalandensis: Medler, new comb.

Diagnosis: Habitus illustration of Distant 1916: 133, fig. 96, used for reproduction of tegmen shown in fig. 5.

18. Genus *Gaja* Distant

Gaja Distant, 1906: 460, gen. n.; Type species: *Gaja definitiva* Distant, original designation, junior synonym of *Gaja inconspicua* (Kirby),

Gaja: Metcalf, 1957: 475 (catalog).

Diagnosis: Head antennal segment I shorter than II, frons lateral margins not raised or ridgelike; without postocular eminence. Veins R,S,M, no submarginal, metatibial spines 2.

Gaja subtilis lectotype genitalia illustrated by Medler, 1987: 538, fig 4. Illustration of *inconspicua* tegmen Fig 6 is reproduced from Distant, 1906: habitus fig. 249.

Habitus illustrations: *definitiva*, by Distant, 1906, fig 248; *inconspicua*, by Distant, 1906, fig 249; *facialis*, by Distant, 1906, fig 250; *Atracis parva* sensu Melichar, misidentified *inconspicua*, by Melichar, 1902, fig 6.

Distribution: Sri Lanka.

18.1 *Gaja inconspicua* (Kirby)

Phalaenomorpha inconspicua Kirby, 1891: 150, sp.n., holotype ♂, Sri Lanka, BMNH.

Atracis subtilis Melichar, 1902: 195, sp n. lectotype ♂, Sri Lanka, NHMW.

Atracis parva Melichar, 1902:195, fig 6, misidentified.

Gaja definitiva Distant, 1906: 460, fig 248, sp. n. holotype ♀, Sri Lanka: Maskeliya, BMNH.

Gaja inconspicua: Distant, 1906: 461, fig. 249.

Gaja facialis Distant, 1906: 462, fig. 250, sp. n., lectotype ♂, Sri Lanka: Maskeliya, BMNH.

Gaja definitiva: Metcalf, 1957: 475, catalog.

Gaja facialis: Metcalf, 1957: 475, catalog.

Gaja inconspicua: Metcalf, 1957: 476, catalog.

Gaja subtilis: Metcalf, 1957: 476, catalog.

Atracis subtilis: Medler, 1987:538, fig. 4, type data.

Gaja definitiva: Medler, 1990: 168, type data.

Gaja facialis: Medler, 1990: 169, type data, jr syn of *Gaja definitiva*, here designated, SYN N.

Gaja definitiva: Medler, jr synonym of *inconspicua* Kirby, here designated, SYN N.

Gaja inconspicua: Kirby, sr synonym, here designated, SYN N.

Gaja subtilis: Medler, jr. synonym of *inconspicua* Kirby here designated, SYN N.

Specimens examined:

BMNH: *Gaja inconspicua* Kirby, holotype ♂, Sri Lanka: Green coll, 90-115; ♀, Green coll, 95-221; Bogawantalawa, ♂ [no Data], VIII, Distant coll; Himulla, ♀, 95-221, Green coll; Namunukeli, ♂, 1-1910, Distant coll. *Gaja definitiva*, holotype ♀, Sri Lanka: Maskeliya, X-1905. Distant coll. *Gaja facialis*, lectotype ♂, Maskeliya, X-1905, Distant coll. Paralectotypes, 2 ♀, 95-221, 10-11.1992, Green coll.

NHMW: *Gaja subtilis*, lectotype: ♂, paralectotype ♀, Sri Lanka: [no data], Felder, Medler, 1987: 538, fig. 4.

ZMHB: *Gaja subtilis*, paralectotypes 3♂, ♀, Sri Lanka: [No data], Nietner, Medler, 1986c: 52, fig. 15.

