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## Tortricidae (Lepidoptera) from Gabon

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Original article

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Abstract. Species of Tortricidae (Lepidoptera) collected on a research expedition to the Gabonese equatorial forest are discussed and described. Forty-eight species belonging to twenty-nine genera were identified, including two new genera, Bonagmene gen. n. and Gaboncydia gen. n., and thirty-one new species: Acroclita celaeno sp. n., Bactra alcyone sp. n., Bonagmene eburnea sp. n., Camptrodoxa pusilla sp. n., Camptrodoxa splendens sp. n., Coniostola cinereocostalis sp. n., Cosmetra maia sp. n., Cydia albimacula sp. n., Dasodis falcata sp. n., Dolichohedya fulgens sp. n., Eccopsis atrobasalis sp. n., Eccopsis luteicaput sp. n., Eccopsis rubiginosa sp. n., Epichoristodes aequatorialis sp. n., Epichoristodes ivindoensis sp. n., Eucosmocydia ipassaensis sp. n., Gaboncydia gabonensis sp. n., Gnathodracon durantei sp. n., Gnathodracon massaronei sp. n., Gnathodracon merope sp. n., Gnathodracon pavesii sp. n., Hilarographa brazzaella sp. n., Megalota roseoeffusa sp. n., Megalota sterope sp. n., Megalota taygete sp. n., Nepheloploce electra sp. n., Prophaecasia gabonana sp. n., Sanguinograptis rubidissecta sp. n., Syntozyga pulchella sp. n., Thylacogaster albistrigulata sp. n., Thylacogaster ornata sp. n. The following new combinations and new synonymies are proposed: Basigonia anisorrhopa (DIAKONOFF, 1983) comb. n., Amabrana acanthoda (RAZOWSKI & WOJTUSIAK, 2015) comb. n., Amabrana bendelana (RAZOWSKI & WOJTUSIAK, 2015) comb. n., Amabrana primaria (RAZOWSKI, 2015) comb. n., Amabrana subseparata (RAZOWSKI, 2015) comb. n., Prophaecasia usambarae (RAZOWSKI & WOJTUSIAK, 2014) comb. n., Prophaecasia usambarae (RAZOWSKI & WOJTUSIAK, 2014) = P. malaviana HEPPNER & BAE, 2017 syn. n., Basigonia anisorrhopa (DIAKONOFF, 1983) = Basigonia anisoscia DIAKONOFF, 1983 syn. n.

Key words: new genera, new species, new combinations, new synonymy, distribution, systematics, Lepidoptera, Tortricidae, Afrotropical.

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### I. INTRODUCTION

RAZOWSKI & WOJTUSIAK (2012) commented on the status of our knowledge of Afrotropical Tortricidae, concluding that the fauna is among the more poorly known on the globe, as is supported by other authors (e.g. RAZOWSKI and BROWN 2012). However, recent collecting trips to tropical Africa (e.g. by J. WOJTUSIAK and G. BASSI) have

made progress toward remedying that shortcoming. The results of some of this field work were published by RAZOWSKI & WOJTUSIAK (2012), AGASSIZ & AARVIK (2014), and RAZOWSKI (2015). Recently collected material from Gabon helps to extend the documented geographic distribution of some previously described species and is rich in undecsribed taxa.

### II. MATERIALS AND METHODS

Field work was conducted at the Ipassa Research Station, where the second author spent 10 days, 14-24 March 2015. Located within the Ivindo National Park, the Ipassa Research Station is part of IRET (Institut de Recherche en Ecologie Tropicale), under the authority of CENAREST (Centre National de la Recherche Scientifique et Technologique). Situated in the buffer zone of Ivindo National Park near the town of Makokou (Ogooué-Ivindo Province), the Ipassa Research Station is the oldest research site in Gabon, and in 1983 it was designated by UNESCO as a Biosphere Reserve. The station is situated on a 500 m hill on the Ivindo river. The surrounding vegetation is mostly secondary forest with residual patches of primary forest. Two light traps were used during the field work. A 250-watt blended lamp was placed in front of a white sheet towards the forest near the station. A second light consisted of a tower equipped with superactinic tubes, deployed in various places about 800 m away from the station, on the Ivindo river over the primary forest, and in the secondary forest (Figs 95, 96).

Methods of genitalia dissection and slide-mounting followed ROBINSON (1976). Terms for structures of the genitalia follow RAZOWSKI (2003). Images of genitalia were captured through a Wild Laborlux 12 microscope with a Canon S120 digital camera. Images of adults were captured with a Nikon D300 digital camera. Images were enhanced with Adobe Photoshop Elements. All specimens have the following label data: Gabon, Ivindo-Ogooué Prov[ince], Ipassa-Makokou Res[earch] St[ation], 500 m, 14-24.III.2015, 00°31′N 12°48′E, lux, legit G. BASSI; and all are deposited in the Graziano BASSI private collection, Avigliana, Italy (CGB; destined to be finally deposited in the Museo Regionale di Scienze Naturali, Turin, Italy) and in the Institute of Systematics and Evolution of Animals Collection, Kraków, Poland (ISEZ). Genitalia slide abbreviation is "GS" and "GB" for Graziano BASSI.

## III. SYSTEMATIC PART

### **Tortricini**

## Sanguinograptis rubidissecta sp. n.

Figs 1, 2, 3, 59

Diagnosis. Sanguinograptis rubidissecta is closely related to S. ochrolegnia RAZOWSKI, 1986 from Nigeria. S. rubidissecta can be distinguished by the two red transverse lines of the forewing and two terminal processes of the sacculus, whereas

*ochrolegnia* has a series of four transverse spots and a single terminal process of the sacculus.

Etymology. The specific name refers to the colouration of forewing: Latin: rubidus-a = dark red and dissecta-ae = cut up.

Holotype male: GS 5778 GB, 49015 CGB.

Description (Fig. 59). Wingspan 13 mm. Head, base of antenna and tegula orange yellow. Forewing slightly expanding terminad; costa almost straight; termen indistinctly oblique, straight. Ground colour leaden grey; costa, transverse fascia from tornus to costa orange yellow, two former sparsely spotted brown. Two red fasciae from 1/3 and 2/3 of dorsum terminating subcostally. Cilia pale orange yellow. Hindwing pale brown; cilia paler.

Male genitalia (Figs 1-3). Pedunculi of tegumen long, slender; terminal part of tegumen concave; socius broad, subtriangular; gnathos weak; valva with dorsosubterminal lobe and weakly sclerotized posterior part; sacculus broad basally, arched medially, with two slender terminal processes; transtilla slender, arched; juxta (Fig. 3) teardropshaped; phallus (Fig. 2) stout; cornutus strong, curved. Scent organ consisting of two broad parts, dorsal part with bunch of long scales.

Female unknown.

## Archipini

### Meridemis hylaeana (GHESQUIÈRE, 1940)

Material examined. A male, GS 5790 GB, CGB.

Remarks. *M. hylaeana* was described from Eala and Elisabethville (Lubumbashi, Democratic Republic of the Congo). RAZOWSKI et al. (2010) redescribed and illustrated the types of *hylaeana*.

### Choristoneura dinota (MEYRICK, 1918)

Material examined. Three male specimens, GS 5779 GB, CGB and ISEZ.

Remarks. *C. dinota* was known from Cameroon, Malawi, Kenya and Tanzania.

## Epichoristodes aequatorialis sp. n.

Figs 4, 60

Diagnosis. *Epichoristodes aequatorialis* is related to *E. capensana* (WALKER, 1863) but the adult is larger, with darker ground colour and with two large bright orange areas on the forewing. Its male genitalia differ in having a longer, subtriangular valva with a more strongly convex sacculus.

Etymology. The name refers to the equator, which crosses Gabon.

Holotype male: GS 5782 GB, 48073 CGB.

Description (Fig. 60). Wingspan 22 mm. Head brownish cream; thorax brownish; forewing not expanding terminally; costa strongly convex at base, then slightly so; termen convex postmedially. Ground colour orange in median part of wing tinged rust brown; base and posterior part of wing brown; cilia rubbed, remnants brown. Hindwing dark brown, anal area scaled brownish and cream; cilia brownish.

Male genitalia (Fig. 4). Uncus club-shaped; socius small; gnathos moderately large; valva tapering terminad with small outer brachiola; sacculus distinctly convex postbasally; transtilla strongly narrowing medially with broad, spiny lateral lobes; phallus large, strongly bent, with small ventroterminal thorns.

Female unknown.

## Epichoristodes ivindoensis sp. n.

Figs 7, 8, 61

Diagnosis. Epichoristodes ivindoensis is related to E. capensana (WALKER, 1863) but the adult is larger, with darker ground colour and a large brown patch on the forewing dorsum. Male genitalia are distinguished from those of congeners by the slender uncus, broadly separated median lobes of the transtilla, the large median process of the sacculus, and the dorsoterminal thorn of the phallus.

Etymology. The specific name refers to the Ivindo river, along which the holotype was collected.

Holotype male: GS 5780 GB, 48854 CGB.

Description (Fig. 61). Wingspan 20 mm. Head and thorax brownish; forewing not expanding terminally; termen uniformly convex. Ground colour ferruginous sprinkled with brown scales; costa with three tiny yellow dots; large mediodorsal brown patch. Cilia (remnants) ferruginous, brown at tornus. Hindwing brown; cilia concolorous with basal yellow line.

Male genitalia (Figs 7, 8). Uncus moderately slender, broadest medially; socius vestigial; valva broad with well-developed brachiola; sacculus convex postmedially, with long dorsomedian process extending toward costa; median part of transtilla long, broadly sclerotized medially, spined lobes at lateral base moderate; phallus (Fig. 8) weakly bent, broadest submedially, with dorsoterminal thorn.

Female unknown.

### Hilarographini

## Hilarographa brazzaella sp. n.

Figs 5, 6, 62

Diagnosis. *Hilarographa brazzaella* is similar to *Mictopsichia microctenota* MEYRICK, 1933 from Sierra Leone but differs from it chiefly in having unicolorous brown hindwings.

Etymology. The specific epithet honours Pietro Savorgnan DI BRAZZÀ (1852-1905), the first European explorer of the Ivindo-Ogooué river basin in Gabon.

Holotype male: GS 5795 GB, 48865 CGB.

Description (Fig. 62). Wingspan 17 mm. Head medially brown, laterally yellow, with tuft of yellow scales on vertex; thorax brown, tegula with external yellow line. Forewing distinctly expanding terminad; apex rounded; termen notched beneath apex. Ground colour whitish cream in form of numerous curved transverse lines perpendicular to dorsum and a group of oblique lines in postmedian area; costal strigulae white, divisions brown, some followed by pale orange lines; terminal area of wing orange; base of wing with three longitudinal orange lines. Cilia brown. Hindwing brown; cilia creamish.

Male genitalia (Figs 5, 6). Uncus slender, rounded apically; socii and hami equally long; valva elongate-oval with more strongly sclerotized belt along middle; phallus (Fig. 6) large, uniformly broad throughout; two cornuti in vesica.

Female unknown.

