Zootaxa 4853 (2): 151–182
https://www.mapress.com/j/zt/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

https://doi.org/10.11646/zootaxa.4853.2.1
http://zoobank.org/urn:lsid:zoobank.org:pub:D310B8C8-A16F-4B55-B6E6-8FD5EC35DE63

Review of the genus *Meganola* Dyar, 1898 of Ivory Coast and adjacent areas with descriptions of 5 new species and several taxonomic updates (Lepidoptera, Nolidae, Nolinae)—Taxonomic studies on West African Nolinae I.

GYULA M. LÁSZLÓ
The African Natural History Research Trust (ANHRT), Street Court, Kingsland, Leominster, HR6 9QA, United Kingdom.
gyula@anhrt.org.uk; https://orcid.org/0000-0001-9862-8290

Abstract

The present paper contains the first comprehensive taxonomic summary of the *Meganola* Dyar, 1898 species recorded in Ivory Coast and adjacent areas. 35 species are recorded in total with 28 species having been collected on recent African Natural History Research Trust expeditions. All species are listed with label data of specimens examined together with 56 colour and 52 black and white illustrations of the adults and their genitalia. A Lectotype is designated for *Meganola furvitincta* (Hampson, 1914), five species are described as new to science (*Meganola smithi*, *M. taiana*, *M. subchionea*, *M. cinereoparva*, *M. hackeri* **spp. n.**) and 23 new synonymies are established: *Meganola endoscota undosaria* Hacker, 2012 **syn. n.**, *M. kaduna* Hacker, 2012 **syn. n.**, *M. mabiriaria* Hacker, 2012 **syn. n.** and *M. simplicifacta* Hacker, 2012 **syn. n.** are synonymised with *M. endoscota* (Hampson, 1914); *M. polioleuca* Hacker, 2012 **syn. n.** is synonymised with *M. mesonephele* (Hampson, 1914); *M. togatulella* Hacker, 2012 **syn. n.**, *M. subterminalis* Hacker, 2012 **syn. n.** and *M. lupii* Hacker & Hausmann, 2012 **syn. n.** are synonymised with *M. lucia* (van Son, 1933); *M. septima* Hacker, 2012 **syn. n.**, *M. octava* Hacker, 2012 **syn. n.**, *M. heteromorpha* Hacker, 2012 **syn. n.**, *M. dissoluta* Hacker, 2012 **syn. n.**, *M. brachyvalva* Hacker, 2012 **syn. n.** and *M. pseudofuscata* Hacker, 2012 **syn. n.** are synonymised with *M. monofascia* (van Son, 1933); *M. mbala* Hacker, 2014 **syn. n.** and *M. poliographa* Hacker, 2012 **syn. n.** are synonymised with *M. furvitincta* (Hampson, 1914); *M. obscuritata* Hacker, 2012 **syn. n.** is synonymised with *M. spermophaga* (Fletcher, 1962); *M. tabbertiella* Hacker & Hoppe, 2012 **syn. n.**, *M. amaniella* Hacker, 2012 **syn. n.** and *M. fuscostriata* Hacker, 2012 **syn. n.** are synonymised with *M. pyrrhomorpha* Hacker, 2012; *M. longisigna* Hacker, 2012 **syn. n.** and *M. politzari* Hacker, 2012 **syn. n.** are synonymised with *M. foviferoides* (Poole, 1989); *Meganola eburneana* Hacker, 2012 **syn. n.** is synonymised with *M. illaudata* (Fletcher, 1958). The hitherto unknown males of *Meganola dananae* Hacker, 2012, *M. rhyssomorpha* Hacker, 2012 and *M. mesothermoides* (Poole, 1989) as well as females of *M. microfascia* Hacker, 2012 and *M. palaeographa* Hacker, 2012 are illustrated for the first time and several new distribution records are provided.

Key words: Nolini, taxonomy, lectotype designation, new synonymy, new record, Afrotropics

Introduction

Meganola Dyar, 1898 is one of the most diverse Heterocera genera in the Afrotropics with a recent revision of the Afrotropical and West Palaearctic Nolinae (Hacker *et al.* 2012) listing 280 valid species. This work and a subsequent supplementary publication by Hacker (2014) provide fundamental information of the Nolini of Sub-Saharan Africa and can be considered undoubtedly as the most important reference ever published on the African taxa of the tribe. Nevertheless, these extensive works are not free from oversights, discrepancies and misinterpretations, due mainly to the limited material available to the authors in the course of the preparation of the revision.

As a result of extensive sampling in West Africa by the African Natural History Research Trust (ANHRT), substantial Nolinae material has been collected in Ivory Coast and the surrounding countries, and the present paper provides an opportunity to improve the taxonomic and zoogeographical information on the taxa of the subfamily in this fairly under-studied region. Through the examination of this material together with the primary type specimens housed in the Natural History Museum, London, it has been possible to clarify or rectify numerous dubious or erroneous interpretations of Hacker *et al.* (2012) and Hacker (2014) as well as delimiting several new taxa.

Accepted by R. Zahiri: 26 Aug. 2020; published: 22 Sept. 2020

With the exception of the Bombycoidea and Lasiocampoidea (e.g. Herder *et al.* 1989, Vuattoux *et al.* 1989, Basquin, 2016, Darge 2018, Eitschberger & Moretto 2019), the Heterocera of the Ivory Coast is poorly known and recent moth sampling has been limited. Only very few Nolinae specimens are known from this country (Hacker *et al.* 2012, Hacker 2014), making the recent collections by the ANHRT all the more valuable. As more of the West African Nolinae material is processed, fundamental taxonomic-faunistic accounts of this family will be published with this present paper representing the first item of a planned series devoted to the taxonomic and zoogeographical aspects of West African Nolinae.

Material and methods

The genital apparatuses were dissected, stained with Eosin red and mounted in Euparal on microscope slides applying standard methods of preparation (Lafontaine & Mikkola 1987). Photos of adults were taken using either a Nikon D700 SLR camera equipped with Nikkor AF-S Micro 105 mm lens or a Nikon D90 SLR camera equipped with Nikkor AF Micro 60 mm lens. Genitalia were photographed using either a Canon EOS 700D camera mounted on a Leitz Diaplan compound microscope or a Canon EOS 5D SLR camera with a Canon MP-E 65 mm lens.

Abbreviations of the depositories used:

ANHRT—African Natural History Research Trust, Leominster, UK;
HNHM—Hungarian Natural History Museum, Budapest, Hungary;
MNVD—Museum of Natural History, Dessau, Germany;
MWM/ZSM– Museum Witt in the Bavarian State Collection of Zoology, Munich, Germany.
NHMUK (formerly BMNH)—The Natural History Museum, London, UK;
RMCA—Royal Museum for Central Africa, Tervuren, Belgium;
TMSA—Ditsong National Museum of Natural History (Transvaal Museum), Pretoria, South Africa;
ZMHB—Natural History Museum, Berlin, Germany;
ZSM—Bavarian State Collection of Zoology, Munich, Germany.

Other abbreviations:

LGNA—genitalia slides of Nolidae prepared by Gyula M. László.

Taxonomic account of the *Meganola* species recorded in Ivory Coast

Genus *Meganola* Dyar, 1898

Meganola Dyar, 1898, Journal of the New York Entomological Society 6: 43. Type species: *Meganola conspicua* Dyar, 1898.

Meganola smithi sp. n.

(Figs 1–3, 57, 88)

Holotype. ♂, Ivory Coast, 1171m, Mt. Tonkoui Peak, 07°27’15.2”N, 07°38’12.5”W, 1-8.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, unique number: ANHRTUK 00009093, slide No.: LGNA 242 ♂ (ANHRT).

Paratypes. Ivory Coast. 1 ♂, with the same data as the holotype, unique number: ANHRTUK 00009094. **Liberia.** 4 ♂, 1 ♀, 1165m, Nimba Mts camp, ENNR, Nimba county, 7°31’45”N, 8°31’37”W, 03-13.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, unique

numbers: ANHRTUK 00019910 - 00019913, 00145314, slide Nos.: LGNA 496 ♂, LGNA 497 ♂, LGNA 498 ♀; 1 ♂, 1 ♀, 1000–1100m, Nimba Mts., ENNR, Nimba county (Cellcom road), 7°32’45.9”N, 8°31’21”W, 27.iii–04.iv.2017, Light Trap (250W blended bulb) & Cold Cathode UV light bucket trap (8W), Sáfián, Sz., Simonics, G. leg., ANHRT:2017.36, unique numbers: ANHRTUK 00056451, 00056444, slide No.: LGNA 525 ♂; 1 ♂, same locality and collectors, but collected at 12–16.iii.2017, unique number: ANHRTUK 00022987; 6 ♂, 750m, Nimba Mts., ENNR, Cellcom road, 7°33’3.8”N, 8°31’46.5”W, 10–12.iii.2017, Light Trap (250W blended bulb) & Cold Cathode UV light bucket trap (8W), Sáfián, Sz., Simonics, G. leg., ANHRT:2017.36, unique numbers: ANHRTUK 00058565, 00058566, 00058571, 00058572, 00058567, 00058568, slide No.: LGNA 798 ♂; 1 ♂, 1♀, 1000–1100m, Nimba Mts., ENNR, Nimba county (Cellcom road), 7°32’45.88”N, 8°31’21.04”W, 02–14.xii. 2017, Cold Cathode Light Bucket, Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, unique numbers: ANHRTUK 00019947, 00019948, slide No.: LGNA 499 ♀; 1 ♀, 865m, Lofa County, 8°07’10”N, 9°57’11”W, 24–29.xi.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg. ANHRT:2017.33, unique number: ANHRTUK 00034351, slide No.: LGNA 523 ♀. **Guinea.** 4 ♂, 1500m, Nimba Mts, SMFG concession area (Societé des Mines de Fer de Guinée) 600 Forest, 7°39’49.93”N, 8°22’22.19”W, 21–30.viii.2017, Cold Cathode UV Light Trap (8W), Sáfián, Sz., Simonics, G. leg., ANHRT:2017.36, unique numbers: ANHRTUK00059223, 00058585 - 00058587, slide Nos: LGNA 796, LGNA 797 (all ♂); 1 ♂, 1400–1752m, Guineé Forestiére Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest) 07°36’19”N, 08°25’30”W, 1–7.VII.2019, 250W Blended Light Trap, Deroziér, V., Miles, W., Sáfián, S. leg., ANHRT: 2019.11, unique number: ANHRTUK 00143347 (ANHRT).

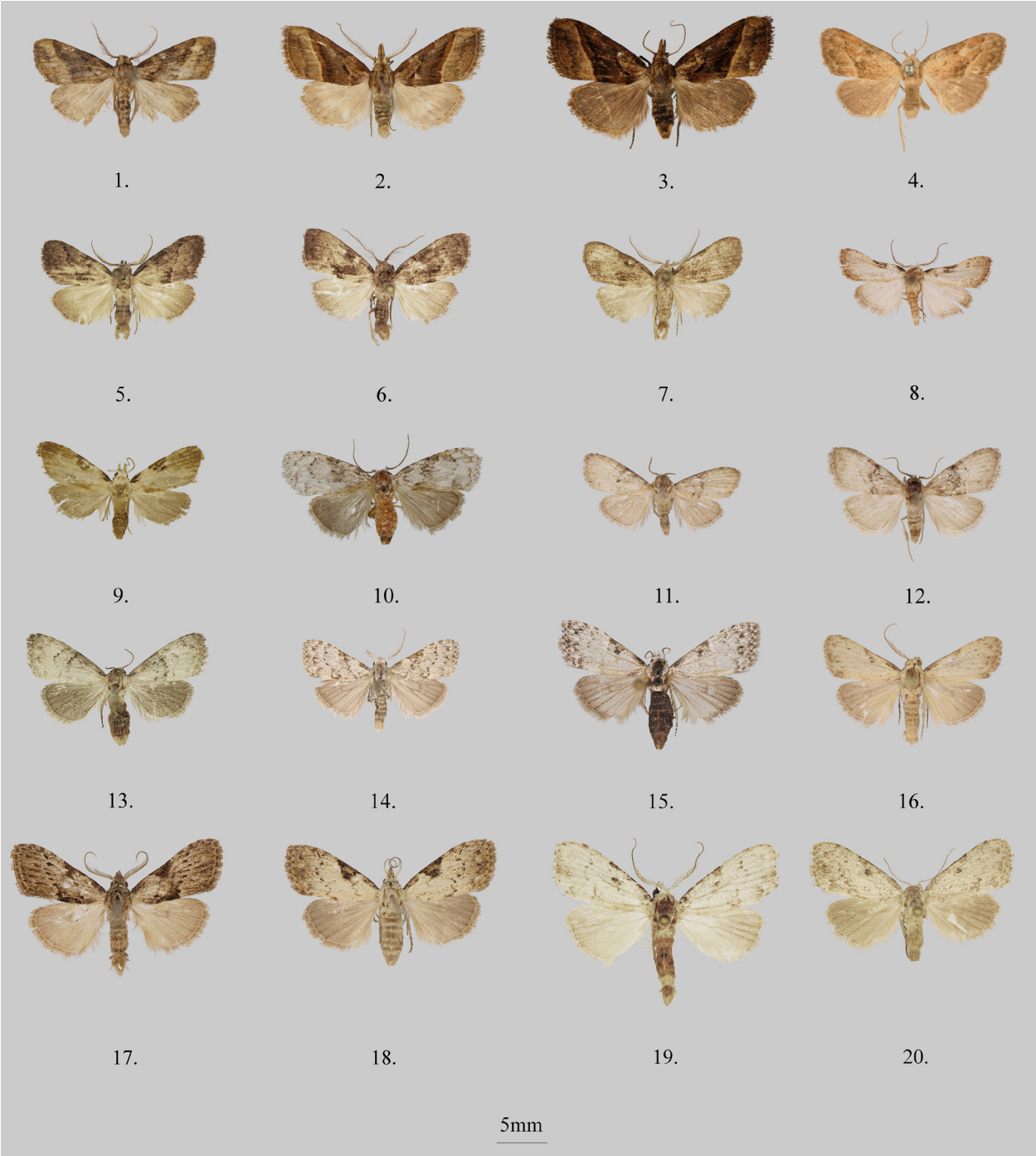
Diagnosis.

The new *Meganola* species belongs to the *dochmographa* species-group sensu Hacker (Hacker *et al.* 2012) with its distinctive dark brown forewing and the nearly straight, oblique, pale brown postmedial line. On the grounds of the configuration of the male genitalia, the closest relative of *M. smithi* is *M. introfusca* Hacker, 2012 described from Kakamega Forest, Kenya and is distinguished by the following characters (cf. Hacker *et al.* 2012: 260): the new species has a somewhat longer and narrower uncus, a considerably shorter and narrower, medially arched, un-tapered, apically rounded harpe (that of *M. introfusca* is almost straight, gradually tapering and apically pointed), shorter and broader medio-basal lobes of the valva, as well as a much shorter, medially arcuate aedeagus (which is straight in *M. introfusca*) with a more robust carinal tooth. In the female genitalia, the new species has a markedly shorter and narrower, less heavily sclerotized antrum as well as a somewhat shorter sclerotized posterior and considerably shorter membranous anterior section of the ductus bursae compared to those of *M. introfusca*.

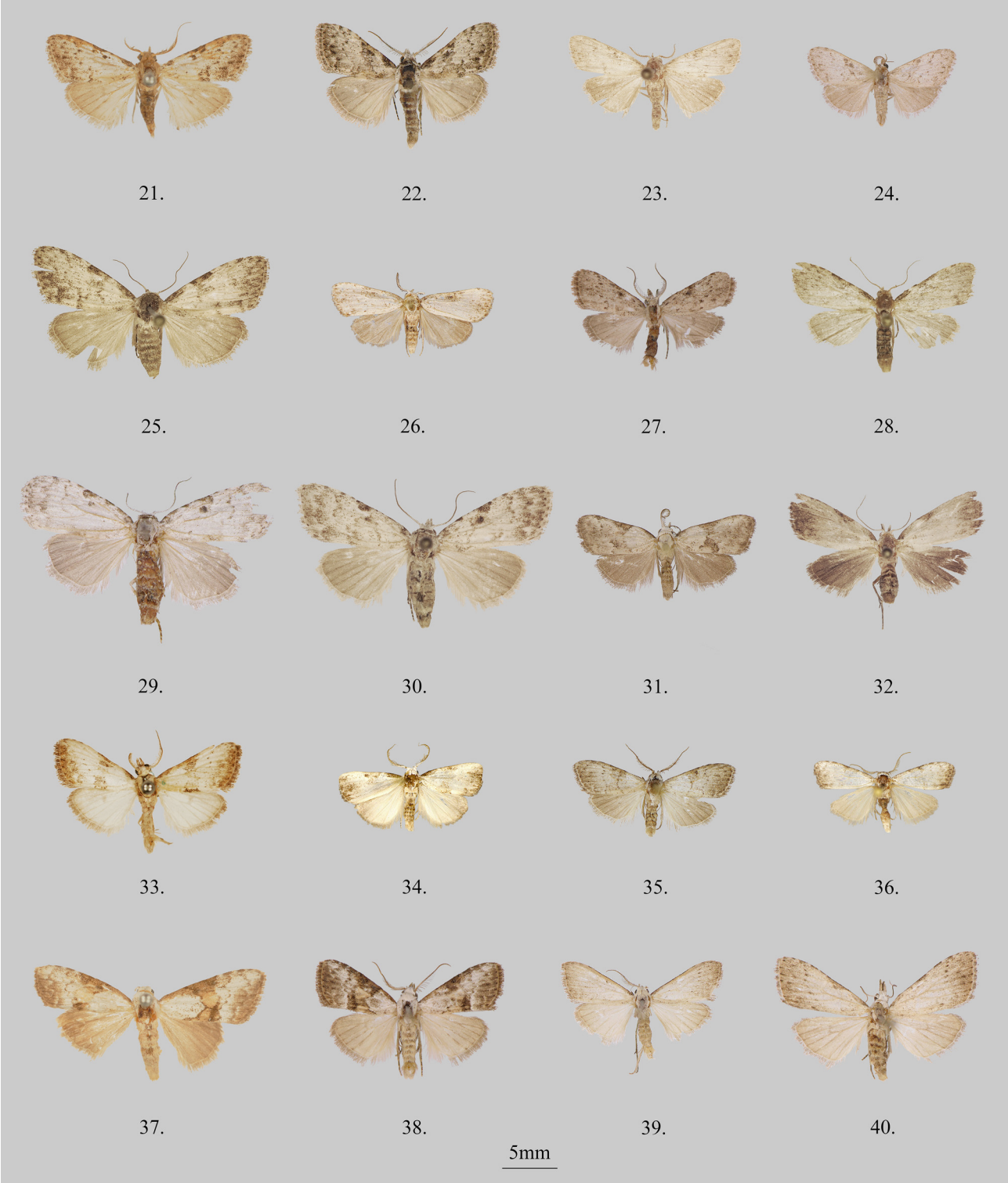
Description.

