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Integrative taxonomic review of the *Meganola monofascia* van Son species group sensu Hacker *et al.* (Lepidoptera, Noctuoidea, Nolidae, Nolinae, Nolini)

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Received 26 March 2025 | Accepted by V. Pešić: 27 May 2025 | Published online 12 June 2025.

Abstract

The taxonomic content of the *Meganola monofascia* (van Son, 1933) species group sensu Hacker *et al.* (2012) is revised following an integrative taxonomical approach. Based on diagnostic morphological features of the genital structures and the results of the Maximum Likelihood analyses of 136 DNA barcodes, three species complexes are delimited to include species with a habitus reminiscent of *M. monofascia*: the *M. monofascia*, the *M. bispermutata* Hacker, 2012 and the *M. furvitincta* Hampson, 1914 species groups. The analyses revealed three new species which are described in this paper: *Meganola saotomeana* **sp. n.**, *Meganola baaka* **sp. n.**, and *Meganola spherographata* **sp. n.** Nine new synonymies are introduced: *Meganola melanosomalis* Hacker, 2012 **syn. n.** is synonymised with *Meganola perfusca* (Hampson, 1911), *Meganola derrae* Hacker, 2012, **syn. n.** and *Meganola stigmatolalis* Hacker, 2012 **syn. n.** are synonymised with *Meganola bispermutata* Hacker, 2012, *Meganola chromatographa* Hacker, 2012 **syn. n.** and *Meganola kakamega* Hacker, 2012 **syn. n.** are synonymised with *Meganola diagrapha* Hacker, 2012, *Meganola murzinialis* Hacker, 2012 **syn. n.** is synonymised with *Meganola pachygrapha* Hacker, 2012, *Meganola spherographa* Hacker, 2012, **syn. n.** is synonymised with *Meganola furvitincta* (Hampson, 1914), *Meganola parastrigula* Hacker, 2012 **syn. n.** is synonymised with *Meganola dicranographa* Hacker, 2012, and *Meganola taiana* László, 2020, **syn. n.** is synonymised with *Meganola canocolorata* Hacker, 2012. *Meganola dissoluta* Hacker, 2012 is reinstated from synonymy with *M. monofascia* and placed as a subspecies of the latter taxon: *Meganola monofascia dissoluta* Hacker, 2012 **stat. rev., stat. n.**; in addition, *Meganola cryptochra* Hacker, 2012 is downgraded to a subspecies of *Meganola bispermutata* Hacker, 2012: *Meganola bispermutata cryptochra* Hacker, 2012 **stat. n.** The paper is illustrated with 92 colour figures of adults, 75 black and white images of genitalia and four dendrograms demonstrating the ML tree topology of the entire complex as well as each separate species group.

Key words Afrotropics, COI-5P, DNA barcode, Maximum Likelihood, morphology, new species, new status, new synonym, revised status, taxonomy.

Introduction

Meganola Dyar, 1898, is one of the most diverse genera of Nolinae found across all continents except Antarctica. The genus comprises eight species in the Nearctic (Lafontaine & Schmidt 2010) and nearly

80 species in the Palaearctic and Indomalayan realms (László *et al.* 2015, Hu *et al.* 2019, Cha *et al.* 2019, Cha *et al.* 2021, Zhang & Hu, 2022). The *Meganola* fauna in the Neotropical and Australasian realms remains unrevised, making the total number of confirmed *Meganola* species unknown. The Afrotropics is home to the greatest diversity of the genus, with 304 known species (Hacker *et al.* 2012, Hacker 2014, László & Vetina 2019, László & Volynkin 2019, László 2020, László 2023) when synonyms are disregarded.

In their revision of the African and Western Palaearctic *Nolini*, Hacker *et al.* (2012) attempted to establish an infrageneric classification by introducing species groups based primarily on external morphological characteristics. Owing to a large number of taxa often displaying a high level of polymorphism, the authors encountered obvious challenges in establishing clear taxonomic units for related taxa. This led to several discrepancies in taxon delimitation and infrageneric classification.

One of the most problematic such units is the *Meganola monofascia* (van Son, 1933) sensu Hacker *et al.* (2012) complex comprising taxa with a greyish-brownish ground colour featuring a distinctive triangular or quadrangular blackish medio-costal patch which often extends to a variably broad medial fascia, and an oblique, variably arched or dentate postmedial line of the forewing. These characters, however, are relatively common throughout the genus, and even several Asian species appear to be alike, as, for instance, *M. major* (Hampson, 1891), leading van Son (1933) to describe *M. monofascia* as a variation of this Asian species. A further example of *Nolinae* taxa displaying similar phenotypical traits is the exclusively Asian genus *Manoba* Walker, 1863 (László *et al.* 2022). Due to the large number of taxa sharing similar or even indistinguishable external appearances, the configuration of the genitalia provides a reliable basis for identification and infrageneric grouping. Hacker *et al.* (2012) established their species-group classification solely based on external traits, which raises questions about the taxon selection within the *M. monofascia* species group. As a result, several taxa that could be classified within this complex, according to the authors' original concept, are instead associated with other species groups. Furthermore, several species described in Hacker *et al.* (2012) appear to be merely different forms of already recognised taxa, resulting in an excess of names introduced within the genus. It is worth noting that at the time of Hacker *et al.*'s (2012) revision, there was only a limited number of specimens available for thorough examination, making it difficult to assess the individual variability of different taxa. However, over the past decade, an extensive research program initiated by the African Natural History Research Trust has resulted in the accumulation of a substantial amount of new Afrotropical *Nolini* material. This new material has opened opportunities for a better understanding of the morphological variability and distribution of these species.

In the course of the identification of the *Meganola* material housed at the collections of the African Natural History Research Trust, some 1,500 genitalia dissections of Afrotropical *Meganola* have been conducted to establish the diagnostic morphological characters among different species, facilitating a more coherent species grouping. Additionally, DNA barcoding of a substantial number of samples has enabled matching male and female specimens of many species that are nearly indistinguishable based on external characteristics. Genetic analyses have also proven to be invaluable tools in taxon delimitation and grouping.

By applying integrative taxonomy, inconsistencies in the current habitus-based species group system and taxon delineation have been rectified. This approach allows for a revision of the taxonomic content of the *M. monofascia* species group, resulting in a more consistent infrageneric classification for the externally often confusingly similar species.

Material and methods

Morphological studies

The material collected during ANHRT expeditions was sampled using a light tent illuminated with a 125 W mercury vapour light bulb or automatic actinic and LepiLED light bucket traps.

Genital apparatuses were extracted and stained with Eosin red and embedded in Euparal on microscope slides, applying standard methods of preparation (Lafontaine & Mikkola 1987). Images of adults were captured using a Nikon D90 SLR camera equipped with a Nikkor AF Micro 60 mm lens. Genitalia were imaged using a Canon EOS 700D camera mounted on a Leitz Diaplan compound microscope.

Holotype label data are quoted exactly as they appear. A division slash (/) denotes the commencement of a new line, two division slashes (//) data on a further label.

Collection acronyms used in the text:

ANHRT – African Natural History Research Trust, Leominster, U.K.
DNMNH – Ditsong National Museum of Natural History, (formerly Transvaal Museum), Pretoria, South Africa
MfN – Museum of Natural History (Museum für Naturkunde), Berlin, Germany
MNUL – Museum of Nature and Environment (Museum für Natur und Umwelt), Lübeck, Germany
MWM – Museum Witt München, Munich, Germany
NHMO – Natural History Museum, University of Oslo, Oslo, Norway
NHMUK – The Natural History Museum, London, U.K.
NHMW – Natural History Museum Vienna (Naturhistorisches Museum Wien), Vienna, Austria
RMCA – Royal Museum for Central Africa, Tervuren, Belgium
SMNF – Senckenberg Nature Museum (Senckenberg Naturmuseum), Frankfurt, Germany
ZSM – Bavarian State Collection of Zoology (Zoologische Staatssammlung München), Munich, Germany

Other abbreviations:

BIN – Barcode Index Number
DRC – Democratic Republic of Congo
GS – genitalia slide
HT – holotype
LG – genitalia slide prepared by Gyula M. László
LT – lectotype
PT – paratype
SL – sequence length
PWD – pairwise distance
RSA – Republic of South Africa
URI – Uniform Resource Identifier

Molecular studies

DNA barcodes were obtained by removing tarsal segments or whole legs from 136 adult specimens of 21 morphologically recognised taxa of Afrotropical *Meganola* (Table 1.). *Meganola swierstrai* (van Son, 1933) was selected as an outgroup taxon. The tissues were submitted to the Canadian Centre for DNA Barcoding (CCDB, Biodiversity Institute of Ontario, University of Guelph) for DNA extraction, amplification and sequencing of cytochrome oxidase subunit I (COI-5P) applying either standard high through-put protocols (Ivanova *et al.* 2006) or Single Molecule Real-Time sequencing through the Sequel (PacBio) pipeline (Hebert *et al.* 2018). Sequences were aligned using MUSCLE and edited in MEGA version 11 (Kumar *et al.* 2018), genetic divergences within and between species were calculated using the Kimura 2-parameter model (Kimura 1980). Phylogenetic tree searches were performed using Maximum Likelihood (ML). ML analyses and tree visualisations were performed in MEGA 11; trees were annotated in Adobe Photoshop CC 2018 software. The COI-5P sequences and metadata are available from the BOLD Systems public dataset DS-MNOLA1 (doi: <https://dx.doi.org/10.5883/DS-MNOLA1>); a summary of data for the sequenced specimens is provided in Table 1.

Results

Genetic analyses

(Text figs 1–4)

Table 1. Data of specimens used in the DNA barcode analysis.

Taxon	Sex	Locality	Sample ID	Process ID	SL	BIN URI	Gen. slide No.
<i>M. aarviki</i>	♂	Côte d'Ivoire, Tai NP	ANHRTUK00049641	ANHRT101-20	658	BOLD:AAP3225	LGNA 980
<i>M. baaka</i> sp. n., HT	♂	Gabon, Mikongo	ANHRTUK00192260	ANLMO2276-23	653	BOLD:AFF7471	LGNA 1582
<i>M. bispermutata bispermutata</i>	♂	Mozambique, Maputo Special Reserve	ANHRTUK00013196	ANLMO099-23	655	BOLD:ABU7264	LGNA 359
<i>M. bispermutata bispermutata</i>	♂	Malawi, Mzuzu	ANHRTUK00275061	ANLMO3190-23	654	BOLD:ABU7264	LGNA 1583
<i>M. bispermutata bispermutata</i>	♂	Mozambique, Maputo Special Reserve	ANHRTUK00013195	ANHRT082-20	619	BOLD:ABU7264	LGNA 358
<i>M. bispermutata bispermutata</i>	♀	Mozambique, Chimanimani NR	ANHRTUK00047843	ANHRT068-20	658	BOLD:ABU7264	LGNA 644
<i>M. bispermutata cryptochra</i>	♀	Guinea, Nimba Mts	ANHRTUK00009090	ANHRT075-20	658	BOLD:ABU7264	LGNA 1247
<i>M. bispermutata cryptochra</i>	♂	Guinea, Bossou Forest	ANHRTUK00147792	ANHRT072-20	658	BOLD:ABU7264	LGNA 1163
<i>M. bispermutata cryptochra</i>	♂	Guinea, Ziela	ANHRTUK00167555	ANLMO1922-23	655	BOLD:ABU7264	LGNA 1571
<i>M. bispermutata cryptochra</i>	♀	Guinea, Nimba Mts	ANHRTUK00159117	ANLMO1848-23	655	BOLD:ABU7264	LGNA 1585
<i>M. bispermutata cryptochra</i>	♂	Sierra Leone, Tiwai Island	ANHRTUK00020578	ANLMN2360-21	654	BOLD:ABU7264	LGNA 469
<i>M. bispermutata cryptochra</i>	♂	Guinea, Nimba Mts	ANHRTUK00212289	ANLMO2465-23	655	BOLD:ABU7264	LGNA 1545
<i>M. canocolorata</i>	♀	Côte d'Ivoire, Tai NP	ANHRTUK00001488	ANLMN2469-21	655	BOLD:AEJ4832	LGNA 400
<i>M. canocolorata</i>	♀	Guinea, Diecke F.	ANHRTUK00106236	ANLMN2472-21	655	BOLD:AEJ4832	LGNA 987
<i>M. canocolorata</i>	♂	Sierra Leone, Tiwai Island	ANHRTUK00016390	ANLMN2343-21	654	BOLD:AEJ4832	LGNA 1252
<i>M. dananae</i>	♂	Guinea, Ziela	ANHRTUK00241657	ANLMO3035-23	653	BOLD:AEG5922	LGNA 1538
<i>M. dananae</i>	♂	Guinea, Nimba Mts	ANHRTUK00148613	ANHRT085-20	658	BOLD:AEG5922	LGNA 1151
<i>M. dananae</i>	♀	Guinea, Diecke F.	ANHRTUK00106241	ANHRT079-20	658	BOLD:AEG5922	LGNA 988
<i>M. diagrapha</i>	♂	Liberia, Wologizi Mts	ANHRTUK00074026	ANHRT071-20	658	BOLD:AAP8748	LGNA 1201
<i>M. diagrapha</i>	♀	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00223413	ANLMO2824-23	655	BOLD:AAP8748	LGNA 1566

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Table 1

<i>M. diagrapha</i>	♀	Liberia, Wologizi Mts	ANHRTUK00074022	ANHRT069-20	658	BOLD:AAP8748	LGNA 978
<i>M. diagrapha</i>	♀	Guinea, Nimba Mts	ANHRTUK00212254	ANLMO2458-23	654	BOLD:AAP8748	LGNA 1550
<i>M. diagrapha</i>	♂	Guinea, Nimba Mts	ANHRTUK00143406	ANLMO1785-23	654	BOLD:AAP8748	LGNA 1547
<i>M. diagrapha</i>	♂	Guinea, Nimba Mts	ANHRTUK00212266	ANLMO2460-23	653	BOLD:AAP8748	LGNA 1565
<i>M. diagrapha</i>	♀	Guinea, Nimba Mts	ANHRTUK00143410	ANLMO1786-23	653	BOLD:AAP8748	LGNA 1283
<i>M. cf-diagrapha</i>	♀	Guinea, Nimba Mts	ANHRTUK00227328	ANLMO2947-23	657	BOLD:AFG3904	LGNA 1552
<i>M. dicranographa</i>	♀	Cameroon, North R.	ANHRTUK00059682	ANHRT093-20	658	BOLD:AEG3087	LGNA 1160
<i>M. dicranographa</i>	♂	Cameroon, North R.	ANHRTUK00059683	ANHRT092-20	658	BOLD:AEG3087	LGNA 1159
<i>M. dicranographa</i>	♀	Côte d'Ivoire, Denguéle Forest	ANHRTUK00225964	ANLMO2931-23	654	BOLD:AEG3087	-
<i>M. dicranographa</i>	♀	Côte d'Ivoire, Denguéle Forest	ANHRTUK00132830	ANLMO1683-23	654	BOLD:AEG3087	LGNA 1246
<i>M. dicranographa</i>	♂	Cameroon, North R.	ANHRTUK00059239	ANLMO439-23	654	BOLD:AEG3087	-
<i>M. dicranographa</i>	♀	Côte d'Ivoire, Denguéle Forest	ANHRTUK00132760	ANHRT086-20	614	BOLD:AEG3087	LGNA 1275
<i>M. fontainei</i>	♀	Gabon, Mikongo	ANHRTUK00193769	ANLMN2358-21	640	BOLD:AEG3087	-
<i>M. fontainei</i>	♀	Zambia, Nyangombe	ANHRTUK00074119	ANLMN2331-21	656	BOLD:AEG3087	-
<i>M. fontainei</i>	♂	Gabon, Mikongo	ANHRTUK00165576	ANLMO1908-23	655	BOLD:AEG3087	LGNA 1575
<i>M. fontainei</i>	♂	Zambia, Chitunta	ANHRTUK00213797	ANLMO2479-23	669	BOLD:AEG3087	LGNA 1593
<i>M. fontainei</i>	♂	Gabon, Mikongo	ANHRTUK00165581	ANLMN2356-21	654	BOLD:AEG3087	-
<i>M. fontainei</i>	♂	Zambia, Choma	ANHRTUK00277636	ANLMO3606-23	654	BOLD:AEG3087	-
<i>M. fontainei</i>	♀	Gabon, Mikongo	ANHRTUK00165474	ANLMO1906-23	654	BOLD:AEG3087	LGNA 1574
<i>M. fontainei</i>	♀	Gabon, Mikongo	ANHRTUK00160530	ANLMO1873-23	654	BOLD:AEG3087	LGNA 1584
<i>M. fontainei</i>	♀	Zambia, Copperbelt	RCAK2022-33A	ANLMO3953-23	659	BOLD:AEG3087	LGNA 1612