### Olethreutini

### Eccopsis luteicaput sp. n.

Figs 9, 10, 63

Diagnosis. Eccopsis luteicaput is related to E. wahlbergiana ZELLER, 1852, but it differs from the latter in having a brownish forewing; elongate, terminally rounded socii (pointed in wahlbergiana); the setae of the cucullus not reaching the angle; a serrate dorsum of phallus; and a large dorso-proximal lobe of the valva (much smaller in E. wahlbergiana). From E. morogoro AARVIK, 2004 from Tanzania, the new species differs chiefly in the male genitalia, particularly the shapes of socii, the dorsobasal process of the valva, and the asymmetrical patch of hair on the valva before the cucullus.

Holotype male: GS 5800 GB, 48815 CGB.

Description (Fig. 63). Wingspan 13 mm. Head yellowish brown; labial palpus yellow sprin-

kled dark brown; thorax brown, tegula dark brown. Forewing weakly expanding terminad; costa slightly convex; termen straight, not oblique to middle. Ground colour cream brown with browner and rust suffusions. Costal strigulae whitish, divisions dark brown. Markings brownish, more or less diffuse, except for remnants of dark brown basal blotch. Cilia (damaged) brownish. Hindwing brown, cilia (damaged) similar.

Male genitalia (Figs 9, 10). Uncus broad expanding terminally, concave apically with two spines; socius elongate ovoid; dorsoproximal lobe of valva broad, spiny; sacculus slightly convex posteriorly with large marginal and median groups of hairs; ventral angle of cucullus naked except for some strong marginal spines and hairs; phallus (Fig. 10) short, serrate dorsally.

Female unknown.

## Eccopsis incultana (WALKER, 1863)

Figs 45, 64

Material examined. A female, GS 5826 GB, CGB

R e m a r k s. In facies, the Gabonese specimen (Fig. 64) matches those from South Africa. In genitalia it differs from the figure by AARVIK (2004) in the shape of the signum (Fig. 45). It has a single median blade accompanied by a minute thorn whereas that described by AARVIK has "a scobinate plate with one broad projection which is triangularly incised". In several South African specimens examined by the first author, there is one large blade with variably sized additional thorns. In a specimen from Nigeria, there are two large blades of different size. Hence, it appears that this character is rather variable.

*E. incultana* was described from Mauritius and is widely distributed in the Afrotropical region.

### Eccopsis atrobasalis sp. n.

Figs 46, 47, 65

Diagnosis. *Eccopsis atrobasalis* is closely related to *E. nebulana* (WALSINGHAM, 1891) from Tanzania, but differs from the latter in having brownish forewing markings without a large dark dorsal blotch; large submedian folds of the posterior edge of the sterigma; an elongate, gradually tapering proximally sclerite of the antrum; and a row of thorns forming the signum.

Etymology. The new species derives its name from the black base of its antenna: Latin atrum-a = black and basis-is = base.

Holotype female: GS 5818 GB, 5818 CGB.

Description (Fig. 65). Wingspan 19 mm. Head brownish. Antenna thickened, brown with golden distally and black basally. Labial palpus yellow mixed with brown, basally yellow. Thorax brown. Forewing weakly expanding terminad; costa bent at 2/3; termen mostly concave beneath apex, slightly oblique. Ground colour creamish; suffusions and strigulation brownish. Markings typical of genus, brown with dark brown parts consisting of incomplete basal blotch and median fascia, dorsal blotch fused with tornal blotch, and slender subterminal fascia. Cilia cream with brown interruptions. Hindwing brown; cilia cream with brown basal line.

Male unknown.

Female genitalia (Fig. 46, 47). Sterigma broad, plate-shaped with two submedian folds posteriorly; sclerite of antrum proximally tapering, with lateral folds; signum a row of six thorns three of which are larger.

## Eccopsis rubiginosa sp. n.

Figs 11, 12, 66

Diagnosis. In facies, *Eccopsis rubiginosa* is similar to *E. pollens* RAZOWSKI, 2015 from Cameroon, but differs from the latter chiefly by the presence in the male genitalia of a single dorsoterminal thorn of the phallus, round terminal lobes of the uncus, dense marginal bristles of the posterior half of the sacculus, and large basal, marginal spines of the cucullus.

Etymology. The name is derived from the Latin rubiginosus-a = rusty, and refers to the thorax colour of the holotype.

Holotype male: GS 5942 GB, 50101 CGB.

Description (Fig. 66). Wingspan 14 mm. Head scaled brown and creamish, labial palpus rust brown with blackish apex; thorax rust brown with brown base of tegulae. Forewing weakly expanding terminad; costa somewhat convex; termen not concave beneath apex, slightly oblique. Ground colour cream brown with pinkish admixture, suffused and strigulated brown. Costal strigulae concolorous with ground colour, divisions dark brown. Markings brown: basal blotch ill-defined, consisting of several spots; median fascia divided into costal and dorsal blotches, latter accompanied by tornal ovate blotch; subterminal fascia slender. Cilia damaged, with brown basal line. Hindwing dark brown with brown basal line.

Male genitalia (Figs 11, 12). Uncus broad, expanding postmedially, incised apically; socius slender; valva broad basally, without neck, with indistinct dorsobasal lobe; sacculus convexly rounded with numerous marginal scales and long

bristles; fold densely spined, marginal spines of cucullus strong, large in proximal part; phallus (Fig. 12) slender, fairly long with single dorsoposterior thorn.

### Cosmorrhyncha microcosma AARVIK, 2004

Material examined. A male and a female, GS 5858 and 5881 GB, CGB.

R e m a r k s. *C. microcosma* was described from the Democratic Republic of the Congo, and it is also recorded by the same author from Kenya, São Tomé and Principe, and Uganda.

## Megalota roseoeffusa sp. n.

Figs 16, 17, 67

Diagnosis. In facies, *M. roseoeffusa* is similar to *M. rhopalitis* (MEYRICK, 1920) from Kenya, but the male genitalia are more similar to those of the Tanzanian *M. archana* AARVIK, 2004, differing in having a short, terminally thorny phallus and a series of short spines of the sacculus which in *archana* are long and form a distinct bunch.

Etymology. The name is derived from the Latin roseus-a = pink and effusus-a = scattered, and refers to the sprinkled pink scales in the forewings of the holotype.

Holotype male: GS 5852 GB, 48874 CGB.

Description (Fig. 67). Wingspan 18 mm. Head and thorax creamish brown, tegula browner proximally. Forewing slightly expanding to middle; costa uniformly convex; termen straight to middle, not oblique. Ground colour creamish, scattered with rust brown, pink and brown scales; suffusions and strigulation brownish, dorsum distinctly suffused; costal strigulae cream, divisions brown. Markings brown with dark brown parts: basal blotch atrophied; median fascia broad, rounded subdorsally, not reaching dorsum; subterminal fascia broadly connected with median part of the latter. Cilia damaged. Hindwing brown, cilia with basal line whitish, medially brown and apical line silvery white. Anal area with moderate grey brown scent scales, also present on the hind legs.

Male genitalia (Fig. 16, 17). Uncus and tegumen typical of genus. Valva fairly slender with large variably spined termination of dorsobasal process; group of hairs at middle of sacculus followed by a row of moderately long setae and terminal group of spines; phallus (Fig. 17) short, tapering terminad with a series of small dorsoterminal thorns.

Female unknown.

## Megalota taygete sp. n.

Figs 14, 15, 68

Diagnosis. In facies, *Megalota taygete* is similar to *Eccopsis pollens* RAZOWSKI, 2015. The male genitalia are similar to those of *M. archana* AARVIK, 2014, but *M. taygete* has a shorter phallus, similar to that of *M. rhopalitis* (MEYRICK, 1920) but with trace of dorsoterminal thorn, and long hairs of both the dorsomedian and terminal groups.

Etymology. The specific epithet refers to Taygete (Ταϋγέτη), one of the Pleiades in Greek mythology.

Holotype male: GS 5847 GB, 48630 CGB.

Description (Fig. 68). Wingspan 19 mm. Head and thorax brown, scaled brown cream. Forewing as in *M. roseoeffusa*, but with termen slightly concave beneath apex. Ground colour brownish cream, strongly suffused and strigulated with brown; costal strigulae concolorous with ground colour, divisions brown. Markings brown: basal blotch and dorsal half of median fascia atrophied; costal part of median fascia diffuse, connected medially with broad subterminal fascia. Cilia brown. Hindwing dark brown with concolorous cilia. Anal tuft of abdomen with long reddish brown scales.

Male genitalia (Figs 14, 15). Sacculus with large groups of long hairs medially and terminally; dorsobasal process of valva large with variably long spines; phallus (Fig. 15) short with trace of dorsomedian thorn.

Female unknown.

## Megalota sterope sp. n.

Figs 13, 69

Diagnosis. *Megalota sterope* is a brown coloured species easily distinguished by the large area of cream scent scales in the anal area of the hindwing. The male genitalia are similar to those of *M. archana*, but in *M. sterope* the long spines of the terminal part of the sacculus and the median group are situated as in *M. taygete*.

Etymology. The specific epithet refers to Sterope (Στερόπη), one of the Pleiades in Greek mythology.

Holotype male: GS 5787 GB, 48780 CGB.

Description (Fig. 69). Wingspan 18 mm. Forewing as in *roseoeffusa* and *taygete*; termen almost straight beneath apex. Ground colour creamish brown, strongly suffused and spotted with brown; costal strigulae cream, divisions brown. Markings brown with dark brown parts: median fascia atrophied in dorsomedian part of wing, not

connected with broad remnants of subterminal fascia. Cilia damaged, basal line brown. Hindwing brown with large anal tuft of cream scent scales. Anal tuft of abdomen with long brown scales. Hindleg with conspicuous patch of scent scales.

Male genitalia (Fig. 13) as in *roseoeffusa* and *taygete* but dorsobasal process of valva broader with strong spines and phallus tapering terminad with two minute dorsoterminal thorns (as in *M. rhopalitis*).

Female unknown.

### Afroploce karsholti AARVIK, 2004

Material examined. A male and a female, GS 5829 and 5838 GB, CGB.

R e m a r k s. *Afroploce karsholti* is known from the Democratic Republic of the Congo, Ghana, Kenya, Nigeria, and Tanzania (AARVIK 2004).

Further additional specimens (male, GS 5802 GB and female, GS 5792 GB) are dark coloured, brownish, with slight genital differences to the type. Hence, they may represent a new species.

# **Basigonia anisorrhopa** (DIAKONOFF, 1983) comb. n.

Olethreutes anisorrhopa DIAKONOFF, 1983, Annls Soc. Ent. Fr. (N.S.), **19**(3): 293, fig. 2; t.l.: Madagascar, Antsalova Region, Antsingy Forest.

Basigonia anisoscia DIAKONOFF, 1983, Annls Soc. Ent. Fr. (N.S.), 19(3): 300, p.l., fig. 5; t.l.: as above – syn. n.

Material examined. A male and a female, GS 5825 and 5877 GB, CGB.

Remarks. *Olethreutes anisorrhopa* and *Basigonia anisoscia* were described from same locality, both collected in February 1957 by P. GRIVEAUD. We synonymize the latter based on the DIAKONOFF's (1983) drawings and descriptions.

AARVIK (2004) redescribed *anisoscia* based on specimens from Tanzania, and RAZOWSKI & WOJTUSIAK (2012) illustrated a male from Nigeria that differed from the type of *anisoscia* by having a distinct neck of the valva. The male genitalia of the Gabon specimens exactly fit those of the Nigerian specimen.