Acknowledgments

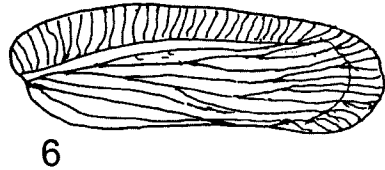
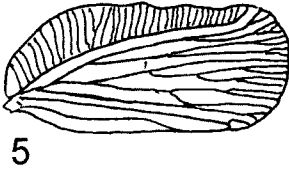
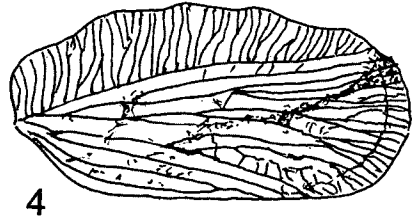
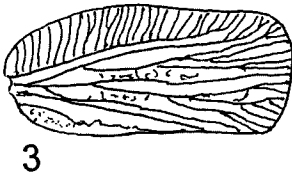
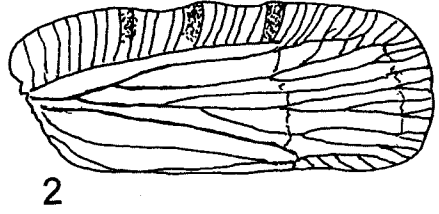
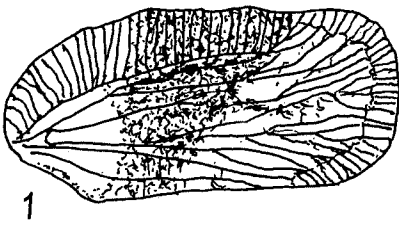
This research was supported in part by the J. Linsley Gressitt Center for Research in Entomology. I wish acknowledge the help of professional and technical staff of the Bishop Museum. I am grateful to K.V. Krombein and curators of the listed depositories who kindly arranged loans of types and other specimens for my study.