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Table 1

<i>M. fontainei</i>	♀	Gabon, Mikongo	ANHRTUK00192258	ANLMO2275-23	653	BOLD:AEG3087	LGNA 1581
<i>M. fontainei</i>	♂	Zambia, Kalene Hill	ANHRTUK00055130	ANLMN2327-21	653	BOLD:AEG3087	LGNA 693
<i>M. fontainei</i>	♂	Gabon, Mikongo	ANHRTUK00165228	ANLMN2355-21	652	BOLD:AEG3087	-
<i>M. fontainei</i>	♀	Zambia, Lungu FR	ANHRTUK00139731	ANLMN2329-21	644	BOLD:AEG3087	-
<i>M. furvitincta furvitincta</i>	♂	Liberia, Foya	ANHRTUK00037361	ANLMN2365-21	652	BOLD:AAP3225	LGNA 863
<i>M. furvitincta furvitincta</i>	♂	Guinea, Dalaba	ANHRTUK00102972	ANLMN2362-21	653	BOLD:AAP3225	LGNA 1243
<i>M. furvitincta furvitincta</i>	♂	Liberia, Nimba Mts	ANHRTUK00208992	ANLMO2410-23	653	BOLD:AAP3225	LGNA 1591
<i>M. furvitincta furvitincta</i>	♀	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00223359	ANLMO2818-23	653	BOLD:AAP3225	LGNA 1589
<i>M. furvitincta furvitincta</i>	♂	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00223362	ANLMO2819-23	653	BOLD:AAP3225	LGNA 1590
<i>M. furvitincta furvitincta</i>	♀	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00223412	ANLMO2823-23	653	BOLD:AAP3225	LGNA 1588
<i>M. furvitincta furvitincta</i>	♀	Liberia, Nimba Mts	ANHRTUK00073967	ANLMO692-23	653	BOLD:AAP3225	LGNA 973
<i>M. furvitincta furvitincta</i>	♂	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00220838	ANLMO2775-23	654	BOLD:AAP3225	LGNA 1587
<i>M. furvitincta furvitincta</i>	♂	Liberia, Nimba Mts	ANHRTUK00019943	ANHRT095-20	658	BOLD:AAP3225	LGNA 491
<i>M. furvitincta furvitincta</i>	♀	Liberia, Nimba Mts	ANHRTUK00022936	ANHRT100-20	658	BOLD:AAP3225	LGNA 1274
<i>M. furvitincta furvitincta</i>	♂	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00225650	ANLMO2920-23	654	BOLD:AAP3225	LGNA 1586
<i>M. furvitincta furvitincta</i>	♂	Guinea, Dalaba	ANHRTUK00102977	ANLMN2363-21	654	BOLD:AAP3225	LGNA 1250
<i>M. furvitincta furvitincta</i>	♀	Guinea, Ziam Forest	ANHRTUK00242038	ANLMO3043-23	653	BOLD:AAP3225	LGNA 1604
<i>M. furvitincta poliographa</i>	♂	Zambia, Mutinondo	ANHRTUK00094986	ANLMN2328-21	654	BOLD:AAP3225	-
<i>M. furvitincta poliographa</i>	♀	Zambia, Zambezi Rapids	ANHRTUK00054821	ANHRT097-20	658	BOLD:AAP3225	LGNA 758
<i>M. furvitincta poliographa</i>	♂	Malawi, Mzuzu	ANHRTUK00275495	ANLMO3223-23	655	BOLD:AAP3225	LGNA 1902
<i>M. furvitincta poliographa</i>	♂	Zambia, Choma	ANHRTUK00277520	ANLMO3589-23	653	BOLD:AAP3225	-

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Table 1

<i>M. furvitincta poliographa</i>	♂	Zambia, Mpika	ANHRTUK00094907	ANHRT098-20	658	BOLD:AAP3225	LGNA 1010
<i>M. monofascia monofascia</i>	♂	Zambia, Zambezi Rapids	ANHRTUK00055233	ANLMN2308-21	653	BOLD:ABZ2648	-
<i>M. monofascia monofascia</i>	♂	Zambia, Lunzua Falls	ANHRTUK00082487	ANLMN2305-21	651	BOLD:ABZ2648	LGNA 1026
<i>M. monofascia monofascia</i>	♀	Mozambique, Maputo Special Reserve	ANHRTUK00013206	ANLMN2302-21	652	BOLD:ABZ2648	LGNA 520
<i>M. monofascia monofascia</i>	♀	Zambia, Mutinondo	ANHRTUK00094984	ANLMN2325-21	653	BOLD:ABZ2648	LGNA 1898
<i>M. monofascia monofascia</i>	♂	Zambia, Jiwundu	ANHRTUK00059344	ANLMN2307-21	655	BOLD:ABZ2648	LGNA 896
<i>M. monofascia monofascia</i>	♂	Zambia, B-M Farm	ANHRTUK00277644	ANLMO3608-23	653	BOLD:ABZ2648	LGNA 1553
<i>M. monofascia monofascia</i>	♀	Zambia, Kapishya	ANHRTUK00234114	ANLMO2974-23	654	BOLD:ABZ2648	LGNA 1554
<i>M. monofascia monofascia</i>	♀	Mozambique, Chimanimani NR	ANHRTUK00047837	ANLMN2299-21	654	BOLD:ABZ2648	LGNA 641
<i>M. monofascia monofascia</i>	♂	Zambia, Senka Hill	ANHRTUK00094962	ANLMN2303-21	654	BOLD:ABZ2648	LGNA 1032
<i>M. monofascia monofascia</i>	♀	Mozambique, Maputo Special Reserve	ANHRTUK00013204	ANLMN2298-21	654	BOLD:ABZ2648	LGNA 355
<i>M. monofascia monofascia</i>	♀	Zambia, Mutinondo	ANHRTUK00101013	ANLMN2304-21	656	BOLD:ABZ2648	LGNA 1028
<i>M. monofascia monofascia</i>	♂	Mozambique, Chimanimani NR	ANHRTUK00047858	ANLMN2301-21	654	BOLD:ABZ2648	LGNA 638
<i>M. monofascia monofascia</i>	♂	Zambia, Jiwundu	ANHRTUK00059362	ANLMN2306-21	656	BOLD:ABZ2648	LGNA 999
<i>M. monofascia dissoluta</i>	♀	Senegal, Niokolo-Koba NP	ANHRTUK00209957	ANLMO2424-23	654	BOLD:ABA7515	LGNA 1561
<i>M. monofascia dissoluta</i>	♂	Guinea, Ditinn	ANHRTUK00178202	ANLMO2152-23	653	BOLD:ABA7515	LGNA 1610
<i>M. monofascia dissoluta</i>	♂	Senegal, Niokolo-Koba NP	ANHRTUK00216066	ANLMO2715-23	654	BOLD:ABA7515	LGNA 1558
<i>M. monofascia dissoluta</i>	♀	Senegal, Niokolo-Koba NP	ANHRTUK00216816	ANLMO2722-23	654	BOLD:ABA7515	-
<i>M. monofascia dissoluta</i>	♂	Senegal, Niokolo-Koba NP	ANHRTUK00216069	ANLMO2716-23	655	BOLD:ABA7515	LGNA 1557
<i>M. monofascia dissoluta</i>	♀	Gabon, Nyonie	ANHRTUK00155694	ANLMO1830-23	653	BOLD:ABA7515	LGNA 1544
<i>M. monofascia dissoluta</i>	♀	Senegal, Niokolo-Koba NP	ANHRTUK00216080	ANLMO2717-23	655	BOLD:ABA7515	LGNA 1563

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Table 1

<i>M. monofascia dissoluta</i>	♂	Senegal, Niokolo-Koba NP	ANHRTUK00216731	ANLMO2718-23	654	BOLD:ABA7515	LGNA 1559
<i>M. monofascia dissoluta</i>	♀	Senegal, Niokolo-Koba NP	ANHRTUK00209958	ANLMO2425-23	653	BOLD:ABA7515	LGNA 1562
<i>M. ochromorpha</i>	♀	Zambia, Kalambo Falls	ANHRTUK00083393	ANLMN2323-21	654	BOLD:AEJ3273	LGNA 1033
<i>M. ochromorpha</i>	♂	Gabon, Mikongo	ANHRTUK00165584	ANLMN2359-21	655	BOLD:AEJ7130	LGNA 1278
<i>M. ochromorpha</i>	♂	Mozambique, Mt. Namuli	ANHRTUK00049326	ANLMN2320-21	651	BOLD:AEJ7130	LGNA 636
<i>M. ochromorpha</i>	♂	Zambia, Mutinondo	ANHRTUK00101024	ANLMN2321-21	654	BOLD:AEJ7130	-
<i>M. ochromorpha</i>	♂	Zambia, Chitunta	ANHRTUK00132491	ANLMN2324-21	655	BOLD:AEJ7130	-
<i>M. ochromorpha</i>	♀	Zambia, Mutinondo	ANHRTUK00101026	ANLMN2322-21	656	BOLD:AEJ7130	-
<i>M. pachygrapha</i>	♂	Guinea, Nimba Mts	ANHRTUK00143403	ANLMO1784-23	653	BOLD:AAP8746	LGNA 1291
<i>M. pachygrapha</i>	♂	Guinea, Nimba Mts	ANHRTUK00143394	ANLMO1783-23	656	BOLD:AAP8746	LGNA 1161
<i>M. pachygrapha</i>	♀	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00134200	ANLMO1687-23	655	BOLD:AAP8746	LGNA 1280
<i>M. pachygrapha</i>	♀	Guinea, Nimba Mts	ANHRTUK00143408	ANHRT074-20	658	BOLD:AAP8746	LGNA 1276
<i>M. pachygrapha</i>	♂	Guinea, Nimba Mts	ANHRTUK00143391	ANHRT077-20	658	BOLD:AAP8746	LGNA 1144
<i>M. pachygrapha</i>	♀	Guinea, Bossou F.	ANHRTUK00235742	ANLMO2995-23	656	BOLD:AAP8746	LGNA 1548
<i>M. pachygrapha</i>	♂	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00225731	ANLMO2927-23	653	BOLD:AAP8746	LGNA 1549
<i>M. pachygrapha</i>	♂	Liberia, Wologizi Mts	ANHRTUK00145389	ANHRT078-20	658	BOLD:AAP8746	LGNA 1168
<i>M. palaeographa</i>	♀	Côte d'Ivoire, Mt. Tonkoui	ANHRTUK00194119	ANLMN2351-21	653	BOLD:ABW4980	LGNA 240
<i>M. palaeographa</i>	♀	Gabon, Mikongo	ANHRTUK00165932	ANLMN2357-21	653	BOLD:ABW4980	-
<i>M. palaeographa</i>	♂	Liberia, Nimba Mts	ANHRTUK00019922	ANLMN2352-21	653	BOLD:ABW4980	LGNA 478
<i>M. palaeographa</i> (PT of <i>M. taiana</i>)	♀	Côte d'Ivoire, Tai NP	ANHRTUK00049668	ANLMN2334-21	654	BOLD:ABW4980	LGNA 983
<i>M. palaeographa</i>	♀	Liberia, Nimba Mts	ANHRTUK00034366	ANLMN2353-21	654	BOLD:ABW4980	LGNA 538

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Table 1

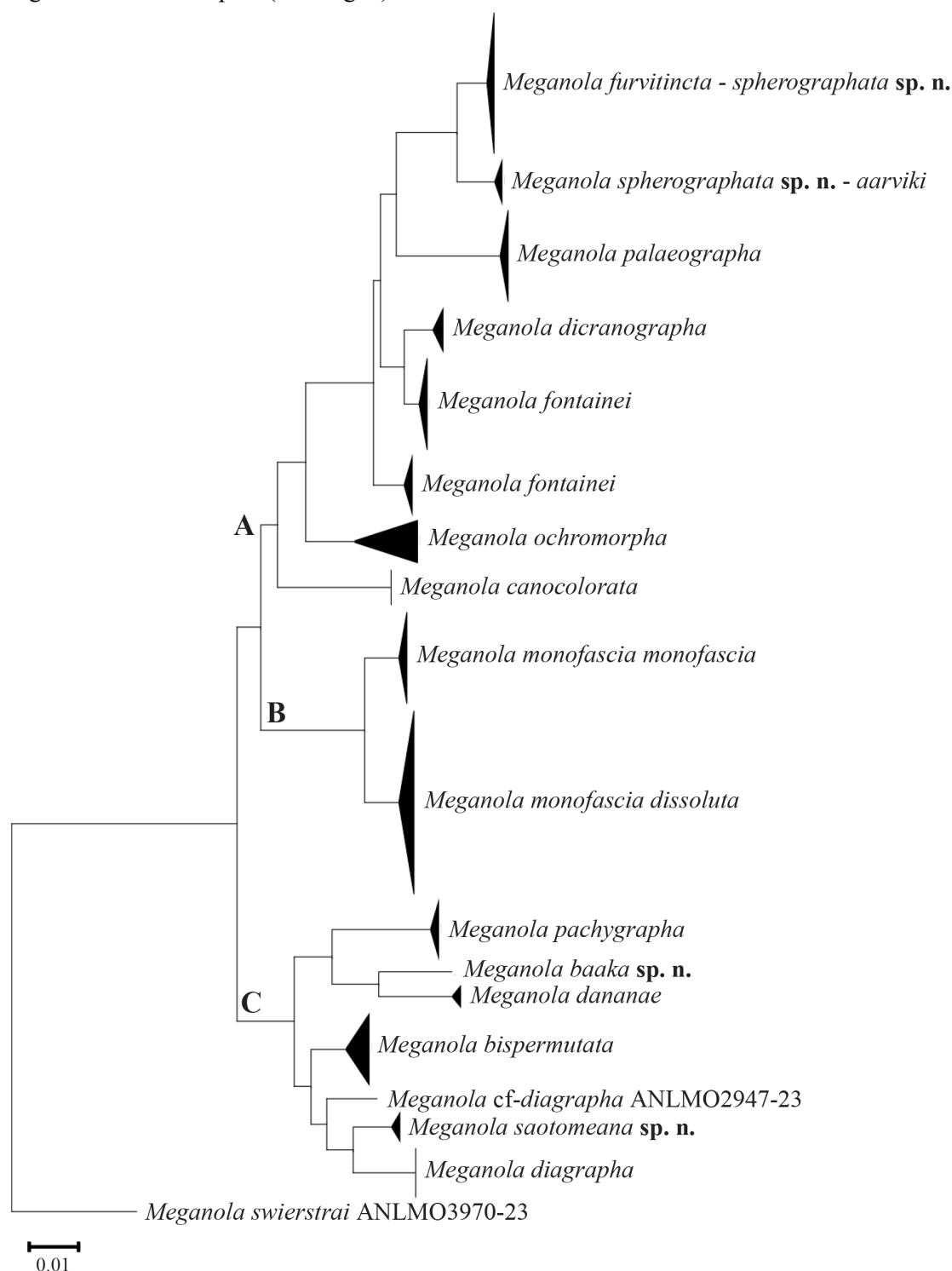
<i>M. palaeographa</i>	♂	Côte d'Ivoire, Tai NP	ANHRTUK00159382	ANLMN2366-21	654	BOLD:ABW4980	-
<i>M. palaeographa</i>	♀	Côte d'Ivoire, Mt. Tonkouï	ANHRTUK00217037	ANLMO2730-23	653	BOLD:ABW4980	LGNA 1577
<i>M. palaeographa</i>	♀	Côte d'Ivoire, Mt. Tonkouï	ANHRTUK00220697	ANLMO2768-23	653	BOLD:ABW4980	LGNA 1578
<i>M. palaeographa</i>	♂	Côte d'Ivoire, Tai NP	ANHRTUK00001411	ANLMN2349-21	655	BOLD:ABW4980	LGNA 394
<i>M. palaeographa</i>	♂	Côte d'Ivoire, Mt. Tonkouï	ANHRTUK00220692	ANLMO2767-23	651	BOLD:ABW4980	LGNA 1536
<i>M. palaeographa</i>	♀	Côte d'Ivoire, Mt. Tonkouï	ANHRTUK00134207	ANLMN2350-21	653	BOLD:ABW4980	LGNA 1169
<i>M. palaeographa</i>	♂	Guinea, Nimba Mts	ANHRTUK00212286	ANLMO2464-23	655	BOLD:ABW4980	-
<i>M. palaeographa</i>	♂	Côte d'Ivoire, Mt. Tonkouï	ANHRTUK00194118	ANLMN2348-21	548	BOLD:ABW4980	LGNA 238
<i>M. perfusca</i>	♀	Gabon, Mikongo	ANHRTUK00141967	ANLMN2560-21	651	BOLD:ABA7515	-
<i>M. perfusca</i>	♀	Liberia, Nimba Mts	ANHRTUK00073986	ANLMN2556-21	654	BOLD:ABA7515	-
<i>M. perfusca</i>	♀	Liberia, Wologizi Mts	ANHRTUK00145399	ANLMN2557-21	654	BOLD:ABA7515	LGNA 1259
<i>M. saotomeana</i> sp. n.	♀	São Tomé, Bom Successo	ANHRTUK00047807	ANLMO314-23	653	BOLD:AEG4865	LGNA 1606
<i>M. saotomeana</i> sp. n.	♂	São Tomé, Bom Successo	ANHRTUK00019787	ANHRT080-20	658	BOLD:AEG4865	-
<i>M. saotomeana</i> sp. n.	♀	São Tomé, Bom Successo	ANHRTUK00105134	ANHRT081-20	658	BOLD:AEG4865	LGNA 1288
<i>M. saotomeana</i> sp. n. , HT	♂	São Tomé, Bom Successo	ANHRTUK00043828	ANLMO259-23	654	BOLD:AEG4865	LGNA 1605
<i>M. spherographata</i> sp. n. , HT	♂	Gabon, Mikongo	ANHRTUK00165572	ANLMO1907-23	656	BOLD:AAP3225	LGNA 1576
<i>M. spherographata</i> sp. n.	♀	Gabon, Nyonie	ANHRTUK00149780	ANHRT083-20	658	BOLD:AAP3225	LGNA 1155
<i>M. spherographata</i> sp. n.	♂	Liberia, Foya	ANHRTUK00034737	ANLMO210-23	653	BOLD:AAP3225	LGNA 861
<i>M. spherographata</i> sp. n.	♀	Liberia, Wologizi Mts	ANHRTUK00145323	ANLMN2361-21	654	BOLD:AAP3225	LGNA 1166
<i>M. spherographata</i> sp. n.	♀	Liberia, Wologizi Mts	ANHRTUK00039390	ANLMN2364-21	655	BOLD:AAP3225	LGNA 587
<i>M. spherographata</i> sp. n.	♀	Liberia, Wologizi Mts	ANHRTUK00145322	ANHRT084-20	658	BOLD:AAP3225	LGNA 1167