Adult (Figs 1–3). Forewing length 9–10.5 mm in males, 11–12 mm in females. Male antennae bipectinate, rami medium long, those of female filiform with fine ciliation. Head relatively large, labial palps relatively long in males, longer in females, porrect, medially dilated, inner and dorsal surface pale creamy brown, lateral surface dark brown; frons and vertex pale brownish white, somewhat darker medially; compound eyes moderately large, globular. Thorax greyish white, tegulae somewhat darker greyish brown, abdomen creamy white with brownish grey transversal stripes. Intraspecific variability low, all known specimens show rather similar coloration and wing pattern without notable alteration. Sexual dimorphism moderately expressed in size (females somewhat larger) and in coloration: females have slightly darker forewing and considerably darker hindwing ground colour compared to those of males. Forewing relatively short, moderately broad, rather triangular, apically rounded. Forewing ground colour dark brown, paler in distal third, costal margin conspicuously blackish in proximal half. Sub-basal and basal lines diffuse, shadow-like, represented by blackish brown groups of hair scales; antemedial line fine, dark brownish, evenly arcuate encircling a slightly paler, more or less elliptical basal area; medial line deleted. Orbicular stigma very small, rounded, consisting of raised, graphite grey scales, located on the distal arch of antemedial line. Medial area gradually darkened towards postmedial line, with red-brown suffusion near the line. Postmedial line relatively thick, oblique, almost straight, pale creamy white. Subterminal line diffuse, interrupted, shadow-like, consisting

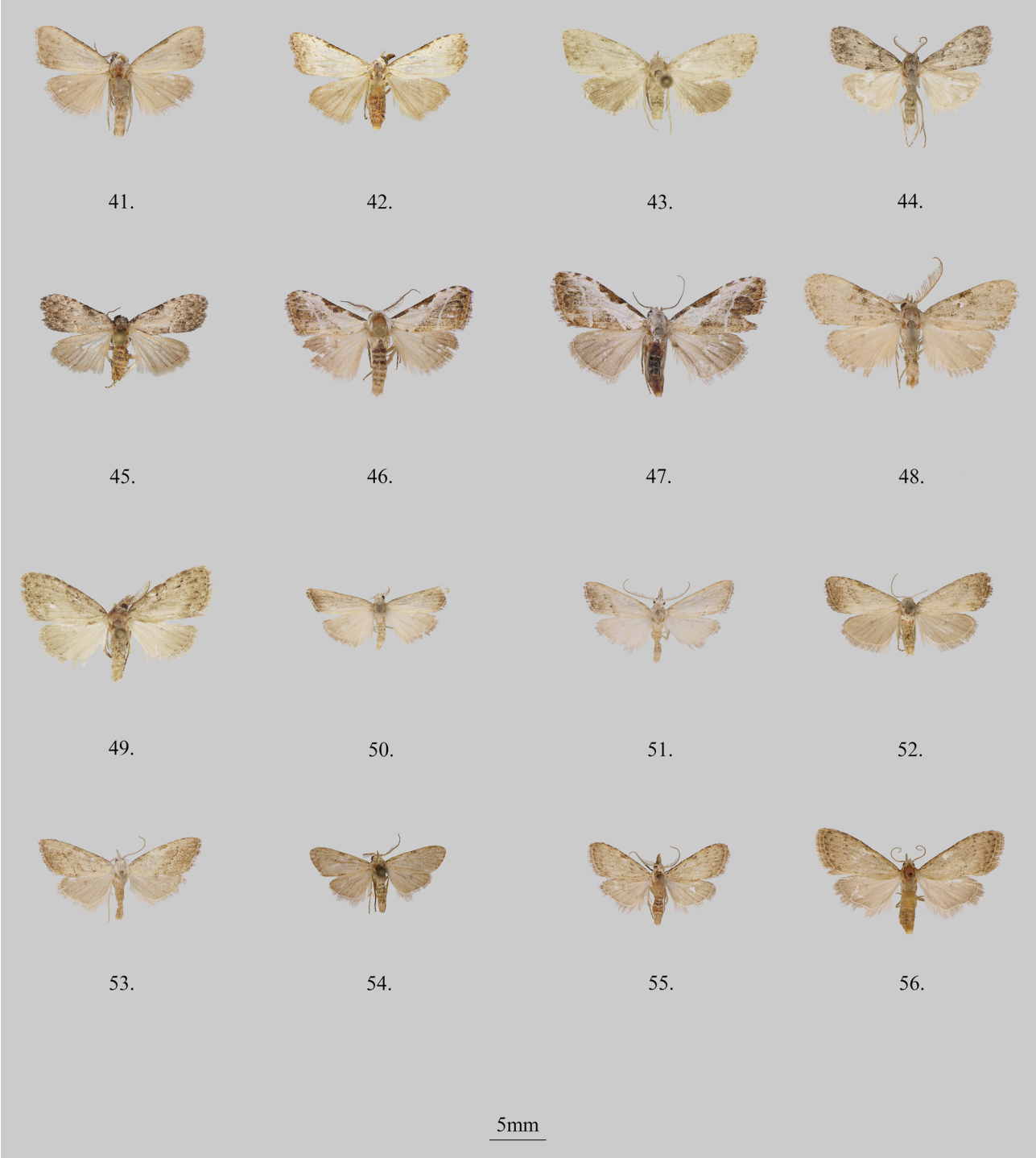
of a series of small graphite grey patches; terminal line very fine, diffuse, greyish brown, terminal area with pale red-brown suffusion; cilia brownish grey mixed with red-brown hair scales. Hindwing creamy white with fine pale greyish brown suffusion in its marginal third in males, uniformly pale grey in females; cilia creamy white in both sexes. Underside of forewing uniformly dark greyish brown, that of hindwing paler greyish brown, darkened along the margin in males, similar, but darker in females, without traces of pattern.



FIGURES 1–20: adults (all in coll. ANHRT unless otherwise indicated). 1, *Meganola smithi* sp. n., holotype, ♂, Ivory Coast; 2, *M. smithi* sp. n., paratype, ♂, Liberia; 3, *M. smithi* sp. n., paratype, ♀, Liberia; 4, *M. endoscota*, holotype, ♀, Ghana (NHMUK); 5, *M. endoscota*, ♂, Liberia; 6, *M. endoscota*, ♂, Guinea; 7, *M. endoscota*, ♂, Cameroon; 8, *M. microfascia*, ♂, Ivory Coast; 9, *M. microfascia*, ♀, Ivory Coast; 10, *M. mesonephele*, ♀, Ivory Coast; 11, *M. lucia*, ♂, Ivory Coast; 12, *M. lucia*, ♂, Cameroon; 13, *M. lucia*, ♀, Ivory Coast; 14, *M. palaeographa*, ♂, Ivory Coast; 15, *M. palaeographa*, ♀, Ivory Coast; 16, *M. monofascia*, ♂, Ivory Coast; 17, *M. monofascia*, ♂, Cameroon; 18, *M. monofascia*, ♀, Liberia; 19, *M. dananae*, ♂, Guinea; 20, *M. dananae*, ♀, Guinea.



FIGURES 21–40: adults (all in coll. ANHRT unless otherwise indicated). 21, *Meganola furvitincta*, lectotype, ♂, Sierra Leone (NHMUK); 22, *M. furvitincta*, ♂, Liberia; 23, *M. aarviki*, ♂, Ivory Coast; 24, *M. spherographa*, ♂, Ivory Coast; 25, *M. spherographa*, ♀, Liberia; 26, *M. taiana* sp. n., holotype, ♂, Ivory Coast; 27, *M. taiana* sp. n., paratype, ♂, Liberia; 28, *M. taiana* sp. n., paratype, ♀, Ivory Coast; 29, *M. xantholeuca*, ♀, Ivory Coast; 30, *M. xantholeuca*, ♀, Liberia; 31, *M. rhyssomorpha*, ♂, Ivory Coast; 32, *M. rhyssomorpha*, ♀, Ivory Coast; 33, *M. chionea*, holotype, ♂, Nigeria (NHMUK); 34, *M. subchionea* sp. n., holotype, ♂, Ivory Coast; 35, *M. cinereoparva* sp. n., holotype, ♂, Ivory Coast; 36, *M. cinereoparva* sp. n., paratype, ♂, Ivory Coast; 37, *M. mesothermoides*, holotype, ♀, Ghana (NHMUK); 38, *M. mesothermoides*, ♂, Liberia; 39, *M. spermophaga*, ♂, Liberia; 40, *M. spermophaga*, ♀, Sierra Leone.



FIGURES 41–56: adults (all in coll. ANHRT). 41, *Meganola pyrrhomorpha*, ♂, Ivory Coast; 42, *M. pyrrhomorpha*, ♀, Ivory Coast; 43, *M. canocolorata* ♀, Ivory Coast; 44, *M. foviferoides* ♂, Togo; 45, *M. foviferoides* ♀, Zambia; 46, *M. leucosigna*, ♂, Ivory Coast; 47, *M. leucosigna*, ♀, Ivory Coast; 48, *M. hackeri* sp. n., holotype, ♂, Ivory Coast; 49, *M. hackeri* sp. n., paratype, ♂, Ivory Coast; 50, *M. ronkayiana*, ♂, Ivory Coast; 51, *M. ronkayiana*, ♂, Liberia; 52, *M. pyrrhosoma*, ♀, Ivory Coast; 53, *M. pyrrhosoma*, ♀, Liberia; 54, *M. illaudata*, ♂, Ivory Coast; 55, *M. illaudata*, ♂, Liberia; 56, *M. illaudata*, ♀, Liberia.

Male genitalia (Fig. 61). Uncus medium long, relatively narrow, somewhat broader at base, gradually tapering, apically pointed; scaphium short, thin, weakly sclerotized; tegumen medium long and broad; juxta short and medium broad, distally concave with two short and narrow, apically rounded processes; vinculum medium long, broad at base, V-shaped; valva relatively short and broad, slightly curved with costal margin gently arcuate basally; costal and ventral margins parallel in their distal two-third, apex broadly rounded; base of valva with a pair of well-

developed, triangular scobinated lobes, covered in easily removable short hair scales; costal margin with a heavily sclerotized, acute triangular process pointing anteriorly, reaching the ventral margin of harpe. Sacculus short, broad at base, without processes. Harpe medium long, relatively narrow, medially slightly arched, with parallel margins, apically rounded, apex pointing caudally. Aedeagus medium long, relatively narrow, tubular, slightly sinuous with a well-developed, somewhat recurved, heavily sclerotized, basally broad, short-triangular, thorn-like carinal process; caecum penis rather short, apically rounded; vesica without cornuti.

Female genitalia (Fig. 88). Ovipositor short and broad; papillae anales conical, apically rounded; apophyses posteriores relatively long and thick, apophyses anteriores very short, broader at base, gradually tapered, apically rounded. Eighth tergite relatively short and broad, its distal margin straight, proximal margin slightly concave. Ostium bursae heavily sclerotized, relatively broad, antrum short, somewhat goblet shaped, with heavily sclerotized, narrow lateral margins; ductus bursae short, medially dilated, forming a strongly sclerotized asymmetrical lateral protrusion at cervix bursae; distal third of corpus bursae tubular, membranous; proximal two-third of corpus bursae relatively large, ovoid; signum bursae consisting of a pair of more or less elliptical somewhat cordiform sclerotized plates with dense marginal scobination and a short, crest-like horizontal medial process; proximal signum larger than the distal one.

Etymology. The species is dedicated to Mr Richard Smith, founder and director of the African Natural History Research Trust, organiser and participant of extensive entomological surveys of Sub-Saharan Africa.

Distribution. *M. smithi* is known from the Mount Tonkoui in Ivory Coast, Mount Wologizi in Liberia and Mount Nimba in Liberia and Guinea. The species is supposedly endemic to the Guinea Highlands Range.

Meganola endoscota (Hampson, 1914)

(Figs 4–7, 58, 89)

Nola endoscota Hampson, 1914, Catalogue of the Lepidoptera Phalaenae in the British Museum, Supplement 1: 407. Type locality: [Ghana] Gold Coast, Bibianaha. Holotype, ♀ (NHMUK).
= *Meganola endoscota undosaria* Hacker, 2012, Esperiana 17: 256, **syn. n.**
= *Meganola kaduna* Hacker, 2012, Esperiana 17: 290, **syn. n.**
= *Meganola peksi* Hacker, 2012, Esperiana 17: 295 (Hacker 2014)
= *Meganola mabiriaria* Hacker, 2012, Esperiana 17: 291, **syn. n.**
= *Meganola simplicifacta* Hacker, 2012, Esperiana 17: 294, **syn. n.**

Type material examined. Holotype. ♀, red ring "Type H.T." label; "Gold Coast. Bibianaha. 24–26.X.1911. H.G.F. Spurrell. 1911-413", with handwritten: "Nola endoscota type ♀ Hmpsn.", unique number: NHMUK010598804, Slide No.: NHMUK010315151 (prep. by Gy.M. László) (NHMUK).

Additional material examined. Cameroon. 1 ♂, 612m, Central Region, Nkoteng, On Sanaga River, Nkoteng Forest, 04°33'34.2"N, 11°59'37.6"E, 24–28.x.2018, LepiLED Light Trap, Sáfián, Sz., Simonics, G. leg. ANHRT:2018.36, slide No.: LGNA 888♂, 1 ♂, same data, but collected by Cold Cathode UV Light Trap, slide No.: LGNA 972♂. **Guinea.** 1 ♂, 435m, Geipa Camp, Foret de Diecke, 7°26'7.06"N, 8°50'47.87"W, 05–14.iv.2019, Light Trap, Blended Bulb (250W), Sáfián, Sz., Koivogui, S. leg. ANHRT:2019.7, slide No.: LGNA 969♂. **Liberia.** 2 ♂, 750m, Nimba County, Nimba Mts., ENNR, Cellcom road, 7°33'3.78"N, 8°31'46.49"W, 16–28.xii.2018, Cold Cathode UV Light Trap (8 W), Sáfián, Sz., Simonics, G. leg. ANHRT:2018.43, slide Nos: LGNA 970♂, LGNA 971♂ (ANHRT) **Ghana.** 1 ♂, 1 ♀, Bunso Arboretum, 6º15'58.03"N, 0º 27'45.72"W, 13–14.IX.2010, leg. Sz. Sáfián (HNHM).

Remark. The taxonomy of *M. endoscota* (Hampson, 1914) has not been satisfactorily clarified by Hacker *et al.* (2012), having failed to illustrate the copulatory organ of the female holotype and figuring instead, an externally similar female specimen from Ivory Coast. Despite not examining the genital morphology of the primary type of the species, Hacker described a new subspecies of *M. endoscota* from Kivu Province, D.R. Congo (*M. endoscota undosaria* Hacker, 2012). The author of this present paper had the opportunity to dissect the female holotype of *M. endoscota* housed in the NHMUK, the genitalia of which is illustrated here for the first time (Fig. 89). As there are no considerable differences in the external habitus or the female genitalia of the two subspecies, *M. endoscota undosaria* is considered here as a mere synonym of *M. endoscota*. In the same work, Hacker described three new species based exclusively on male specimens (*M. peksi*, *M. simplicifacta* and *M. mabiriaria* Hacker, 2012) despite

their undoubted similarities with *M. endoscota*, namely their markedly short, brownish grey forewings with the conspicuously dark brown median area and the oblique, slightly dentate postmedial line. A fourth species, *M. kaduna* Hacker, 2012 also reminiscent of *M. endoscota*, shares the same, rather characteristic male genital morphology with the above-mentioned three taxa. A female paratype of *M. kaduna* illustrated by Hacker *et al.* (2012: 290) has proved to be a misidentification of *Meganola cirrhographa* Hacker & Hoppe, 2012 (cf. p. 288 in Hacker *et al.* (2012)). Subsequently, Hacker (2014: 143) figured a male specimen identified as *M. endoscota undosaria* from Nyungwe Forest (Rwanda), without illustrating its genitalia, unfortunately rendering this identification doubtful. Hacker (2014) himself synonymised his *M. peksi* with *M. kaduna*, admitting the lack of distinctive features to separate the two species. A series of male specimens in the ANHRT collection reminiscent of *M. endoscota* recently collected in Cameroon, Guinea and Liberia display identical male genitalia characters (fig. 58) to Hacker's taxa discussed above (cf. Hacker *et al.* 2012: 290, 291, 294, 295), namely the conspicuously narrow, medially constricted valva, the long and robust, curved harpe and the short but conspicuous, heavily sclerotized crest-like ventral carinal process of the aedeagus. From the comparative study of genital morphology based on a dozen specimens from various West African localities, it has been possible to conclude that *M. kaduna*, *M. mabiriaria*, *M. peksi* and *M. simplicifacta* are conspecific and represent the hitherto unknown male of *M. endoscota*; the four former species are here synonymised with the latter. It is also worth noting that this species has a much wider distribution than had been proposed earlier (Hacker *et al.* 2012; Hacker 2014).

Distribution. Ghana, Ivory Coast, D.R. Congo, Uganda (Hacker *et al.* 2012) and Rwanda (Hacker 2014). The specimens from Cameroon, Guinea and Liberia represent new country records.

Meganola allardi Hacker, 2012

Meganola allardi Hacker, 2012, Esperiana 17: 328. Type locality: Ivory Coast, Abidjan. Holotype, ♂ (RMCA).

Remark. The species is known only from the male holotype specimen.

Distribution. Ivory Coast (Hacker *et al.* 2012).

Meganola odontographa Hacker, 2012

Meganola odontographa Hacker, 2012, Esperiana 17: 427. Type locality: [Burkina Faso] Comoe. Holotype, ♀ (ZSM).

Remark. The species is known exclusively from female specimens. However, having compared the illustrations of *M. odontographa* and *M. allardi* in Hacker *et al.* (2012: 328, 427), it seems to be highly likely that the two species are conspecific. As the author of the present paper could not locate specimens of either species for thorough examination, both taxa have tentatively been treated here as valid. It is also worth mentioning that *M. inculta* Hacker, 2012 described from Katanga Province, D.R. Congo and *M. griseodentata* Hacker, 2012 described from near Iringa, Tanzania are also confusingly similar to *M. allardi* both externally and in genital morphology. The female of *M. inculta* illustrated in Hacker *et al.* (2012: 332) is misidentified and is in fact *M. monofascia* (van Son, 1933). In order to prove whether or not the four species are conspecific, examination of further material is necessary.

Distribution. Burkina Faso, Ivory Coast and Nigeria (Hacker *et al.* 2012).

Meganola microfascia Hacker, 2012
(Figs 8–9, 59, 90)

Meganola microfascia Hacker, 2012, Esperiana 17: 374. Type locality: Congo, Eala. Holotype, ♂ (RMCA).