### Nepheloploce electra sp. n.

Figs 21, 22, 23, 70

Diagnosis. *Nepheloploce electra* is closely related to *N. nephelopyrga* (MEYRICK, 1938) from the Democratic Republic of the Congo and *N. prodroma* RAZOWSKI, 2015 from Cameroon, but it distinctly differs from the two in having slender, terminally expanding forewings with an oblique termen and a whitish posterior third of the wing (in

the remaining species the forewing is broad, the termen weakly oblique, and the colouration is uniform). *N. electra* and *N. prodroma* have different phalli, and *N. nephelopyrga* has a group of spines from the neck of valva rather than a large group of setae.

Etymology. The specific epithet refers to Electra (Ήλέκτρα), one of the Pleiades in Greek mythology.

Holotype male: GS 5875 GB, 48540 CGB.

Description (Fig. 70). Wingspan 11 mm. Head and thorax brownish. Forewing expanding terminad; costa straight to beyond middle; termen oblique, almost straight. Ground colour white cream, sparsely sprinkled and dotted brown; costal strigulae whitish, divisions brown. Markings brown: basal third of the wing densely spotted and suffused with brown followed by diffuse postbasal interfascia; median fascia broad, with ill-defined edges; subterminal fascia atrophying. Cilia cream, partially brown. Hindwing brownish with creamish spaces between end of veins; cilia cream, brown at apex of wing. Sclerotizations of male abdominal segment VIII as shown in Fig. 23.

Male genitalia (Figs 21, 22). Uncus slender basally, bilobed, terminally spined; socii absent; dorsobasal process of valva pointed apically, membranous proximally; neck of valva broad with large group of hairs; sacculus hairy; cucullus broad, with large ventral lobe; phallus (Fig. 22) stout, with minute medio-dorsal tooth, with moderate subapical ventral triple thorn and a long cornutus-like process in the vesica.

Female unknown.

# *Prophaecasia usambarae* (RAZOWSKI & WOJTUSIAK, 2014) comb. n.

Fig. 72

Material examined. A male and female, GS 5784 and 5791 GB, CGB.

R e m a r k s. *P. usambarae* was described from Tanzania; it is also known from Nigeria and its synonym, *P. malaviana* Heppner & Bae, 2017 **syn. n**., from Malawi. The adult male (Fig. 72) is illustrated for comparison with the next species.

## Prophaecasia gabonana sp. n.

Figs 20, 71

Diagnosis. *Prophaecasia gabonana* is closely related to *P. usambarae* (Fig. 72) from which it differs in having broad, white transverse fascia limiting the pink scaling in the less marbled dorsal part of the forewing, and the presence of dense dark strigulation in the tornal area. The male

genitalia differ in the elongate-ovoid (not triangular) socii, and long, slender cucullus.

E t y m o l o g y. The specific epithet refers to the country of origin.

Holotype male: GS 5768 GB, 48840 CGB.

Description (Fig. 71). Wingspan 13 mm. Head brownish cream; thorax greenish cream. Forewing slightly expanding terminad; costa weakly convex; termen indistinctly depressed beneath apex, not oblique. Basal half of wing greenish cream, sparsely strigulated brown; costal strigulae whitish, divisions brown. Posterior part of wing pale pink separated from the anterior part by a broad white line, proximally edged with black. Numerous blackish strigulae agglomerated medially in pink area. Cilia pink with brown suffusions and interruptions. Hindwing brown; cilia dirty cream.

Male genitalia (Fig. 20). Tegumen broad with lateroterminal, rounded lobes; socius subovoid with straight outer edge, pointed apically; hairs and long bristles form subterminal part of tegumen and socii; valva broad basally; sacculus slightly concave subterminally, with broadly rounded, bristled angle; cucullus long, slender; phallus broad.

Female unknown.

### Dolichohedya fulgens sp. n.

Figs 18, 19, 94

D i a g n o s i s. The male genitalia of *D. fulgens* are similar to those of *D. tripila* DIAKONOFF, 1970 from Madagascar, but *D. fulgens* is different externally, having a dark brown hindwing (in *tripila* the hindwing is ochreous yellow).

Etymology. The name is derived from the Latin *fulgens-ntis* = glittering, and refers to the coloration of the forewing.

Holotype male: GS 5840 GB, 48825 CGB.

Description (Fig. 94). Wingspan 16 mm. Head and thorax brown; third joint of labial palpus white. Forewing broadest medially; costa gradually convex; apex rounded; termen weakly convex. Ground colour dark brown scattered with silvery blue scales, orange from 2/3 of costa to apex; costal strigulae white, divisions brown, present in orange part of wing only; indistinct greyish diffused fasciae in terminal third of wing and dark brown suffusion in subterminal third of wing. Cilia damaged, concolorous with wing. Hindwing dark brown; cilia similar.

Male genitalia (Figs 18, 19). Pedunculi of tegumen long, simple; uncus strong, broad to middle, rounded terminally; socius broad, drooping; gnathos ill-defined; valva mostly slender, with indistinct neck; sacculus broad to 1/3; cucullus long,

slender; strong spines along fold, some reaching ventral lobe of cucullus; bunch of long setae from above ventral incision of outer surface of valva; phallus (Fig. 19) almost straight, with a small apical cornutus.

Female unknown.

### **Bactrini**

## Bactra alcyone sp. n.

Figs 48, 49, 73

Diagnosis. *Bactra alcyone* is related to *B. erema* DIAKONOFF, 1964 from Karimun Djawa Island of Java. It can be distinguished from the latter by the longer and more slender sclerite of the antrum and shallow ventral concavities of the anteostial sterigma.

Etymology. The specific epithet refers to Alcyone (Άλκυόνη), one of the Pleiades in Greek mythology.

Holotype female: GS 5878 GB, 48826 CGB.

Description (Fig. 73). Wingspan 16 mm. Head and thorax brownish. Forewing typical of the genus. Costal strigulae fine, brownish cream, divisions brown. Ground colour brownish cream suffused and sprinkled brown; dorsum with scattered rust scales, termen more brown, apex dark brown; brownish cream fascia from end of median cell to apex. Markings reduced to diffuse brown traces of median fascia. Hindwing pale brownish, apex browner; cilia brownish cream.

Male unknown.

Female genitalia (Figs 48, 49). Anteostial sterigma slender, with sac-shaped structures lateropostmedially; postostial sterigma consisting of broad lateral lobes separated by a narrow, deep incision and a large ventral heart-shaped lobe; sclerite of antrum moderately broad reaching end of latter; ductus bursae membranous; ductus seminalis and bulla large; signum distinct, subovoid.

### Syntozyga pulchella sp. n.

Figs 24, 74

D i a g n o s i s. *Syntozyga pulchella* is closely related to the African *S. triangulata* AARVIK, 2008 from Tanzania, differing from it in having a whitish cream forewing ground colour, and a subtriangular, sclerotized lobe from the end of the sacculus.

Etymology. The name is derived from the Latin *pulchellus-a* = nice or beautiful, and refers to the coloration of the forewing.

Holotype male: GS 5830 GB, 48877 CGB.

Description (Fig. 74). Wingspan 12 mm. Head brownish cream; thorax white cream marked with pale brown. Forewing slightly expanding terminal; costa weakly convex; termen almost straight, not oblique. Ground colour white cream sparsely dotted brownish; costal strigulae creamish, divisions pale brown. Markings pale brown; basal blotch divided into three parts; median fascia interrupted submedially with slender, dark brown costal half and pale, diffuse dorsal part followed by elongate tornal blotch; subterminal fascia slender, atrophying subcostally. Cilia cream with brownish suffusions. Hindwing brown; cilia brown with distinct yellow basal line.

Male genitalia (Fig. 24). Top of tegumen weakly sclerotized, hairy; valva broad basally, well sclerotized medially; sacculus convex posteriorly with strongly spiny serrate lobe; subtriangular sclerotic serrate lobe above subterminal part of sacculus; large caudal lobe before posterior end of cucullus; phallus simple, weakly bent.

Female unknown.

### **Enarmoniini**

## Dasodis falcata sp. n.

Figs 25, 50, 75, 76

D i a g n o s i s. *Dasodis falcata* is closely related to the Indian *D. microphthora* (MEYRICK, 1936). It differs from the latter in having a longer phallus and a triangular ventral lobe of the sacculus.

Etymology. The species name is derived from the Latin falcatus-a = sickle-shaped, and refers to the strongly hooked apex of the forewing.

Holotype male: GS 5805 GB, 48985 CGB; paratype female, GS 5796 GB; 48931 CGB.

Description. Male (Fig. 75). Wingspan 14 mm. Head creamy; thorax yellowish brown, tegula creamy. Forewing slender; costa gently convex; apex sickle-shaped; termen strongly concave beneath apex. Ground colour cream, slightly tinged brown, suffusions pale rust brown; costal strigulae creamish, divisions dark brown. Markings rust brown in form of longitudinal lines and fasciae; two dark brown, short lines in subterminal area directed towards apex. Cilia rust cream, rust brown at apex. Hindwing brown, apex cream; cilia brownish.

Female (Fig. 76) darker than male; wingspan 14 mm; forewing markings more brown, with reduced areas of ground colour. Hindwing brown with small cream part of apex.

Male genitalia (Fig. 25). Pedunculi slender with strong apodemes for muscle M4; socius large, ovoid, densely hairy, with proximal spine; valva

slender; sacculus convexely rounded; cucullus short with triangular, spiny ventral lobe; phallus long, slender, weakly bent.

Female genitalia (Fig. 50). Sterigma extending laterally, concave in middle posteriorly; antrum sclerite tapering proximally, extending towards middle of ductus bursae by a thread-like sclerite; ductus bursae long slender; ductus seminalis very short; signa two similar blades expanding terminally. Two rounded pouches of scent scales on subgenital sternite submedially.

### Amabrana RAZOWSKI & WOJTUSIAK, 2012

R e m a r k s. *Amabrana* was orginally described in Grapholitini, but RAZOWSKI (2015) subsequently suggested that it may belong to Enarmoniini. In addition to *A. plumbana* RAZOWSKI & WOJTUSIAK, 2012 (the type species) and *A. yaouondeae* RAZOWSKI, 2015, three species are here transferred from *Thylacogaster* to *Amabrana* primarily on basis of the external characters, structure of the valva, and the female genitalia. These are: *Amabrana acanthoda* (RAZOWSKI & WOJTUSIAK, 2015) **comb. n.**, *A. primaria* (RAZOWSKI, 2015) **comb. n.**, *A. primaria* (RAZOWSKI, 2015) **comb. n.**, *A. subseparata* (RAZOWSKI, 2015) **comb. n.** is transferred from *Endotera* AGASSIZ, 2001.

# Amabrana subseparata (RAZOWSKI, 2015) comb. n.

Material examined. A male, GS 5954 GB, CGB.

Remarks. *Amabrana subseparata* was described from a male collected on Mt. Cameroon at the altitude of 1090 m.

# Amabrana bendelana (RAZOWSKI & WOJTUSIAK, 2015) comb. n.

Material examined. A female, GS 5870 GB, CGB.

Remarks. *Amabrana bendelana* was described from the State of Bendel, Nigeria, and reported from Cameroon (RAZOWSKI, 2015).

### Phalarocarpa harmographa MEYRICK, 1937

Material examined. A male, GS 5773 GB, CGB.