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Table 1

<i>M. spherographata</i> sp. n.	♂	Liberia, Wologizi Mts	ANHRTUK00148434	ANHRT099-20	658	BOLD:AAQ3396	LGNA 1176
<i>M. taiana</i> (=canocolorata)	♂	Liberia, Nimba Mts	ANHRTUK00019898	ANLMN2336-21	654	BOLD:AEJ4832	LGNA 487
<i>M. taiana</i> (=canocolorata)	♂	Liberia, Foya	ANHRTUK00039105	ANLMN2335-21	654	BOLD:AEJ4832	LGNA 551
<i>M. trigonographa</i>	♂	Gabon, Nyonic	ANHRTUK00149778	ANLMN2346-21	654	BOLD:AAQ3396	LGNA 1170
<i>M. trigonographa</i>	♂	Zambia, Zambezi Rapids	ANHRTUK00074276	ANLMN2332-21	654	BOLD:AAQ3396	LGNA 1965
<i>M. trigonographa</i>	♂	Zambia, Hillwood	ANHRTUK00039455	ANHRT090-20	658	BOLD:AAQ3396	LGNA 753
<i>M. trigonographa</i>	♂	Côte d'Ivoire, Tai NP	ANHRTUK00161398	ANLMN2347-21	654	BOLD:AAQ3396	-
<i>M. trigonographa</i>	♀	Liberia, Nimba Mts	ANHRTUK00034855	ANHRT089-20	658	BOLD:AAQ3396	LGNA 588
<i>M. trigonographa</i>	♂	Liberia, Wologizi Mts	ANHRTUK00026527	ANHRT088-20	658	BOLD:AAQ3396	LGNA 537
<i>M. trigonographa</i>	♀	Liberia, Nimba Mts	ANHRTUK00148122	ANLMO1804-23	653	BOLD:AAQ3396	LGNA 1245
<i>M. trigonographa</i>	♂	Liberia, Nimba Mts	ANHRTUK00019227	ANLMO145-23	654	BOLD:AAQ3396	LGNA 862

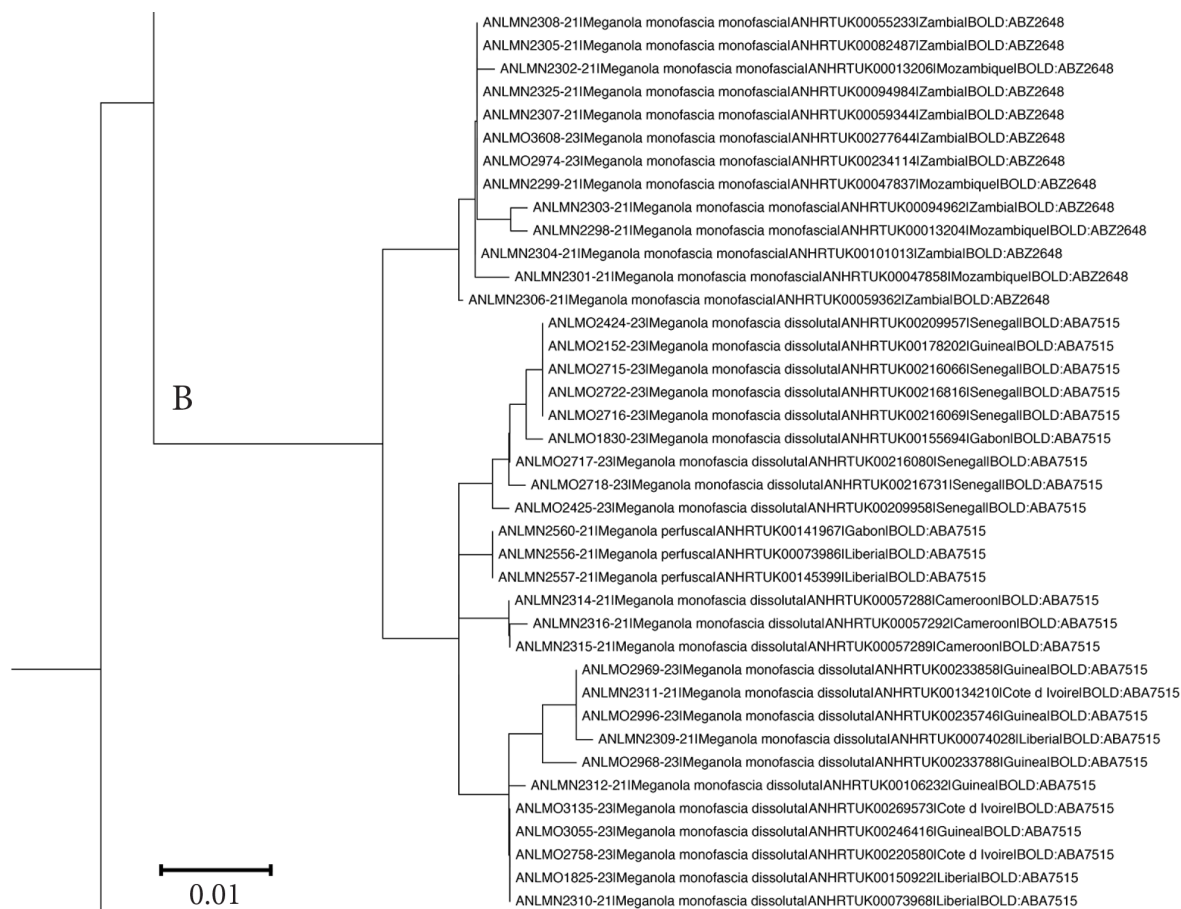
The topology of the ML tree inferred from the analyses of 136 DNA barcodes revealed three main lineages within the complex (Text fig. 1).



Text figure 1. ML dendrogram with collapsed branches displaying the relationships of the *Meganola furvitincta* (lineage A), *M. monofascia* (lineage B) and *M. bispermutata* (lineage C) species groups based on analysis of COI barcodes. The tree is rooted with *Meganola swierstrai*.

Lineage A (Text fig. 2) comprises six sub-clusters: *M. furvitincta*, *M. spherographata* **sp. n.**, *M. aarviki* form a morphologically compact sub-group where all taxa are BIN sharing; *M. palaeographa* is identified as a direct sister to the *M. furvitincta* cluster; *M. dicranographa* and *M. fontainei*, which are also BIN-sharing sisters, clustered together; and finally, *M. trigonographa*, *M. ochromorpha* and *M.*

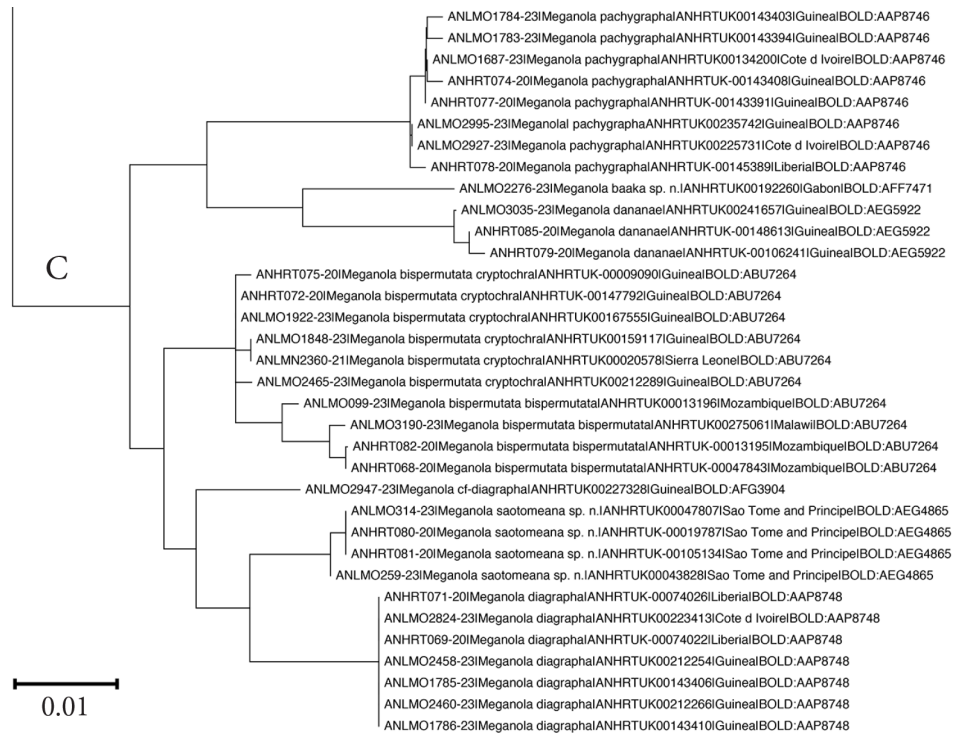
Lineage B (Text fig. 3) represents the morphologically distinct taxa of the *M. monofascia* species group, which consists of *M. monofascia monofascia*, *M. monofascia dissoluta* **stat. rev.**, **stat. n.** and *M. perfusca*, the latter two being BIN-sharing.



Text figure 3. ML dendrogram of the *Meganola monofascia* species group (lineage B) based on analysis of COI barcodes.

Lineage C (Text fig. 4) comprises members of the newly established *M. bispermutata* species complex, which includes the closely related *M. bispermutata bispermutata*, *M. bispermutata cryptochra*, *M. diagrapha* and *M. saotomeana* **sp. n.**; meanwhile, *M. pachygrapha*, *M. dananae* and *M. baaka* **sp. n.** form a sister cluster.

Phylogenetic analyses based on the single COI-5P gene region (DNA barcode) often yield conflicting results when compared to morphological evidence (e.g. László *et al.* 2023). However, the results of the DNA barcode analyses conducted on the taxa discussed in this study align completely with the morphology-based classification, as discussed below.



Text figure 4. ML dendrogram of the *Meganola bispermutata* species group (lineage C) based on analysis of COI barcodes.

A revised species group classification of the Afrotropical taxa related to *Meganola monofascia*

The *Meganola monofascia* species group

Characterisation of the species group

Nola major var. *monofascia* van Son, 1933 was described from Transvaal, South Africa, based on a male holotype specimen. The drawing of the male genitalia by van Son (1933) indicated that *monofascia* represents a distinct species belonging to the genus *Meganola*, as it was recognised by Hacker *et al.* (2012).

The main diagnostic male genitalia characters of the species of this complex are the distally dilated, apically rounded-quadrangular valva, the somewhat elongate, apically rounded digitiform harpe and the relatively short, tubular phallus, which is characteristically curved dorsad and tapered distad, possessing a tiny lateral tooth subapically. The female genitalia are characterised by the short, rounded anterior apophyses, the V-shaped sinus vaginalis, the short, asymmetrical sclerotization of the distal section of the ductus bursae and the two large thorn-shaped signa bursae situated medially.

In his paper on the *Meganola* of Côte d'Ivoire, László (2020) addressed the apparent surplus of names in the species complex and synonymised several taxa, including *M. septima* Hacker, 2012, *M. octava* Hacker, 2012, *M. heteromorpha* Hacker, 2012, *M. dissoluta* Hacker, 2012, *M. brachyvalva* Hacker, 2012, and *M. pseudofuscata* Hacker, 2012, with *M. monofascia*, treating it as a widely distributed pan-African taxon. However, the present study has shown that the western and central African *M. monofascia* populations differ externally from the southern-eastern African nominotypical population in a more creamy and often darker brownish tinge. Furthermore, although both populations feature identical genitalia characters, the DNA barcode analysis supports their distinctness. Thus, *M. dissoluta* Hacker, 2012 **stat. rev.**, **stat. n.** is revived here from synonymy as a western-central African subspecies of *M. monofascia*.

Taxon content*M. monofascia monofascia* (van Son, 1933)*M. monofascia dissoluta* Hacker, 2012 **stat. rev., stat. n.***M. praefica* (Saalmüller, 1884)*M. perfusca* (Hampson, 1911)***Meganola monofascia monofascia* (van Son, 1933)**

(Figs 1–5, 93–94, 144)

Nola major var. *monofascia* van Son, 1933, Annals of the Transvaal Museum 15 (2): 214, pl. 8. Fig. 13. TL: [RSA] Pietersburg. Holotype, male, in coll. DNMNH.

Synonymy.

M. septima Hacker, 2012, Esperiana 17: 375. TL: Uganda, Mpigi District, Mpanga Forest. Holotype, male, in coll. NHMO.

M. octava Hacker, 2012, Esperiana 17: 377. TL: Kenya, Buda Forest. Holotype, male, in coll. ZSM.

M. heteromorpha Hacker, 2012, Esperiana 17: 383. TL: Uganda, Rakai District, Sango Bay. Holotype, male, in coll. NHMO.

M. brachyvalva Hacker, 2012, Esperiana 17: 385. TL: DRC, Matadi. Holotype, male, in coll. RMCA.

M. pseudofuscata Hacker, 2012, Esperiana 17: 468. TL: Tanzania, Matengo Highland, Songea. Holotype, male, in coll. NHMW.

Material examined (all in coll. ANHRT).