Material examined. Ivory Coast. 1 ♂, 1171 m, Mt Tonkoui Peak, N07°27'15,2", W07°38'12,5", 1–8.XI.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., ANHRT:2017.16, slide No.: LGNA 250 ♂; 1 ♀, 174m, Tai NP., Tai Research Station (SRET), 05°50'00"N, 07°20'32"W, 25.III.–17.IV.2017, MV light, Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. leg., ANHRT:2017.25, slide No.: LGNA 418 ♀. **Liberia.** 1 ♀,

865m, Lofa County, 8°07’10”N, 9°57’11”W, 24–29.xi.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 503 ♀ (ANHRT).

Remark. The rather characteristic *M. microfascia* Hacker, 2012 was described from male specimens only. The adult female and its genitalia are illustrated here for the first time (Figs 9, 90).

Distribution. D.R. Congo (Hacker *et al.* 2012). The specimens from Ivory Coast and Liberia represent new country records.

Meganola mesonephele (Hampson, 1914)

(Figs 10, 60, 91)

Celama mesonephele Hampson, 1914, Catalogue of the Lepidoptera Phalaenae in the British Museum, Suppl. 1: 398, pl. 23, fig. 2. Type locality: Gold Coast, Bibianaha. Holotype, ♂ (NHMUK).
= *Meganola polioleuca* Hacker, 2012, Esperiana 17: 573, **syn. n.**

Material examined. Ivory Coast. 1 ♂, 1171m, Mt. Tonkoui Peak, 07°27’15.2”N, 07°38’12.5”W, 1–8.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide No.: LGNA 149 ♂; 1 ♀, 1171 m, Mt Tonkoui Peak, N07°27’15”, W07°38’13”, 12–18.VII.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., ANHRT:2017.14, slide No.: LGNA 21 ♀; 1 ♀, 415m, Telo village, outside Sangbe NP, 08°09’06.5”N, 07°23’53.5”W, 10–13.XI.2015, Light trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide No.: LGNA 151 ♀. **Sierra Leone**. 1 ♀, Baoma, Goderich, 8°25‘41“N, 13°15‘47“W, leg. R.W. Goff, 27.XII.2014, slide No.: LGNA 211 ♀; 1 ♂, 80m, Kalainkay nr. Kamabai, Northern Prov., 3–6.XI.2015, N09°10‘52“, W11°56‘44“, Light Trap, R. Goff coll., leg. Smith, R. & Takano, H., slide No.: LGNA 284 ♂ (ANHRT).

Remarks. The female of *M. mesonephele* was considered unknown by Hacker *et al.* (2012), although he described 39 pages later *M. polioleuca* Hacker, 2012 based on a single, slightly worn female specimen which is externally almost identical with *M. mesonephele*. The examination of recently collected material from Ivory Coast and Sierra Leone has proved the identity of *M. mesonephele* and *M. polioleuca* to be the male and female of the same taxon with specimens having been collected at the same locality displaying both external and genitalia features agreeing with those of the two species illustrated in Hacker *et al.* (2012). Consequently, *M. polioleuca* is here synonymised with *M. mesonephele*.

Distribution. Ghana, Ivory Coast, Nigeria and South Sudan (Hacker *et al.* 2012). The specimens from Sierra Leone represent new country record.

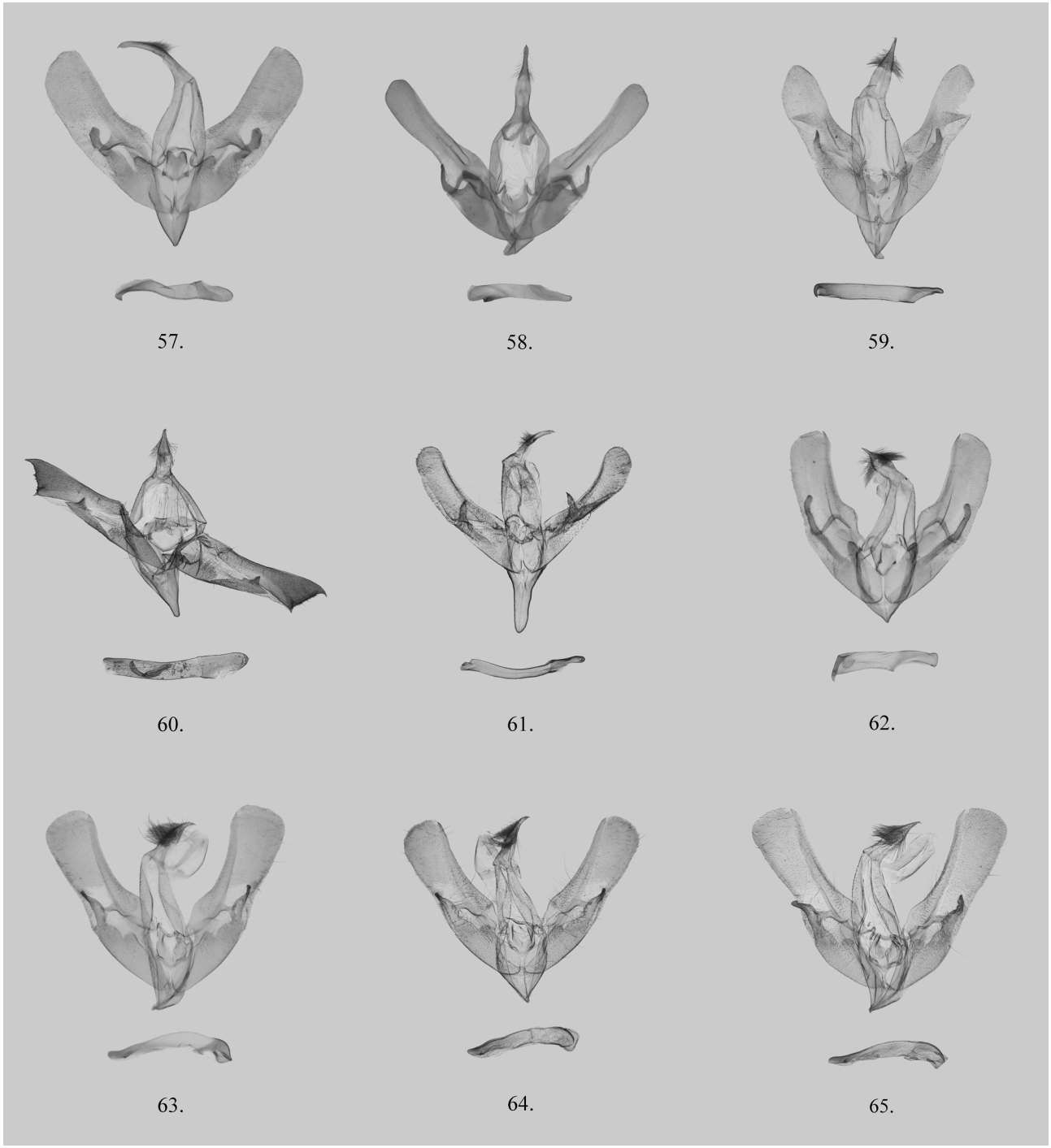
Meganola lucia (van Son, 1933)

(Figs 11–13, 61, 92)

Roeselia lucia van Son, 1933, Annals of the Transvaal Museum 15: 227. Type locality: [RSA] Zululand, St. Lucia Lake. Holotype, ♂ (TMSA).
= *Meganola togatulella* Hacker, 2012, Esperiana 17: 243, **syn. n.**
= *Meganola subterminalis* Hacker, 2012, Esperiana 17: 314, **syn. n.**
= *Meganola lupii* Hacker & Hausmann, 2012, Esperiana 17: 505, **syn. n.**

Material examined. Ivory Coast. 2 ♂, 1 ♀, 174m Tai NP., Tai Research Station (SRET), 05°50’00”N, 07°20’32.0”W, 25.III.–17.IV.2017, MV light, Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. leg., ANHRT:2017.25, slide Nos: LGNA 472 ♂, LGNA 979 ♂, LGNA 420 ♀. **Cameroon.** 2 ♂, 1246m, Adamawa Region, Adamawa Plateau, 7.3km West of Bazanga, Chute de Tello, 07°13’50.6”N, 13°56’29.2”E, 24–30.ix.2018, MV Light Trap, Sáfián, Sz., Simonics, G. leg., ANHRT:2018.36, slide No.: LGNA 567 ♂. **Zambia.** 1 ♂, 1080m, Mayukuyuku, Kafue, N.P., S14°54’55, E26°03’47”, 9–11.IV.2014, Light Trap, leg. Smith, R., Takano, H., Chmurova, L., Smith, L., ANHRT:2017.11, slide No.: LGNA 50 ♂; 1 ♀, 1400 m, Hillwood, Ikelenge, S11°16’02”, E24°18’59”, 17–24.III.2013, Light Trap, leg. Smith, R. & Takano, H., ANHRT:2017.8, slide No.: LGNA 79 ♀. **Mozambique.** 1 ♀, Maputo Special Reserve, 9m, Mangrove Camp, Mangrove-Woodland Mosaic, 26°19’35.9”S, 32°42’35.7”E, 7–9.XII.2016, Light Trap, Aristophanous, M., Cristovao, J., László, G., Miles, W. leg., ANHRT:2017.22, slide No.: LGNA 352♀; 1 ♂, 15m, nr Swamp Forest, Sand Thicket, 26°27’59”S, 32°54’16”E, 28.V.2017, Actinic Light Trap,

Aristophanous, M., László, G., Miles, W., Vetina, A. leg., ANHRT:2017.26, slide No.: LGNA 381♂; 1 ♂, 11m, forest clearing campsite, Sand Forest, 26°17’24”S, 32°45’45”E, 29–12.VI.2017, MV Light Trap, Aristophanous, M., László, G., Miles, W., Vetina, A. leg., ANHRT:2017.26, slide No.: LGNA 382♂; 1 ♂, 22m, Maputo Special Reserve, West Gate, Sand Forest, 26°30’14.2”S, 32°42’59.6”E, 13–15.II.2018, MV Light Trap, László, G., Mulvaney, J., Smith, L. leg., ANHRT:2018.2, slide No.: LGNA 447♂ (ANHRT).



FIGURES 57–65: male genitalia (all in coll. ANHRT unless otherwise indicated). 57, *Meganola smithi* sp. n., holotype, Ivory Coast, LGNA 242; 58, *M. endoscota*, Liberia, LGNA 970; 59, *M. microfascia*, Ivory Coast, LGNA 250; 60, *M. mesonephele*, Ivory Coast, LGNA 149; 61, *M. lucia*, Ivory Coast, LGNA 472; 62, *M. palaeographa*, Ivory Coast, LGNA 235; 63, *M. monofascia*, Ivory Coast, LGNA 237; 64, *M. monofascia*, Cameroon, LGNA 568; 65, *M. monofascia*, Zambia, LGNA 103.

Remark. Hacker *et al.* (2012) illustrated a drawing of the male genitalia of *M. lucia* (van Son, 1933) taken from the original description of the species. László & Vetina (2019) provided photographic figures of both the male and female genitalia of *M. lucia* for the first time based on specimens from South Mozambique. *M. lucia* slightly resembles the Palaearctic *Meganola togatulalis* (Hübner, 1796) with its darker medial area of the forewing and a characteristically arcuate medial line. Numerous specimens with similar habitus in the ANHRT collection from different countries display identical genital morphology suggesting the species has a much wider distribution than was previously thought. *Meganola togatulella* Hacker, 2012 was described based on a single female specimen collected in Uganda. Females with the same external habitus from Ivory Coast, Cameroon, Zambia and Mozambique display identical genital morphology to that illustrated in the description of *M. togatulella* (Hacker *et al.* 2012: 243). As the females were collected at the same time and site with externally identical males (including in South Mozambique near the type locality of *M. lucia*), *M. togatulella, subterminalis* and *lupii* are here synonymised with *M. lucia*.

Distribution. South Africa, Ethiopia, D.R. Congo, Uganda (Hacker *et al.* 2012) and Mozambique (László & Vetina 2019). Specimens from Ivory Coast, Cameroon and Zambia represent new country records.

Meganola palaeographa Hacker, 2012

(Figs 14–15, 62, 93)

Meganola palaeographa Hacker, 2012, Esperiana 17: 417. Type locality: Tanzania, Iringa. Holotype, ♂ (coll. Hacker/ZSM).

Material examined. Ivory Coast. 7 ♂, 10 ♀, 1171 m, Mt Tonkoui Peak, N07°27’15,2”, W07°38’12,5”, 1–8.XI.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., ANHRT:2017.16, slide Nos LGNA 24 ♀, LGNA 39 ♂, LGNA 40 ♀, LGNA 41 ♂, LGNA 87 ♀, LGNA 148 ♂, LGNA 150 ♀, LGNA 165 ♀, LGNA 166 ♂, LGNA 167 ♀, LGNA 168 ♀, LGNA 235 ♂, LGNA 236 ♂, LGNA 238 ♂, LGNA 240 ♀, LGNA 252 ♀, LGNA 254 ♀; 2 ♂, 174m, Tai NP., Tai Research Station, 05°49’59.8”N, 07°20’32”W, 14–23.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide Nos: LGNA 227 ♂, LGNA 234 ♂; 2 ♂, from the same site, but collected at 25.III.–17.IV.2017 by Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P., ANHRT:2017.25, slide Nos: LGNA 394 ♂, LGNA 398 ♂. **Liberia.** 5 ♂, 1 ♀, 1165m, Nimba Mts camp, ENNR, Nimba county, 7°31’45”N, 8°31’37”W, 03–13.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide Nos LGNA 478 ♂, LGNA 544 ♂; 2 ♂, 1000–1100m, Nimba Mts, ENNR, Nimba county (Cellcom road), 7°32’45.88”N, 8°31’21.04”W, 02–14.xii.2017, Cold Cathode Light Bucket, Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33; 1 ♂, 1 ♀, 1327m, Nimba Mts main ridge (montane forest), ENNR, Nimba county, 7°31’1.3”N, 8°31’1.0”W, 9.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg. ANHRT:2017.33, slide No.: LGNA 538 ♀; 1 ♀, 230m, Lofa county, Zuwulor Village School, 7°54’52”N, 9°31’08”W, 8.xi.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 543 ♀ (ANHRT).

Remark. The species was known only from two specimens: the male holotype specimen from Udzungwa Mts, Tanzania (Hacker *et al.* 2012) and an additional record from the same area published later (Hacker 2014). Surprisingly, the specimens recently collected in West Africa hardly show any morphological differences to the ones from Tanzania, despite the large distance between these localities. The female and its copulatory organ are illustrated here for the first time.

Distribution. Tanzania (Hacker *et al.* 2012, Hacker 2014). The specimens from Ivory Coast and Liberia represent new country records. The species is likely to be distributed throughout Equatorial Africa.

Meganola monofascia (van Son, 1933)

(Figs 16–18, 63–65, 107)

Nola major var. *monofascia* van Son, 1933, Annals of the Transvaal Museum 15: 214. Type locality: [RSA] Transvaal, Pietersburg. Holotype, ♂ (TMSA).

= *Meganola septima* Hacker, 2012, Esperiana 17: 375, **syn. n.**

= *Meganola octava* Hacker, 2012, Esperiana 17: 377, **syn. n.**

= *Meganola heteromorpha* Hacker, 2012, Esperiana 17: 383, **syn. n.**
= *Meganola dissoluta* Hacker, 2012, Esperiana 17: 384, **syn. n.**
= *Meganola brachyvalva* Hacker, 2012, Esperiana 17:385, **syn. n.**
= *Meganola pseudofuscata* Hacker, 2012, Esperiana 17: 468, **syn. n.**

Material examined. Ivory Coast. 1 ♂, 1171 m, Mt Tonkoui Peak, N07°27'15", W07°38'13", 12–18.VII.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., ANHRT:2017.14, slide No.: LGNA 26 ♂; 3 ♂, same site, but collected at 1–8.XI.2015, ANHRT:2017.16, slide Nos: LGNA 237 ♂, LGNA 245 ♂, LGNA 246 ♂. **Liberia.** 1 ♂, 1327m, Nimba county, ENNR, Nimba Mts, main ridge (montane forest), 7°31'1.3"N, 8°31'1.0"W, 9.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 583 ♂. **Cameroon.** 2 ♂, 1246m, Adamawa Region, Adamawa Plateau, 7.3km West of Bazanga, Chute de Tello, 07°13'50.6"N, 13°56'29.2"E, 24–30.ix.2018, MV Light Trap, Sáfián, Sz., Simonics, G. leg., ANHRT:2018.36, slide Nos: LGNA 568 ♂, LGNA 570 ♂. **Sierra Leone.** 1 ♂, 80m, Kalainkay nr. Kamabai, Northern Prov., 3–6.XI.2015, N09°10'52", W11°56'44", Light Trap, R. Goff coll., leg. Smith, R. & Takano, H., ANHRT:2018.20, slide No.: LGNA 289 ♂; 1 ♂, 420m, Mansonia village at the foothills of Loma Mts, N09°07'47", W11°05'06", 6.vi.2016, Light Trap, leg. Takano, Miles & Goff, ANHRT:2017.18, slide No.: LGNA 471 ♂. **Zambia.** 1 ♂, 1400m, Hillwood, Ikelenge, S11°16'02", E24°18'59', 30.IV.–11.V.2014, Light Trap, leg. Smith, R., Takano, H., Chmurova, L. & Smith, L., ANHRT:2017.11, slide No.: LGNA 103 ♂; 1 ♂, same locality, but collected at 25–27.xi.2014 by Smith, R. & Takano, H., ANHRT:2017.12, slide No.: LGNA 393 ♂. **Mozambique.** 1 ♂, Maputo Special Reserve, 22m, West Gate, Sand Forest, 26°30'14.2"S, 32°42'59.6"E, 3–13.XII.2016, Light Trap, Aristophanous, M., Cristovao, J., László, G., Miles, W. leg., ANHRT:2017.22, slide No.: LGNA 354♂; 2 ♂, same locality and collectors, but collected at 21–30.XII.2016, slide Nos: LGNA 517 ♂, LGNA 518 ♂; 1 ♂ , same site, but collected at 21–22.II.2018, by László, G., Mulvaney, J. & Smith, L., ANHRT:2018.2, slide No.: LGNA 519 ♂; 1 ♂, Ponta Milibangalala, Dune Grassland, 26°26'58.6"S, 32°55'29.8"E, 25–30.V.2017, MV Light Trap, Aristophanous, M., László, G., Miles, W., Vetina, A. leg., ANHRT:2017.26 (ANHRT).

Remark. The externally variable but internally (genital morphology) fairly constant and distinctive *M. monofascia* has been found to be surprisingly widely distributed throughout Sub-Saharan Africa. As the validity of the numerous related species described by Hacker (Hacker *et al.* 2012) in the *M. monofascia* species-group is not supported by any firm distinctive morphological characters (cf. Hacker *et al.* 2012: 366, 375, 377, 383, 384, 385, 468), *M. septima, octava, heteromorpha, dissoluta, brachyvalva* and *pseudofuscata* are synonymized here with *M. monofascia*. The closest relative of *M. monofascia* is the Madagascan taxon *M. praefica* (Saalmüller, 1884). *Meganola monofascia* is hardly distinguishable externally from the Southern African *M. bispermutata* Hacker, 2012 despite the considerable differences in their male genitalia (László & Vetina 2019). It is also worth noting that the three specimens identified as *M. furvitincta* (Hampson, 1914) from Nigeria and Ivory Coast figured by Hacker *et al*. (2012: 380) belong in fact to *M. monofascia*.