References

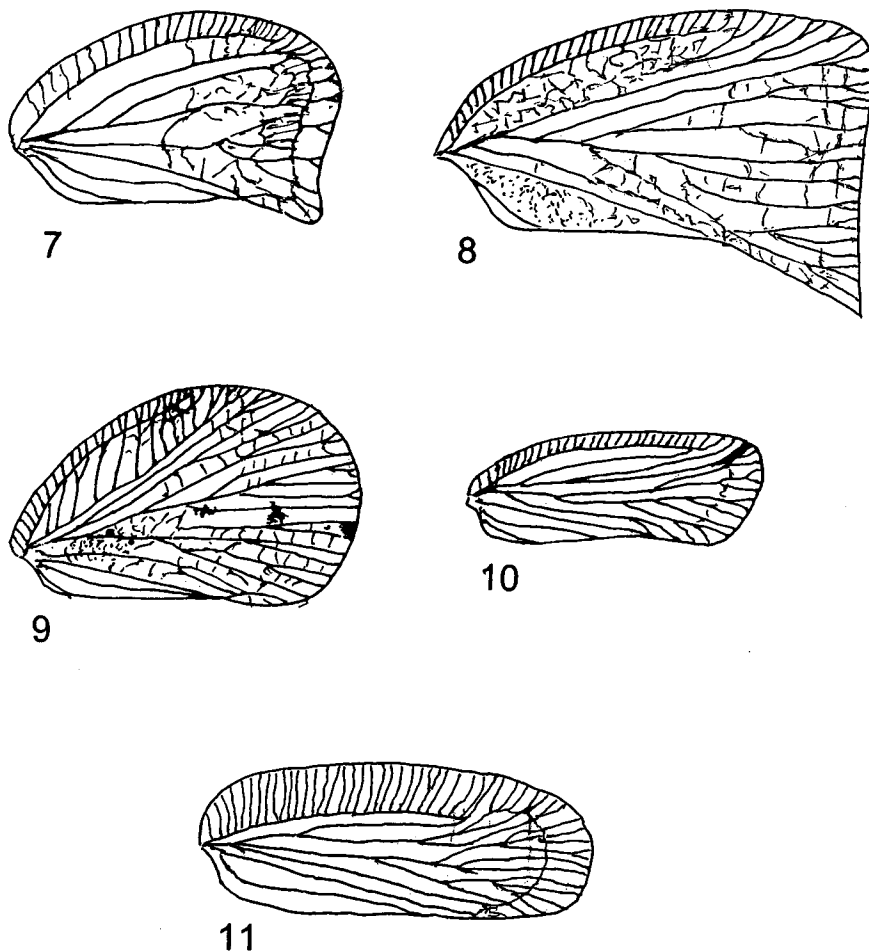
- AHMED, M. & RAO, S., 1986. Some commonly found leaf and planthoppers on vegetable plants in the suburbs of Peshawar, N.W.F.P., Pakistan: Proc. Pakistan Congr. Zool., 6: 72-80.
- AMYOT, C.J.B. & J.G.A. SERVILE, J.G.A., 1843. Histoire Naturelle des Insectes. Deuxime partie Homopteres, pp 455-588, pls. 9-12.
- ARNETT, R.H., Jr., SAMUELSON, G.A. & NISHIDA, G.M., 1993. The insect and spider collections of the world. Flora & Fauna Handbook, No. 11.
- ATKINSON, E.T., 1886. Notes on Indian Rhynchota, No. 5. J. Asiatic Soc. Bengal, 55: 12-83.
- BAKER, C.F., 1927. Homoptera Fulgoroidea. Philippine J. Sci., 32: 391-411, pl 1, figs 1-13.
- BOISDUVAL, 1835. Hemipteres. Voyage de decouvertes de l'Astrolabe, 2: 1-716, pl 1-12 (609-622, pl 10).
- COMMISSION ZOOLOGICAL NOMENCLATURE, 1960. Hansenia Kirkaldy added to Official List. Bull. Zool. Nomenclature, 18: 236-37.
- DATTA, B., 1979. On Oriental Fulgoroidea (Homoptera). Eos Rev. Esp. Ent., 53: 9-24, 25-33.
- DISTANT, W.L., 1880. Notes on exotic Rhynchota with descriptions of new species. Trans. Entomol. Soc. London, 1880: 147-153, pl 5.
- DISTANT, W.L., 1892. Contribution to a knowledge of the homopterous family Fulgoridae. Trans. Entomol. Soc. London, 1892: 275-286, pl 13.
- DISTANT, W.L., 1906. Heteroptera-Homoptera. In: The Fauna of British India, including Sri Lanka and Burma. Rhynchota. Vol. 3: 397-464, figs 205-252.
- DISTANT, W.L., 1907. Insecta Transvaaliensia. A contribution to a knowledge of the entomology of South Africa, 8: 181-204, pls 18-19.
- DISTANT, W.L., 1910. Rhynchota Malayana. Part III. Rec. Indian Mus. (Calcutta), 5: 313-338, pls 21-22.
- DISTANT, W.L., 1912. New genera and species of Oriental Homoptera. Ann. & Mag. Nat. Hist., (8) 9: 459-471.
- DISTANT, W.L., 1914. Some additions to the genera and species in the Homopterous family Fulgoridae. Ann. & Mag. Nat. Hist., (8) 13: 409-424.
- DISTANT, W. L., 1916. The Fauna of British India, including Sri Lanka and Burma. Rhynchota, Homoptera. Vol. 6: 1-248 (Appendix).
- DISTANT, W.L., 1917. Rhynchota Part II. Suborder Homoptewra. The Percy Sladen Trust Expedition to the Indian Ocean in 1905, under the leadership of Mr. J. Stanley Gardiner, M.A. Trans. Linn. Soc. London, Zool. 17: 273-322, pls 49-51.
- DISTANT, W.L., 1918. The Homoptera of Indo-China. Ann. & Mag. Nat. Hist., (9) 1: 196-200.