Mozambique. Maputo Special Reserve, see László & Vetina (2019); 1 male, 2 females, Manica Province, Chimanimani National Reserve, Moribane Forest, Ndzou Camp, (Moist Forest), 630m, 19°44'01.4"S, 33°20'15.1"E, 3–5.viii.2018, actinic and MV light trap, leg. László, G., Miles, W., Vetina, A., gen. slide Nos: LGNA 638 (male), LGNA 641 (female). **RSA.** 1 male, Krüger N. P., Krüger Gate, Garden of Protea Hotel, 300m, 22–23.iii.2014., leg. M. Hluchy & G. László, gen. slide No.: LGNA 208; 1 male, Limpopo Province, 50 km NW of Mokopane, Waterberg Wilderness Reserve, 1420m, 24°12'26"S, 28°52'17"E, 8–9.iv.2011, leg. R. Yakovlev. **Zambia.** 1 male, Hillwood, Ikelenge, 1400m, 11°16'02"S, 24°18'59"E, 30.iv–11.v.2014, light trap, leg. Smith, R., Takano, H., Chmurova, L., Smith, L., gen. slide No.: LGNA 103; 1 male, same site, 25–27.xi.2014, leg. Smith, R., Takano, H., gen. slide No.: LGNA 393; 1 male, same site, 28.v–4.vi.2020, leg. Chizuwa, D., Choongo, W.; 1 male, same site and collectors, 5–11.vi.2021; 2 males, 1 female, Kapishya Hot Springs, Shiwa N'gandu Estate, 1437m, 11°10'13"S, 31°36'00"E, i–iii.2016, M.T. Harvey coll., leg. Smith, R., Takano, H., gen. slide No.: LGNA 1554 (female); 1 female, Ngonye Falls, Zambezi River, 980m, 16°39'39"S, 23°34'24"E, 17–18.iv.2014, light trap, leg. Smith, R., Takano, H., Chmurova, L., Smith, L., gen. slide No.: LGNA 98; 1 female, Kasanka River Pontoon, Kasanka N.P., 1191m, 12°34'23"S, 30°14'05"E, 2–4.xii.2012, light trap, leg. Smith, R. & Takano, H., gen. slide No.: LGNA 116; 1 male, Bruce-Miller Farm, Choma, 1191m, 16°37'58.6"S, 27°02'45.8"E, 28.ii–8.iii.2019, MV light trap, leg. Dérozier, V., Imakando, M., Miles, W., Mulvaney, L.; long series of both sexes, Bruce-Miller Farm Nansai (Southern miombo woodland), 1179m, 16°38'32"S, 27°01'47"E, 25.iv–1.v.2022, MV light trap, leg. Miles, W., Mulvaney, L., gen. slide No.: LGNA 1553 (male); 1 male, 1 female, Ijobwe, Sioma Ngwezi NP, 1020m, 16°53'55"S, 23°35'54"E, 18–20.iv.2014, light trap, leg. Smith, R., Takano, H., Chmurova, L., Smith, L., gen. slide No.: LGNA 368 (female); 1 female, Kambishi, Jiwundu, 1340m, 11°54'39"S, 25°29'05"E, 18–19.x.2014, light trap, leg. Smith, R., Takano, H., Oram, D., gen. slide No.: LGNA 85; 3 males, 1 female, Jiwundu Swamp (Miombo/Riverine forest mosaic), 1340m, 11°51'54"S, 25°33'20"E, 29.x–4.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., gen. slide Nos: LGNA 1008, LGNA 999, LGNA 896 (males), LGNA 1006 (female); 1 male, 3 males, Muchinga Prov., Benyanga village, 1250m, 10°40'41"S, 33°27'45"E, 07–12.xii.2023, MV and actinic light trap, leg. László, G., Morgan, L., Volynkin, A.; gen. slide No.: LGNA 1705; 4 males, 2 females, Mutinondo Wilderness Area, Northern Province, 1460m, 12°27'06"S, 31°17'30"E, 17–20.v.2019, actinic light trap, leg. Dérozier, V., Imakando, M., László, G., Miles, W., gen. slide Nos: LGNA 1028, LGNA 1898 (females), LGNA 1025 (male); 1 female, Muchinga Prov., Muyombe, Mama Muwowo's Lodge, 1230m,

10°32'40"S, 33°26'05"E, 29–30.xi.2023, actinic light trap, leg. Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A.; 2 males, Eastern Province, 48 km North of Lundazi, Lake Beu, 1140m, 11°53'56"S, 33°08'51"E, 26–27.xi.2023, MV light trap, leg. Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A.; 1 male, 3 females, Danger Hill, 30 km N of Mpika, Muchinga Province, 1684m, 11°37'38"S, 31°33'56"E, 27–30.iv.2019 Actinic Light Trap, leg. Dérozier, V., László, G., Miles, W., gen. slide Nos: LGNA 1027, LGNA 1029 (females); 1 male, Muchinga Province, Jombo village, 1400m, 10°27'01"S, 33°14'30"E, 30.xi–05.xii.2023, MV light trap, leg. Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A.; 1 female, 1396m, Chitunta Plain (Miombo/Dambo mosaic), 11°29'12"S, 24°24'18"E, 11–17.vi.2021, Fish Bait, Chizuwa, D., Choongo, W. leg., gen. slide No.: LGNA 1712; 5 males, 1 female, Senka Hill, Mukulizi Forest Reserve, Muchinga Province, 1566m, 09°05'43"S, 32°05'06"E, 1–6.v.2019, MV, LepiLED and UV LED Light Trap, Dérozier, V., László, G., Miles, W., gen. slide No.: LGNA 1032 (male), LGNA 1134 (female); 7 males, Zambezi Rapids (Miombo/Riverine forest mosaic), 1205m, S11°7'30", E24°11'6", 4–9.xi.2018, MV, actinic and LepiLED light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; 4 males, Lunzua Falls, 20 km S of Mpulungu, Northern Province, 1416m, 08°55'38"S, 31°09'31"E, 11–16.v.2019, MV light trap, leg. Dérozier, V., László, G., Miles, W., gen. slide No.: LGNA 1026; 2 males, 1 female, Kalungu, North of Isoka, S9°40'52", E32°42'50", 1280m, 30.iv–1.v.2019, actinic light trap, leg. Dérozier, V., László, G., Miles, W.; 1 male, Kalambo Falls, 30 km N of Mbala, Northern Province, 1189m, 08°35'50"S, 31°14'26"E, 9–11.v.2019, actinic light trap, leg. Dérozier, V., László, G., Miles, W.; 1 male, Source of the Zambezi, 1494m, 11°22'09"S, 24°18'30"E, 12–13.v.2015, light trap, leg. Smith, R., Takano, H. & Aristophanous, M.; 1 female, Chilambwe Falls, Kafubu River, 1420m, S09°50'13"; E30°43'35", 8–12.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H., gen. slide No.: LGNA 1030.

Genetic information. This species has been assigned the BIN URI: BOLD ABZ2648. The intraspecific divergence calculated from 13 samples is in the range of 0.00–0.77%. The nominotypical subspecies of *M. monofascia* diverges from *M. monofascia dissoluta* by 1.87–2.84%. Another morphologically similar taxon is *M. perfusca*, diverging at 1.71–2.04%.

Distribution. Confirmed records of nominotypical *M. monofascia* are known from the RSA, Uganda, Ethiopia, Tanzania, Kenya, DRC, Burundi (as *M. septima*, *M. octava*, *M. heteromorpha*, *M. pseudofuscata* and *M. brachyvalva* (Hacker *et al.* 2012, Hacker 2014)), Mozambique (László & Vetina 2019) and Zambia (László 2020).

***Meganola monofascia dissoluta* Hacker, 2012 stat. rev., stat. n.**
(Figs 6–13, 95–97, 148)

Meganola dissoluta Hacker, 2012, Esperiana 17: 384. TL: Nigeria, Jemaa. Holotype, male, in coll. ZSM.

Material examined (all in coll. ANHRT).

Cameroon. 4 males, 3 females, Adamawa Region, Adamawa Plateau, 7.3km West of Bazanga, Chute de Tello, 1246m, 07°13'50.6"N, 13°56'29.2"E, 24–30.ix.2018, Cold Cathode UV and MV light trap, leg. Sáfián, Sz., Simonics, G., gen. slide Nos.: LGNA 568, LGNA 570 (males), LGNA 866, LGNA 1787 (females). **Gabon.** 5 males, 1 female, Mikongo (Rougier), Monts de Cristal (Secondary Forest), 430m, 0°29'47"N, 11°10'42"E, 28.vii–12.viii.2019, MV, actinic and LepiLED light trap, leg. Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P., gen. slide Nos: LGNA 1150, LGNA 1270, LGNA 1271 (males), LGNA 1544 (female). **Guinea.** 2 males, 1 female, Sereidou camp, Forêt Classée de Ziama (upland forest), 872m, 8°21'14.53"N, 9°19'31.93"W, 24.ii–06.iii.2019, general coll., leg. Sáfián, Sz., Simonics, G., Florczyk, K., Koivogui, S.; 3 males, Guinée Forestière Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest), 1400–1752m, 07°36'19"N, 08°25'30"W, 1–7.vii.2019, 250W Blended, UV Cold Cathode and LepiLED light trap, leg. Dérozier, V., Miles, W., Sáfián, Sz.; 9 males, 1 female, Guinée Forestière, Bossou Forest and Institut de Recherche Environnementale de Bossou (Lowland Forest-Farmland), 690m, 07°38'32"N, 08°30'30"W, 24–30.vi.2019, 8W UV Cold Cathode, LepiLED and MV light trap, leg.

Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R., gen. slide No.: LGNA 1555 (male); 1 female, Dalaba, Foret de Tinka, 1289m, 10°43'14"N, 12°15'22"W, 25–28.ix.2019, MV light trap, leg. Geiser, M., Leno, M., Koivagui, S., Miles, W., Mulvaney, L., Sáfián, Sz., gen. slide No.: LGNA 1761; 1 male, Nimba Mts, SMFG concession area, (Societe des Mines de Fer de Guinee), Cite 1, 700m, 7°42'2.83"N, 8°23'58.60"W, 16–25.vii.2017, General coll. at light, leg. Sáfián, Sz.; 1 male, 1 female, Ditinn, Chute de Ditinn, 771m, 10°49'08"N, 12°11'30"W, 18–25.ix.2019, MV light trap, leg. Geiser, M., Leno, M., Koivagui, S., Miles, W., Mulvaney, L., Sáfián, Sz., gen. slide No.: LGNA 1610 (male); 3 females, Geipa Camp, Foret de Diecke, 435m, 7°26'7.06"N, 8°50'47.87"W, 05–14.iv.2019, light trap, blended bulb (250W), leg. Sáfián, Sz., Koivogui, S., gen. slide No.: LGNA 1148; long series of both sexes, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, leg. local collectors, gen. slide Nos: LGNA 1540, LGNA 1541, LGNA 1542, LGNA 1752. **Côte d'Ivoire.** 3 males, Mt. Tonkoui Peak, 07°27'15.2"N; 07°38'12.5"W, 1171m, 1–8.xi.2015, light trap, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide Nos: LGNA 237, LGNA 245, LGNA 246; 1 male, 1 female, same site and collectors, 12–18.vii.2015, gen. slide Nos: LGNA 26 (male), LGNA 27 (female); long series of both sexes, same site, 19–27.xi.2019, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S.; 1 male, Tai NP, Tai Research Station (SRET), 174m, 05°50'00"N, 07°20'32.0"W, 25.iii–17.iv.2017, MV light trap, leg. Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P.; 1 female, Park National d'Azagny, entrée Sonaye (Secondary forest), 60m, 05°14'32"N, 04°48'05"W, 25–28.xi.2021, MV light trap, leg. Moretto, P., Mulvaney, L., Takano, H., gen. slide No.: LGNA 1543; 1 female, Azagny NP, 59m, 05°14'33.7"N, 04°48'06.2"W, 26.xi–1.xii.2015, light trap, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide No.: LGNA 256; 1 male, Park National d'Azagny, entrée Sonaye (Secondary forest), 60m, 05°14'32"N, 04°48'05"W, 25–28.xi.2021, MV light trap, leg. Moretto, P., Mulvaney, L., Takano, H., gen. slide No.: LGNA 1865; 1 male, 40m, Banco National park, 05°23'3.8"N, 04°03'11.2"W, 29.xi–5.xii.2019, LepiLED light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S., gen. slide No.: LGNA 1539; 2 males, Park National du Mont Sangbé (forest/savannah mosaic), 422m, 08°07'05"N, 07°19'09"W, 14–20.xi.2021, MV light trap, leg. Moretto, P., Mulvaney, L., Takano, H.; 2 females, Station d'Ecologie de Lamto (Riverine Forest), 95m, 06°13'2"N, 05°13'2"W, 21–25.xi.2021, MV light trap, leg. Moretto, P., Mulvaney, L., Takano, H. **Liberia.** 1 male, 1 female, Nimba county, ENNR, Nimba Mts, main ridge (montane forest), 1327m, 7°31'1.3"N, 8°31'1.0"W, 9.xii.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide Nos: LGNA 583, LGNA 584; 1 male, Nimba County, Nimba Mts, ENNR, Cellcom road, 750m, 7°33'3.78"N, 8°31'46.49"W, 16–28.xii.2018, Cold Cathode UV light trap (8 W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1146; 1 male, Nimba county, Nimba Mts, ENNR, Grassfield FDA Field Station, 494m, 7°29'32.45"N, 8°34'54.05"W, 22.xi.2018, light trap, blended bulb (250W), leg. Sáfián, Sz., Simonics, G.; 1 male, Mount Nimba, Cellcom Road, ENNR, Nimba County, 750–1100m, 7°32'35.89"N, 8°31'20.63"W, 14–28.xii.2017, Cold Cathode light bucket trap, leg. Sáfián, Sz., Simonics, G.; 1 male, Nimba Mts, East Nimba Nature Reserve, Little stream, 1250–1300m, 7°31'27.99"N, 8°30'39.89"W, 14–15.iii.2017, 8W Cold Cathode light bucket trap, leg. Sáfián, Sz., Simonics, G.; 4 males, 1 female, Nimba Mts, ENNR, Nimba county (Cellcom road), 1000–1100m, 7°32'45.88"N, 8°31'21.04"W, 16–28.xii.2018, Cold Cathode UV light trap (8W), leg. Sáfián, Sz., Simonics, G., gen. slide Nos: LGNA 1551 (male), LGNA 974 (female); 2 males, 1 female, Lofa County, Wologizi Mts, Ridge Camp 2, 883m, 8°07'20.79"N, 9°56'50.75"W, 22–30.xi.2018, Cold Cathode UV light trap (8W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1147 (male). **Republic of Congo.** 1 male, 1 female, Nouabale-Ndoki National Park, Bomassa camp, 341m, 02°12'36.9"N, 16°11'30.2"E, 06–14.v.2023 actinic and LepiLED light trap, leg. Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S., gen. slide No.: ANHRT 02482; 1 male, same site, 16–23.ix.2022, MV ligh trap, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H., gen. slide No.: ANHRT 02719, 1 male, same site and collectors, 10–16.x.2022; 1 female, Nouabale-Ndoki National Park, Bomassa camp, 353m, 02°12'36.9"N, 16°11'30.2"E, 18.vi–3.vii.2022, MV light trap, leg. Dérozier, V., gen. slide No.: ANHRT 02541; 2 males, 2 female, 377m, Likouala Prov., Nouabale-Ndoki NP, Makao camp (Secondary forest), 2°35'42.2"N, 17°10'08.3"E, 15–21.v.2023, MV light trap, leg. Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S., gen. slide No.: ANHRT 02704; 1 female, Nouabale-Ndoki National Park, Mondika camp, 365m, 02°21'50.63"N, 16°16'25.82"E, 07–14.ii.2023, MV light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G.; 1 male, 2 females, Sangha Prov., Nouabale-Ndoki National Park, Mbeli camp, (*Gilbertiodendron* forest), 372m, 02°14'23.8"N,