Distribution. South Africa, Zimbabwe, Tanzania, Uganda, Ethiopia, Tanzania, Kenya, D.R. Congo, Republic of Congo, Burundi, Nigeria, in addition, Ivory Coast (Hacker *et al.* 2012), Senegal (Hacker 2014) and Mozambique (László & Vetina 2019). The specimens from Sierra Leone, Liberia, Cameroon and Zambia represent new country records.

Meganola dananae Hacker, 2012

(Figs 19–20, 66, 94)

Meganola dananae Hacker, 2012, Esperiana 17: 382. Type locality: Ivory Coast, Danane. Holotype, ♀ (coll. Hacker/ZSM).

Material examined. **Guinea.** 1 ♂, 435m, Geipa Camp, Foret de Diecke, 7°26'7.06"N, 8°50'47.87"W, 05–14.iv.2019, Cold Cathode UV Light Trap (8W), Sáfián, Sz., Koivogui, S. leg. ANHRT:2019.7, slide No.: LGNA 975 ♂; 1 ♀, same data but collected by light trap equipped with 250W blended bulb, slide No.: LGNA 988 ♀ (ANHRT).

Remark. The species was described from a single female specimen. The external habitus as well as the genital morphology of the species suggest a close relationship to *M. bispermutata* Hacker, 2012. The male is illustrated here for the first time (Figs 19, 66).

Distribution. Ivory Coast (Hacker *et al.* 2012). New country record for Guinea.

***Meganola furvitincta* (Hampson, 1914)**
(Figs 21–22, 67–68)

Celama furvitincta Hampson, 1914, Catalogue of the Lepidoptera Phalaenae in the British Museum, Suppl. 1: 398, pl. 23, fig. 1. Type locality: Sierra Leone. Syntypes, 2 ♂ (NHMUK).
= *Meganola mbala* Hacker, 2014, Esperiana 19: 165, **syn. n.**
= *Meganola poliographa* Hacker, 2012, Esperiana 17: 334, **syn. n.**

Type material examined. Lectotype (here designated), ♂, red ring type label, with handwritten: "Celama furvitincta type ♂. Hmpsn.", „Sierra Leone. W.G. Clements. 99–116", unique number: NHMUK010598119, Slide No.: BM Arct. 6469 (prep. by Gy.M. László) (NHMUK).

Additional material examined. Liberia. 1 ♂, 1000–1100m, Nimba Mts., ENNR, Nimba county (Cellcom road), 7°32'45.88"N, 8°31'21.04"W, 02–14.xii.2017, Cold Cathode Light Bucket, Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 491 ♂; 2 ♂, 1165m, Nimba Mts camp, ENNR, Nimba county, 7°31'45"N, 8°31'37"W, 03–13.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 560 ♂; 1 ♂, 1327m, Nimba Mts main ridge (montane forest), ENNR, Nimba county, 7°31'1.3"N, 8°31'1"W, 9.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33 (ANHRT). **Zambia.** 1 ♂, 1437m, Kapishya Hot Springs, Shiwa N'gandu Estate, S11°10'13", E31°36'00", I.-III.2017 M.T. Harvey coll. leg. Oram, D., Miles, W., Smith, L., ANHRT:2017.30, slide No.: LGNA 743♂; 2 ♀, 1205m, Zambezi Rapids (Miombo/Riverine forest mosaic), S11°7'30", E24°11'6", 4–9.xi.2018 MV Light Trap Aristophanous, M., Dérozier, V., László, G., Oram, D. leg. ANHRT:2018.40, slide Nos: LGNA 758♀, LGNA 1009♀; 1 ♂, 1 ♀, 1684m, Danger Hill, 30 km N of Mpika, Muchinga Province, 11°37'38"S, 31°33'56"E, 27–30.iv.2019 MV Light Trap, Dérozier, V., László, G., Miles, W. leg. ANHRT:2019.12, slide Nos: LGNA 1010♂, LGNA 1034♀; 1 ♂, 1035 m, Lyangu, Liuwa Plain NP S14°46'51", E22°34'44" 12–15.XI.2013 Light Trap leg. Smith, Takano & Oram, ANHRT:2017.10, slide No.: LGNA 22♂; 1 ♂, 1440m, Kalene Hill (Miombo woodland), S11°11'11", E24°12'5", 6.xi.2018 Actinic Light Trap Aristophanous, M., Dérozier, V., László, G., Oram, D. leg. ANHRT:2018.40, slide No.: LGNA 744; 1 ♀, 1500m, Kundalila Falls, 12 km SE of Kanona, Central Province, 13°09'17"S, 30°42'07"E, 26–27.IV.2019, Actinic Light Trap, Dérozier, V., László, G., Miles, W. leg., ANHRT:2019.12, slide No.: LGNA 1011♀ (ANHRT).

Remarks. In their monograph, Hacker *et al.* (2012) did not illustrate the genitalia of any of the syntypes of *M. furvitincta* (Hampson, 1914). The author of this present paper had the opportunity to dissect and image the genitalia of one of the male syntype specimens of *M. furvitincta* which is designated here as the lectotype and its genitalia figured here for the first time (Fig. 68). Examination of the genital morphology of the lectotype has revealed a misidentification by Hacker *et al.* (2012: 380) where instead of *M. furvitincta*, specimens of *M. monofascia* (van Son, 1933) are illustrated below the photo of the syntype of *M. furvitincta*. The misidentification is obvious in the case of the two illustrated male genitalia figures (Figs E and F on page 380), whereas the true identity of the two female genitalia figures is dubious as they are not conspecific, with Fig. H most probably belonging to *M. bispermutata*. The female copulatory organ illustrated under Fig. G may well be that of *M. furvitincta*, although the poor quality of the image does not allow for a firm identification. Omitting the examination of the primary type of *M. furvitincta* has led Hacker to describe several synonyms: the habitus of the illustrated holotypes and their genitalia of *M. poliographa* Hacker, 2012 from Uganda and *M. mbala* Hacker, 2014 from North-eastern Zambia agree undoubtedly with that of the lectotype of *M. furvitincta*, and therefore these two species are here synonymized with *M. furvitincta*. Based on their distinctive genital morphology, the following species are closely related to *M. furvitincta* and treated tentatively as valid until further material is examined:

- *M. usambarana* Hacker, 2012: The species described from the Usambara Mts, Tanzania with paratypes also from Rwanda, Uganda and D.R. Congo differs from *M. furvitincta* by its conspicuously brighter, silvery forewing coloration. However, as the differences in the male genitalia of the two species are almost negligible, it is highly likely that *M. usambarana* is only a light form of *M. furvitincta*.

- *M. spherographa* Hacker, 2012: The species occurs sympatrically with *M. furvitincta* in West Africa but differs from the latter by its somewhat shorter and apically slightly dilated laminar process of the carina and narrower harpe.

- *M. aarviki* Hacker, 2012: The species is known from Congo and Kenya and differs from all other taxa in this species-group by having the shortest laminar process of the carina and the longest, rather sinuous harpe.

- *M. stigmatographa* Hacker, 2012: The species described from near Songea, Tanzania is taxonomically rather remote from the other taxa in this group due to its long and narrow aedeagus bearing a long, slightly arcuate stick-like carinal process and the large, broad V-shaped vinculum. The ground plan of the clasping apparatus and aedeagus however suggests an affinity to the *furvitincta* species-group.

Distribution. Due to the errors in Hacker *et al*. (2012) discussed above and the yet unclarified taxonomic position of several closely related species, it is difficult to outline the exact distribution of the species. One of the female genitalia illustrated in Hacker *et al*. (2012) from Ivory Coast (cf. fig. G on page 380) might indeed be those of *M. furvitincta*, although reliable pairing of male and female specimens of each species of the species-group would require molecular data. As the type locality of *M. furvitincta* is Sierra Leone and the species is also found in Zambia, it appears to be another example of widely distributed taxa such as *M. monofascia* and *M. lucia* discussed previously. The specimens from Liberia represent new distributional data for the species.

Meganola aarviki Hacker, 2012

(Figs 23, 69)

Meganola aarviki Hacker, 2012, Esperiana 17: 451. Type locality: Republic of Congo, Kisangani. Holotype, ♂ (MWM/ZSM).

Material examined. Ivory Coast. 1 ♂, 174m Tai NP. Tai Research Station (SRET), 05°50’00”N, 07°20’32.0W, 25.III.–17.IV.2017, MV light Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. leg., ANHRT:2017.25, slide No.: LGNA 980 ♂ (ANHRT).

Distribution. Congo and Kenya (Hacker *et al.* 2012). The single male specimen collected in Tai National Park represents new country record for Ivory Coast.

Meganola spherographa Hacker, 2012

(Figs 24–25, 70, 108)

Meganola spherographa Hacker, 2012, Esperiana 17: 449. Type locality: Nigeria, Kaduna. Holotype, ♀ (ZSM).

Material examined. Ivory Coast. 2 ♂, 174m, Tai NP., Tai Research Station, 05°49’59.8”N, 07°20’32”W, 14–23.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide Nos LGNA 144 ♂, LGNA 228 ♂. **Liberia.** 1 ♂, 530m, Lofa County, Foya Proposed Protected Area, 7°56’36”N, 10°16’36”W, 10–19.xi.2017, MV Light Trap (125W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg. ANHRT:2017.33, slide No.: LGNA 861 ♂; 1 ♀, 750m, Nimba County, Nimba Mts., ENNR, Cellcom road, 7°33’3.78”N, 8°31’46.49”W, 16–28.xii.2018 Cold Cathode UV Light Trap (8 W), Sáfián, Sz., Simonics, G. leg. ANHRT:2018.43, slide No.: LGNA 973 ♀ (ANHRT).

Distribution. Nigeria, Ivory Coast and Sierra Leone (Hacker *et al.* 2012). New record for Liberia.

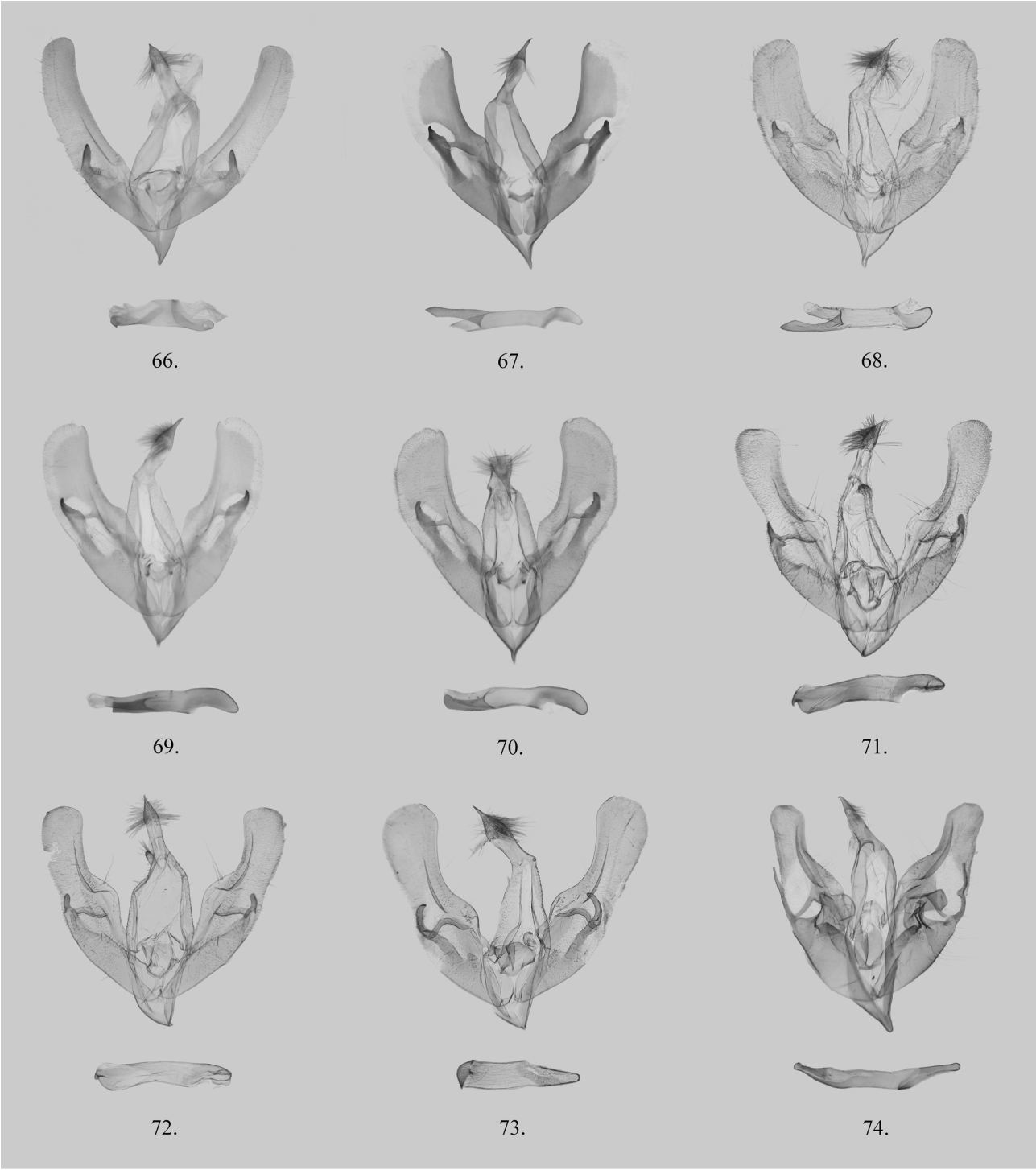
Meganola taiana sp. n.

(Figs 26–28, 71–72, 95)

Holotype. ♂, Ivory Coast, 174m, Tai NP., Tai Research Station, 05°49’59.8”N, 07°20’32.0”W, 14–23.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, unique number: ANHRTUK 00009096, slide No. LGNA 142 ♂ (ANHRT).

Paratypes. **Ivory Coast**. 2 ♂, with the same data as the holotype, unique numbers: ANHRTUK 00009097, 00009098, slide Nos: LGNA 147 ♂, LGNA 209 ♂; 1 ♂, 1 ♀, same site, but collected at 25.III.–17.IV.2017 by Aristophanous, A., Aristophanous, M., Geiser, M., Moretto P., ANHRT:2017.25, unique numbers: ANHRTUK 00001412, ANHRTUK 00049668, slide Nos: LGNA 395 ♂, LGNA 983 ♀. **Sierra Leone.** 3 ♂, 120m, Tiwai Island, Moa River, N07°33’00”, W11°21’09”, 17–22.vi.2016, Light Trap, leg. Takano, Miles & Goff, ANHRT:1017.18, unique numbers: ANHRTUK 00016243, 00026228, 00026230, slide Nos: LGNA 409 ♂, LGNA 515 ♂, LGNA 564 ♂. **Liberia.** 1 ♂, 530m, Lofa County, Foya Proposed Protected Area, 7°56’36”N, 10°16’36”W, 10–19.xi.2017, MV Light

Trap (125W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33, unique number: ANHRTUK 00039105, slide No.: LGNA 551 ♂; 1 ♂, 1165m, Nimba Mts camp, ENNR, Nimba county, 7°31'45"N, 8°31'37"W, 03–13.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, unique number: ANHRTUK 00019898, slide No.: LGNA 487 ♂ (ANHRT).



FIGURES 66–74: male genitalia (all in coll. ANHRT unless otherwise indicated). 66, *Meganola dananae*, Guinea, LGNA 975; 67, *M. furvitincta*, lectotype, Sierra Leone, BM Arct. 6469 (prep. by Gy. M. László) (NHMUK); 68, *M. furvitincta*, Liberia, LGNA 491; 69, *M. aarviki*, Ivory Coast, LGNA 980; 70, *M. spherographa*, Ivory Coast, LGNA 228; 71, *M. taiana* sp. n., holotype, Ivory Coast, LGNA 142; 72, *M. taiana* sp. n., paratype, Liberia, LGNA 487; 73, *M. fontainei*, Zambia, LGNA 1; 74, *M. rhyssomorpha*, Ivory Coast, LGNA 233.

Diagnosis.

The closest relative of *Meganola taiana* sp. n. is *M. fontainei* Hacker, 2012 distinguished by the following characters: the new species is considerably smaller in size (forewing length is 7–7.5 mm in *M. taiana* compared to 8–12 mm in *M. fontainei*), its forewing transverse lines are much paler without the broad, sharply defined blackish medial stripe that is characteristic for *M. fontainei* (as well as for *M. parastrigula* Hacker, 2012 and *M. dicranographa* Hacker, 2012), substituted by only a narrow, dash-like medio-costal patch. The differences in the male genitalia (see figs 71–73) are as follows: the new species has a somewhat narrower valva, considerably shorter harpe showing asymmetry (shorter and more acute on the left valva compared to the one on the right valva), while the much longer harpes of *M. fontainei* are symmetrical. *Meganola taiana* has a somewhat longer aedeagus with considerably shorter pointed carinal process, while the carina of *M. fontainei* is much longer, more robust and conspicuously angled and beak-like. In the female genitalia, comparing with *M. fontainei* the new species has somewhat shorter papillae anales, slightly longer and considerably narrower apophyses posteriores, shorter and narrower apophyses anteriores, a somewhat longer, posteriorly more deeply concave antrum, and medially broader, large elliptical scobinated plate of the signum bursae without a horizontal sclerotized crest, which is characteristic for *M. fontainei*. It is worth noting, that the female genitalia of *M. taiana* is almost identical with that of *M. palaeographa* but distinguishable by the following characters: the new species has a somewhat longer 8th tergite, a slightly longer and narrower, posteriorly concave antrum (the posterior margin of the antrum of *M. palaeographa* is straight) and a medially somewhat broader, large elliptical scobinated plate of the signum bursae compared to that of *M. palaeographa*.

Description.