- FABRICIUS, J.C., 1775. Ryngota. *Systema entomologica*, 673-689.
- FABRICIUS, J.C. 1798. Ryngota. – *Supplementum Entomologica Systematicae*, 511-524.
- FABRICIUS, J.C., 1803. *Systema Rhyngotorum*. Rhyngota, 1-101.
- FENNAH, R.G., 1960. Fulgoroidea (Homoptera) from New Caledonia and the Loyalty Islands. *Flatidae*. Pacific Ins. Monogr, 21: 102-108.
- FENNAH, R.G., 1960. *Hansenia* Kirkaldy publication date. *Bull. Zool. Nomenclature*, 17: 175.
- GHAURI, M.S.K., 1971. Two new species of the genus *Ketumala* Distant (Hom., Flatidae), one attacking tea in South India. *Bull. Ent. Res.*, 60: 635-638.
- GHAURI, M.S.K., 1973. Taxonomic notes on a collection of Fulgoroidea from tea in southern India. *Bull. Ent. Res.*, 62: 541-544.
- GUERIN-MENEVILLE, 1844. *Iconographie du regne animal de G. Cuvier, ouvrage pouvant servir d'atlas a tous des traits de zoologie 1829-1838*: 355-370 (plates, see 1829).
- INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE, 1961. *Hansenia* Kirkaldy, 1902 (Insecta, Hemiptera); added to the Official List. *Bull. Zool. Nomencl.*, 18: 236-237.
- KIRBY, W.F., 1891. Catalogue of the described Hemiptera Heteroptera and Homoptera of Sri Lanka based on the collection formed (chiefly at Pundaloya) by Mr. E. Ernest Green. *J. Linn. Soc. Zool.*, 24: 126-174, pls 5-6.
- KIRKALDY, G.W., 1900. Notes on some Sinhalese Rhynchota. *Entomologist*, 33: 293-295.
- KIRKALDY, G.W., 1902. Memoirs on Orietal Rhynchota. *J. Bombay Nat. Hist. Soc.*, 14:46-58.
- KIRKALDY, G.W., 1903. Recent literature. *Entomologist*, 36:77-79.
- KIRKALDY, G.W., 1908. Memoir on the Rhynchota collected by Dr. Arthur Willey, F.R.S., chiefly in Bira (New Britain) and Lifu. *Trans. Ent. Soc. London*, 1905: 327-363.
- KIRKALDY, G.W., 1913. On some new species of leafhoppers. Part 1. Flatinae. *Bull. Hawaii Sugar Plant Assoc. Div. Entomol.*, 12: 19-23.
- KROMBEIN, K.V., 1980. The Smithsonian Insect Project in Sri Lanka, 1969-1975. *Spolia Zeylanica*, 35: 119-133, Pl I.
- MEDLER, J.T., 1986a. Types of Flatidae (Homoptera). II. Lectotype designations and taxonomic notes on species in the Genova Museum. *Ann. Mus. Civico Storia Naturale Genova*, 85:299-306.
- MEDLER, J.T., 1986b. The types of Flatidae (Homoptera) in the Stockholm Museum described by Stål, Melichar, Jacobi and Walker. *Ent. Scandinavica*, 17: 323-337.
- MEDLER, J.T., 1987. Types of Flatidae (Homoptera) IV. Lectotype designations and Taxonomic notes on species in the Vienna Museum. *Ann Naturhist. Mus Wien*, 88/89: 535-539.
- MEDLER, J.T., 1988. Types of Flatidae (Homoptera): XII. Taxonomic notes on Guerin-Meneville types in the Naples Museum, with illustrations of male genitalia of plesiotypes for the respective species. *Boll. Lab. Ent. Agrar. Filippo Silvestri*, 43: 11-20.
- MEDLER, J.T., 1990. Types of Flatidae (Homoptera) XIV. Walker and Distant types in the British Museum. *Oriental Insects*, 24:127-195.
- MEDLER, J.T., 1991. Flatidae of Sulawesi, with notes on some related Philippine and Indomalayan species (Homoptera: Fulgoroidea). *Oriental Insects*, 25: 1-43.
- MEDLER, J.T., 1992. Revision of the tribe Phylliphantini in the Oriental Region, with descriptions of new genera and new species (Homoptera: Flatidae). *Oriental Ins.*, 26:1-38.
- MEDLER, J.T., 1993. Types of Flatidae (Homoptera) XIX. Lectotype designations and taxonomic notes on species in the Budapest Museum, Part 2. *Ann. Hist. Nat. Mus. Nationalis Hungarici*, 85:37-45.
- MEDLER, J.T., 1996. Flatidae of Borneo, with descriptions of new genera and species (Homoptera: Fulgoroidea). *Oriental Insects*, 30:11-96.
- MEDLER, J.T., 1999. Flatidae of Indonesia exclusive of Irian Jaya (Homoptera, Fulgoroidea). *Zool. Verh. Leiden*, 324: 1-88.
- MEDLER, J.T., 2001. Review of Flatidae in Southern Africa, with keys and descriptions of new species (Homoptera, Fulgoroidea). *Contrib. Ent. Internatl.*, 4: 323-374.
- MEDLER, J.T., 2003:591-597. Types of Flatidae. XXIV. Type designations and taxonomic notes on species in the Natural History Museum of Geneva (Homoptera, Auchenorrhyncha, Fulgoroidea). *Rev. Suisse de Zoologie*, 110: 591-597, 6 figs.
- MELICHAR, L., 1901. Monographie der Acanaloniiden und Flatiden (Homoptera). *Ann. Naturhist. Mus. Wien*, 16: 178-258.
- MELICHAR, L., 1902. Monographie der Acanaloniiden und Flatiden (Homoptera) (Fortsetzung). *Ann. Naturhist. Mus. Wien*, 17: 1-123, pl 1-IX.
- MELICHAR, L., 1903. Homopteren-Fauna von Sri Lanka. 1903: 1-248, pls 1-6.