16°23'52.1"E, 1–10.x.2022, LepiLED light trap, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H., gen. slide Nos: ANHRT 02212 (male), ANHRT 02211 (female); 1 male, same site, 14–20.ii.2023, MV light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G.; 1 male, 1 female, Sangha Prov., Nouabale-Ndoki National Park, Bomassa (Secondary forest), 02°12'25.7"N, 16°11'39.1"E, 380m, 18–22.vi.2022, actinic light trap, leg. Dérozier, V., gen. slide Nos: LGNA 1693 (male), LGNA 1694 (female); 3 males, 1 female, Odzala-Kokoua National Park, Imbalanga Camp, 480m, 00°45'47"N, 15°15'39"E, 05–11.iv.2024, MV and actinic light trap, leg. Bashford, M., László, G., Talani, M., Yaba Ngouma, S., gen. slide No.: LGNA 1401 (female); 4 males, 2 females, Odzala-Kokoua National Park, Camp Imbalanga, 490m, 00°45'59"N, 15°15'20"E, 13–20.ix.2024, MV, actinic and LepiLED light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A.; 1 male, 1 female, same site, 14–18.xi.2024, MV and LepiLED light trap, leg. Bashford, M., Elliott, I., Kirk-Spriggs, A.; 1 male, Odzala-Kokoua National Park, Bangassou Forest near Lobo, 400m, 00°32'50"N, 14°51'47"E, 23–26.ix.2024, actinic light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma, S.; 1 male, Odzala-Kokoua National Park, Moba, 380m, 00°48'52"N, 15°05'15"E, 19–20.ix.2024, actinic light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma, S.; 2 females, Odzala-Kokoua National Park, Lobo Research Camp, 390m, 00°35'04"N, 14°53'12"E, 20–27.ix.2024, MV light trap, Bashford, M., László, G., Volynkin, A., gen. slide No.: LGNA 1832; 8 males, 1 female, Odzala-Kokoua National Park, Mbomo HQ, 570m, 00°26'13"N, 14°42'01"E, 28.ix–01.x.2024, MV, actinic and LepiLED light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma, S., gen. slide Nos: LGNA 1435, LGNA 1833 (males). **Senegal.** Long series of both sexes, Simenti, Niokolo-Koba NP, 30m, 13°1'33"N, 13°17'4"W, 3–16.vi.2019, actinic light trap, leg. Aristophanous, M., Moretto, P., Mulvaney, L., gen. slide Nos: LGNA 1557, LGNA 1558, LGNA 1559 (males), LGNA 1561, LGNA 1562, LGNA 1563 (females). **Sierra Leone.** 1 female, Kono Province, Gori Hills, Near Giehum, 373m, 08°27'47"N, 10°46'17"W, 22–29.ii.2020, leg. Kalnoi, G., Sinyaev, V.; 1 male, Kalainkay nr. Kamabai, Northern Prov., 80m, 3–6.xi.2015, 09°10'52"N, 11°56'44"W, light trap, R. Goff coll., leg. Smith, R., Takano, H., gen. slide No.: LGNA 289; 1 male, Mansonia village at the foothills of Loma Mts, 420m, 09°07'47"N, 11°05'06"W, 6.vi.2016, light trap, leg. Takano, Miles & Goff, gen. slide No.: LGNA 471.

Taxonomic note. László (2020) synonymised *M. dissoluta* with *M. monofascia* based on their identical genital morphology. However, this study demonstrated that the western and central African populations of *M. monofascia* can be distinguished from the nominotypical taxon found in southeastern Africa by the more brownish tint of their forewing ground colour. In addition to the phenotypical differences, the two populations also exhibit significant genetic divergence. Since the name *dissoluta* applies to the western African *M. monofascia*, it has been reinstated from synonymy and classified as a subspecies of the latter taxon: *M. monofascia dissoluta* **stat. rev., stat. n.**

Genetic information. *Meganola monofascia dissoluta* has been assigned the BIN URI: BOLD ABA7515. The intraspecific divergence of COI-5P sequences calculated from 23 samples is in the range of 0.00–1.71% where the specimens from Senegal diverge at the highest rate. *Meganola monofascia dissoluta* diverges from the nominotypical subspecies by 1.87–2.84%. The PWD between this taxon and the BIN sharing *M. perfusca* (Hampson, 1911) is in the range of 0.77–1.39%.

Distribution. Confirmed records of *Meganola monofascia dissoluta* are known from Nigeria (type locality), DRC and Republic of Congo (as *M. septima*), Côte d'Ivoire, Senegal, and Ghana (as *M. furvitincta*) (Hacker *et al.* 2012, Hacker 2014), Cameroon, and Sierra Leone (as *M. monofascia*) (László 2020). In this present study, the taxon has been newly recorded from Gabon, Guinea, and Liberia.

Meganola praefica (Saalmüller, 1884)

Nola praefica Saalmüller, 1884, Lepidopteren von Madagascar: 174, pl. 5, fig. 57. TL: Madagascar, Nossi-Be. Syntypes, 1 male, in coll. SMNF, 1 female, in coll. MNUL.

Genetic information. This species was not sequenced in this study.

Distribution. *Meganola praefica* is an allopatric sibling of *M. monofascia*; endemic to Madagascar.

***Meganola perfusca* (Hampson, 1911)**

(Figs 14–16, 98–99, 146)

Nola perfusca Hampson, 1911, Annals and Magazine of Natural History (8) 8 (46): 398. TL: Nigeria, Lagos. Syntypes, 1 male, 1 female, in coll. NHMUK.

Synonymy.

Meganola melanosomalis Hacker, 2012 **syn. n.**, Esperiana 17: 473. TL: Ghana, Biakpa, Volta Region. Holotype, female, in coll. H. Hacker/ZSM).

Material examined (all in coll. ANHRT).

Côte d'Ivoire. 1 male, Mt. Tonkoui Peak, 07°27'15.2"N; 07°38'12.5"W, 1171m, 1–8.xi.2015, light trap, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide No.: LGNA 1734; 2 females, same site, 19–27.xi.2019, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S. **Gabon.** 1 female, Mikongo (Rougier), Monts de Cristal (Secondary Forest), 430m, 0°29'47"N, 11°10'42"E, 28.vii–12.viii.2019, actinic light trap, leg. Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P. **Guinea.** 2 females, Guinee Forestiere, Bossou Forest and Institut de Recherche Environnementale de Bossou (Lowland Forest-Farmland), 690m, 07°38'32"N, 08°30'30"W, 24–30.vi.2019, MV light trap, leg. Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R.; 3 females, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, leg. local collectors. **Liberia.** 3 females, Lofa County, Wologizi Mts, Ridge Camp, 865m, 8°07'10"N, 9°57'11"W, 24–29.xi.2017, Cold Cathode light bucket and blended bulb (250W) light trap, leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L., gen. slide No.: LGNA 1259; 1 female, Lofa county, Wologizi Mts, Rosewood Camp, 585m, 8°06'14.9"N, 9°58'27.3"W, 18.xi–1.xii.2018 MV light trap (8W), leg. Sáfián, Sz., Simonics, G.; 1 female, Lofa County, Wologizi Mts, base camp forest, 611m, 8°07'17"N, 9°57'42"W, 20.xi–01.xii.2017, MV light trap (125W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L.; 1 female, Lofa County, Wologizi Mts, Elephant Ridge, 1002m, 8°7'1.46"N, 9°55'24.18"W, 23–26.xi.2018, LepiLED light trap, leg. Sáfián, Sz., Simonics, G.; 1 female, Lofa County, Zuwulor Village School, 230m, 7°54'52"N, 9°31'08"W, 8.xi.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L.; 1 female, Lofa County, Foya Proposed Protected Area, 530m, 7°56'36"N, 10°16'36"W, 10–19.xi.2017, 8W actinic light bucket trap, leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L.; 1 male, 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), leg. Sáfián, Sz., Simonics, G.; 1 female, Nimba County, Nimba Mts, ENNR, Blue lake road, 583m, 7°33'38"N, 8°30'28.5"W, 7.xii.2017, general collection, leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L.; 3 females, Nimba Mts, ENNR, Nimba county (Cellcom road), 1000–1100m, 7°32'45.88"N, 8°31'21.04"W, 16–28.xii.2018, Cold Cathode UV Light Trap (8W), leg. Sáfián, Sz., Simonics, G.; 1 female, Nimba County, Nimba Mts, ENNR, Cellcom Road, 1300m, 7°31'2.18"N, 8°31'1.90"W, 24–28.xii.2018, light trap blended bulb (250W) & LepiLED, leg. Sáfián, Sz., Simonics, G.; 1 female, Nimba county, ENNR, Nimba Mts, main ridge (montane forest), 1327m, 7°31'1.3"N, 8°31'1.0"W, 9.xii.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L. **Republic of Congo.** 2 males, Likouala Prov., Nouabale-Ndoki National Park, Makao forest, 349m, 02°36'42.5"N, 17°09'23.8"E, 15–21.v.2023, actinic light trap, leg. Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S., gen. slide Nos: ANHRT 02502, ANHRT 02505; 1 male, Sangha Prov., Nouabale-Ndoki National Park, Bomassa camp (Secondary forest), 341m, 02°12'36.9"N, 16°11'30.2"E, 16–23.ix.2022, MV light trap, Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H.; 1 male, Nouabale-Ndoki National Park, Mombongo camp, 352m, 02°10'30.7"N, 16°8'37.7"E, 02–07.ii.2023, MV light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G.; 1 male, Nouabale-Ndoki NP, Makao camp (Secondary forest), 377m, 2°35'42.2"N, 17°10'08.3"E, 15–21.v.2023, MV Light Trap, leg. Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S.; 1 male, Sangha Prov., Nouabale-Ndoki National Park, Bomassa forest, (Secondary forest), 358m, 02°11'58.1"N, 16°11'16.9"E, 17–22.ix.2022, Actinic Light Trap, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A.,

Takano, H., gen. slide No.: LGNA 1374; 1 male, 1 female, Nouabale-Ndoki National Park, Mondika camp, 365m, 02°21'50.63"N, 16°16'25.82"E, 07–14.ii.2023, actinic light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G., gen. slide Nos: ANHRT 03281 (male), LGNA 1375 (female); 1 male, 2 females, Odzala-Kokoua National Park, Mbomo HQ, 570m, 00°26'13"N, 14°42'01"E, 28.ix–01.x.2024, MV and LepiLED light trap, leg. Bashford, M., László, G., Volynkin, A., gen. slide No.: LGNA 1517 (female); 1 male, Odzala-Kokoua National Park, Lobo Research Camp, 390m, 00°35'04"N, 14°53'12"E, 20–27.ix.2024, MV light trap, leg. Bashford, M., László, G., Volynkin, A., gen. slide No.: LGNA 1468; 1 female, Odzala-Kokoua National Park, Bangassou Forest near Lobo, 400m, 00°32'50"N, 14°51'47"E, 25–26.ix.2024, LepiLED light trap, Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma, S., gen. slide No.: LGNA 1480.

Genetic information. This highly distinctive species was found to be BIN-sharing with *M. monofascia dissoluta* (BIN URI: BOLD ABA7515). The intraspecific divergence calculated from three samples is 0.00%. *Meganola perfusca* diverges from *M. monofascia dissoluta* by 0.77–1.39%, from *M. monofascia monofascia* by 1.71–2.04%.

Distribution. *Meganola perfusca* was reported from Nigeria (type locality), Burkina Faso, Côte d'Ivoire, and Ghana (as *M. melanosomalis*) (Hacker *et al.* 2012). This present study confirmed the occurrence of the species in Gabon, Guinea, Liberia and the Republic of Congo.

Taxonomic note. Hacker *et al.* (2012) treated this species under a distinct eponymous species group comprising similarly dark species. However, as the genitalia of *M. perfusca* are hardly distinguishable in both sexes from those of the *M. monofascia* complex, furthermore, *M. perfusca* shows very close genetic affinities to *M. monofascia dissoluta* (the two species are BIN sharing), the correct assignment of this peculiar species in the *M. monofascia* complex is beyond any doubt.

Meganola melanosomalis Hacker, 2012 **syn. n.** was described from Ghana based on a single female specimen which displays identical external and genitalia characters to *M. perfusca*, and consequently, it is synonymised here.

The *Meganola bispermutata* species group

Characterisation of the species group

The facies of the taxa of this species group are confusingly similar to those of the *M. monofascia* complex, featuring a well-developed, blackish, broad-based triangular medio-costal patch and a variably developed medial fascia of the forewing. The shared diagnostic male genitalia characters of the species group are the relatively narrow, elongate, apically evenly rounded valva, the variably long, apically pointed harpe and the variably long aedeagus possessing a characteristic rounded carina with a small subapical ventral tooth. In the female genitalia, the species of this complex display a very short sclerotised sinus vaginalis, a heavily sclerotised distal section of the ductus bursae and a single, short and rounded signum bursae accompanied distally by a longitudinal scobinated band.

Taxon content

M. bispermutata bispermutata Hacker, 2012

M. bispermutata cryptochra Hacker, 2012 **stat. n.**

M. diagrapha Hacker, 2012

M. saotomeana **sp. n.**

M. pachygrapha Hacker, 2012

M. dananae Hacker, 2012

M. baaka **sp. n.**

M. subderrae Hacker, 2012

***Meganola bispermutata bispermutata* Hacker, 2012**

(Figs 18–21, 100–101, 147)

Meganola bispermutata Hacker, 2012, *Esperiana* 17: 368. TL: RSA, Port St-Johns. Holotype, male, in coll. A. Legrain, later in RMCA.

Synonymy.

Meganola meridianissima Hacker, 2012, *Esperiana* 17: 391. TL: RSA, W. Cape. Holotype, male, in coll. MfN.

Meganola derrae Hacker, 2012, **syn. n.**, *Esperiana* 17: 388. TL: Kenya, South Coast, Buda forest. Holotype, male, in coll. MWM/ZSM.

Meganola stigmatolalis Hacker, 2012 **syn. n.**, *Esperiana* 17: 504. TL: Ethiopia, Southern Province, Welkite. Holotype, male, in coll. H. Hacker/ZSM.

Material examined (all in coll. ANHRT).

Malawi. 1 male, Mzuzu Wildlife Sanctuary, (Afromontane forest), 1294m, 11°27'30.2"S, 34°03'11.3"E, 22–27.vi.2022, MV light trap, leg. Kirk-Spriggs, A., Miles, W., gen. slide No.: LGNA 1583. **Mozambique.** Maputo Special Reserve, see László & Vetina (2019); 9 males, 1 female, Manica Province, Chimanimani National Reserve, Moribane Forest, Ndzou Camp, (Moist Forest), 630m, 19°44'01.4"S, 33°20'15.1"E, 3–5.viii.2018, actinic and LepiLED light trap, László, G., Miles, W., Vetina, A., gen. slide Nos: LGNA 637, LGNA 639, LGNA 640 (males), LGNA 644 (female). **RSA.** 1 male, Krüger NP, P. Krüger Gate, Garden of Protea Hotel, 300m, 22–23.iii.2014, leg. M. Hluchy & G. László, gen. slide No.: LGNA 207. **Uganda.** 1 female, Bwindi Impenetrable N.P., Cuckooland Lodge, 1700m, 01°00'17"S, 29°43'06"E, 28–29.vi.2022, leg. Naumann, S., Ott, E., Schintlmeister, A., Sulak, H., gen. slide No.: LGNA 1716.

Genetic information. Both subspecies of this species belong to the BIN URI: BOLD ABU7264. The intraspecific divergence of the nominotypical taxon calculated from four samples is 0.00–0.82%. The PWD between the two subspecies is in the range of 0.61–1.31%. The morphologically closest relatives of *M. bispermutata bispermutata* are *M. diagrapha* and *M. saotomeana* **sp. n.**, diverging by 2.81–3.34% and 2.66–3.35%, respectively.

Taxonomic note. Hacker (Hacker *et al.* 2012) described two additional species that show no noticeable morphological divergence from *M. bispermutata*: *M. derrae* from southern Kenya and *M. stigmatolalis* from the Southern Province of Ethiopia. Since they lack distinctive morphological characters, these two species are considered northern populations of *M. bispermutata bispermutata*, and consequently, they are synonymised here: *M. derrae* **syn. n.** and *M. stigmatolalis* **syn. n.**

Distribution. *Meganola bispermutata* occurs sympatrically with *M. monofascia* in the RSA and Mozambique, where the identification of the two species can only be confirmed by genitalia dissection. The species has also been recorded from southern Kenya under the name *M. derrae* and southern Ethiopia as *M. stigmatolalis* (Hacker *et al.* 2012). In this study, *M. bispermutata* has been newly recorded from Malawi and Uganda. Interestingly, despite extensive sampling efforts by the ANHRT, it has not been found in Zambia.