Remarks. *Phalarocarpa harmographa* was described from Kampala, Uganda.

### Thylacogaster monospora (MEYRICK, 1939)

### Figs 58, 77

Material examined. Eight specimens, GS 5803, 5880, 5885 and 5889 GB, CGB and ISEZ.

R e m a r k s. We illustrate male hindlegs (Fig. 77) and eighth abdominal segment with scent scales (Fig. 58). The species was described from the Democratic Republic of the Congo, and reported from Nigeria by RAZOWSKI & WOJTUSIAK (2012).

### Thylacogaster ornata sp. n.

Figs 51, 52, 78

Diagnosis. *Thylacogaster ornata* is related to *T. monospora*, but differs from it in the forewing ground colour, mainly olive green, and in the submarginal markings reddish rust, as opposed to mainly brown ground colour and smaller orange brown submarginal dot in *T. monospora*. The presence of an abdominal scent organ under a subrectangular sclerotized plate, and the strongly sclerotized, proximally elongate sterigma distinguish the female genitalia of the new species from those of its congeners.

Etymology. The name is derived from the Latin ornatus-a = adorned, and refers to the scent organs of abdominal sternite VIII.

Holotype female: GS 5884 GB, 5884 CGB.

Description (Fig. 78). Wingspan 14 mm. Head and thorax pale olive brown, the latter densely dotted with pale brown scales. Forewing indistinctly expanding terminad; termen not oblique, minutely incised beneath apex. Ground colour olive brown, densely sprinkled with brown; costal strigulae yellowish, divisions brownish, lines extending from latter edged brownish rust. Posterior part of wing from tornus obliquely to before costa reddish rust with brown proximal and posterior parts; a few black dots on intervenal, more orange red areas. Other markings absent. Cilia brown, reddish rust basally. Hindwing brown; cilia pale brown with whitish and dark brown basal lines.

Male unknown.

Female genitalia (Figs 51, 52). Ovipositor and posterior apophyses long; eighth tergite elongate; anteostial sterigma elongate, cup-shaped; postostial sterigma expanding distad, with a pair of terminal lobes; ductus bursae long, membranous; ductus seminalis short, originating approximately from 2/3 of latter; blades of signa long.

Abdominal scent organ (Fig. 52) bound with eighth sternite, consisting of a lightly sclerotized pocket situated medially on proximal edge of sternum under a broad subrectangular plate.

## Thylacogaster albistrigulata sp. n.

Figs 53, 79

Diagnosis. *Thylacogaster albistrigulata* is similar to *T. garcinovora* RAZOWSKI & BROWN, 2012 from Kenya but it has a brownish inner area of the speculum and a distinctly sclerotized, larger antrum.

Etymology. The species is named after the distinctive white strigulae of the holotype forewings: Latin *albus-a* = white.

Holotype female: GS 5854 GB, 48685 CGB.

Description (Fig. 79). Wingspan 10 mm. Head and thorax ferruginous brown. Forewing weakly expanding terminad; costa nearly straight; apex broadly rounded; termen not oblique. Ground colour pale brownish with some whitish scales, tinged ferruginous in posterior third of wing; costal strigulae white, divisions dark brown; series of black spots from posterior part of termen towards costa. Ferruginous brown strigulae and weak fasciae present. Traces of median fascia reaching tornal marking. Cilia brownish. Hindwing brown; cilia paler.

Male unknown.

Female genitalia (Fig. 53). Apophyses moderately short; sterigma ill-defined, weakly sclerotized transverse plate; antrum sclerite strong, concave ventroposteriorly; ductus bursae shorter than corpus bursae; signa slender.

## Gnathodracon pavesii sp. n.

Figs 26, 80

Diagnosis. In facies, Gnathodracon pavesii is very similar to G. phaetusa RAZOWSKI & KARISCH, 2017 from Sierra Leone. In G. pavesii the subdorsal dark line terminates at the end of first subcostal line and reaches the end of vein M2 whilst in phaetusa it reaches M3 and its dorsal branch is long and terminates at the tornus. In G. pavesii the valva has a distinct neck and a short, caudally expanding cucullus which in phaetusa are less expressed and longer, tapering apicad, respectively.

Etymology. The species is dedicated to Dr. Maurizio PAVESI, a specialist of Coleoptera and Odonata in the Milan Natural History Museum, in recognition of his support and friendship during the Gabon expedition.

Holotype male: GS 5958 GB, 50208 CGB.

Description (Fig. 80). Wingspan 19 mm. Head and thorax cream; dorsum of labial palpus and frons brown, thorax rust. Forewing not expanding terminally; costa strongly curved basally, then straight; termen gently concave medially.

Ground colour cream and whitish; reticulation orange; costal strigulae whitish, divisions dark brown, subcostal suffusion pale orange. Markings rust brown with dark brown parts; subcostal fascia arched, extending from before mid-costa to midtermen, subdorsal line along vein CuA1. Cilia rust brown with blackish basal line. Hindwing whitish tinged cream on peripheries, cilia similar with grey basal line.

Male genitalia (Fig. 26). Uncus bifid beyond middle; neck of valva broad, ventral incision well defined; cucullus short, convex, with indistinct ventral lobe; phallus broad; cornuti numerous.

Female unknown.

## Gnathodracon durantei sp. n.

Figs 27, 81

D i a g n o s i s. *Gnatodracon durantei* is similar to *G. phaetusa* RAZOWSKI & KARISCH, 2017 and *G. pavesii* sp. n., but it lacks the subdorsal line of the forewing and the broad arms of uncus.

E t y m o l o g y. The species is dedicated to Dr. Antonio DURANTE, specialist of Arctiinae (Erebidae) in the Museo di Storia naturale del Salento, for his friendship during the Gabon expedition.

Holotype male: GS 5771 GB, 48933 CGB.

Description (Fig. 81). Wingspan 22 mm. Head yellowish cream with orange suffusion, thorax yellowish cream with orange suffusion and transverse lines. Forewing costa distinctly convex basally; termen straight. Ground colour yellowish cream densely reticulated with orange; costal strigulae cream, divisions brown. Markings dark brown, consisting of subcostal line connected to postbasal line, short costal line reaching mid-part of the latter, and small tornal blotch. Cilia brown with black basal line. Hindwing creamish white, tinged brownish apically; cilia white cream.

Male genitalia (Fig. 27). Arms of uncus broad, with apical thorn; basal part of valva broad; neck moderately broad; ventral incision distinct; sacculus angulate with large group of setae at angle; cucullus short with distinct ventral lobe; phallus short and enlarged; cornuti short, numerous.

Female unknown.

## Gnathodracon massaronei sp. n.

Figs 28, 82

Diagnosis. *Gnathodracon massaronei* is closely related to *G. phaetusa* RAZOWSKI & KARISCH, 2017, *G. pavesii* sp. n., and *G. durantei* sp. n., differing in having the forewing ground colour cream white with only a brown subcostal line. The male

genitalia differ from those of its congeners in having the uncus processes apically dentate and a weaker ventral lobe of the cucullus.

Etymology. The species is dedicated to Carlo MASSARONE, specialist of Cerambycidae (Coleoptera), acknowledging his friendship during the Gabon expedition.

Holotype male: GS 5769 GB, 48950 CGB.

Description (Fig. 82). Wingspan 16 mm. Head and thorax white. Forewing costa bent basally; termen slightly concave medially. Ground colour cream white with faint traces of pale orange, strigulation: costal strigulae pale cream, divisions rust brown. Markings rust brown with some dark brown spots consisting of subcostal line only. Cilia pale rust brown with black basal line. Hindwing cream, cilia similar.

Male genitalia (Fig. 28). Arms of uncus with fairly long base and three lateroterminal indentations; neck of valva broad; incision shallow; sacculus angulate with angular setae; cucullus short with indistinct ventral lobe; phallus short, large, apically upcurved; cornuti numerous, short.

Female unknown.

### Gnathodracon lukimayumbe RAZOWSKI, 2012

Material examined. Three males, GS 5775, 5806 and 5811 GB, CGB and ISEZ.

R e m a r k s. In RAZOWSKI (2012) there is a mistake in the legends of the illustrations that should be corrected as follows: Fig. 9 (female genitalia) refers to *G. orbiculina* RAZOWSKI, 2012; Fig. 11 (imago) refers to *G. lukimayumbe*; and Figs 14 and 15 (imagines) represent *G. orbiculina*.

### Gnathodracon merope sp. n.

Figs 29, 83

Diagnosis. *Gnathodracon merope* is related to *G. strigulata* KARISCH, 2009 from the Democratic Republic of the Congo. It differs from the latter in lacking the transverse forewing fasciae, and in having a broader basal part of the uncus, with more curved posterior arms.

Etymology. The specific epithet refers to Merope (Μερώπη), one of the Pleiades in Greek mythology.

Holotype male: GS 5786 GB, 48677 CGB.

Description (Fig. 83). Wingspan 13 mm. Head and thorax pale brownish orange. Forewing weakly expanding terminally; costa convex basally; termen indistinctly oblique, almost straight. Ground colour orange cream, suffused and reticulated brownish orange; costal strigulae paler than suffusions, divisions brown. Markings strongly re-

duced, brown, consisting of costal spot representing median fascia and a marking at 2/3 of dorsum. Cilia orange cream. Hindwing brownish suffused red, with apical area rust brown and yellow; cilia cream brown with basal and apical lines yellow.

Male genitalia (Fig. 29). Basal part of uncus broad, posterior arms longer than latter, curved; neck of valva indistinct; sacculus short with strong dorsal spine; cucullus long, convex ventrocaudally; phallus moderately short, almost straight; several cornuti sockets present.

Female unknown.

## Camptrodoxa pusilla sp. n.

Figs 30, 31, 84

Diagnosis. *Camptrodoxa pusilla* is closely related to *C. bisecta* (MEYRICK, 1918) from the Republic of South Africa but differs from it in having a more posterior group of spines in the ventral incision of valva and in the presence of a strong spine from the ventral lobe of the cucullus.

Etymology. The name is derived from the Latin pusillus-a = tiny, and refers to the small size of the species.

Holotype male: GS 5824 GB, 48668 CGB.

Description (Fig. 84). Wingspan 9 mm. Head and thorax brownish. Forewing not expanding terminally (termen damaged). Ground colour brownish; remnants of markings brown. Hindwing brown, cilia paler.

Male genitalia (Fig. 30). Tegumen and its pedunculi long, slender; valva long with moderately long neck and semicircular ventral incision; group of spines from middle of proximal edge of latter; cucullus small with rounded lobes; strong spine from ventral lobe of latter; phallus long, slender. Sclerites of subgenital segment as in Fig. 31.

Female unknown.

## Camptrodoxa splendens sp. n.

Figs 32, 33, 85

D i a g n o s i s. *Camptrodoxa splendens* is closely related to *C. plectocosma* (MEYRICK, 1921) from Zimbabwe, but the male genitalia of *C. splendens* have a long ventral incision of the valva and a ventral patch of spines submedially.

Etymology. The name is derived from the Latin *splendens-ntis* = resplendent, and refers to the handsome colouration of the forewing.

Holotype male: GS 5812 GB, 48845 CGB.