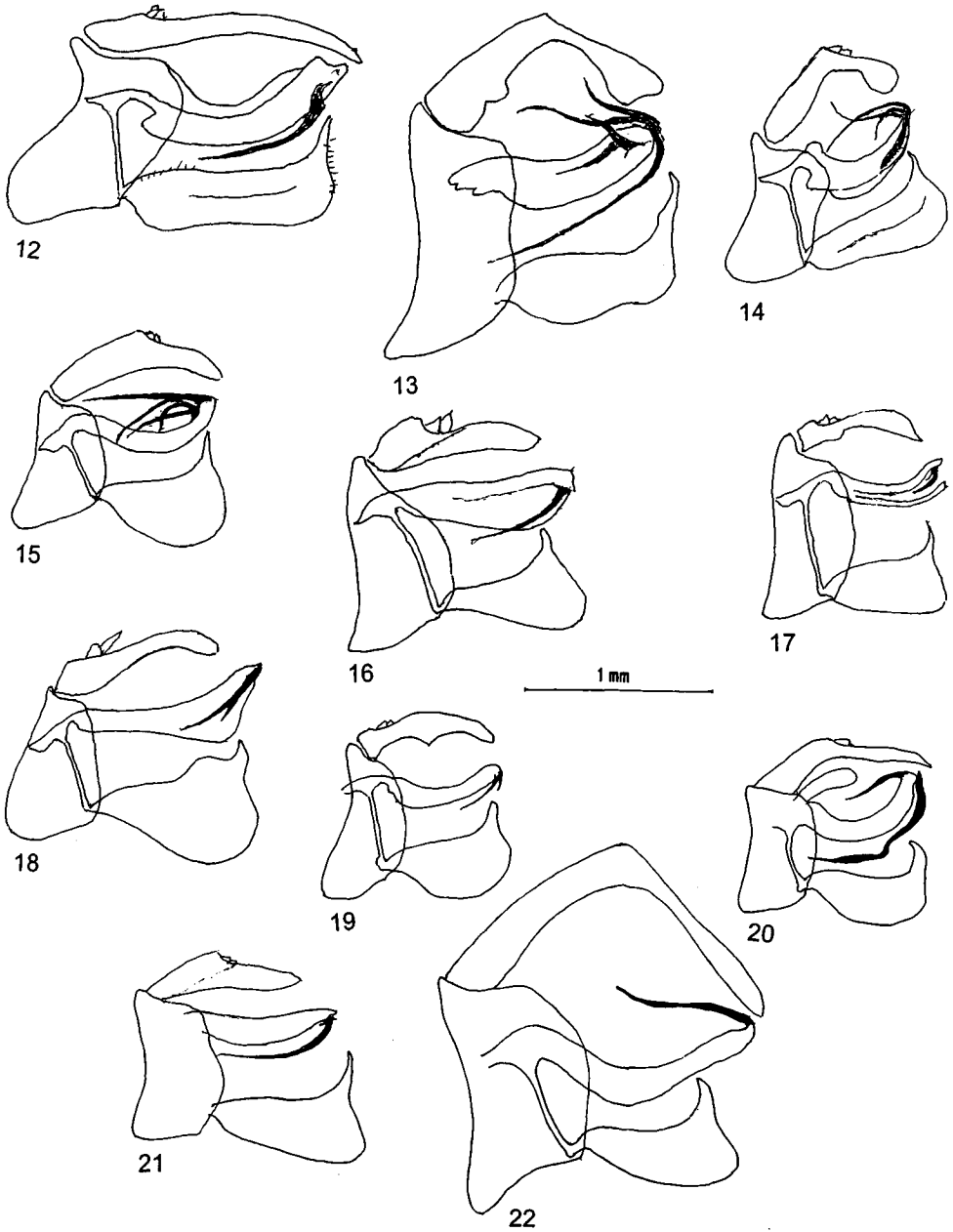
- MELICHAR, L., 1912. Homoptera. Wissenschaftliche Ergebnisse der Zweiten Deutschen Zentral-Afrika-Expedition 1910-1911 unter Führung Adolf Friedrichs, Herzog zu Mecklenburg. 1:109-134, pls 1-2.
- MELICHAR, L., 1923. Homoptera Fam. Acanaloniidae, Flatidae et Ricaniidae. *Genera Insectorum*, 182: 12-119, 2 pl.
- METCALF, Z.P., 1952. New Names in the Homoptera. *J. Washington Acad. Sci.*, 42: 226-231.
- METCALF, Z.P., 1957. Flatidae. In *General Catalogue of the Homoptera*, Fasc. IV, Part 13, 565 pp. North Carolina State College, Raleigh, N.C.
- OLIVIER,, G.A., 1791. Fulgore, Fulgora. In: *Encyclopedie methodique. Dictionnaire des Insects*, 6: 561-577.
- SCHMIDT, E., 1912. Diagnosen neues Fulgoroidea. Gattungen und Arten nebst einigen bemerkungen. *Stettiner Ent. Zeit.*, 73: 67-102.
- SINGH-PRUTHI, H., 1925. The morphology of the male genitalia in Rhynchota. *Trans. Ent. Soc. London*, 1925: 127-267, pl 16-32.
- SPINOLA, C., 1839. Essai sur les Fulgorelles, sous tribu de la tribu des Cicadaïres, ordre des Rhyngotes (Suite). *Ann Soc. Ent. Fr.*, 8: 339-454, pl 8.
- STÅL, C., 1858. Hemipterologiska birag. *Ofvers K. Vetenskakd Forh.*, 15: 433-455.