***Meganola bispermutata cryptochra* Hacker, 2012 stat. n.**

(Figs 22–25, 102–103, 148)

Meganola cryptochra Hacker, 2012, *Esperiana* 17: 270. TL: Cameroon, Kribi. Holotype, male, in coll. H. Hoppe.

Material examined (all in coll. ANHRT).

Côte d'Ivoire. 1 male, Mt. Tonkoui Peak, 1171m, 07°27'15.2"N, 07°38'12.5"W, 19–27.xi.2019, LepiLED light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S.; 1 male, Abidjan, Banco Forest (Parc National du Banco), 39–48m, 05°23'03.8"N, 04°03'11.2"W, 21–30.iv.2017, MV light

trap, leg. Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. **Guinea.** 1 male, Guinee Forestiere, Bossou Forest and Institut de Recherche Environmentale de Bossou (Lowland Forest-Farmland), 690m, 07°38'32"N, 08°30'30"W, 24–30.vi.2019, MV light trap, leg. Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R., gen. slide No.: LGNA 1163; 1 female, Nimba Mts, SMFG concession area (Societe des Mines de Fer de Guinee) 600 Forest, 1500m, 7°39'49.93"N, 8°22'22.19"W, 21–30.viii.2017, Cold Cathode UV light trap (8W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1247; 9 males, 3 females, Guinee Forestiere Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest), 1400–1752m, 07°36'19"N, 08°25'30"W, 1–7.vii.2019, UV Cold Cathode, LepiLED and 250W Blended light trap, leg. Dérozier, V., Miles, W., Sáfián, Sz., gen. slide Nos: LGNA 1545 (male), LGNA 1585, LGNA 1552 (females); 4 males, 1 female, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, leg. local collectors, gen. slide Nos: LGNA 1571, LGNA 1760, LGNA 1793 (males). **Republic of Congo.** Sangha Prov., Nouabale-Ndoki National Park, Bomassa camp (Secondary forest), 341m, 02°12'36.9"N, 16°11'30.2"E, 16–23.ix.2022, MV light trap, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H., gen. slide No.: LGNA 1388; 1 male, Nouabale-Ndoki National Park, Mombongo camp, 352m, 02°10'30.7"N, 16°8'37.7"E, 02–07.ii.2023, actinic light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G., gen. slide No.: LGNA 1392; 1 female, Nouabale-Ndoki National Park, Mbeli camp, 372m, 02°14'23.8"N, 16°23'52.1"E, 14–20.ii.2023, MV light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G., gen. slide No.: ANHRT 02311; 1 female, same site, 1–10.x.2022, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H., gen. slide No.: ANHRT 02221; 1 female, Nouabale-Ndoki NP, Makao camp (Secondary forest), 377m, 2°35'42.2"N, 17°10'08.3"E, 15–21.v.2023, MV light trap, leg. Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S., gen. slide No.: LGNA 1410; 1 female, Nouabale-Ndoki National Park, Mondika camp, 365m, 02°21'50.63"N, 16°16'25.82"E, 07–14.ii.2023, MV light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G., gen. slide No.: LGNA 1399; 1 male, 1 female, Odzala-Kokoua National Park, Lobo Research Camp, 390m, 00°35'04"N, 14°53'12"E, 20–27.ix.2024, MV and LepiLED light trap, leg. Bashford, M., László, G., Volynkin, A., Yaba Ngouma, S., gen. slide No.: LGNA 1491; 1 male, Odzala-Kokoua National Park, Mbomo HQ, 570m, 00°26'13"N, 14°42'01"E, 19–22.iv.2024, MV light trap, leg. Bashford, M., László, G., Talani, M., Yaba Ngouma S., gen. slide No.: LGNA 1353. **Sierra Leone.** 1 male, Mansonia village at the foothills of Loma Mts, 420m, 09°07'47"N, 11°05'06"W, 6.vi.2016, light trap, leg. Takano, Miles & Goff, gen. slide No.: LGNA 461; 1 male, 120m, Tiwai Island, Moa River, 07°33'00"N, 11°21'09"W, 17–22.vi.2016, light trap, leg. Takano, Miles & Goff, gen. slide No.: LGNA 469.

Genetic information. This taxon has been assigned the BIN URI: BOLD ABU7264; BIN-sharing with *M. bispermutata bispermutata*. A single female specimen from Guinea (gen. slide No.: LGNA 1552), showing no morphological differences to other West African specimens, belongs to a different BIN URI: BOLD AFG3904. The intraspecific divergence calculated from six samples (excluding the diverging specimen) is 0.00–0.31%. This subspecies diverges from the nominotypical *M. bispermutata* by 0.61–1.31%. The morphologically closest taxa are *M. diagrapha* and *M. saotomeana* **sp. n.**, diverging by 2.82–2.99% and 2.03–2.35%, respectively.

Taxonomic note. The western-central African populations of *M. bispermutata* exhibit identical genital morphology to those found in southern-eastern Africa. However, they can be distinguished by their somewhat smaller size and paler forewing markings observed in West African individuals. Due to these minor but consistent differences in external appearance, a West African subspecies, separate from the nominotypical *M. bispermutata* can be recognised. The name *M. cryptochra* Hacker, introduced for a species from Cameroon, can be applied to the western *M. bispermutata* populations: *M. bispermutata cryptochra* **stat. n.**

Distribution. The western-central African *M. cryptochra* was earlier known from Cameroon (type locality) (Hacker *et al.* 2012). The specimens from Côte d'Ivoire, Guinea, Liberia, the Republic of Congo and Sierra Leone represent new country records.

***Meganola diagrapha* Hacker, 2012**

(Figs 26–29, 104–105, 149)

Meganola diagrapha Hacker, 2012, *Esperiana* 17: 463. TL: Burkina Faso, Folonzo. Holotype, male, in coll. ZSM.**Synonymy.***Meganola chromatographa* Hacker, 2012 **syn. n.**, *Esperiana* 17: 466. TL: Burkina Faso, Folonzo. Holotype, female, in coll. ZSM.*Meganola kakamega* Hacker, 2012 **syn. n.**, *Esperiana* 17: 387. TL: Kenya, Kakamega forest. Holotype, male, in coll. ZSM.**Material examined (all in coll. ANHRT).**

Côte d'Ivoire. 2 males, 1 female, Mt. Tonkouï Peak, 1171m, 07°27'15.2"N, 07°38'12.5"W, 19–27.xi.2019, actinic, LepiLED and MV light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S., gen. slide Nos: LGNA 1149, LGNA 1592 (males), LGNA 1566 (female). **Guinea.** 6 males, 4 females, Guinée Forestière Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest), 1400–1752m, 07°36'19"N, 08°25'30"W, 1–7.vii.2019, 250W blended bulb light trap, leg. Dérozier, V., Miles, W., Sáfián, Sz., gen. slide Nos: LGNA 1289, LGNA 1547, LGNA 1565 (males), LGNA 1283, LGNA 1164, LGNA 1165, LGNA 1550 (females); 3 males, 1 female, Guinée Forestière, Bossou Forest and Institut de Recherche Environnementale de Bossou (Lowland Forest-Farmland), 690m, 07°38'32"N, 08°30'30"W, 24–30.vi.2019, MV and 8W UV Cold Cathode light trap, leg. Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R.; 2 males, 1 female, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, leg. local collectors, gen. slide No.: LGNA 1757 (female). **Liberia.** 883m, Lofa County, Wologizi Mts, Ridge Camp 2, 8°07'20.79"N, 9°56'50.75"W, 22–30.xi.2018, Cold Cathode UV (8W) and blended bulb (250W) light trap, leg. Sáfián, Sz., Simonics, G., gen. slide Nos: LGNA 1201 (male), LGNA 1282, LGNA 978 (females); 1 female, Nimba County, Nimba Mts, ENNR, Cellcom road, 750m, 7°33'3.78"N, 8°31'46.49"W, 16–28.xii.2018, Cold Cathode UV light trap (8W), leg. Sáfián, Sz., Simonics, G.

Genetic information. This species has been assigned the BIN URI: BOLD AAP8748. The intraspecific divergence calculated from seven samples is 0.00%. The morphologically closest taxa are *M. saotomeana* **sp. n.**, *M. bispermutata cryptochra*, and *M. bispermutata bispermutata*, diverging by 2.02–2.19%, 2.82–2.99% and 2.81–3.34%, respectively. The externally highly similar *M. pachygrapha* diverges by 4.42–4.77%.

Taxonomic notes. *Meganola kakamega* has been synonymized with *M. bispermutata* by László & Vetina (2019). However, the examination of extensive material from Central Africa suggests that the Kakamega population, which resembles *M. bispermutata*, is more likely to belong to the western-central African species *M. diagrapha*.

Meganola chromatographa was described based on two female specimens from Burkina Faso. The characteristics of these specimens closely match those of the male types of *M. diagrapha*, which were also collected in Burkina Faso. Additionally, the female illustrated by Hacker *et al.* (2012) as *M. diagrapha* is actually *M. dicranographa* Hacker, 2012. Therefore, the female specimens representing *M. chromatographa* **syn. n.** are now considered conspecific with *M. diagrapha*.

Distribution. This species was earlier published from Burkina Faso (type locality) and Kenya-Kakamega (as *M. kakamega*) (Hacker *et al.* 2012). The specimens from Côte d'Ivoire, Guinea and Liberia represent new country records.

***Meganola saotomeana* sp. n.**

<https://zoobank.org/urn:lsid:zoobank.org:act:59E71020-70CD-4732-9943-113185E0F716>

(Figs 30–33, 106–107, 150)

Holotype. Male, “SAO TOME 1321m / Bom Sucesso, Antenna / (plantation-dry scrub forest) / 0°16'31"N, 6°36'14"E / 22-25.i.2018 MV Light Trap / Aristophanous, M., Lima, D., / Miles, W., Turner, Clive R. leg. / ANHRT:2018.1” // “ANHRTUK / 00043828” / “SAMPLED FOR: / DNA (2022)” // “Gen. slide No. / LGN A 1605 ♂ / prep. by Gy. M. Laszlo” (ANHRT).

Paratypes (all in coll. ANHRT). São Tomé. 7 males, 7 females, with the same data as the holotype, gen. slide Nos: LGNA 1288, LGNA 1606 (females); 1 male, 1 female, Antenna, Bom Sucesso, 0°16'33.7"N, 6°36'19.7"E, 19.x.2016, MV light trap, leg. Turner, C.R., Tasane, T., gen. slide No.: LGNA 405 (male); 1 male, same site and collectors, 20.x.2016, gen. slide No.: LGNA 388; 2 males, same site and collectors, 29.x.2016.

Diagnosis. Forewing length 11–13 mm in males, 13–15 mm in females. *Meganola saotomeana* sp. n. is an island vicariant of *M. diagrapha* and easily distinguished by its larger size, notably darker and more extensive forewing markings, especially in terms of the more distinct postmedial line and the considerably broader and more contrasting subterminal and terminal lines.

In the male genitalia, the clasping apparatus of both species has a nearly identical configuration, possessing a similarly short and pointed harpe; however, the valva of the new species is slightly more dilated postmedially compared to *M. diagrapha*. Similar to the other species of the *M. bispermutata* complex, the shape of the aedeagus bears the most distinctive diagnostic characters. In *M. saotomeana* sp. n., the aedeagus is 25–30% longer with a more elongate and narrower distal section than in *M. diagrapha*. Compared to *M. bispermutata*, the clasping apparatuses are also nearly identical, being slightly broader in *M. saotomeana* sp. n., and the aedeagus of the new species is also longer (by ca. 20%) with a noticeably longer coecum.

In the female genitalia, the new species has a considerably smaller ostium bursae continuing in a notably narrower and longer distal sclerotised section of the ductus bursae compared to *M. diagrapha*. Furthermore, the narrow longitudinal scobinated field of the signum bursae is narrower and less sclerotised in the new species than in *M. diagrapha*. Compared to *M. bispermutata*, the new species is readily distinguished by the more rounded and markedly smaller ostium bursae, the longer distal sclerotisation of the ductus bursae, the considerably narrower and longer ductus bursae, the smaller corpus bursae and the much longer longitudinal scobinated field of the signum bursae.

Etymology. This new species is named after its type locality, the island of São Tomé.

Genetic information. *Meganola saotomeana* sp. n. has been assigned the BIN URI: BOLD AEG4865. The intraspecific divergence calculated from four samples is 0.00–0.15%. The closest relative is *M. diagrapha* diverging by 2.02–2.19%.

Distribution. *Meganola saotomeana* sp. n. is a species endemic to São Tomé.

***Meganola pachygrapha* Hacker, 2012**

(Figs 34–39, 108–110, 151)

Meganola pachygrapha Hacker, 2012, Esperiana 17: 312. TL: Ethiopia, Oromia Province, Bonga. Holotype, male, in coll. H. Hacker/ZSM.

Synonymy.

Meganola murzinialis Hacker, 2012 **syn. n.**, Esperiana 17: 386. TL: R. Congo, Odzala-Kokoua National Park. Holotype, male, in coll. MWM/ZSM.

Material examined (all in coll. ANHRT).

Cameroon. 1 female, SW slope of Mount Cameroon, Elephant camp, 1091m, 4°07'01.20"N, 9°04'22.51"E, 18–23.ii.2017, light trap (105W energy saving bulb), leg. Janecek, S., Mertens, J., Potocky, P., Sáfián, Sz., Tropek, R., gen. slide No.: LGNA 808. **Côte d'Ivoire.** Mt. Tonkouli Peak, 07°27'15.2"N, 07°38'12.5"W, 1171m, 19–27.xi.2019, actinic, LepiLED and MV light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S., gen. slide Nos: LGNA 1782, LGNA 1549, LGNA 1290 (males); LGNA 1280, LGNA 1781 (females); 2 females, same site, 1–8.xi.2015, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide Nos: LGNA 86, LGNA 253. **Guinea.** Long series of both sexes, Guinée Forestière Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest), 1400–1752m, 07°36'19"N, 08°25'30"W, 1–7.vii.2019, 250W Blended and LepiLED light trap, leg. Dérozier, V., Miles, W., Sáfián, Sz., gen. slide Nos: LGNA 1144, LGNA 1291, LGNA 1161 (males), LGNA 1276 (female); 4 females, Guinée Forestière, Bossou Forest and Institut de Recherche Environnementale de Bossou (Lowland Forest-Farmland), 690m, 07°38'32"N, 08°30'30"W, 24–30.vi.2019, 8W UV Cold Cathode, LepiLED and MV light trap, leg. Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R., gen. slide Nos: LGNA 1286, LGNA 1287, LGNA 1548; 1 male, Geipa Camp, Forêt de Diecke, 435m, 7°26'7.06"N, 8°50'47.87"W, 05–14.iv.2019, Cold Cathode UV Light Trap (8W), leg. Sáfián, Sz., Koivogui, S., gen. slide No.: LGNA 975; 5 males, 10 females, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, leg. local collectors. **Kenya.** 1 male, Gatamaiyo Forest, Aberdare Mountains, 2260m, 0°58'26.2"S, 36°41'49.03"E, 22–23.vii.2017, light trap (blended bulb 250W), leg. Sáfián Sz., gen. slide No.: LGNA 806; 1 male, Western, Kakamega F.R. Prim. For., 0°21'34"N, 34°51'39"E, 1600m, 15 Watt Black Light, 9-I-2002, F.N. Namu, gen. slide No.: LGNA 1762. **Liberia.** 1 male, Lofa County, Wologizi Mts, Ridge Camp, 865m, 8°07'10"N, 9°57'11"W, 24–29.xi.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L., gen. slide No.: LGNA 1168; 2 females, same site, 22–30.xi.2018, Cold Cathode UV light trap (8W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 977; 2 males, Mount Nimba, Cellcom Road, ENNR, Nimba County, 750–1100m, 7°32'35.89"N, 8°31'20.63"W, 14–28.xii.2017, Cold Cathode light bucket trap, leg. Sáfián, Sz., Simonics, G.; 1 female, Nimba County, Nimba Mts, ENNR, Cellcom road, 750m, 7°33'3.78"N, 8°31'46.49"W, 16–28.xii.2018, Cold Cathode UV light trap (8W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1281. **Republic of Congo.** 2 males, Nouabale-Ndoki NP, Makao camp (Secondary forest), 377m, 2°35'42.2"N, 17°10'08.3"E, 15–21.v.2023, MV light trap, leg. Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S., gen. slide Nos: LGNA 1387, LGNA 1390; 1 male, Odzala-Kokoua National Park, Imbalanga Camp, 480m, 00°45'47"N, 15°15'39"E, 05–09.iv.2024, MV light trap, Bashford, M., László, G., Talani, M., Yaba Ngouma, S., gen. slide No.: LGNA 1396; 2 males, Odzala-Kokoua National Park, Kokoua base, 540m, 00°28'39"N, 15°16'42"E, 05–13.ix.2024, MV light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma, S., gen. slide No.: LGNA 1777; 1 male, Odzala-Kokoua National Park, Lobo Research Camp, 390m, 00°35'04"N, 14°53'12"E, 20–27.ix.2024, MV light trap, leg. Bashford, M., László, G., Volynkin, A., gen. slide No.: LGNA 1776. **Sierra Leone.** 1 male, Mansonia village at the foothills of Loma Mts, 420m, N09°07'47", W11°05'06", 6.vi.2016, light trap, leg. Takano, Miles & Goff, gen. slide No.: LGNA 1251; 1 female, Kono Province, Gori Hills, Near Giehum, 373m, 08°27'47"N, 10°46'17"W, 22–29.ii.2020, leg. Kalnoi, G., Sinyaev, V. **Uganda.** 1 male, Bwindi Impenetrable N.P., Cuckooland Lodge, 1700m, 01°00'17"S, 29°43'06"E, 28–29.vi.2022, leg. Naumann, S., Ott, E., Schintlmeister, A., Sulak, H., gen. slide No.: LGNA 1718.