Description (Fig. 85). Wingspan 11 mm. Head and proximal part of thorax dark brown, posterior part of the latter much paler. Forewing

slightly expanding terminad; costa almost straight; termen somewhat oblique. Ground colour dirty cream, suffusions brownish, refractive grey areas distinct; dorsum with three pairs of slender creamish lines; speculum sparsely scaled yellowish white; costal strigulae white, divisions and costal area of wing dark brown. Markings dark brown, divided into parts, with some rust brown shades. Cilia cream, scaled brown, brownish in dorsal half of termen. Hindwing brown, cilia paler.

Male genitalia (Fig. 32). Tegumen typical of genus; valva slightly tapering distad; neck slender; ventral incision large with small, median group of spines; cucullus triangular, spined caudally; phallus long, slender. Sclerites of subgenital segment as in Fig. 33.

Female unknown.

#### Eucosmini

### Cosmetra spiculifera (MEYRICK, 1913)

Material examined. A female, GS 5833 GB.

R e m a r k s. *Cosmetra spiculifera* has been reported from Gabon, Cameroon, the Democratic Republic of the Congo, Ghana, Kenya, Nigeria, and Republic of South Africa (AARVIK 2016).

### Cosmetra maia sp. n.

Figs 54, 55, 86

Diagnosis. Cosmetra maia is related to C. tumulata (MEYRICK, 1908) from the Republic of South Africa, but differs from the latter in having a cream grey colouration of the forewing. The female genitalia of C. maia are distinguished by the longer sclerite of the ductus bursae and the absence of spines of the subgenital sternite.

Et y m o l o g y. The specific epithet refers to Maia ( $M\alpha\tilde{i}\alpha$ ), one of the Pleiades in Greek mythology. Holotype female: GS 5888 GB, 48957 CGB.

Description (Fig. 86). Wingspan 12 mm. Head dirty cream; thorax more olive grey. Forewing slightly expanding posteriorly; costa almost straight; termen concave beneath apex. Ground colour white cream sprinkled and suffused with brownish; costal strigulae whitish, divisions brownish. Markings ill-defined, brownish with blackish scales; trace of dorsobasal and tornal blotch, median fascia indistinct; row of spots subterminally. Cilia brown, whitish in dorsal third. Hindwing uniformly greyish brown, cilia paler.

Male unknown.

Female genitalia (Figs 54, 55). Proximal edge of postostial sterigma strongly sclerotized, slender, extending submedially posterad, terminating in

a weakly sclerotized plate; sclerite of antrum large, membranous along middle; signa strong.

## Acroclita celaeno sp. n.

Figs 37, 87

D i a g n o s i s. *Acroclita celaeno* is related to the Palaearctic *A. consequana* (HERRICH-SCHÄFFER, 1851) but is distinguished by its indistinct uncus, represented by a bilobed, sclerotized process of the tegumen, and its very long socii.

Etymology. The specific epithet refers to Celaeno (Κελαινώ), one of the Pleiades in Greek mythology.

Holotype male: GS 5860 GB, 48889 CGB.

Description (Fig. 87). Wingspan 10.5 mm. Head and thorax brown. Forewing almost uniformly broad throughout; costa slightly bent; termen weakly concave beneath apex. Ground colour pale brown with rust admixture, sparsely scaled whitish; shades similar; costal strigulae creamish, in anterior part of costa mixed brownish; divisions rust brown, apex brown. Markings rust brown, in dorsal area of wing suffused dark brown consisting of incomplete basal blotch and median fascia which are interrupted medially, tornal blotch, and small blotch at mid-termen. Cilia brown. Hindwing brown, cilia similar.

Male genitalia (Fig. 37). Tegumen fairly long; uncus in form of bilobed prominence of tegumen; socii very long, drooping, hairy, with a slender hook situated at each base; valva long, slender with ill-defined neck marked by elongate rib; sacculus terminating in a short process; cucullus without ventral lobe, spined ventroproximally; phallus short, broad.

Female unknown.

### Grapholitini

## Coniostola cinereocostalis sp. n.

Figs 57, 89, 90

D i a g n o s i s. *Coniostola cinereocostalis* is related to *C. stereoma* (MEYRICK, 1912) described from Bengal, India, but it differs from the latter in having a dark brown hindwing and a minute sclerite at the base of the ductus seminalis.

Etymology. The species name is derived from the Latin cinereus-a = grey and costa-ae = side, and refers to the coloration of the costa of the hindwing.

Holotype female: GS 5869 GB, 51220 CGB. Paratype: female, GS 5963 GB, ISEZ.

Description (Figs 89, 90). Wingspan 11 mm. Head and thorax brown, dotted creamish (ends of scales). Forewing slightly expanding terminad; costa almost straight; apex rounded; termen concave beneath apex. Ground colour brownish cream in form of a pair of transverse lines perpendicular to dorsum continued in the middle of wing, and weakly so along costa with broader elements at termen; costal strigulae cream, divisions dark brown; speculum with spots and lines. Markings absent. Cilia brown with pale orange parts, greyish at apex. Hindwing brown with large grey area at costa (Fig. 90), cilia brown in the middle, paler basally and terminally. Frenulum with three bristles.

Variation. One specimen with pale transverse lines and numerous dots on a brownish olive ground.

Male unknown.

Female genitalia (Fig. 57). Ovipositor and apophyses long; lateral parts of sterigma fairly slender; cingulum small; sclerite protecting base of ductus seminalis very small; signa two large blades.

## Coniostola seira RAZOWSKI & WOJTUSIAK, 2012

Material examined. Three females, GS 5781, 5817 and 5883 GB, CGB.

Remarks. *Coniostola seira* was described from Cross River State, Nigeria.

# Eucosmocydia terreirana RAZOWSKI & WOJTUSIAK, 2014

Material examined. A female, GS 5862 GB, CGB.

Remarks. This species was described from São Tomé. The genitalia are similar to those of *E. antidora* (MEYRICK, 1921) from Zimbabwe, but *E. terreirana* can be distinguished by the forewing pattern and dark brown hindwing.

### Eucosmocydia ipassaensis sp. n.

Figs 34, 35, 36, 88

Diagnosis. *Eucosmocydia ipassaensis* is related to the Madagascan *E. oedipus* DIAKONOFF, 1988 but differs from the latter in having an orange-brown strigulate forewing and a distinct ventral lobe of the cucullus.

Etymology. The new species derives its name from the type locality.

Holotype male: GS 5820 GB, 48809 CGB.

Description (Fig. 88). Wingspan 12 mm. Head and thorax orange, scaled brown. Forewing weakly expanding terminad; costa slightly con-

vex; termen concave beneath apex. Ground colour orange; costal strigulae in posterior part of wing cream, divisions dark brown; strigulation brown, dense; spots of speculum distinct. Markings brown, indistinct. Cilia orange brown with strong brown basal line. Hindwing dark brown, cilia similar.

Male genitalia (Fig. 34). Tegumen long, broad terminally; neck of valva submedian, ventral incision deep; cucullus long, tapering posterad, with large, rounded ventral lobe; phallus short, basally broad, medially concave and apically very narrow and slightly upcurved. Sclerites of subgenital segment as in Figs 35 and 36.

Female unknown.

## Cydia minor RAZOWSKI & WOJTUSIAK, 2012

Material examined. A female, GS 5859 GB, CGB.

Remarks. Our specimen differs from the holotype of *C. minor* by having a small white mark near the middle of the hindwing median cell, similar to that in *C. albisignis* RAZOWSKI & WOJTUSIAK, 2012 (both Nigerian), but its genitalia are similar to those of *C. minor*.

### Cydia albimacula sp. n.

Figs 56, 91

Diagnosis. In female genitalia, *Cydia albimacula* resembles the Rhodesian *C. platydryas* (MEYRICK, 1932), but differs from it by having a short, laterally dentate eighth sternite and a broad anteostial sterigma.

Etymology. The species name is derived from the Latin *albus-a* = white and macula-ae = spot, and refers to the median spot of the forewing.

Holotype female: GS 5823 GB, 48896 CGB.

Description (Fig. 91). Wingspan 14 mm. Head white, vertex rust; thorax rust white scaled. Forewing broad, slightly expanding posteriorly; costa convex mostly in basal part; apex rounded; termen not oblique, weakly depressed beneath apex. Ground colour rust, densely scaled white, in distal third of wing suffused black with median white spots, and a large, round medio-dorsal spot; costal strigulae very slender, white, divisions ill-defined, concolorous with wing. Markings atrophied. Cilia rust brown. Hindwing pale brown with rust admixture; cilia similar, basally and apically white.

Male unknown.

Female genitalia (Fig. 56). Papilla analis broadest medially; apophyses moderately short; postostial sterigma large, broad posteriorly with two submedian concavities of posterior edge; antrum

sclerite short; cingulum weakly sclerotized; signa two strong funnels with elongate tips.

## Cryptophlebia peltastica (MEYRICK, 1921)

Material examined. A female, CGB.

R e m a r k s. This species was described from South Africa and is known from Madagascar, Malawi, Mauritius and São Tomé and Principe.

### Gaboncydia gen. n.

Type species: Gaboncydia gabonensis sp. n.

Diagnosis. *Gaboncydia* is related to *Cydia* but differs from it and other grapholitines in having a large scent organ on outer surface of the valva.

Etymology. The generic name is a combination of the name *Cydia* and the country of origin of its type species. The gender of the new genus is feminine.

Description. Venation. In forewing R5 to termen beneath apex; CuA2 opposite mid-distance between bases of R1-R2; chorda absent; M-stem subvestigial. In hindwing Rr-M1 approaching termen; M3-CuA1 stalked basally.

Male genitalia (Fig. 38). Pedunculi of tegumen very slender; socii absent; neck of valva and ventral incision slender, costa strongly convex medially; cucullus with outer postbasal fold with triple row of strong setae followed in middle valva by an area of long scent scales; phallus (Fig. 39) a broad tube narrowing at base; caulis long; cornutus plough-shaped.

Female unknown.

Distribution and biology. The genus is known only from Gabon. The biology is unkown.

### Gaboncydia gabonensis sp. n.

Figs 38, 39, 40, 41, 42, 92

Diagnosis. *Gaboncydia gabonensis* is the only representative of the genus; in male genitalia it resembles some *Cydia*, e.g. the Arabian *C. odontica* DIAKONOFF, 1983, but differs from it in having a conspicuous valval scent organ, a broader phallus, and a cucullus.

Etymology. The species derives its name from its type locality.

Holotype male: GS 5866 GB, 51444 CGB.

Description (Fig. 92). Wingspan 12 mm. Head laterally yellow, medially grey brown with grey brown tuft of scales at vertex suffused green, and apically yellow; labial palpi white with golden yellow apex; antennae basally yellow, annulated

brown, distally black brown. Thorax dark brown, sprinkled with yellow scales. Forewing slender, somewhat expanding terminad; costa nearly straight; termen slightly oblique, indistinctly concave beneath apex. Ground colour in dorsal part of wing yellow-brown, in terminal part yellow with brownish suffusions; costal part of wing blackish brown and dark brown; costal strigulae small, white, divisions refractive silver blue. Markings absent. Cilia concolorous with terminal part of wing. Hindwing dark brown, cilia concolorous with apical greyish line; cubital pecten with long black modified scales.

Male genitalia (Figs 38, 39) as described for the genus. Sclerites of subgenital segment as in Figs 40 and 41, sclerotizations of abdominal segment VIII as in Fig. 42.