Adult (Figs 26–28). Forewing length 7–7.5 mm in males, 7.5 mm in female. Male antennae bipectinate, rami relatively long; segments covered dorsally by snowy white scales in the basal half, pale grey ones in the apical half of the antennae; rami dark brown with fine whitish ciliae erected ventrally; female antennae filiform, greyish brown. Head relatively large, labial palps short, porrect, medially dilated, inner and dorsal surface creamy white, lateral surface greyish brown; frons and vertex snowy white; compound eyes moderately large, globular. Thorax snowy white, tegulae may be scattered with darker greyish brown hair scales, abdomen pale greyish white. Sexual dimorphism negligible. Intraspecific variability moderate, specimens from Liberia significantly darker with more greyish brown suffusion throughout head, body and wings. Forewing short, relatively narrow, rather quadrangular, apically rounded. Forewing ground colour off white, with variably sparse brownish suffusion, terminal area pale greyish brown. Sub-basal, basal and antemedial lines diffuse, interrupted, poorly visible, represented by variably sparse blackish brown groups of hair scales. Medial line poorly visible, undulating, pale greyish brown with a sharply defined blackish brown costal section forming a reversed-triangular costal patch. Orbicular stigma well developed, rounded, consisting of raised, blackish brown scales. Postmedial line fine, interrupted, blackish brown, slightly arcuate. Subterminal line pale greyish brown, interrupted, shadow-like, terminal line deleted; cilia rather long, pale greyish brown, slightly chequered by groups of somewhat darker greyish scales. Hindwing uniformly pale brownish grey; cilia very long, somewhat darker than hindwing ground colour. Underside of fore- and hindwing uniformly dark greyish brown, without traces of any pattern, traces of cell spot visible on the hindwing underside.

Male genitalia (Figs 71–72). Uncus medium long, relatively narrow, tapering in its distal third, apically pointed; scaphium short, thin, weakly sclerotized with two semi-circular scobinated plates; tegumen medium long, rather narrow; juxta more or less quadrangular, short, relatively broad, with two short triangular anterio-lateral processes; vinculum rather short, wide V-shaped; valva elongate, rather narrow, with costa strongly dilated basally, then slightly laced medially, apically gently dilated, broadly rounded. Sacculus relatively long, broad at base, gradually tapered, without processes. Harpe rather short, asymmetrical: right harpe slightly arcuate, not tapered, apically rounded, left harpe almost straight, tapered, apically pointed, rather thorn-like. Aedeagus relatively short and narrow, tubular, very slightly arched medially, with a very short, basally broad, tapered, apically rounded claw-like carinal process situated on the ventral side of aedeagus pointed dorsad.

Female genitalia (Fig. 95). Ovipositor conspicuously short, papillae anales very short, apically rounded, rather quadrangular, apophyses posteriores relatively long and thick, gradually tapered, apically pointed, apophyses anteriores very short, triangular, apically rounded; 8th tergite short, posterior margin slightly concave, anterior margin straight; ostium bursae deeply concave anteriorly, goblet shaped, antrum heavily sclerotized, short rather quadran-

gular; ductus bursae substituted by the tubular section of corpus bursae; cervix bursae membranous, slightly swollen; tubular part of corpus bursae relatively short, moderately thick, corpus bursae large, ovoidal, signum bursae represented by an extensive, markedly dilated medially, somewhat teardrop-shaped scobinated area without sclerotized processes or crest.

Etymology. The new species is named after Tai National Park, Ivory Coast where the first specimens were collected.

Distribution. *Meganola taiana* is known from Ivory Coast, Sierra Leone and Liberia.

Meganola fontainei Hacker, 2012

(Figs 73, 96)

Meganola fontainei Hacker, 2012, Esperiana 17:390. Type locality: [D.R.] Congo, Lubumbashi. Holotype, ♂ (RMCA).

Remark. A male and a female specimen from Ivory Coast are treated in Hacker *et al.* (2012) as *M. fontainei*. The illustrated female specimen (erroneously referred to as a male) seems to refer to true *M. fontainei*, although in Ivory Coast its West African sister species *M. taiana* would be expected to occur. It is possible that the specimen in Hacker *et al.* (2012) was mislabelled.

Distribution. D.R. Congo, Republic of Congo, Burundi, Ivory Coast (Hacker *et al.* 2012) and Zambia (Hacker 2014).

Meganola xantholeuca Hacker, 2012

(Figs 29–30, 97)

Meganola xantholeuca Hacker, 2012, Esperiana 17: 498. Type locality: Ivory Coast, Danane. Holotype, ♂ (ZSM).

Material examined. Ivory Coast. 2 ♀, 1171m, Mt. Tonkoui Peak, 07°27’15.2”N, 07°38’12.5”W, 1–8.XI.2015, Light Trap, Aristophanous, M., Moretto, P. & Ruzzier, E. leg., ANHRT:2017.16, slide Nos: LGNA 86 ♀, LGNA 253 ♀. **Liberia.** 1 ♀, 883m, Lofa County, Wologizi Mts, Ridge Camp 2, 8°07’20.79”N, 9°56’50.75”W, 22–31.xi.2018, Cold Cathode UV Light Trap (8W), Sáfián, Sz., Simonics, G. leg. ANHRT:2018.43, slide No.: LGNA 977 (ANHRT).

Remark. *M. xantholeuca* was considered to be a sister species of *M. cretacea* (Hampson, 1914) by Hacker *et al.* (2012). The taxonomy of *M. cretacea* has been clarified by László (2020) and the species has been transferred to the genus *Ezishnola* László, Ronkay & Witt, 2010. The former presumption namely that *M. xantholeuca* is related to *E. cretacea* was due to a misidentification of the latter taxon by Hacker *et al.* (2012) (László 2020).

Distribution. Ivory Coast and Nigeria (Hacker *et al.* 2012). New record for Liberia.

Meganola rhyssomorpha Hacker, 2012

(Figs 31–32, 74, 98)

Meganola rhyssomorpha Hacker, 2012, Esperiana 17: 390. Type locality: Ivory Coast, San Pedro. Holotype, ♀ (ZSM).

Material examined. Ivory Coast. 3 ♂, 174m, Tai NP., Tai Research Station, 05°49’59.8”N, 07°20’32”W, 14–23.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide Nos.: LGNA 140 ♂, LGNA 210 ♂, LGNA 233 ♂; 2 ♀, from the same site, but collected at 25.III.–17.IV.2017 by Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P., ANHRT:2017.25, slide Nos: LGNA 399 ♀, LGNA 984 ♀. **Sierra Leone.** 5 ♂, 1 ♀, 120m, Tiwai Island, Moa River, N07°33’00”, W11°21’09”, 17–22.vi.2016, Light Trap, leg. Takano, Miles & Goff, ANHRT:2017.18, slide Nos: LGNA 406 ♂, LGNA 407 ♂, LGNA 410 ♂, LGNA 467 ♂, LGNA 408 ♀. **Liberia.** 1 ♂, 530m, Lofa County, Foya Proposed Protected Area, 7°56’36”N, 10°16’36”W, 10–19.xi.2017, MV Light Trap (125W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 550 ♂ (ANHRT).

Remark. The species was described based on a single female specimen. A series of males of this rather distinctive species have recently been collected in West Africa and the genitalia are illustrated here for the first time.

Distribution. Ivory Coast (Hacker *et al.* 2012). The specimens from Sierra Leone and Liberia represent new country records.

Meganola chionea (Hampson, 1911)

(Figs 33, 75)

Nola chionea Hampson, 1911, Annals and Magazine of Natural History (8) 8: 398. Type locality: S. Nigeria, Ilesha. Holotype, ♂ (NHMUK).

Type material examined. Holotype, male, red ring type label, „S. Nigeria. Ilesha. L.E.H. Humfrey 1911-57". Slide No.: BM Arct. 6467 (prep. by Gy.M. László) (NHMUK).

Remark. Hacker did not examine the genitalia of the holotype of *M. chionea* (Hampson, 1911) as part of his 2012 monograph, only illustrating the genitalia of a topotypical specimen in a later publication (Hacker 2014). The author of this present paper had the opportunity to dissect and image the genitalia of the male holotype (Fig. 75), which agrees well with the one published by Hacker (2014) as *M. chionea*. The knowledge of the genital morphology of the holotype of *M. chionea* revealed the existence of two additional species in Ivory Coast which are described below. As the sympatrically occurring members of the *chionea* species-group are not easily distinguishable by external characters, the identification of the female specimens illustrated in Hacker *et al.* (2012) as *M. chionea* are rather dubious as they could belong either to *M. diagrapha* Hacker, 2012 or to one of the two new species described below. The female specimen and genitalia illustrated under fig. H on p. 463 is most probably *M. parastrigula* Hacker, 2012 (cf. p. 231 in Hacker *et al.* 2012). Further species related to *M. chionea* based on male genital morphology are *M. fulvolurida* Hacker, 2012 and *M. karischiella* Hacker, 2012.

Distribution. Nigeria, Ivory Coast, Ghana and D.R. Congo (Hacker *et al.* 2012).

Meganola subchionea sp. n.

(Figs 34, 76)

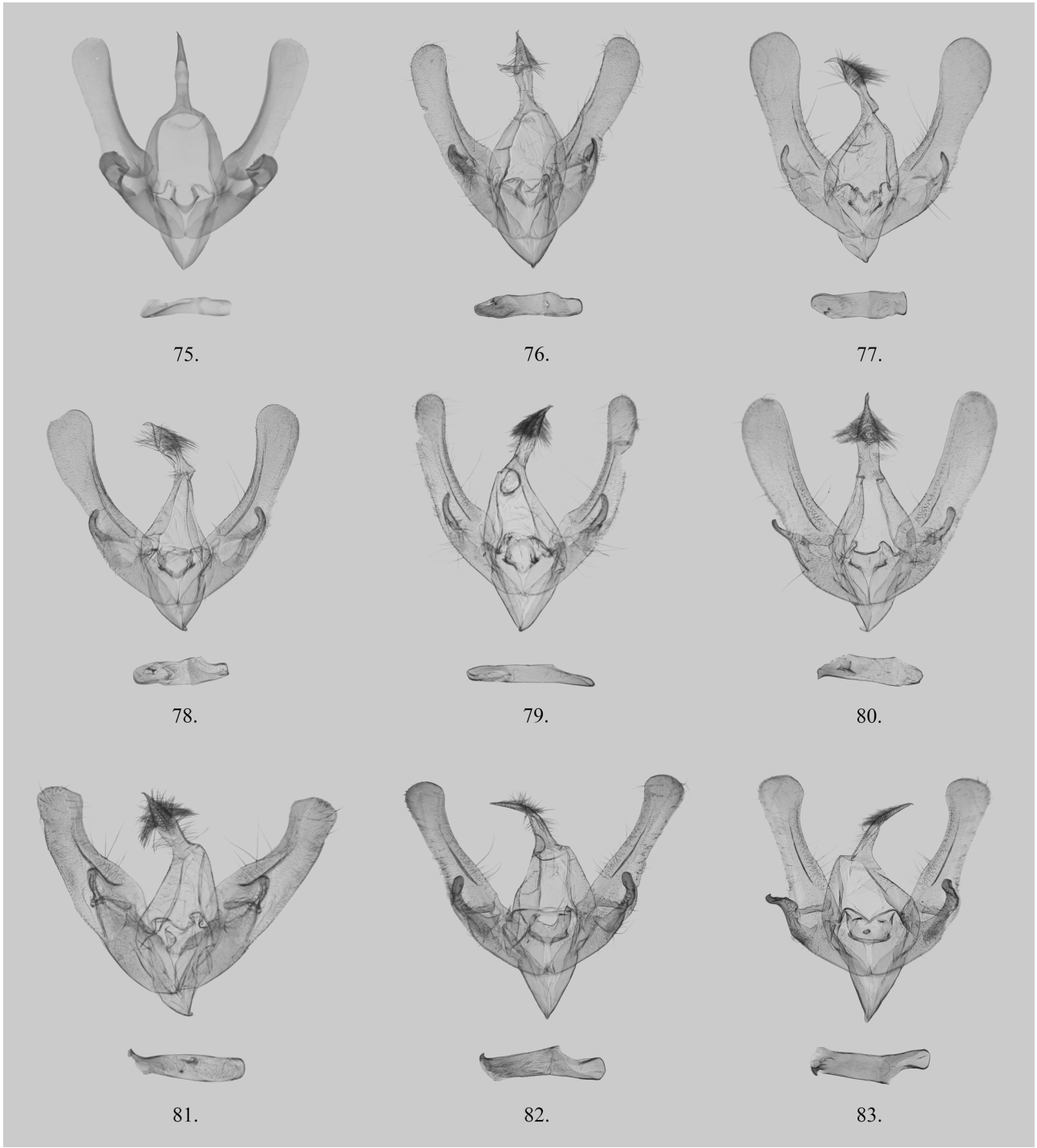
Holotype. ♂, Ivory Coast, 174m, Tai NP, Tai Research Station, 05°49'59.8"N, 07°20'32.0"W, 14–23.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, unique number: ANHRTUK 00009099, slide No.: LGNA 139 ♂ (ANHRT).

Diagnosis. The new species belongs to the *M. chionea* species-group, being most closely related to *M. chionea* (Hampson, 1911) with its pale greyish white forewing ground colour and the broad, almost straight, obtuse pale grey medial band of the forewing. As the species-group comprises several externally indistinguishable species, examination of the genitalia is required for reliable identification. In the male genitalia, *M. subchionea* differs clearly from *M. chionea* by its somewhat broader uncus and considerably narrower harpe and the vesica armed with a pair of short but heavily sclerotized, thorn-like cornuti (the vesica of *M. chionea* bears a peculiar elongate, crest-like, dentate cornutus). The female is unknown.

Description.

Adult (Fig. 34). Forewing length 6.5 mm. Male antennae bipectinate, rami relatively long; segments covered dorsally by snowy white scales in the basal quarter, pale grey ones in the apical three-quarter of the antennae; rami pale brown with fine creamy white ciliae erected ventrally. Head relatively large, labial palps short, porrect, medially dilated, inner and dorsal surface creamy white, lateral surface greyish brown; frons and vertex snowy white; compound eyes moderately large, globular. Thorax snowy white, abdomen off white. Intraspecific variability unknown. Forewing short, relatively narrow, rather quadrangular, apically rounded. Forewing ground colour off white, with sparse brownish suffusion along costa, somewhat denser suffusion in the medial area forming a broad, slightly darker medial band, and with a rather intense suffusion in the terminal area. Sub-basal and basal lines deleted, antemedial

and medial lines diffuse, shadow-like, gently arcuate, area between antemedial and medial lines filled in by dense pale brown suffusion forming a pale, but well-defined broad medial band. Orbicular stigma rather small, rounded, consisting of raised, blackish brown scales. Postmedial, subterminal and terminal lines interrupted, shadow-like, poorly visible. Cilia rather long, pale brown basally, dark greyish brown apically. Hindwing creamy white, termen slightly suffused with pale greyish scales; cilia very long, pale greyish. Underside of fore- and hindwing uniformly greyish brown, without traces of pattern, traces of cell spot visible on the hindwing underside.



FIGURES 75–83: male genitalia (all in coll. ANHRT unless otherwise indicated). 75, *Meganola chionea*, holotype, Nigeria, BM Arct. 6467 (prep. by Gy. M. László) (NHMUK); 76, *M. subchionea* sp. n., holotype, Ivory Coast, LGNA 139; 77, *M. cinereoparva* sp. n., holotype, Ivory Coast, LGNA 397; 78, *M. cinereoparva* sp. n., paratype, Ivory Coast, LGNA 137; 79, *M. mesothermoides*, Liberia, LGNA 502; 80, *M. spermophaga*, Liberia, LGNA 547; 81, *M. pyrrhomorpha*, Ivory Coast, LGNA 565; 82, *M. foviferoides*, Togo, LGNA 597; 83, *M. foviferoides*, Zambia, LGNA 17.

Male genitalia (Fig. 76). Uncus medium long, narrow at base, dilated medially, tapering distally, apically pointed; scaphium short, thin, without sclerotization; tegumen short and narrow; juxta small, horseshoe-shaped; vinculum rather short, wide V-shaped, apically pointed; valva elongate, rather narrow, costa slightly arcuate, somewhat dilated basally, costal margin evenly arcuate, apex rounded. Sacculus relatively short and narrow, without processes. Harpe elongate, narrow, apical half dilated, forming a more or less ear-shaped process. Aedeagus short, medium thick, tubular, straight, carina apically rounded, elongate-trapezoidal, vesica with a pair of short, triangular, thorn-like cornuti situated close to each other.

Female unknown.

Etymology. The name of the new species refers to its close relationship to *M. chionea*.

Distribution. *M. subchionea* is known to date only by its holotype collected in Tai National Park, Ivory Coast.

Meganola cinereoparva sp. n.

(Figs 35–36, 77–78)

Holotype. ♂, Ivory Coast, 174m, Tai NP., Tai Research Station (SRET), 05°50’00”N, 07°20’32.0”W, 25.III–17.IV.2017, MV Light, Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. leg., ANHRT:2017.25, unique number: ANHRTUK 00001457, slide No.: LGNA 397 ♂ (ANHRT).

Paratype. ♂, Ivory Coast, 174m, Tai NP., Tai Research Station, 05°49’59.8”N, 07°20’32.0”W, 14–23.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, unique number: ANHRTUK 00009100, slide No.: LGNA 137 ♂ (ANHRT).

Diagnosis. The new species is similar externally to *M. spermophaga* Fletcher, 1962, but distinguished by its characteristically long, wedge-shaped costal patch of the forewing, which is much shorter and dash-like in *M. spermophaga*. In the male genitalia the most conspicuous differences between the two species are the much narrower valva, the more slender and shorter harpe, and the significantly shorter aedeagus of the new species compared to those of *M. spermophaga*; in addition a short, triangular carinal process of the aedeagus is present in *M. spermophaga* (that character is absent in the new species) and a pair of short, thorn-like cornuti is present on the vesica in the new species (the cornutus of the vesica is a relatively larger plate with a single thorn-like process in *M. spermophaga*). The genital morphology suggests *M. cinereoparva* is closely related to *M. subchionea*, in particular the similar ground plan of their clasping apparatus and the presence of a characteristic pair of short, thorn-like cornuti of the vesica situated near the posterior end of the aedeagus when the vesica is not everted. The main morphological differences between *M. cinereoparva* and *M. subchionea* are as follows: the forewing ground colour of the new species is dark greyish, while that of *M. subchionea* is off white; in addition the medial area of the forewing of the new species is not filled in with dark grey scales, only the costal half of the antemedial line is connected to a wedge-shaped dark grey costal patch, while in *M. subchionea* the medial area of forewing is completely filled in with darker scales, forming a wide medial band. In the male genitalia, *M. cinereoparva* and *M. subchionea* differ in the following characters: the uncus of the new species is significantly shorter, the apical part of its valva is considerably broader and its harpe is much more slender, longer and more curved than those of the related species. The aedeagus of *M. cinereoparva* is similar to that of *M. subchionea*, but considerably shorter and the pair of small cornuti of the vesica are somewhat longer than those of the related species. The female is unknown.

Description.