Genetic information. This species belongs to the BIN URI: BOLD AAP8746. The intraspecific divergence calculated from eight samples is 0.00–0.46%. The morphologically closest taxa are *M. bispermutata cryptochra*, *M. bispermutata bispermutata* and *M. saotomeana* **sp. n.** diverging by 3.44–3.94%, 3.76–4.10% and 3.78–4.27%, respectively.

Taxonomic notes. *Meganola pachygrapha* is readily distinguished from the other members of the *M. bispermutata* complex by the conspicuously short and stout aedeagus of the male genitalia. This character is identical in *M. murzinialis* as illustrated in Hacker *et al.* (2012) and confirmed by dissections of topotypical specimens from the Odzala-Kokoua National Park. Since *M. pachygrapha* and *M. murzinialis* display no distinctive morphological characters, the latter is considered a junior synonym: *M. murzinialis* **syn. n.**

There is multiple confusion regarding *M. xantholeuca* in Hacker *et al.* (2012: 498): The females illustrated as *M. xantholeuca* belong to *M. pachygrapha*. Additionally, the male holotype of *M. xantholeuca* is misclassified and actually belongs to the genus *Ezishnola* László, Ronkay & Witt, 2010. Furthermore, the holotype genitalia illustrated in the original description closely resemble those of *M. nyungwe* Hacker, 2012. These taxonomic issues will be addressed in detail in an upcoming paper on the genus *Ezishnola* (László, in prep.).

Distribution. *Meganola pachygrapha* is a widespread species with an equatorial distribution. It has been recorded from Ethiopia (type locality), Uganda, Kenya, South Sudan, Bioko Island (as *M. pachygrapha*), the Republic of Congo (as *M. murzinialis*), and Côte d'Ivoire (as *M. xantholeuca*) (Hacker *et al.* 2012). The specimens from Cameroon, Guinea, Liberia, and Sierra Leone represent new country records.

***Meganola dananae* Hacker, 2012**

(Figs 40–42, 111–112, 152)

Meganola dananae Hacker, 2012, Esperiana 17: 382. TL: Côte d'Ivoire, Danane. Holotype, female, in coll. H. Hacker/ZSM).

Material examined (all in coll. ANHRT).

Côte d'Ivoire. 2 males, Denguele Classified Forest, 479m, 09°30'0.6"N, 07°40'51.1"W, 11–18.xi.2019, actinic light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Outtara, S., gen. slide Nos: LGNA 1962, LGNA 1963. **Guinea.** 1 male, Nimba Mts, SMFG concession area, (Societe des Mines de Fer de Guinee), Cite 1, 700m, 7°42'2.83"N, 8°23'58.60"W, 25.viii–05.ix.2017, general coll., leg. Sáfián Sz., Simonics, G., gen. slide No.: LGNA 1151; 1 female, Geipa Camp, Foret de Diecke, 435m, 7°26'7.06"N, 8°50'47.87"W, 05–14.iv.2019, light trap, blended bulb (250W), leg. Sáfián, Sz., Koivogui, S., gen. slide No.: LGNA 988; 1 male, 2 females, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, leg. local collectors, gen. slide No.: LGNA 1538 (male), LGNA 1696, LGNA 1754 (females).

Genetic information. This species has been assigned the BIN URI: BOLD AEG5922. The intraspecific divergence calculated from three samples is 0.15–0.31%. The closest relative of *M. dananae* is *M. baaka* sp. n. with a PWD of 3.15–3.31%. *Meganola bispermutata bispermutata* and *M. bispermutata cryptochra* diverge from *M. dananae* by 3.80–4.19% and 3.80–4.28%, respectively.

Taxonomic note. Owing to the then-lack of DNA barcodes, László (2020) erroneously illustrated the male of *M. pachygrapha* as the male of *M. dananae*. The correct matching of the males and females of these species was clarified by the DNA barcode analyses during this study, and the confirmed male and female genitalia are illustrated under Figs 111–112, 152.

Distribution. *Meganola dananae* is a west African species with confirmed records from Côte d'Ivoire (Hacker *et al.* 2012) and Guinea (present study).

***Meganola baaka* sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:BB9E669B-58B3-4F78-BE58-F49EF4363D06>

(Figs 43–46, 113–114, 153)

Holotype. Male, “GABON 430m / Mikongo (Rougier), Monts / de Cristal (Secondary Forest) / 0°29'47"N, 11°10'42"E / 28.vii–12.viii.2019 MV LightTrap / Albert, J-L., Aristophanous, M., / Bie Mba, J., Dérozier, V., / Moretto, P. Leg. / ANHRT:2019.17” // “ANHRTUK / 00192260” / “SAMPLED FOR: / DNA (2022)” // “Gen. slide No. / LGN A 1582 ♂ / prep. by Gy. M. Laszlo” (ANHRT).

Paratypes (all in coll. ANHRT).

Republic of Congo. 1 male, Sangha Prov., Noubale-Ndoki National Park, Ndoki formation (Secondary forest), 352m, 02°12'47.7"N, 16°23'45.8"E, 29.ix–1.x.2022, actinic light trap, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H., gen. slide No.: ANHRT 02216; 2 males, 3 females, Likouala Prov., Nouabale-Ndoki National Park, Makao forest (Secondary forest), 349m, 02°36'42.5"N, 17°09'523.8"E, 24–29.ix.2022, actinic and LepiLED light trap, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H., gen. slide Nos: LGNA 1318, ANHRT 02224 (males), LGNA 1384, LGNA 1389, ANHRT 2223 (females); 2 males, Nouabale-Ndoki National Park, Mbeli camp, 372m, 02°14'23.8"N, 16°23'52.1"E, 14–20.ii.2023, actinic light trap, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G., gen. slide Nos: ANHRT 02239, ANHRT 02267; 7 males, 1 female, Odzala-Kokoua National Park, Kokoua base, 540m, 00°28'39"N, 15°16'42"E, 05–13.ix.2024, MV light trap, Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma, S., gen. slide Nos: LGNA 1423, LGNA 1487, LGNA 1831 (males); 3 males, Odzala-Kokoua National Park, Mbomo HQ, 570m, 00°26'13"N, 14°42'01"E, 28.ix–01.x.2024, MV light trap, leg. Bashford, M., László, G., Volynkin, A., gen. slide Nos: LGNA 1433, LGNA 1465, LGNA 1485; 1 female, Odzala-Kokoua National Park, Lobo Research Camp, 390m, 00°35'04"N, 14°53'12"E, 25–26.ix.2024, LepiLED light trap, leg. Bashford, M., László, G., Volynkin, A., Yaba Ngouma, S., gen. slide No.: LGNA 1490.

Diagnosis. Forewing length 7–9 mm in males, 9–10 mm in females. *Meganola baaka* **sp. n.** is a central African allopatric sibling of the West African *M. dananae*, distinguished in the following external features: the new species has a notably more extensive and contrasting elongate-triangular costal patch and considerably darker terminal area of the forewing, which has a whitish grey sheen in contrast to the pale ochreous-grey ground colour of *M. dananae*. In the male genitalia, both species feature a narrow, apically rounded valva and a remarkably long, pointed harpe; however, the new species has a noticeably longer tegumen without an angled medial dilation as observed in *M. dananae*. The aedeagi of both species are similarly long, with an elongate distal section distinguishing them from the other taxa of the *M. bispermutata* complex, having markedly shorter aedeagi.

In the female genitalia, *M. baaka* **sp. n.** has a somewhat shorter and broader anterior apophysis, a noticeably narrower, elongate-quadrangular ostium bursae (it is rounded, U-shaped in *M. dananae*), a narrower distal sclerotised section of the ductus bursae, and a shorter (by ca. 30%) ductus bursae.

Etymology. This new species is dedicated to the Baaka people, a major ethnic group in central Africa.

Genetic information. *Meganola baaka* **sp. n.** belongs to the BIN URI: BOLD AAF7471. As only one specimen was sequenced in this study, intraspecific divergence of the COI 5P sequences could not be calculated. The species' closest relative is *M. dananae*, diverging by 3.15–3.31%.

Distribution. *Meganola baaka* **sp. n.** is a central African vicariant of the West African *M. dananae* with confirmed records only from Gabon and the Republic of Congo.

Meganola subderrae Hacker, 2012

Meganola subderrae Hacker, 2012, Esperiana 17: 389. TL: Kenya, Kakamega forest. Holotype, male, in coll. ZSM.

Genetic information. This species has not been DNA barcoded during the study.

Taxonomic note. The female paratype specimen illustrated by Hacker *et al.* (2012) is not conspecific with the male holotype of *M. subderrae* but related to *M. microfascia* Hacker, 2012.

Distribution. This species is known only from the Kakamega forest in Kenya.

Meganola furvitincta* species group*Characterisation of the species group**

Several species in this complex are highly reminiscent of members of the *M. monofascia-bispermutata* species-groups, although often displaying more contrasting transverse lines. In the male genitalia, the valva is shorter and broader than in the *M. bispermutata* complex and apically evenly rounded, unlike in the *M. monofascia* species group. The harpe is considerably shorter and more triangular in the *M. furvitincta* species group than in the other complexes. The most characteristic feature of this species group is the well-developed, often excessively long, flat and straight laminar, or thorn-shaped and curved carina process, the length and shape of which is an important specific character. The shared female genitalia characters of the species group are the very short, rounded anterior apophysis, the well-developed, heavily sclerotised somewhat infundibular antrum and the small transverse signum bursae surrounded by an extensive ovoid field of fine longitudinal scobination continued in a narrow scobinate area towards the base of the ductus bursae.

Taxon content

M. furvitincta furvitincta (Hampson, 1914)

M. furvitincta poliographa Hacker, 2012 **stat. rev.**

M. usambarana Hacker, 2012

M. spherographata **sp. n.**

M. aarviki Hacker, 2012

M. stigmatographa Hacker, 2012

M. palaeographa Hacker, 2012

M. dicranographa Hacker, 2012

M. fontainei Hacker, 2012

M. trigonographa Hacker, 2012

M. ochromorpha Hacker, 2012

M. canocolorata Hacker, 2012

***Meganola furvitincta furvitincta* (Hampson, 1914)**

(Figs 47–51, 115–117, 154)

Celama furvitincta Hampson, 1914, Catalogue of the Lepidoptera Phalaenae in the British Museum, Suppl. 1: 398, pl. 23, fig. 1. TL: Sierra Leone. Lectotype, male, in coll. NHMUK (designated by László 2020).

Synonymy.

Meganola spherographa Hacker, 2012, **syn. n.**, Esperiana 17: 449. TL: Nigeria, Kaduna. Holotype, female, in coll. ZSM.

Material examined (all in coll. ANHRT).

Côte d'Ivoire. 7 males, 4 females, Mt. Tonkoui Peak, 1171m, 07°27'15.2"N, 07°38'12.5"W, 19–27.xi.2019, actinic, LepiLED and MV light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S., gen. slide Nos: LGNA 1586, LGNA 1587, LGNA 1590, LGNA 1703, LGNA 1964 (males), LGNA 1588, LGNA 1589 (females). **Guinea.** 2 males, Dalaba, Foret de Tinka, 1289m, 10°43'14"N, 12°15'22"W, 25–28.ix.2019, LepiLED light trap, leg. Geiser, M., Leno, M., Koivogui, S., Miles, W., Mulvaney, L., Sáfián, Sz., gen. slide Nos: LGNA 1243, LGNA 1250; 1 male, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, leg. local collectors, gen. slide No.: LGNA 1794; 1 female, Sérédou camp, Forêt Classée de Ziamá (upland forest), 872m, 8°21'14.53"N, 9°19'31.93"W, 24.ii–06.iii.2019, general coll., leg. Sáfián, Sz., Simonics, G., Florczyk, K., Koivogui, S., gen. slide No.: LGNA 1604. **Liberia.** 1 male, Nimba Mts, ENNR, Nimba county (Cellcom road), 1000–1100m, 7°32'45.88"N, 8°31'21.04"W, 02–14.xii.2017, Cold Cathode light bucket, leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide No.: LGNA 491; 2 males, Nimba Mts camp, ENNR, Nimba county, 1165m, 7°31'45"N, 8°31'37"W, 03–13.xii.2017, light trap

(blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide Nos: LGNA 560, LGNA 616; 1 male, 1 female, Nimba County, Nimba Mts, ENNR, Cellcom road, 750m, 7°33'3.78"N, 8°31'46.49"W, 16–28.xii.2018, Cold Cathode UV light trap (8 W), leg. Sáfián, Sz., Simonics, G., gen. slide Nos: LGNA 1244 (male), LGNA 973 (female); 1 male, Mount Nimba Main Ridge, ENNR, Nimba County, 1300m, 7°31'1.53"N, 8°31'1.24"W, 14–28.xii.2017, light trap blended bulb (250W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1591; 1 female, Nimba Mts, Mt. Gangra Summit, 978m, 7°32'45.82"N, 8°38'9.36"W, 17–25.iii.2017, Light Trap (250w blended bulb) & cold cathode UV light bucket trap (8w), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1274; 1 male, Nimba county, ENNR, Nimba Mts, main ridge (montane forest), 1327m, 7°31'1.3"N, 8°31'1.0"W, 9.xii.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L.; 1 male, Lofa County, Wologizi Mts, Ridge camp, 865m, 8°07'10"N, 9°57'11"W, 24–29.xi.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L.; 1 male, Lofa County, Foya Proposed Protected Area, 530m, 7°56'36"N, 10°16'36"W, 10–19.xi.2017, MV light trap (125W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide No.: LGNA 863. **Republic of Congo.** 1 male, Odzala-Kokoua National Park, Kokoua base, 540m, 00°28'39"N, 15°16'42"E, 05–13.ix.2024, MV light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A, Yaba Ngouma, S., gen. slide No.: LGNA 1774.

Taxonomic notes. The genitalia illustrations of *M. furvitincta* presented in Hacker *et al.* (2012) are incorrect, as they were not based on examination of primary types. This discrepancy was addressed in László (2020), who designated and dissected the lectotype of this species. The male genitalia shown in Figures E and F in Hacker *et al.* (2012) actually belong to *M. monofascia*, while the female genitalia depicted in Figure G represent an undescribed species, which will be discussed below. Additionally, Figure H illustrates the copulatory organ of *M. monofascia*, although it is incorrectly referred to as *M. bispermutata* by László (2020).