### Bonagmene gen. n.

Type species: Bonagmene eburnea sp. n.

Diagnosis. *Bonagmene* is related to *Pammenopsis* KUZNETSOV, 2003 as its male scent organs show, but it can be distinguished from the latter mainly by the presence of scent areas on abdominal segments 3, 4 and 5 (Fig. 43), the absence of a lateral scale bundle of segment 3, the absence of the hindwing anal fringe, and the shape of the valva. It is also distinct in facies.

Etymology. The generic name is an anagram of the country of the type species, Gabon, and a part of the generic name of *Pammene*. The gender of the new genus is feminine.

Description. In facies, especially the forewing shape, the new species is almost indistinguishable from species of *Pammene* Hübner, 1816 and *Dichrorampha* GUENÉE, 1845.

V e n a t i o n. In forewing R5 reaches termen beneath apex; CuA2 opposite mid-distance between bases of R1-R2; chorda absent; M-stem rudimentary. In hindwing Rr-M1 to termen; M3-CuA1 stalked basally.

Male genitalia (Fig. 43). Tegumen fairly short, rounded apically; socius subterminal, lateral, hairy; gnathos slender; valva broad to end of sacculus; neck long, slender; ventral incision deep, ovoid; cucullus short with large ventral lobe; phallus slender; cornuti numerous short spines; caulis very short.

Scent organs as described in diagnosis (Fig. 44).

Female unknown.

Biology and distribution. The genus is monotypic known only from Gabon. The biology is unknown.

### Bonagmene eburnea sp. n.

Figs 43, 44, 93

D i a g n o s i s. Externally, *B. eburnea* resembles some Palaearctic grapholitines, e.g. *Pammene fasciana* (LINNAEUS, 1761), but it has a paler head and thorax. The male genitalia are quite similar to *Dichrorampha* species, but those of the new species are disitinguished by the well developed socii.

Etymology. The specific name refers to the ground colour of the holotype: Latin *eburneus-a* = ivory coloured.

Holotype male: GS 5882 GB, 49010 CGB.

Description (Fig. 93). Wingspan 10.5 mm. Antenna thick, annulate, with raised scales. Head ivory white; labial palpus white on inner side, outer side grey, tip white; vertex with tuft of grey scales with white apices. Thorax ivory white, base of tegula grey. Forewing slightly expanding terminad; costa straight; termen somewhat oblique, straight, indistinctly concave beneath apex. Ground colour ivory white; suffusions and strigulation brownish grey, distal fourth of wing suffused pale brownish with a few blackish spots; costal strigulae white, divisions and remnants of markings brownish; speculum rudimentary. Cilia pale brown. Hindwing brownish; cilia paler.

Male genitalia (Fig. 43): as described for the genus

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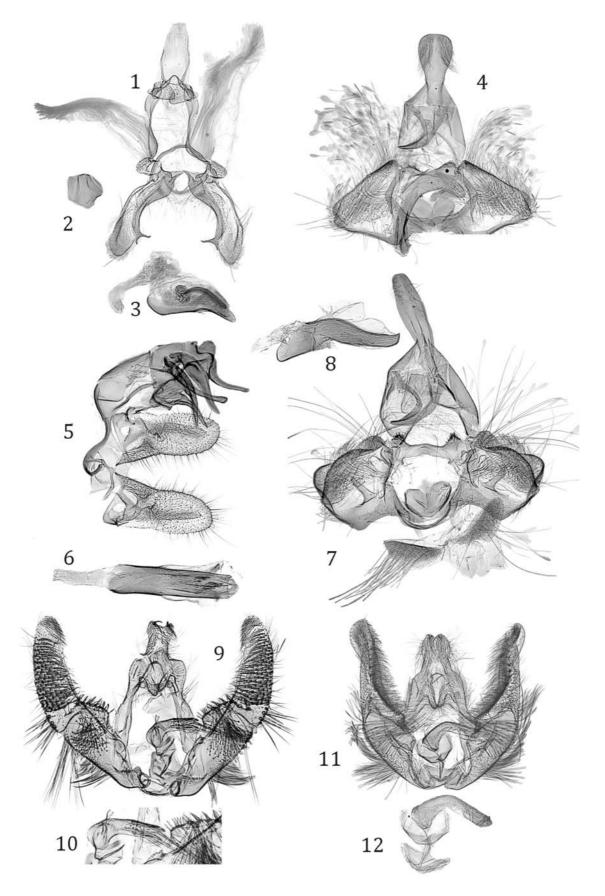
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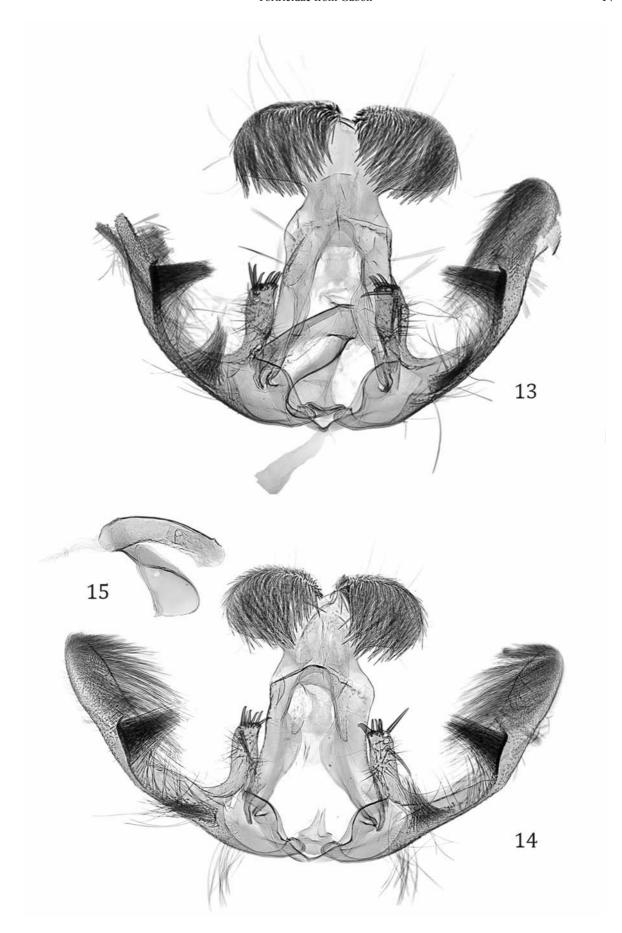
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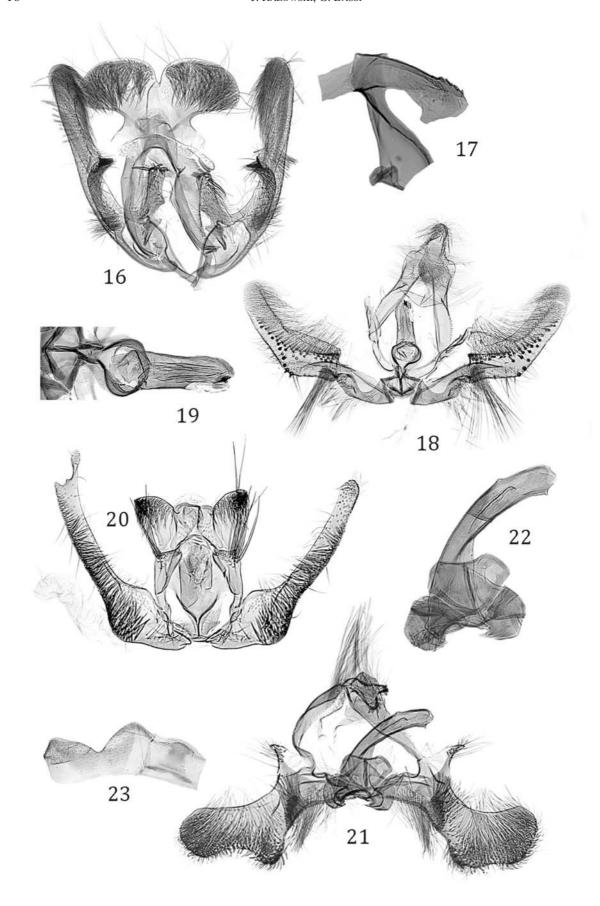
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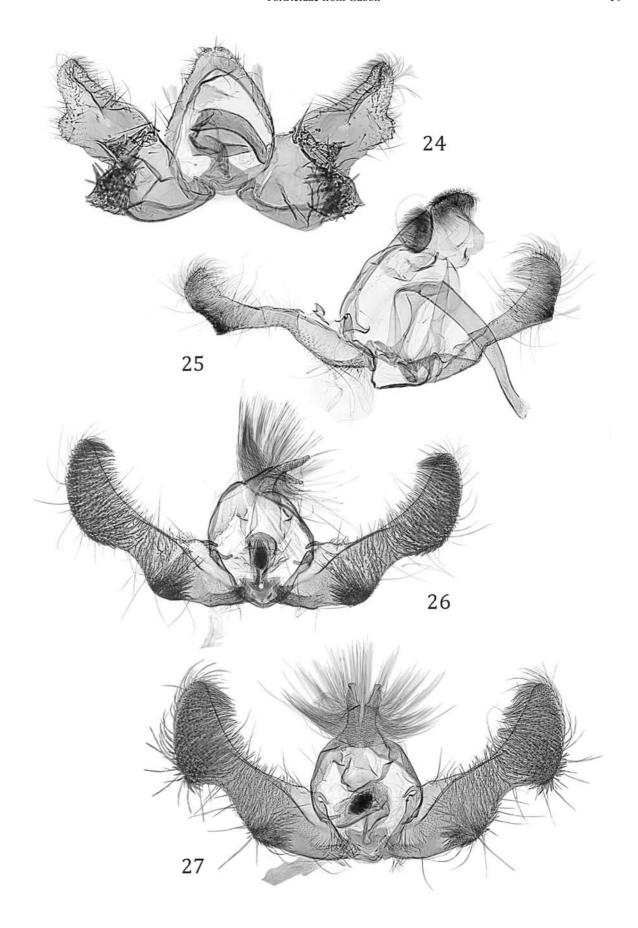
Figs 1-12. Male genitalia: 1-3 – Sanguinograptis rubidissecta sp. n., holotype; 4 – Epichoristodes aequatorialis sp. n., holotype; 5, 6 – Hilarographa brazzaella sp. n., holotype; 7, 8 – Epichoristodes ivindoensis sp. n., holotype; 9, 10 – Eccopsis luteicaput sp. n., holotype; 11, 12 – Eccopsis rubiginosa sp. n., holotype.