Adult (Figs 35–36). Forewing length 6.5–7 mm. Male antennae bipectinate, rami relatively short; segments covered dorsally in a mixture of off white and greyish brown scales in the basal quarter, brownish grey ones in the apical three-quarter of the antennae; rami pale brown with fine creamy white ciliae erected ventrally. Head relatively large, labial palps short, porrect, medially dilated, covered by greyish brown scales; frons and vertex off white; compound eyes moderately large, globular. Thorax and abdomen pale grey. Intraspecific variability expressed by a slightly different shade of grey of the forewing ground colour. Forewing short, relatively narrow, elongate triangular, apically rounded. Forewing ground colour pale grey, with a narrow darker grey suffusion on the costa and a dense, extensive

darker grey suffusion in the terminal area. Sub-basal and basal lines deleted, antemedial line very fine, sharply defined by blackish scales, semi-circular, medial line diffuse, shadow-like, interrupted, area between antemedial and medial lines in their costal section filled in by dense, pale brownish grey suffusion, forming a pale, but well-defined reverse-triangular costal patch reaching the middle of the forewing. Orbicular stigma rather small, rounded, consisting of raised, pale greyish scales. Postmedial line very fine, slightly undulating, consisting of almost continuous line of darker grey scales; subterminal and terminal lines interrupted, shadow-like, poorly visible. Cilia rather long, brownish grey with a narrow creamy white line basally. Hindwing pale yellowish grey basally, somewhat darkening to pale grey apically; cilia very long, pale greyish. Underside of fore- and hindwing uniformly dark grey, without traces of pattern.

Male genitalia (Figs 77–78). Uncus medium long, narrow at base, dilated medially, tapering distally, apically pointed; scaphium short, thin, without sclerotization; tegumen short and narrow; juxta small, medio-posteriorly with a V-shaped incision; vinculum rather short, wide V-shaped, apically rounded; valva elongate, medium broad, costa very slightly dilated basally, costal margin evenly arcuate, apex dilated, broadly rounded. Sacculus relatively short and narrow, without processes. Harpe elongate, narrow, curved, crescent-shaped, apically tapered and narrowly rounded. Aedeagus conspicuously short, medium thick, tubular, straight, coecum very short, quadrangular, carina apically rounded without processes, vesica with a pair of short, triangular, thorn-like cornuti situated close to each other.

Female unknown.

Etymology. The Latin name of the species refers to its small size and grey colour (cinereus = grey, parvus = small).

Distribution. Both specimens of *M. cinereoparva* were collected in Tai National Park, Ivory Coast.

Meganola mesothermoides (Poole, 1989)

(Figs 37–38, 79, 99)

Nola mesothermoides Poole, 1989, Lepidopterorum Catalogus 118, Noctuidae, part II: 698. Type locality: [Ghana] Gold Coast, Bibianaha. Holotype, ♀ (NHMUK).

Nola mesotherma Hampson, 1914, Catalogue of the Lepidoptera Phalaenae in the British Museum, Supplement 1: 409. Nom. praeocc., junior secondary homonym of *Celama mesotherma* Hampson, 1909.

Type material examined. Holotype. ♀, red ring type label, "Gold Coast. Bibianaha. 700 ft. VI.1912. H.G.F. Spurrell. 1912-275.", with handwritten: "Nola mesotherma type ♀. Hmpsn.", BMNH(E) 1403523, Slide No.: NHMUK010315152 (prep. by Gy.M. László) (NHMUK).

Additional material examined. Liberia. 1 ♂, 865m, Lofa County, 8°07'10"N, 9°57'11"W, 24–29.xi.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg. ANHRT:2017.33, slide No.: LGNA 502 (ANHRT).

Remark. The copulatory organ of the female holotype is illustrated here for the first time (Fig. 99) matching with the female genitalia illustrated in Hacker *et al.* (2012: 460). A male specimen from Liberia in the ANHRT collection reminiscent of the female holotype is considered here to be the previously unknown male of the species (Fig. 79).

Distribution. Ghana, Ivory Coast and D.R. Congo (Hacker *et al.* 2012, Hacker 2014). New country record for Liberia.

Meganola angola (Bethune-Baker, 1911)

Nola angola Bethune-Baker, 1911, Annals and Magazine of Natural History (8) 7: 534. Type locality: N. Angola, N'Dalla Tando. Holotype, ♀ (NHMUK).

Remark. Hacker *et al.* (2012) refer to a single male specimen from Man, Ivory Coast deposited in ZSM.

Distribution. Angola, D.R. Congo, Kenya, Ethiopia, Uganda and Ivory Coast (Hacker *et al.* 2012).

Meganola florianhackeri Hacker, 2012

Meganola florianhackeri Hacker, 2012, Esperiana 17: 482. Type locality: Kenya, Mt. Kenya, Thego. Holotype, ♂ (ZSM).

Remark. Hacker *et al.* (2012) refer to a single male specimen from Abidjan, Ivory Coast deposited in RMCA.

Distribution. Kenya, Tanzania, Ethiopia, Rwanda and Ivory Coast (Hacker *et al.* 2012).

Meganola spermophaga (Fletcher, 1962)

(Figs 39–40, 80, 100)

Nola spermophaga Fletcher, 1962, Veröffentlichungen der zoologischen Staatssammlung München 7: 5. Type locality: Uganda, Kampala. Holotype, ♂ (NHMUK).

= *Meganola obscuritata* Hacker, 2012, Esperiana 17: 413, **syn. n.**

Material examined. Sierra Leone. 2 ♀, 80m, Kalainkay nr. Kamabai, Northern Prov., 3–6.XI.2015, N09°10'52", W11°56'44" Light Trap, R. Goff coll., leg. Smith, R. & Takano, H., ANHRT:2018.20, slide Nos: LGNA 291, LGNA 462 (all ♀). **Cameroon.** 1 ♂, 1246m, Adamawa Region, Adamawa Plateau, 7.3km West of Bazanga, Chute de Tello, 07°13'50.6"N, 13°56'29.2"E, 24–30.ix.2018, MV Light Trap, Sáfián, Sz., Simonics, G. leg., ANHRT:2018.36, slide No.: LGNA 575 ♂. **Liberia.** 1 ♂, 530m, Lofa County, Foya Proposed Protected Area, 7°56'36"N, 10°16'36"W, 10–19.xi.2017, MV Light Trap (125W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 547 ♂. **Zambia.** 1 ♀, 1030m, Kundabwika Falls, Kalungwishi River, S09°13'00", E29°18'17", 5–7.V.2013, Light Trap, leg. Smith, Takano & Oram, ANHRT:2017.9, slide No.: LGNA 43 ♀ (ANHRT).

Remark. The male holotype of *M. obscuritata* Hacker, 2012 as illustrated by Hacker *et al.* (2012: 413) does not show any distinctive features in genitalia and external habitus compared to *M. spermophaga* and thus the former species is synonymised here with the latter. It is worth noting however, that the female specimens illustrated in Hacker *et al.* (2012) as *M. obscuritata* are apparently not conspecific with the male holotype, judging from their considerably different coloration and wing pattern.

Distribution. Uganda, D.R. Congo, Republic of Congo, Burundi, Kenya, Tanzania, Ethiopia, Nigeria, Burkina Faso and Ivory Coast (Hacker *et al.* 2012). Specimens from Sierra Leone, Cameroon, Liberia and Zambia represent new country records.

Meganola pyrrhomorpha Hacker, 2012

(Figs 41–42, 81, 101)

Meganola pyrrhomorpha Hacker, 2012, Esperiana 17: 398. Type locality: Ethiopia, Oromia Prov., Bonga. Holotype, ♂ (coll. Hacker/ZSM).

= *Meganola tabbertiella* Hacker & Hoppe, 2012, Esperiana 17: 414, **syn. n.**

= *Meganola amaniella* Hacker, 2012, Esperiana 17: 409, **syn. n.**

= *Meganola fuscostriata* Hacker, 2012, Esperiana 17: 411, **syn. n.**

Material examined. Ivory Coast. 1 ♂, 174m, Tai NP., Tai Research Station, 05°49'59.8"N, 07°20'32.0"W, 14–23.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide No.: LGNA 138 ♂; 1 ♂, 3 ♀, 1171 m, Mt Tonkoui Peak, N07°27'15,2", W07°38'12,5" 1–8.XI.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., ANHRT:2017.16, slide Nos: LGNA 232 ♂, LGNA 48 ♀, LGNA 49 ♀, 145 ♀; 1 ♂, same site, but collected at 9–16.IV.2016 by Aristophanous, M. and Moretto, P., ANHRT:2017.17, slide No.: LGNA 565 ♂. **Sierra Leone.** 1 ♀, Baoma, Goderich, 8°25'41"N, 13°15'47"W, leg. R.W. Goff, 18.III.2015, ANHRT:2019.1, slide No.: LGNA 171 ♀. **Liberia.** 2 ♂, 530m, Lofa County, Foya Proposed Protected Area, 7°56'36"N, 10°16'36"W, 10–19.xi.2017, MV Light Trap (125W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33, slide Nos: LGNA 548 ♂, LGNA 552 ♂; 1 ♀, 1165m, Nimba Mts camp, ENNR, Nimba county, 7°31'45"N, 8°31'37"W, 03–13.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 553 ♀; 1 ♀, 1000–1100m, Nimba Mts., ENNR, Nimba county (Cellcom road), 7°32'45.9"N, 8°31'21"W, 27.iii–04.iv.2017, Light Trap (250W blended

bulb) & Cold Cathode UV light bucket trap (8W), Sáfián, Sz., Simonics, G. leg., ANHRT:2017.36, slide No.: LGNA 546 ♀ (ANHRT).

Remarks. *M. pyrrhomorpha* Hacker, 2012 is a rather characterless small moth, rendering it difficult to identify. It resembles other highly similar species (e.g. *M. spermophaga*, *M. illaudata*, *M. antennata*) requiring the examination of the genitalia for reliable identification. The most important distinctive features in the male of the species are the conspicuously curved valva with a heavily sclerotized, broad costal margin, the long, distally slightly curved, apically dilated and broadly rounded harpe, the short aedeagus bearing a short, curved carinal process and the single, short and thin spike-like cornutus of the vesica. The most distinctive features in the female are the short, narrow, distally asymmetrical antrum, the short, rounded lateral protrusion at the distal end of the very long and membranous ductus bursae and the elongate ovoid scobinated plate of signum bursae. As several species described in Hacker *et al.* (2012) share these characters without any detectable distinctive features, the following species are considered to be mere synonyms of *M. pyrrhomorpha*: *M. tabbertiella* Hacker & Hoppe, 2012 **syn. n.**, *M. amaniella* Hacker, 2012 **syn. n.** and *M. fuscostriata* Hacker, 2012 **syn. n.** The validity of several further, externally very similar species is supported by minor, but stable differences in the genitalia. These species are as follows: *M. spermophaga* (Fletcher, 1962), *M. stictographa* Hacker, 2012, *M. amphigrapha* Hacker, 2012, *M. foviferoides* (Poole, 1989), *M. pedata* (Fletcher, 1962) and *M. obscuritata* Hacker, 2012. It is worth noting that the externally strikingly different *M. loxoleuca* (Fletcher, 1958) and *M. loxodentata* Hacker & Hoppe, 2012 belong to the same species-group based on the configuration of their genitalia.

Distribution. Ethiopia, Tanzania, Uganda, D.R. Congo, Kenya, Ghana (Hacker *et al.* 2012), Sierra Leone and Ivory Coast (Hacker 2014). The specimens from Liberia represent new country record.

Meganola canocolorata Hacker, 2012

(Figs 43, 102)

Meganola canocolorata Hacker, 2012, Esperiana 17: 440. Type locality: Ivory Coast, Katiola. Holotype, ♀ (ZSM).

Material examined: Ivory Coast. 1 ♀, 174m Tai NP. Tai Research Station (SRET), 05°50’00”N, 07°20’32.0W, 27.III.–16.IV.2017, Actinic Light Trap, Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. leg. ANHRT:2017.25, slide No.: LGNA 981 ♀. **Liberia**. 1 ♀, 140m, Krahn-Bassa Reserve, Sinoe County, Juboe River, 7.5km South West Pellokon Town, 5°39’4”N, 8°39’4”W, 14–21.i.2018, Cold Cathode UV Bucket Light Trap, Geiser, M., Sáfián, Sz., Simonics, G. leg. ANHRT:2017.33, slide No.: LGNA 985 ♀.

Distribution. The species was known only from its holotype collected at Katiola, Ivory Coast (Hacker *et al.* 2012). The specimen from Liberia represents a new country record.

Meganola foviferoides (Poole, 1989)

(Figs 44–45, 82–83, 103)

Nola foviferoides Poole, 1989, Lepidopterorum Catalogus 118, Noctuidae: Part II: 695. Type locality: [Zambia] N.E. Rhodesia, Fort Jameson. Holotype, ♂ (NHMUK).

Nola fovifera Hampson, 1911, *Annals and Magazine of Natural History* (8)8: 397. Nom. praeocc., junior secondary homonym of *Celama fovifera* Hampson, 1903.

= *Meganola longisigna* Hacker, 2012, Esperiana 17: 418, **syn. n.**

= *Meganola politzari* Hacker, 2012, Esperiana 17: 511, **syn. n.**

Type material examined. Holotype. ♂, red ring type label, “N.E. Rhodesia, Ft. Jameson, to Lundazi, 4,000 ft. 9.VI.1910. S.A. Neave, 1910-406.”, with handwritten: “Nola fovifera type ♂. Hmpsn.”, NHMUK 010598825, Arctiidae gen. slide No. 536 (NHMUK).

Additional material examined. Togo. 2 ♂, 415m, Fazao-Malfakassa NP, Point de vue campsite (Sudanian savannah), 8°48’50”N, 0°49’3.2”E, 16–23.viii.2018, Actinic Light Trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., ANHRT:2018.31, slide Nos.: LGNA 597 ♂, LGNA 598 ♂. **Cameroon.** Long series of both sexes, 900m, North Region, Wack (La Falaise), 07°40’16.5”N, 13°33’18.4”E, 2–21.x.2018, Cold Cathode UV Light Trap,

Sáfián, Sz., Simonics, G. leg., ANHRT:2018.36, slide Nos: LGNA 578, LGNA 579, LGNA 855 (all ♀) (ANHRT). **Zambia.** 1 ♂, 1030m, Kundabwika Falls, Kalungwishi River, S09°13'00", E29°18'17", 5–7.V.2013, Light Trap, leg. Smith, Takano & Oram, ANHRT:2017.9, slide No.: LGNA 32 ♂; 1 ♀, 1191 m, Kasanka River Pontoon, Kasanka N.P. S12°34'23", E30°14'05", 2–4.XII.2012, Light Trap, leg. Smith, R. & Takano, H., ANHRT:2017.7, slide No.: LGNA 33 ♀; 1 ♂, 2 ♀, 1416m, Changwena Falls, N. Swaka F.R., Copperbelt, S13°22'48", E29°33'18", 27–28.X.2014, Light Trap, leg. Smith, Takano & Oram, ANHRT:2017.12, slide Nos: LGNA 95 ♂, LGNA 34 ♀, LGNA 37 ♀; 1 ♂, 1166 m, Ntumbachushi Falls, Ngona River, Luapula Prov., S09°51'12", E28°56'40", 12–13.V.2013, Light Trap, leg. Smith, Takano & Oram, ANHRT:2017.9, slide No.: LGNA 58 ♂; 1 ♂, same locality and collectors, but 3–4.XI.2014, slide No.: LGNA 17 ♂; 1 ♂, 1 ♀, 1160m, Lake Kashiba, Mpongwe, S13°26'55", E27°56'40" 25–26.X.2014, Light Trap, leg. Smith, Takano & Oram, ANHRT:2017.12, slide Nos: LGNA 101 ♀, LGNA 102 ♂; 2 ♀, 1320m, Lukangaba F.R., Mansa, S11°25'18"; E28°58'34", 30–31.X.2014, Light Trap, leg. Smith, Takano & Oram, ANHRT:2017.12, slide Nos: LGNA 106 ♀, LGNA 108 ♀ (ANHRT).

Remark. The clasping apparatus of the holotype of *M. foviferoides* had not been mounted in a flattened position during the preparation of the genitalia and has therefore proved difficult to compare with other genitalia that have been prepared and mounted in the standard fashion. This is likely the reason why Hacker was unable to recognise the identical genitalia characters of *M. foviferoides* and *M. longisigna* Hacker, 2012. Nevertheless, aside from the external similarity between the holotype of *M. foviferoides* and the specimens of *M. longisigna* illustrated in Hacker *et al.* (2012: 418), the main distinctive characters of the male genitalia are visible even on the poorly prepared genitalia slide of *M. foviferoides*, namely: the long, robust, almost straight, pointed uncus, the medially curved, apically dilated and broadly rounded valva, the relatively large and thick, medially incurved, apically broadly rounded harpe and the small, but conspicuous, thorn-like tooth of the carina. Based on a misinterpretation of the visible characters of this slide, Hacker suggested *M. spermophaga* to be a junior synonym of the *M. foviferoides*, despite the dissimilarities between the shape of the uncus, valva, harpe and aedeagus of the two species. Furthermore, the species was mistakenly described by Hacker 93 pages later in the monograph under the name *M. politzari* (Hacker *et al.* 2012: 511). As there is no noticeable difference between these three species, neither in habitus nor in genital morphology, *M. longisigna* and *M. politzari* are synonymised here with *M. foviferoides*. The rather polymorphic and abundant species is widely distributed throughout the open woodlands of Sub-Saharan Africa from Ivory Coast throughout Southern Ethiopia, reaching NW Zambia and Malawi in Southern Africa. Based on the extensive material of *M. foviferoides* housed in the ANHRT collection, the species can be considered as one of the most common and widely distributed Nolinae in Africa. The closest relative of *M. foviferoides* is *M. obliquivittata* Hacker, 2012 described from Madagascar.

Distribution. Zambia (the type locality of *M. foviferoides* was erroneously given as Zimbabwe in Hacker *et al.* (2012)), in addition, Ethiopia, Tanzania, Kenya, Malawi, Cameroon, D.R. Congo, Burundi, Nigeria, Ivory Coast, Burkina Faso and Togo (Hacker *et al.* 2012).

Meganola leucosigna Hacker, 2012

(Figs 46–47, 84, 104)

Meganola leucosigna Hacker, 2012, Esperiana 17: 298. Type locality: Uganda, Fort Portal. Holotype, ♂ (ZSM).

Material examined. Ivory Coast. 3 ♂, 1 ♀, 1171 m, Mt Tonkoui Peak, N07°27'15,2", W07°38'12,5", 1–8.XI.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., ANHRT:2017.16, slide Nos: LGNA 46 ♂, LGNA 263 ♂, LGNA 264 ♀. **Tanzania**. 1 ♀, 1137 m, Sali Forest, Mahenge Mts., S08°56'99.7", E36°40'24.8", 25–27.IV.2011, Light Trap, leg. Smith, R. & Takano, H., ANHRT:2017.3, slide No.: LGNA 124 ♀ (ANHRT).