- STÅL, C., 1862. Notes on the British Museum Catalogue of Homoptera. *J. Ent. (London)*, 1: 477-482.
- STÅL, C., 1870. Homoptera insularum Philippinarum. Bidrag till Philipppinska oarnes Hemipter-fauna. *Ofvers K. Vetenskakd. Forh.*, 27: 707-776, pl 7-9.
- TENNENT, J.E., 1861. Sketches of the Natural History of Sri Lanka.
- WALKER, F., 1851. List of the specimens of Homopterous insects in the collection of the British Museum 2: 261-636, pls. 3-4.
- WALKER, F., 1857a. Catalogue of the Homopterous insects collected at Singapore and Malacca by Mr. A. R. Wallace, with descriptions of new species. *J. Proc. Linn. Soc. London*, 1: 82-100, pls 3-4.
- WALKER, F., 1857b. Catalogue of the Homopterous insects collected at Sarawak, Borneo, by Mr. A. R. Wallace, with descriptions of new species. *J. Proc. Linn. Soc. London*, 1: 141-174, pls 7-8.
- WALKER, F., 1858a. *Insecta Saundersiana*, 1858: 1-117.
- WALKER, F., 1858b. List of specimens of Homopterous insects in the collection of the British Mueum, Supplement, 1858: 1-307.
- WHITE, A., 1846. Descriptions of some apparently new species of Orthopterous and Homopterous insects. *Ann. & Mag. Nat. Hist.*, 18: 23-26, pl 1.