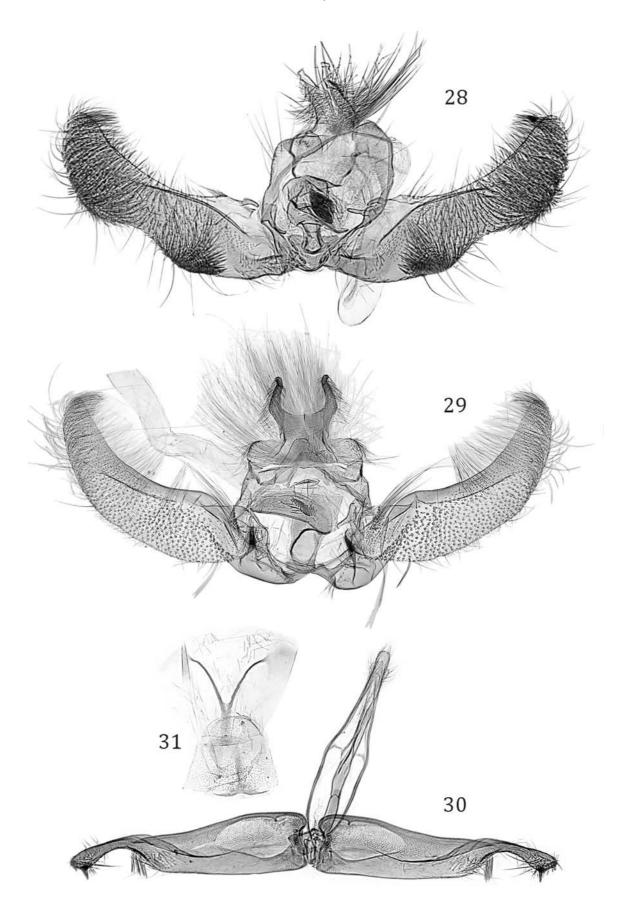
Figs 13-15. Male genitalia: 13 – *Megalota sterope* sp. n., holotype; 14, 15 – *Megalota taygete* sp. n., holotype.



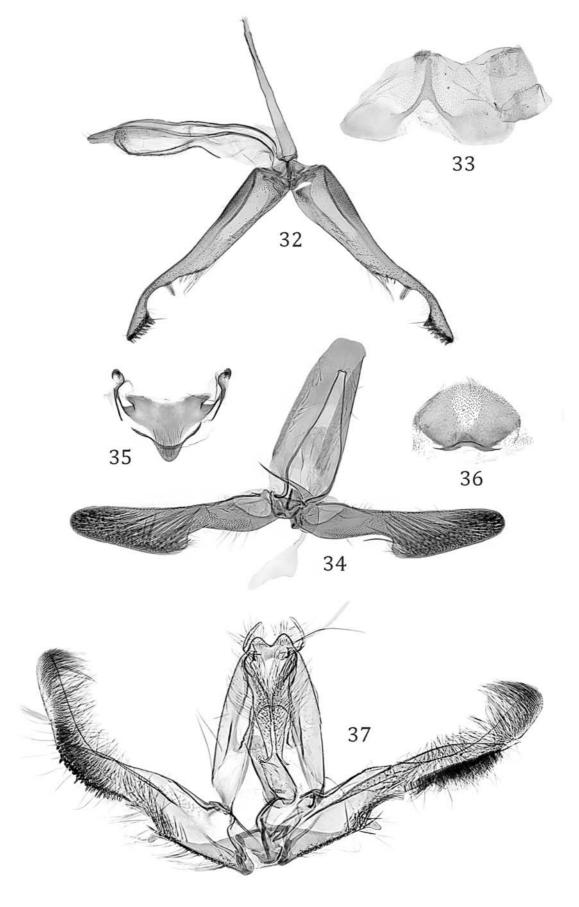
Figs 16-23. Male genitalia: 16, 17 – *Megalota roseoeffusa* sp. n., holotype; 18, 19 – *Dolichohedya fulgens* sp. n., holotype, with [19] aedaegus magnified; 20 – *Prophaecasia gabonana* sp. n., holotype; 21-23 – *Nepheloploce electra* sp. n., holotype, with [22] phallus magnified and [23] sclerotizations of abdominal segment VIII.



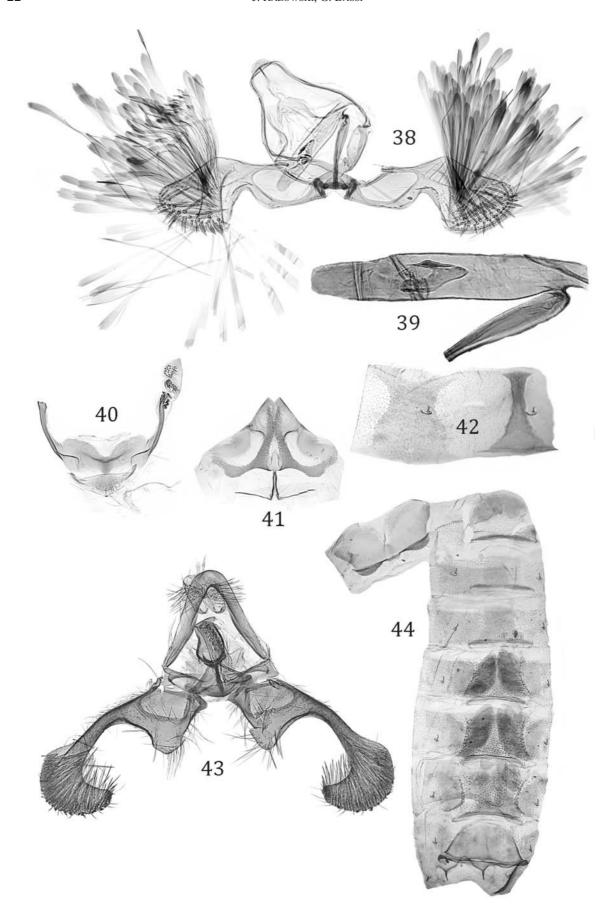
Figs 24-27. Male genitalia: 24 – *Syntozyga pulchella* sp. n., holotype; 25 – *Dasodis falcata* sp. n., holotype; 26 – *Gnathodracon pavesii* sp. n., holotype; 27 – *Gnathodracon durantei* sp. n., holotype.



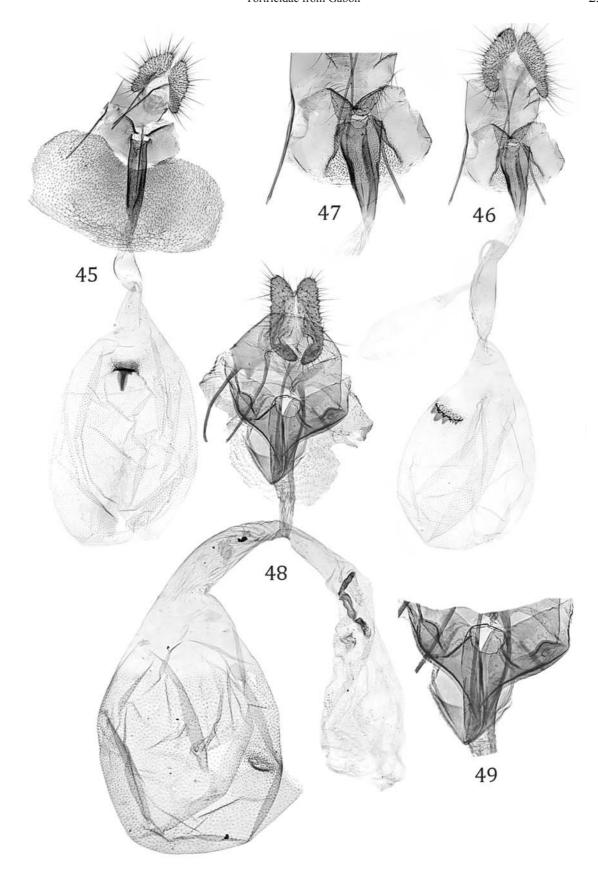
Figs 28-31. Male genitalia:  $28 - Gnathodracon\ massaronei\ sp.\ n.$ , holotype;  $29 - Gnathodracon\ merope\ sp.\ n.$ , holotype;  $30, 31 - Camptrodoxa\ pusilla\ sp.\ n.$ , holotype, with [31] its subgenital plates.



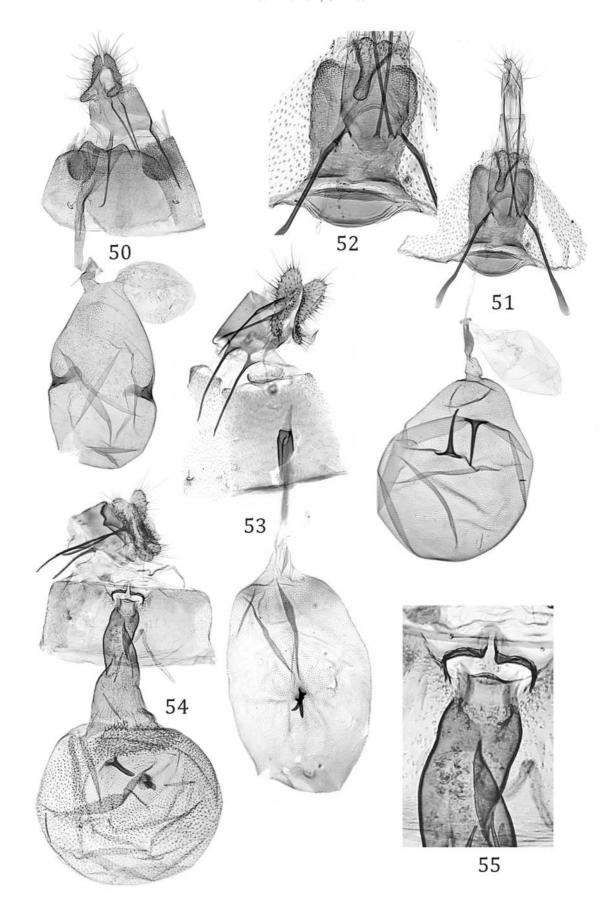
Figs 32-37. Male genitalia: 32, 33 – *Camptrodoxa splendens* sp. n., holotype, with [33] its subgenital plates; 34-36 – *Eucosmocydia ipassaensis* sp. n., holotype, with [35, 36] its subgenital plates; 37 – *Acroclita celaeno* sp. n., holotype.



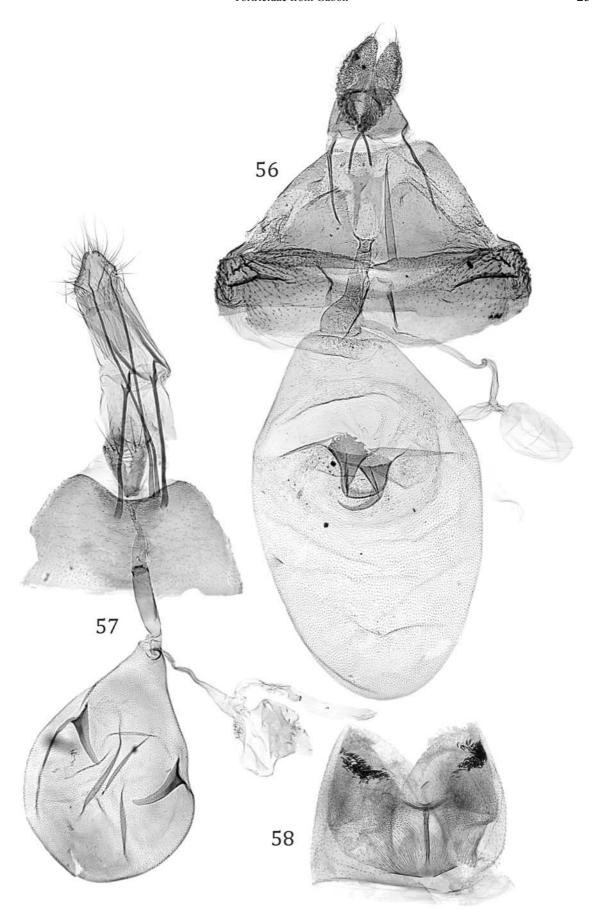
Figs 38-44. Male genitalia: 38-42 – *Gaboncydia gabonensis* sp. n., holotype, with [39] phallus magnified, [40,41] subgenital plates, [42] sclerotizations of abdominal segment VIII; 43, 44 – *Bonagmene eburnea* sp. n., holotype, with [44] its abdomen.