Remark. *M. leucosigna* is the second member of the *M. leucographa* (Fletcher, 1958) species-group sensu Hacker (Hacker *et al.* 2012). The nominate taxon of the species-group was illustrated in Hacker *et al.* (2012) showing the male holotype and three female specimens along with their genitalia identified as *M. leucographa*, including a paratype. Hacker considered the two species superficially identical, although the male genitalia are strikingly different (Hacker *et al.* 2012). Moreover, he suggested that the female paratype of *M. leucographa* was probably misidentified by Fletcher. In fact, the three female specimens (including the paratype) figured as *M. leucographa* are actually *M. leucosigna*. The only true *M. leucographa* is the male holotype, which displays considerably different wing pattern, especially the white postmedial line which is arched inwards in the ventral half of the forewing in *M.*

leucographa, whereas it is conspicuously arcuate outwards in its whole length in *M. leucosigna*. It is worth noting, that *M. leucographa* seems to be nearly identical both in habitus and male genitalia with *M. stenochra* Hacker, 2012 described from Kivu Province, D.R. Congo. The latter species is possibly conspecific with *M. leucographa*, however confirmation of their synonymy requires further studies.

Distribution. Uganda, Burkina Faso Kenya, Cameroon, Ghana (Hacker *et al.* 2012) and Tanzania (Hacker 2014). Specimens from Ivory Coast represent new distribution data for the species.

Meganola denticulatalis Hacker, 2012

Meganola denticulatalis Hacker, 2012, Esperiana 17: 508. Type locality: Sudan, Ed Damer, Hudeiba. Holotype, ♂ (ZSM).

Remark. Hacker *et al.* (2012) refer to a single male specimen from Doloe, Ivory Coast deposited in ZSM.

Distribution. Sudan, Burkina Faso, Ivory Coast, Ethiopia, Yemen (Hacker *et al.* 2012).

Meganola hackeri sp. n.

(Figs 48–49, 85)

Holotype. ♂, Ivory Coast, 1171m, Mt. Tonkoui Peak, 07°27’15.2”N, 07°38’12.5”W, 1–8.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, unique number: ANHRTUK 00009101, slide No.: LGNA 239 ♂ (ANHRT).

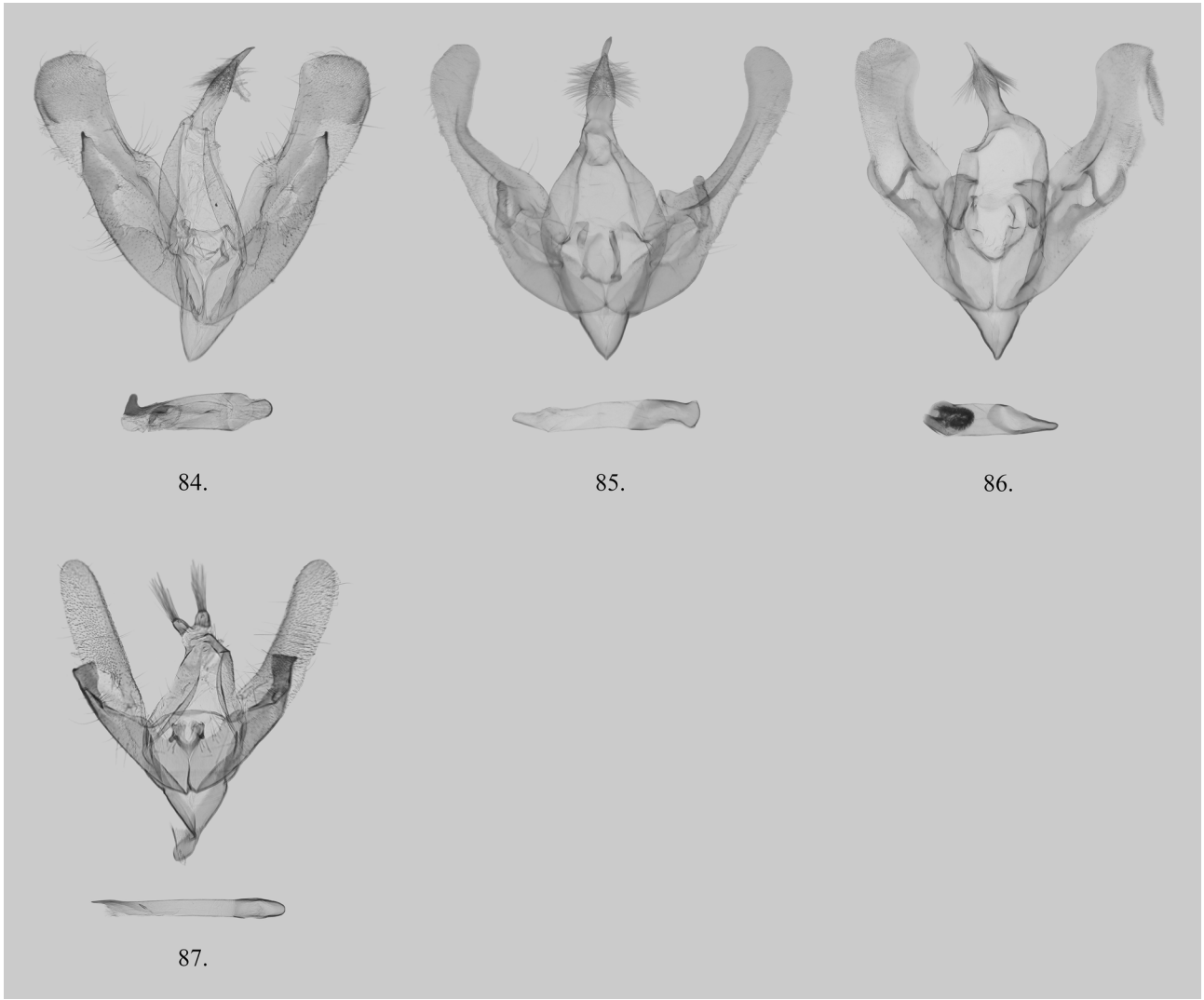
Paratypes. **Ivory Coast.** 1 ♂, 39–48m Abidjan, Banco Forest (Parc-National du Banco), 05°23’03.8”N, 04°03’11.2W, 21–30.IV.2017, MV light Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. leg. ANHRT:2017.25, unique number: ANHRTUK 00052754, slide No.: LGNA 982 ♂. **Sierra Leone.** 1 ♂, 80m, Kalainkay nr. Kamabai, Northern Prov., 3–6.XI.2015, N09°10’52”, W11°56’44”, Light Trap, R. Goff coll., leg. Smith, R. & Takano, H., ANHRT:2018.20, unique number: ANHRTUK 00009102, slide No.: LGNA 286 ♂. **Liberia.** 1 ♂, 1165m, Nimba Mts camp, ENNR, Nimba county, 7°31’45”N, 8°31’37”W, 03–13.xii.2017 Light Trap (blended bulb 250W) Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg. ANHRT:2017.33, unique number: ANHRTUK 00019908, slide No.: LGNA 488 ♂; 1 ♂, 865m, Lofa County, Wologizi Mts, Ridge Camp, 8°07’10”N, 9°57’11”W, 24–29.xi.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg. ANHRT:2017.33, unique number: ANHRTUK 00145396, slide No.: LGNA 1152 ♂ (ANHRT).

Diagnosis. The new species is related to *M. conspicillaris* (Fletcher, 1962), but easily distinguishable by its larger size (wingspan of *M. conspicillaris* is 14–16 mm, that of *M. hackeri* is 17–21 mm) and the much narrower, dash-like medio-costal patch, which is much broader, longer and rather quadrangular in *M. conspicillaris*. In addition, both the fore- and hindwing ground colour of the new species is considerably paler than that of *M. conspicillaris*. It is worth mentioning the extraordinarily long rami of the male bipectinate antennae of *M. hackeri*, although it is not possible to make any comparisons with the holotype of *M. conspicillaris* as the antennae are missing. The configuration of the male genitalia of *M. hackeri* suggests a close relationship to *M. conspicillaris*, both taxa sharing a rather unique, long, asymmetrical basal processes of the valva. However, the new species has a somewhat longer, apically protracted uncus (which is evenly tapering in the related species), an apically more dilated valva, considerably shorter and pointed asymmetrical basal processes of the valva (these are apically dilated and rounded in *M. conspicillaris*), a much shorter and thicker, almost straight harpe (which is slightly S-shaped in the related species) and a somewhat longer vinculum compared to *M. conspicillaris*. The aedeagus of the new species is similar in shape to that of the sister species, but considerably shorter and slightly thicker. The female is unknown.

Description.

Adult (Figs 48–49). Forewing length: 8–11 mm. Male antennae bipectinate, rami conspicuously long; segments covered dorsally by off white scales in the basal quarter, brownish grey ones in the apical three-quarter of the antennae; rami pale brown with very short and fine pale brownish dense ciliation erected ventrally. Head relatively

large, labial palps short, porrect, medially dilated, covered by greyish brown scales; frons and vertex greyish white; compound eyes moderately large, globular. Thorax and abdomen greyish white. Intraspecific variability expressed in somewhat different shade of grey of the forewing ground colour and in size. Forewing medium long, relatively narrow, triangular, apically rounded. Forewing ground colour pale grey, with a sparse greyish brown suffusion scattered throughout the wing. Transverse lines interrupted, diffuse, antemedial line relatively well defined, oblique, fused with a sharply defined narrow, dash-like costal patch. Medial area with groups of extensive brownish grey patches. Orbicular stigma large, rounded, consisting of raised, dark grey scales. Cilia long, brownish grey with a narrow creamy white line basally. Hindwing off white basally, slightly suffused by brownish grey hair scales marginally; cilia very long, pale greyish. Underside of fore- and hindwing uniformly brownish grey, with traces of cell spot on the hindwing.



FIGURES 84–87: male genitalia (all in coll. ANHRT). 84, *Meganola leucosigna*, Ivory Coast, LGNA 263; 85, *M. hackeri* sp. n., holotype, Ivory Coast, LGNA 239; 86, *M. ronkayiana*, Ivory Coast, LGNA 225; 87, *M. illaudata*, Ivory Coast, LGNA 224.

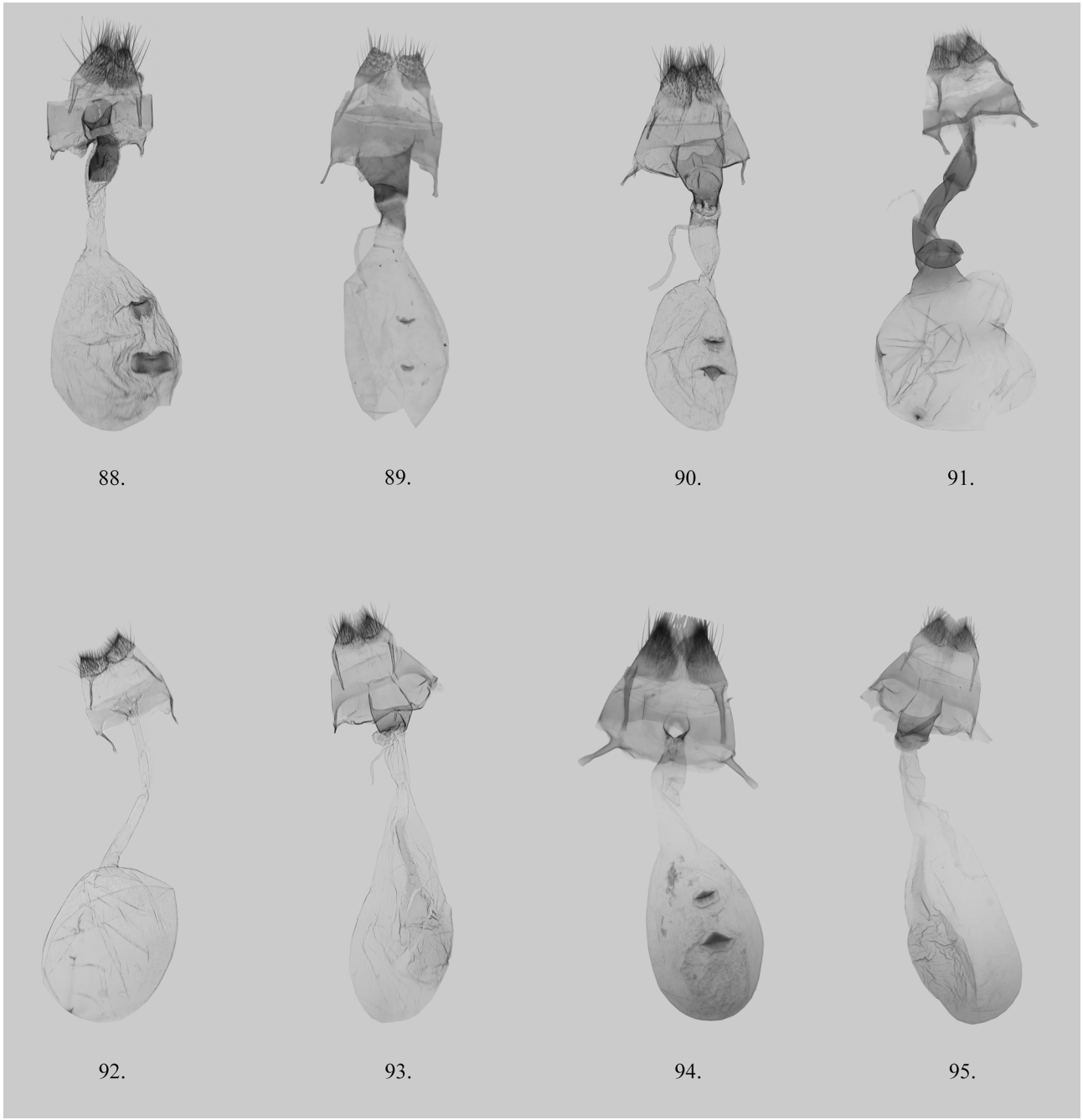
Male genitalia (Fig. 85). Uncus medium long, narrow at base, slightly dilated medially, then tapering, distal section protracted, apically pointed; scaphium short, thin, weakly sclerotized; tegumen short relatively broad; juxta relatively long, elongate-quadrangular, medio-posteriorly with a U-shaped incision, latero-anteriorly with a pair of short processes; vinculum rather short, narrow V-shaped, apically pointed; valva elongate, broad at base, conspicuously narrowed postmedially, dilated and broadly rounded apically; valva costa convex basally, rather concave medially, heavily sclerotized. Base of valva with a pair of long, asymmetrical processes directed towards the medial plate of valva; left side process very long, relatively broad at base, gradually tapering, slightly curved distally, apically pointed, extending over tip of harpe; right side valval process shorter, approximately half as long as the left one, gradually tapering, almost straight, apically pointed, reaching only the base of harpe. Sacculus relatively short

and narrow, without processes. Harpe elongate, narrow, straight, finger-like, apically rounded. Aedeagus relatively short, medium thick, tubular, straight, coecum short, apically slightly dilated, carina elongate-triangular, apically rounded without processes, vesica without cornuti.

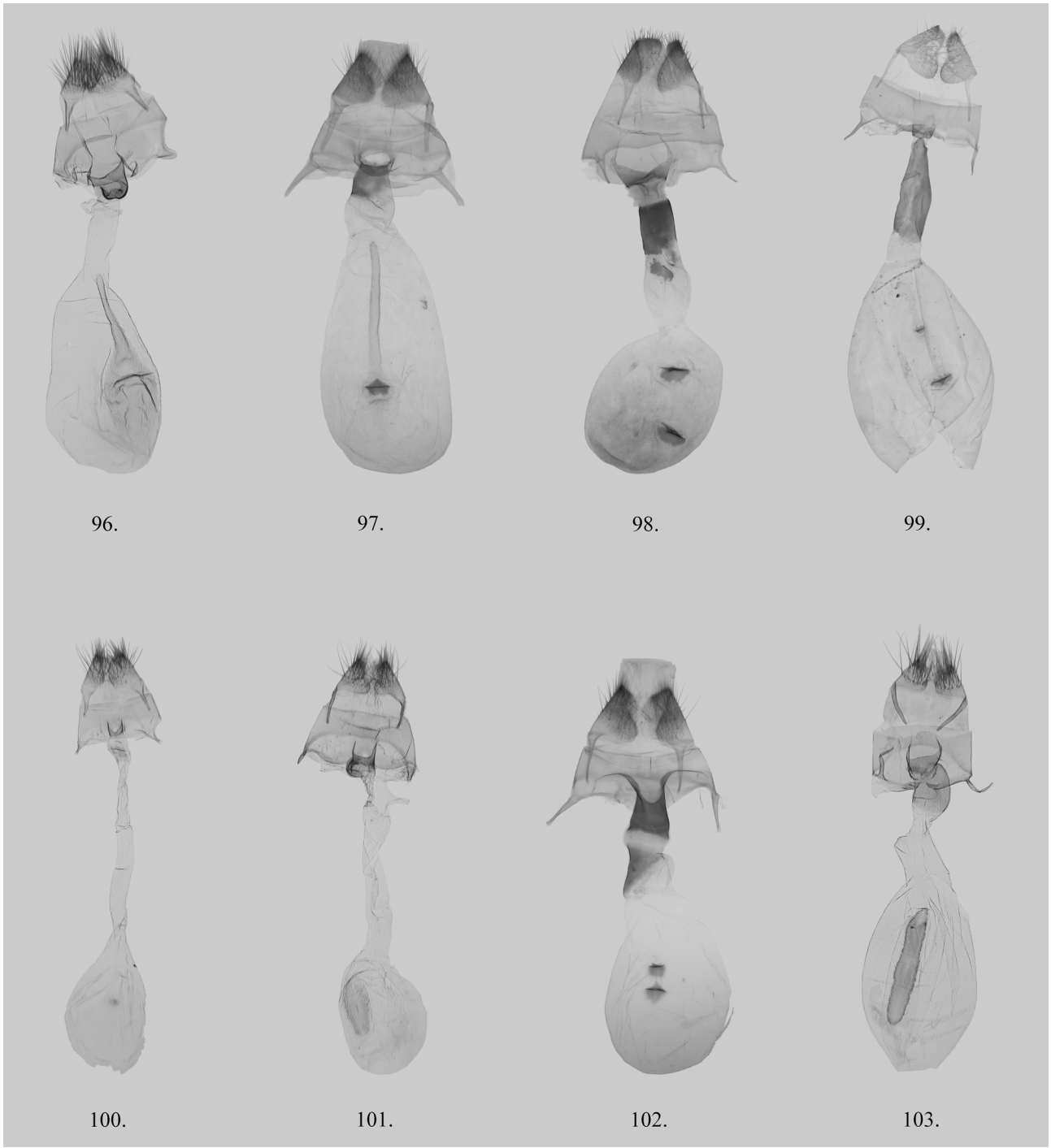
Female unknown.

Etymology. The new species is named after the renowned Noctuoidea specialist, Dr Hermann Hacker, who made a monumental contribution to the knowledge of the Afrotropical Nolinae by publishing his monograph in 2012.

Distribution. The type specimens of *M. hackeri* were collected on Mount Tonkoui, Ivory Coast, in the Northern Province of Sierra Leone and in the Nimba and Wologizi mountains in Liberia.