Figs 1-6, Tegmen shape and venation: 1. *Cerfennia emersoniana* (Walker); 2, *Cerfennia erosipennis* (Stål); 3, *Cerfennia munita* (Melichar); 4, *Cerfennia perplexa* (Walker); 5, *Cerfennia nalandensis* (Distant); 6, *Gaja inconspicua* (Kirby).



Figs. 7-11, Tegmen shape and venation: 7, *Danavara tennentina* (Walker); 8, *Pulastya acutipennis* Kirby; 9, *Gomeda abdominalis* Kirby; 10, *Satapa sicula* Distant; 11, *Bochara parva* Kirby.



Figs 12-22, Male genitalia: 12, *Cerfennia perplexa* (Walker); 13, *Cromna albopunctata* (Kirby); 14, *Flata ferrugata* Fabricius; 15, *Flata stellaris* (Walker); 16, *Hilavrita fatua* (Melichar); 17, *Hilavrita obliqua* Distant; 18, *Ketumala bisecta* (Kirby); 19, *Ketumala farinose* Distant; 20, *Melicharia sinhalana* Kirkaldy; 21, *Satapa sricula* Distant; 22, *Scarpuna modesta* (Distant).

INDEX

- abdominalis* Kirby, Gomeda, 252
acutipennis Kirby, Pulastya, 242
Adelidoria Metcalf, 237
albopunctata Kirby, Cromna, 244
Anaya Distant, 245
atkinsoni Distant, Cerfennia, 256

bimaculata Distant, Scarpuna, 239
bisecta Kirby, Ketumala, 249
Bochara Distant, 253

Cerfennia Stål, 253
Ceryniini Schmidt, 237
clypeata Distant, Cerfennia, 255
conflicta Melichar, Anaya, 245
conformis Melichar, Ketumala, 249
consanguinea Distant, Cerfennia, 256
conspurcata Melichar, Cerfennia, 256
cornutipennis Melichar, Pulastya, 242
Cromna Walker, 243

Danavara Distant, 236
definita Distant, Gaja, 258
deltotensis Kirby, Flatida, 235
dubia Kirby, Pulastya, 243

emersoniana Walker, Cerfennia, 254
erosipennis Stål, Cerfennia, 255

facialis Distant, Gaja, 258
facialis Distant, Cerfennia, 256
farinosa Distant, Ketumala, 250
fatua Melichar, Hilavrita, 247
ferrugata Fabricius, Flata, 240
Flata Fabricius, 239
Flatida White, 235
Flatidae Spinola, 235
Flatinae, Melichar, 235
Flatini Schmidt, 239
Flatoidinae Melichar, 253
flavoguttata Melichar, Flata, 240
fuscata Melichar, Ormenis, 251
fuscmarginata Distant, Ketumala, 251

Gaja Distant, 257
glauca Kirby, Hansenia, 237
Gomeda Distant, 252
greeni Distant, Cerfennia, 255

Hansenia Kirkaldy, 237
haragamensis Distant, Serfennia, 255
Hilavrita Distant, 247

inconspicua Kirby, Gaja, 258

Ketumala Distant, 248
kirbyi Melichar, Hansenia, 237

lactifera Walker, Anaya, 245
Lasura Medler, 242
latifasciata Melichar, Cerfennia, 254
latipennis Kirby, Danavara, 236
Lawanini Melichar, 243
limbata Distant, Planata, 244

maculosus Distant, Planata, 245
marginella Olivier, Flatida, 236
Melicharia Kirkaldy, 246
mesochlorus Walker, Anaya, 245
modesta Distant, Scarpuna, 239
munita Melichar, Cerfennia, 255

nalandensis Distant, Cerfennia, 257
nebulosa Distant, Bochara, 253
nietneri Stål, Cerfennia, 256
nigropunctata Kirby, Seliza, 251

obliqua Distant, Hilavrita, 248
obtusangula Distant, Anaya, 245
ocellata Fabricius, Flata, 240
Ormenis Melichar, 246
Ormenisini Medler, 244

pallidior Melichar, Flatida, 236
Paranotus Karsch, 244
parva Kirby, Bochara, 253
perplexa Walker, Cerfennia, 256
Phromnia Stål, 235
Phromniini Melichar, 235
Phyllyphantini Melichar, 241

Planata Medler, 244
proxima Melichar, Anaya, 246
Pulastya Distant, 242
pulverulenta Walker, Hansenia, 238

quadrata Kirby, Melicharia, 247

Rabocha Melichar, 254
rufilineus Walker, Paranotus, 244

Satapa Distant, 252
Scarpantini Melichar, 238
Scarpuna Medler, 238
Selizini Melichar, 252
separata Medler, Lasura, 242
sacula Distant, Satapa, 252
sinhalana Kirkaldy, Melicharia, 247
sinuata Distant, Ketumala, 251
stellaris Walker, Flata, 240
subtilis Melichar, Gaja, 257

taeniata Schmidt, Planta, 244
taprobana Kirkaldy, Pulastya, 242
tennentina Walker, Danavara, 236
tineoides Olivier, Bythopsyna, 238
trimaculata Distant, Hilavrita, 247
tuberculosa Distant, Satapa, 252

Walena Medler, 244