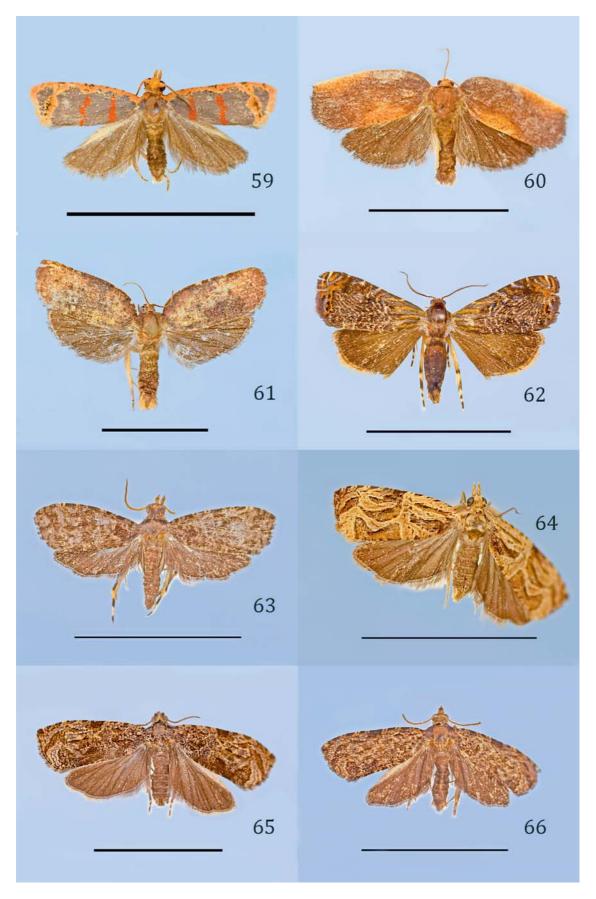
Figs 45-49. Female genitalia: 45 – *Eccopsis incultana* (WALKER), Gabon, Ipassa; 46, 47 – *Eccopsis atrobasalis* sp. n., holotype, with [47] sterigma-antrum complex magnified; 48, 49 – *Bactra alcyone* sp. n., holotype, with [49] sterigma-antrum complex magnified.



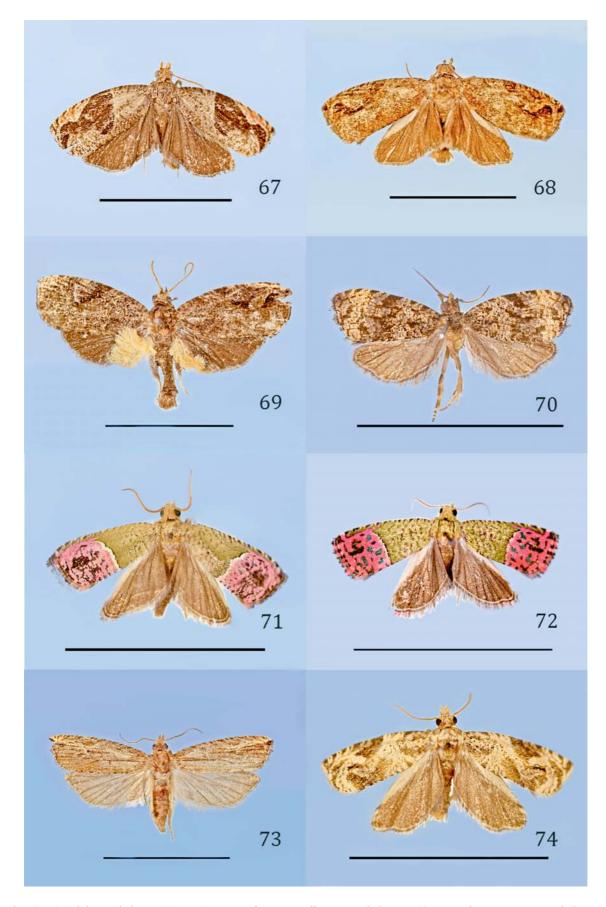
Figs 50-55. Female genitalia: 50 – *Dasodis falcata* sp. n., paratype; 51, 52 – *Thylacogaster ornata* sp. n., holotype, with [52] sterigma, subgenital plate and scent organ magnified; 53 – *Thylacogaster albistrigulata* sp. n., holotype; 54, 55 – *Cosmetra maia* sp. n., holotype, with [55] sterigma-antrum complex magnified.



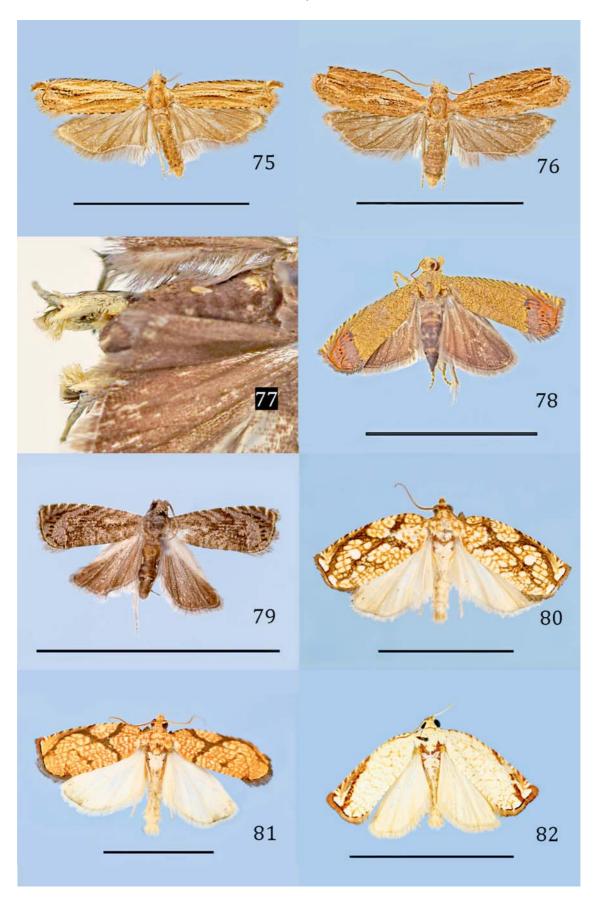
Figs 56-58. 56 – *Cydia albimacula* sp. n., holotype, female genitalia; 57 – *Coniostola cinereocostalis* sp. n., holotype, female genitalia; 58 – *Thylacogaster monospora* (MEYRICK), male, Gabon, Ipassa, abdominal segment VIII with scent scales.



Figs 59-66. Adults, scale bar = 10 mm: 59 – Sanguinograptis rubidissecta sp. n., holotype; 60 – Epichoristodes aequatorialis sp. n., holotype; 61 – Epichoristodes ivindoensis sp. n., holotype; 62 – Hilarographa brazzaella sp. n., holotype; 63 – Eccopsis luteicaput sp. n., holotype; 64 – Eccopsis incultana (WALKER), Gabon, Ipassa; 65 – Eccopsis atrobasalis sp. n., holotype; 66 – Eccopsis rubiginosa sp. n., holotype.



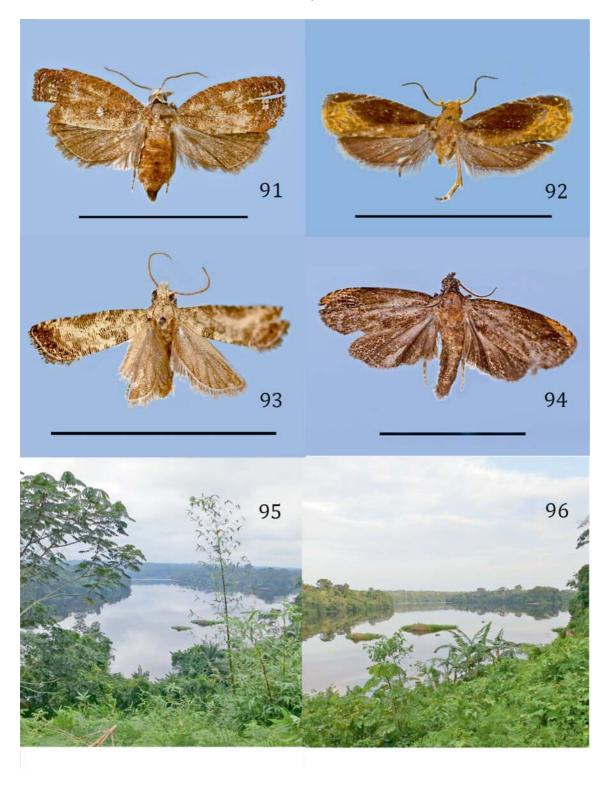
Figs 67-74. Adults, scale bar = 10 mm: 67 – *Megalota roseoeffusa* sp. n., holotype; 68 – *Megalota taygete* sp. n., holotype; 69 – *Megalota sterope* sp. n., holotype; 70 – *Nepheloploce electra* sp. n., holotype; 71 – *Prophaecasia gabonana* sp. n., holotype; 72 – *Prophaecasia usambarae* (RAZOWSKI & WOJTUSIAK), Gabon, Ipassa; 73 – *Bactra alcyone* sp. n., holotype; 74 – *Syntozyga pulchella* sp. n., holotype.



Figs 75-82. Adults, scale bar = 10 mm: 75 – *Dasodis falcata* sp. n., holotype; 76 – *Dasodis falcata* sp. n., female paratype; 77 – *Thylacogaster monospora* (MEYRICK), male, Gabon, Ipassa, hindlegs; 78 – *Thylacogaster ornata* sp. n., holotype; 79 – *Thylacogaster albistrigulata* sp. n., holotype; 80 – *Gnathodracon pavesii* sp. n., holotype; 81 – *Gnathodracon durantei* sp. n., holotype; 82 – *Gnathodracon massaronei* sp. n., holotype.



Figs 83-90. Adults, scale bar = 10 mm: 83 – *Gnathodracon merope* sp. n., holotype; 84 – *Camptrodoxa pusilla* sp. n., holotype; 85 – *Camptrodoxa splendens* sp. n., holotype; 86 – *Cosmetra maia* sp. n., holotype; 87 – *Acroclita celaeno* sp. n., holotype; 88 – *Eucosmocydia ipassaensis* sp. n., holotype; 89 – *Coniostola cinereocostalis* sp. n., holotype, 90 – the same, unspread to show the large grey costa of the hindwings.



Figs 91-96. Adults, scale bar = 10 mm and landscapes: 91 - Cydia albimacula sp. n., holotype; 92 - Gaboncydia gabonensis sp. n., holotype; 93 - Bonagmene eburnea sp. n., holotype; 94 - Dolichohedya fulgens sp. n., holotype; 95 and 96 - landscapes of the Ivindo River and forest from Ipassa Research Station.