FIGURES 88–95: female genitalia (all in coll. ANHRT unless otherwise indicated). 88, *Meganola smithi* sp. n., paratype, Liberia, LGNA 523; 89, *M. endoscota*, holotype, Ghana, NHMUK010315151 (prep. by Gy.M. László) (NHMUK); 90, *M. microfascia*, Ivory Coast, LGNA 418; 91, *M. mesonephele*, Ivory Coast, LGNA 151; 92, *M. lucia*, Ivory Coast, LGNA 420; 93, *M. palaeographa*, Ivory Coast, LGNA 24; 94, *M. dananae*, Guinea, LGNA 988; 95, *M. taiana* sp. n., paratype, Ivory Coast, LGNA 983.

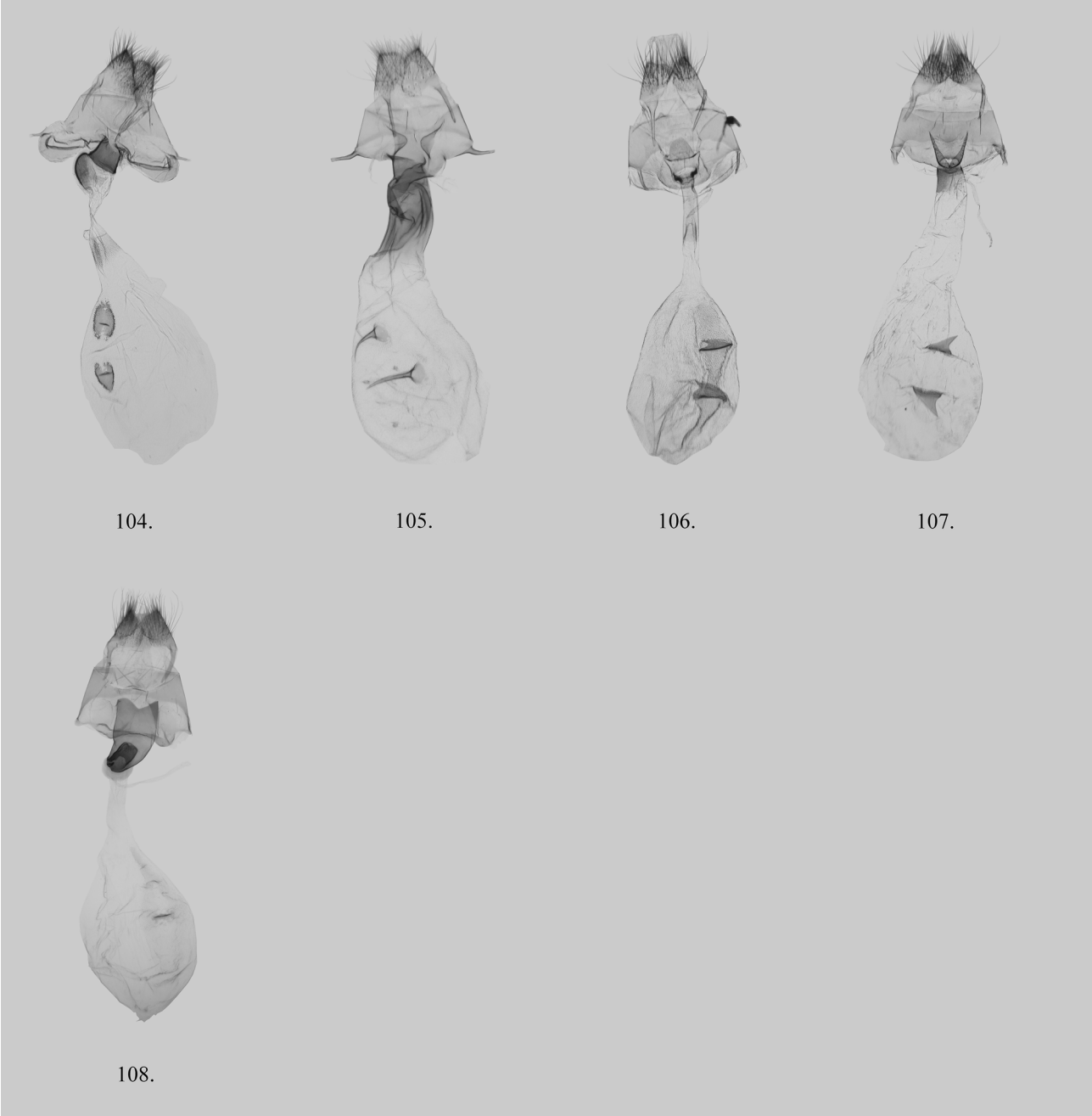


FIGURES 96–103: female genitalia (all in coll. ANHRT unless otherwise indicated). 96, *Meganola fontainei*, Zambia, LGNA 3; 97, *M. xantholeuca*, Liberia, LGNA 977; 98, *M. rhyssomorpha*, Ivory Coast, LGNA 984; 99, *M. mesothermoides*, holotype, Ghana, NHMUK010315152 (prep. by Gy.M. László) (NHMUK); 100, *M. spermophaga*, Sierra Leone, LGNA 462; 101, *M. pyrrhomorpha*, Ivory Coast, LGNA 145; 102, *M. canocolorata*, Ivory Coast, LGNA 981; 103, *M. foviferoides*, Zambia, LGNA 37.

Meganola despicillaris Hacker, 2012

Meganola despicillaris Hacker, 2012, Esperiana 17: 455. Type locality: Ivory Coast, Gouedie. Holotype, ♀ (MNVD).

Distribution. Ivory Coast (Hacker *et al.* 2012).



F FIGURES 104–108: female genitalia (all in coll. ANHRT). 104, *Meganola leucosigna*, Ivory Coast, LGNA 264; 105, *M. pyrrhosoma*, Ivory Coast, LGNA 226; 106, *M. illaudata*, Liberia, LGNA 501; 107, *M. monofascia*, Ivory Coast, LGNA 256; 108, *M. spherographa*, Liberia, LGNA 973.

Meganola ronkayiana Hacker, 2012

(Figs 50–51, 86)

Meganola ronkayiana Hacker, 2012, Esperiana 17: 456. Type locality: Congo, Kalamba. Holotype, ♂ (in coll. T. Karisch/MNVD).

Material examined. Ivory Coast. 1 ♂, 1171m, Mt. Tonkoui Peak, 07°27’15.2”N, 07°38’12.5”W, 1–8.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide No.: LGNA 225 ♂. **Sierra Leone.** 1 ♂, 120m, Tiwai Island, Moa River, N07°33’00”, W11°21’09”, 17–22.vi.2016, Light Trap, leg. Takano, Miles & Goff, ANHRT:1017.18, slide No.: LGNA 411 ♂; 1 ♂, 180m, Western Area Peninsula Forest Reserve, 21.ix.2015,

N08°20’57”, W13°10’42”, Light Trap, R. Goff coll., leg. Smith, R. & Takano, H., slide No.: LGNA 466 ♂. **Liberia.** 1 ♂, 1000–1100m, Nimba Mts., ENNR, Nimba county (Cellcom road), 7°32’45.88”N, 8°31’21.04”W, 02–14.xii.2017, Cold Cathode Light Bucket, Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 490 ♂ (ANHRT).

Distribution. D.R. Congo and Uganda (Hacker *et al.* 2012). Specimens from Ivory Coast, Sierra Leone and Liberia represent new country records.

Meganola pyrrhosoma Hacker, 2012

(Figs 52–53, 105)

Meganola pyrrhosoma Hacker, 2012, Esperiana 17: 420. Type locality: Ghana, Biakpa, Volta Region. Holotype, ♀ (ZMHB).

Material examined. Ivory Coast. 1 ♀, 1171 m, Mt Tonkoui Peak, N07°27’15,2”, W07°38’12,5”, 1–8.XI.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., ANHRT:2017.16, slide No.: LGNA 226 ♀; 1 ♀, same site and collectors, but collected at 12–18.VII.2015, ANHRT:2017.14, slide No.: LGNA 57 ♀. **Liberia.** 2 ♀, 611m, Lofa County, Wologizi Mts, base camp forest, 8°07’17”N, 9°57’42”W, 20.xi.–01.xii.2017, MV Light Trap (125W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33, slide Nos: LGNA 559 ♀, LGNA 561 ♀; 1 ♀, 1000–1100m, Nimba Mts., ENNR, Nimba county (Cellcom road), 7°32’45.88”N, 8°31’21.04”W, 02–14.xii.2017, Cold Cathode Light Bucket, Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.: LGNA 600 ♀ (ANHRT).

Remark. The externally rather characterless *M. pyrrhosoma* was described from Ghana based on a single female specimen. As only additional female specimens are present in the ANHRT collection, the male remains unknown.

Distribution. The species was known only from its holotype from Biakpa, Ghana (Hacker *et al.* 2012). The specimens from Ivory Coast and Liberia represent new country records.

Meganola perfusca (Hampson, 1911)

Nola perfusca Hampson, 1911, Annals and Magazine of Natural History (8) 8: 398. Type locality: S. Nigeria, Lagos. Syntypes, ♂, ♀ (NHMUK).

Remark. The taxonomy of this species has not been clarified in Hacker *et al.* (2012) as none of the syntypes were examined and dissected. The author of the present paper was also unable to examine the genitalia of the species and thus the morphology of the male genitalia of *M. perfusca* remains unknown. The female genitalia of a specimen from Ivory Coast illustrated in Hacker *et al.* (2012) is inadequate for identification.

Distribution. Nigeria, Ghana, Burkina Faso and Ivory Coast (Hacker *et al.* 2012).

Meganola illaudata (Fletcher, 1958)

(Figs 54–56, 87, 106)

Vandamia illaudata Fletcher, 1958, Ruwenzori Expedition 1952 1 (4): 56, figs 22–24, 37. Type locality: Uganda, Ruwenzori, Ibanda. Holotype, ♂ (NHMUK).
= *Meganola eburneana* Hacker, 2012, Esperiana 17: 416, **syn. n.**

Material examined. Ivory Coast. 1 male, 1171m, Mt. Tonkoui Peak, 07°27’15.2”N; 07°38’12.5”W, 1–8.XI.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., ANHRT:2017.16, slide No.: LGNA 224 ♂. **Liberia.** 4 ♂, 6 ♀, 1165m, Nimba Mts camp, ENNR, Nimba county, 7°31’45”N, 8°31’37”W, 03–13.xii.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide Nos: LGNA 486 ♂, LGNA 500 ♂, LGNA 555 ♂, LGNA 556 ♂, LGNA 489 ♀, LGNA 501 ♀, LGNA 557 ♀, LGNA 558 ♀; 1 ♂, 1 ♀, 1000–1100m, Nimba Mts., ENNR, Nimba county (Cellcom road), 7°32’45.88”N, 8°31’21.04”W, 02–14.xii.2017, Cold Cathode Light Bucket, Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. leg., ANHRT:2017.33, slide No.:

LGNA 493 ♂; 1 ♀, 611m, Lofa County, Wologizi Mts, base camp forest, 8°07'17"N, 9°57'42"W, 20.xi.–01.xii.2017, MV Light Trap (125W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33; 1 ♀, 865m, Lofa County, Wologizi Mts, Ridge Camp, 8°07'10"N, 9°57'11"W, 24–29.xi.2017, Light Trap (blended bulb 250W), Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L. leg., ANHRT:2017.33 (ANHRT).

Remark. *Meganola illaudata* has unique male genitalia bearing a bifid uncus (Fig. 87), allowing for easy identification of an otherwise rather featureless moth. The species was described from the Ruwenzori Mts, Uganda. The genitalia of the male holotype and a female paratype are illustrated by Hacker *et al.* (2012) and despite his knowledge of both sexes of *M. illaudata*, Hacker described *M. eburneana* Hacker, 2012 based on a single female specimen collected in Ivory Coast showing no distinctive characters distinguishing it from *M. illaudata*. A long series of externally well matching males and females of *M. illaudata* from Liberia in the ANHRT collection confirms the conspecificity of the two species, therefore *M. eburneana* is synonymised here with *M. illaudata*. It is worth noting that the species is also figured by Hacker *et al.* (2012) as a female paratype specimen of *M. antennata* Hacker, 2012 from Pwani, Tanzania which is undoubtedly as a result of a misidentification.

Distribution. Uganda, Ethiopia, Tanzania, D.R. Congo, Equatorial Guinea (Bioko Island) and Ivory Coast (Hacker *et al.* 2012). The specimens from Liberia are new country records representing the westernmost occurrence of the species.

Acknowledgements

The author is indebted to the following persons for their assistance in the preparation of this present paper: Dr Alberto Zilli and Mr Geoff Martin (NHMUK) for kindly facilitating access to the Nolini type and accession material under their care; Mrs Lydia Mulvaney and Mr Jason Mulvaney (ANHRT) for their technical help in specimen imaging and plate compilation; Mr Philippe Moretto for providing valuable information on the literature regarding Heterocera of Ivory Coast; Dr Hitoshi Takano (ANHRT) for the linguistic corrections of the manuscript. Scientific research in Côte d'Ivoire was authorised by the Ministère de l'Enseignement Supérieur et de la Recherche Scientifique. The Office Ivoirien des Parcs et Réserves (OIPR) and the Société de Développement des Forêts (SODEFOR) are thanked for authorising access to protected forests and providing export permits. The following people are acknowledged for authorising research and issuing export permits in the Republic of Guinea: Mamadou Diawara (Executive Director)—Guineé Ecologie; Colonel Layaly Camara (National Director) and Cece Papa Konde (General Director) - Ministère de l'Environment et aux Eaux et Forêts; Jamison Suter (Manager)—Societe des Mines de Fer de Guineé—Responsibilite Environmentale et Social.

In the Republic of Liberia, the necessary permits were issued by the Forestry Development Authority: Mike Doryen, Darlington Taugben and Kederick F. Johnson managing directors are thanked for the kind collaboration.

The Author declares that to the best of his knowledge he conforms to the national regulations and meets with the conditions and requirements of International Conventions concerning collecting/export and handling of the specimens presented in this Article.

References

Basquin, P. (2016) Premières données sur les Lasiocampidae du Mont Tonkoui (République de Côte d'Ivoire). *Saturnafrica*, 24, 33–46. [in French]

Bethune-Baker, G.T. (1911) Descriptions of new African Heterocera. *Annals and Magazine of Natural History*, Series 8, 7 (41), 530–576.
https://doi.org/10.1080/00222931108692974

Darge, Ph. (2018) Premières données entomologiques sur la faune du Mont Tonkoui en Côte d'Ivoire (Lepidopteres Saturniidae et Eupterotidae). *Saturnafrica*, 27, 3–15. [in French]

Dyar, H.G. (1898) New American moths and synonymical notes. *Journal of the New York Entomological Society*, 6, 43.

Eitschberger, U. & Moretto, Ph. (2019) Vorläufige Checkliste der Sphingidae-Arten des Mt. Tonkoui, Elfenbeiküste, die von Philippe Moretto und einheimischen Sammlern dort bisher entdeckt wurden (Lepidoptera, Sphingidae). *Atalanta*, 50 (1–4), 195–202. [in German]

Fletcher, D.S. (1958) Ruwenzori Expedition 1952. Arctiidae, Nolidae. *Ruwenzori Expedition 1952*, 1 (4), 55–67.

Fletcher, D.S. (1962) Nolinae from Tanganyika collected by Dr. Christa Lindemann and Nina Pavlitzki. *Veröffentlichungen der zoologischen Staatssammlung München*, 7, 1–8.

Hacker, H.H., Schreier, H.P. & Goater, B. (2012) Revision of the tribe Nolini of Africa and the Western Palaearctic Region (Lepidoptera, Noctuoidea, Noctuidae, Nolinae). *Esperiana*, 17, 7–612.
Hacker, H.H. (2014) Revision of the tribe Nolini of Africa and the Western Palaearctic Region (Lepidoptera, Noctuoidea, Noctuidae, Nolinae) Supplement 1. *Esperiana*, 19, 121–179.
Hampson, G.F. (1911) Descriptions of new genera and species of Syntomidae, Arctiadae, Agaristidae and Noctuidae. *Annals and Magazine of Natural History*, Series 8, 8 (46), 393–445.
https://doi.org/10.1080/00222931108693053
Hampson, G.F. (1914) Catalogue of the Amatidae and Arctiadae (Nolinae and Lithosianae) in the Collection of the British Museum. *Catalogue of the Lepidoptera Phalaenae in the British Museum, London*, Supplement 1, 1–858.
Herder, S., Lery, X., Fediere, G. & Kouassi, N.K. (1989) Saturnides de Cote d'Ivoir (Lepidoptera, Attacidae). *Institut International De Recherche Scientifique Pour Le Developpement A Adiopodoume, Abidjan*, 5, 1–10. [in French]
Hübner, J. (1796–[1838]) *Sammlung Europäischer Schmetterlinge. 7 Vols*. s.n. Augsburg, 194 pp. [in German]
Lafontaine, J.D. & Mikkola, K. (1987) Lock–and–key system in the inner genitalia of Noctuidae (Lepidoptera) as taxonomic character. *Entomologiske Meddelelser*, 55, 161–167. [in Finnish]
László, Gy. M., Ronkay, G. & Witt, T. (2010) Contribution to the Nolinae (Lepidoptera, Noctuidae) fauna of North Thailand. *Esperiana*, 15, 7–125.
László, Gy. M. & Vetina, A.A. (2018) Contribution to the knowledge of the Nolini of the Maputo Special Reserve in South Mozambique with description of two new species and several taxonomic updates (Lepidoptera, Nolidae, Nolinae). *Zootaxa*, 4571 (2), 225–246,
https://doi.org/10.11646/zootaxa.4571.2.3
László, Gy. M. (2020) On the taxonomy of *Meganola cretacea* (Hampson, 1914) with description of two new species (Lepidoptera, Nolidae, Nolinae). *Ecologica Montenegrina*, 30, 82–92.
https://doi.org/10.37828/em.2020.30.8
Poole, R.W. (1989) Noctuidae, Part 2. *In:* Heppner, J.B. (Ed.), *Lepidopterorum Catalogus. New Series. Fascicle* 118. Flora and Fauna Publications. E. J. Brill, New York, pp. 635–639.
Saalmüller, M. (1884) *Lepidopteren von Madagascar. Erste Abtheilung. Rhopalocera, Heterocera: Sphinges et Bombyces*. Im Selbstverlas, der Gesellscliaft, Frankfurt am Main, 246 pp. [in German]
Son, V.G. (1933) A revision of the South African moths of the tribe Nolini. *Annals of the Transvaal Museum*, 15 (2), 181–232.
Vuattoux, R., Pierre, J. & Haxaire, J. (1989) Les Sphinx de Côte-d'Ivoire, avec des données nouvelles sur les élevages effectués à la Station écologique de Lamto. *Bulletin de la Société entomologique de France*, 93 (7–9), 239–255. [in French]