Following the clarification of the male genital morphology, genetic analyses conclusively identified the female of *M. furvitincta* (see Text fig. 2 and Table 1). The genitalia illustration of the female holotype of the externally similar *M. spherographa* Hacker, 2012 displays the same features as those observed in *M. furvitincta*. Therefore, *M. spherographa* **syn. n.** is considered conspecific with *M. furvitincta*. However, there is, indeed, a second, closely related species that occurs sympatrically with *M. furvitincta* in West Africa. The male genitalia described under *M. spherographa* (Hacker *et al.* 2012: 449, figs D, E) actually belong to this other species, which is described below as new to science.

Genetic information. Despite their distinctive morphology, *M. furvitincta furvitincta*, *M. furvitincta poliographa*, *M. spherographata* **sp. n.** and *M. aarviki* all belong to the same BIN URI: BOLD AAP3225. The intraspecific divergence of *M. furvitincta furvitincta* (n=13) ranges from 0.00% to 0.46%. The PWD between *M. furvitincta furvitincta* and *M. furvitincta poliographa*, *M. spherographata* **sp. n.** and *M. aarviki* are 0.11–1.24%, 0.46–2.19% and 1.86–2.02%, respectively. Additionally, close relatives such as *M. fontainei* and *M. trigonographa* diverge by 2.24–2.84% and 2.51–2.82%, respectively.

Distribution. The nominotypical subspecies of *M. furvitincta* is a western-central African taxon with confirmed records from Guinea, Côte d'Ivoire, Liberia, the Republic of Congo (present research), Sierra Leone (type locality) and Nigeria (as *M. spherographa* **syn. n.** (Hacker *et al.* 2012). The specimens identified as *M. furvitincta* in Hacker *et al.* (2012) and Hacker (2014) have been misidentified; apart from the syntype, the illustrated specimens actually belong to *M. monofascia*.

***Meganola furvitincta poliographa* Hacker, 2012 stat. rev., stat. n.**
(Figs 52–55, 118–119, 155)

Meganola poliographa Hacker, 2012, Esperiana 17: 334. TL: Uganda, Bushenyi District, Kalinzu Forest. Holotype, male, in coll. NHMO.

Synonymy.

Meganola mbala Hacker, 2014, Esperiana 19: 165. TL: Zambia, Mbala. Holotype, male, in coll. NHMUK.

Material examined (all in coll. ANHRT).

Malawi. 2 males, Mzuzu Wildlife Sanctuary, (Afromontane forest), 1294m, 11°27'30.2"S, 34°03'11.3"E, 22–27.vi.2022, LepiLED and MV light trap, leg. Kirk-Spriggs, A., Miles, W., gen. slide Nos: LGNA 1788, LGNA 1902. **Uganda.** 2 females, Bwindi Impenetrable N.P., Cuckooland Lodge, 1700m, 01°00'17"S, 29°43'06"E, 28–29.vi.2022, leg. Naumann, S., Ott, E., Schintlmeister, A., Sulak, H., gen. slide Nos: LGNA 1717, LGNA 1720. **Zambia.** 2 females, Zambezi Rapids, (Miombo/Riverine forest mosaic), 1205m, S11°7'30", E24°11'6", 4–9.xi.2018, MV light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., gen. slide Nos: LGNA 758, LGNA 1009; 1 male, Kalene Hill (Miombo woodland), 1440m, S11°11'11", E24°12'5", 6.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., gen. slide No.: LGNA 744; 3 males, Hillwood, Ikelenge (Miombo/Riverine forest mosaic), 1400m, S11°16'02", E24°18'59", 23–30.xi.2019, actinic and MV light trap, leg. Bashford, M., Miles, W., Mulvaney, L., Smith, R.; 1 male, same site, 28.v–4.vi.2020, leg. Chizuwa, D., Choongo, W.; 2 males, Nyangombe Falls (Miombo/Riverine forest mosaic), 1300m, 11°48'25"S, 24°32'12"E, 17–23.xi.2019, actinic and MV light trap, leg. Bashford, M., Miles, W., Mulvaney, L., Smith, R.; 1 male, Chitunta Plain (Miombo/Dambo mosaic), 1396m, 11°29'12"S, 24°24'18"E, 29.xi–4.xii.2019, actinic light trap, leg. Bashford, M., Miles, W., Mulvaney, L.; 1 female, Jiwundu Swamp (Miombo/Riverine forest mosaic), 1340m, S11°51'54", E25°33'20", 29.x–4.xi.2018, MV light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; 1 male, Lyangu, Liuwa Plain NP, 1035 m, 14°46'51"S, 22°34'44", 12–15.xi.2013, light trap, leg. Smith, Takano & Oram, gen. slide No.: LGNA 22; 1 male, Lunzua Falls, 20 km S of Mpulungu, Northern Province, 1416m, 08°55'38"S, 31°09'31"E, 11–16.v.2019, MV light trap, Dérozier, V., László, G., Miles, W.; 1 female, Kundalila Falls, 12 km SE of Kanona, Central Province, 1500m, 13°09'17"S, 30°42'07"E, 26–27.iv.2019, actinic light trap, Dérozier, V., László, G., Miles, W., gen. slide No.: LGNA 1011; 1 male, Kapishya Hot Springs, Shiwa N'gandu Estate, 1437m, S11°10'13", E31°36'00", i–iii.2017, M.T. Harvey coll., leg. Oram, D., Miles, W., Smith, L., gen. slide No.: LGNA 743; 1 female, Chilambwe Falls, Kafubu River, 1420m, 09°50'13"S, 30°43'35"E, 8–12.ii.2019, MV light trap, leg. Dérozier, V., Mulvaney, L., Smith, R., Takano, H., gen. slide No.: LGNA 934; 1 female, Mutinondo Wilderness Area, Mpika, Northern Prov., 1460m, 12°27'06"S, 31°17'30"E, 16–20.iii.2017, MV, leg. Oram, D., Miles, W., Smith, L.; 9 males, 1 female, Choma, Bruce-Miller Farm Nansai (Southern Miombo woodland), 1179m, 16°38'32"S, 27°01'47"E, 25.iv–1.v.2022, MV light trap, leg. Miles, W., Mulvaney, L.; 1 male, 2 females, Danger Hill, 30 km N of Mpika, Muchinga Province, 1684m, 11°37'38"S, 31°33'56"E, 27–30.iv.2019, actinic and MV light trap, Dérozier, V., László, G., Miles, W., gen. slide Nos: LGNA 1010 (male), LGNA 1034 (female); 7 males, 3 females, same site, 13–15.xii.2023, leg. László, G., Morgan, L., Volynkin, A., gen. slide Nos: LGNA 1972 (male), LGNA 1707, LGNA 1970, LGNA 1971 (female).

Genetic information. This species has been assigned the BIN URI: BOLD AAP3225; BIN-sharing with *M. furvitincta furvitincta*, *M. spherographata* **sp. n.** and *M. aarviki*. The intraspecific divergence of *M. furvitincta poliographa* (n=5) ranges from 0.00% to 1.52%. It diverges from *M. furvitincta furvitincta*, *M. spherographata* **sp. n.** and *M. aarviki* by 0.11–1.24%, 0.00–2.51% and 2.17%, respectively. Additionally, *M. furvitincta poliographa* shows a divergence from *M. trigonographa* and *M. fontainei* of 2.35–3.15% and 2.82–3.53%, respectively.

Taxonomic notes. László (2020) synonymised this taxon with *M. furvitincta*. However, an examination of several specimens resembling *M. furvitincta* from southern-central Africa revealed subtle but consistent differences in external and genital morphology between the two species. Externally, *M. poliographa* has much darker and more contrasting forewing markings than *M. furvitincta*. In the male genitalia, the former taxon has a slightly curved and ca. 20–30% shorter flap-like laminar projection of the carina than that of *M. furvitincta*; in addition, the dorsal margin of the distal section of the aedeagus is smooth in *M. furvitincta poliographa*, whilst it is slightly serrated in the nominotypical taxon. Based on these diagnostic morphological characters, the name *poliographa* has been reinstated as a subspecies to represent the southern-central African populations of *M. furvitincta*: *M. furvitincta poliographa* **stat. rev., stat. n.**

Distribution. *Meganola furvitincta poliographa* is a southern-central African taxon expanding northward along the Rift valley, up to Uganda (type locality). The subspecies has further confirmed records from Zambia (as *M. mbala* (Hacker *et al.* 2014)) and Malawi (present study).

Meganola usambarana Hacker, 2012

Meganola usambarana Hacker, 2012, Esperiana 17: 444. TL: Tanzania, Tanga, Usambara Mts, Masumbai. Holotype, male, in coll. Hacker/ZSM.

Genetic information. This species was not sequenced in this study.

Taxonomic note. The validity of this taxon was examined by László (2020), who suggested that it may only be a pale form of *M. furvitincta*. However, a thorough examination of the *M. furvitincta* complex indicates that this taxon is valid and probably confined to the Usambara Mountains. This mountain range is part of the Eastern Arc Mountains, which are known for their exceptional diversity and endemism (Rodgers & Homewood 1982). Although the clasping apparatus of both subspecies of *M. furvitincta* and *M. usambarana* is identical, the latter species features a distinctly narrower and approximately 20% longer aedeagus in the male genitalia. Additionally, the female genitalia of *M. usambarana* are notably different from those of *M. furvitincta*, characterized by a funnel-shaped antrum that is about 1.5 times longer and slightly curved. Based on these unique morphological traits, *M. usambarana* is upheld as a valid species. However, specimens identified under this taxon in Hacker *et al.* (2012) from Rwanda, Uganda, and DRC (Lubumbashi) belong to *M. furvitincta poliographa*.

Distribution. *Meganola usambarana* is presumably an endemic species in the Usambara Mountains.

Meganola spherographata sp. n.

<https://zoobank.org/urn:lsid:zoobank.org:act:C4A0A80A-C17D-4EA0-812B-CF9D06093F69>

(Figs 56–60, 120–122, 156)

Holotype. Male, “GABON 430m / Mikongo (Rougier), Monts / de Cristal (Secondary Forest) / 0°29'47"N, 11°10'42"E / 28.vii-12.viii.2019 MV LightTrap / Albert, J-L., Aristophanous, M., / Bie Mba, J., Dérozier, V., / Moretto, P. Leg. / ANHRT:2019.17” // “ANHRTUK / 00165572” // “SAMPLED FOR: / DNA (2022)” // “Gen. slide No. / LGN A 1576 ♂ / prep. by Gy. M. Laszlo” (ANHRT).

Paratypes (all in coll. ANHRT).

Côte d'Ivoire. 2 males, Tai NP., Tai Research Station, 174m, 05°49'59.8"N, 07°20'32.0W, 14–23.xi.2015, light trap, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide Nos: LGNA 144, LGNA 228. **Gabon.** 1 male, same site and collectors as in the holotype, but collected at LepiLED light trap, gen. slide No.: LGNA 1579; 1 female, Nyonie (Lowland forest), 10m, 0°2'22"S, 9°20'25"E, 23–28.viii.2019, MV light trap, leg. Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P., gen. slide No.: LGNA 1155. **Liberia.** 1 male, 1 female, Lofa County, Foya Proposed Protected Area, 530m, 7°56'36"N, 10°16'36"W, 10–19.xi.2017, MV light trap (125W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L., gen. slide Nos: LGNA 861 (male), LGNA 539 (female); 1 male, 2 females, Lofa County, Wologizi Mts, base camp forest, 611m, 8°07'17"N, 9°57'42"W, 20.xi–01.xii.2017, MV light trap (125W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide No: LGNA 1176 (male), LGNA 587, LGNA 864 (females); 4 females, Lofa County, 8°07'10"N, 9°57'11"W, 865m, 24–29.xi.2017, light trap (blended bulb 250W) and Cold Cathode light bucket, leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L., gen. slide Nos: LGNA 541, LGNA 542, LGNA 1167, LGNA 1166; 1 female, Nimba Mts, ENNR, Nimba county (Cellcom road), 1000–1100m, 7°32'45.88"N, 8°31'21.04"W, 16–28.xii.2018, Cold Cathode UV Light Trap (8W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1284.

Diagnosis. Forewing length 7–8 mm in males, 9–11 in females. *Meganola spherographata* **sp. n.** is reminiscent externally of *M. furvitincta furvitincta*, but it can be distinguished by the lighter greyish forewing ground colour, where the medial area has only a large costal patch including a rounded discal spot, whilst in *M. furvitincta*, a larger proportion of the medial area displays a darker colouration. The postmedial line in the new species is finer, but often more contrasting, and the terminal forewing area is less darkened in *M. spherographata* **sp. n.** than in its allied species. As the two species occur sympatrically in western and central Africa, accurate identification often necessitates genitalia dissection.

In the male genitalia, the clasping apparatus of *M. spherographata* **sp. n.** has a somewhat shorter valva, a noticeably narrower and more elongate harpe, and a shorter vinculum. The most distinct differences between this new species and *M. furvitincta* are expressed in the configuration of the aedeagus, where *M. spherographata* **sp. n.** has a considerably narrower and apically tapering flap-like carinal process, which does not reach over the tip of the aedeagus, whilst in both subspecies of *M. furvitincta*, the apically dilated carinal process extends well over the tip of the aedeagus. The length of the carinal process is nearly identical in both species; however, the post-carinal distal section of the aedeagus in *M. spherographata* **sp. n.** is ca. twice as long as in *M. furvitincta*.

In the female genitalia, the antrum is noticeably shorter and narrower with nearly straight lateral margins and a deeper, semicircular distal concavity marking the ostium bursae in *M. spherographata* **sp. n.** compared to the considerably larger, goblet-shaped antrum with a V-shaped notch of the ostium bursae in *M. furvitincta*. Further differences between the two species are the shorter, medially more constricted eighth tergite, the slightly shorter and broader anterior apophysis, the ca. 10% longer tubular section of the corpus bursae and the less extensive scobinated plate of the signum bursae of *M. spherographata* **sp. n.** compared to its congener.

Meganola spherographata **sp. n.** also closely resembles *M. aarviki*, but the latter species can be distinguished by its creamy sheen of the forewing, in contrast to the matte grey ground colour of the new species. In the male genitalia, compared to *M. spherographata* **sp. n.**, *M. aarviki* has a ca. 10% shorter aedeagus with a markedly shorter flap-like carinal process that ends well before the tip of the aedeagus and has a sharply truncate tip, unlike the tapered-rounded tip of the carinal process found in *M. spherographata* **sp. n.**

The configuration of the female genitalia is nearly identical in *M. spherographata* **sp. n.** and *M. aarviki*; however, the latter has considerably larger anterior lobes of the eighth sternite and a noticeably shorter antrum.

Etymology. The specific epithet is a modified form of “*spherographa*”, an adjective of Greek origin, referring to the species *M. spherographa*, which has sunk into synonymy with *M. furvitincta* due to the designation of a misidentified female holotype (Hacker *et al.* 2012).

Genetic information. *Meganola spherographata* **sp. n.** has been assigned the BIN URI: BOLD AAP3225. The species is BIN-sharing with *M. furvitincta furvitincta*, *M. furvitincta poliographa* and *M. aarviki*, diverging by 0.46–2.19%, 0.00–2.51% and 0.00–2.33%, respectively. The intraspecific divergence of the COI 5P sequences calculated from seven samples is 0.00–2.33%. This species is also closely related to *M. fontainei* and *M. trigonographa*, diverging by 2.57–3.31% and 2.67–3.15%, respectively.

Taxonomic note. This species was illustrated by Hacker *et al.* (2012) as *M. spherographa* Hacker, 2012. However, since Hacker designated a female holotype for this taxon which has been proven to be conspecific with *M. furvitincta* (as mentioned above), *M. spherographa* **syn. n.** was placed in synonymy with the former taxon. Consequently, the otherwise distinct species required a new description based on a male holotype, along with a correct matching of male and female sexes through DNA barcode analyses.

Distribution. A male specimen of this new species was previously identified as *M. spherographa* **syn. n.** from Nigeria (Hacker *et al.* 2012). In the current study, the species has been confirmed in Gabon, Côte d’Ivoire, and Liberia. Additionally, the female specimens illustrated in Hacker *et al.* (2012) as *M. spherographa* **syn. n.** from Nigeria and Sierra Leone actually belong to *M. furvitincta*.

***Meganola aarviki* Hacker, 2012**

(Figs 61–64, 123–125, 157)

Meganola aarviki Hacker, 2012, *Esperiana* 17: 451. TL: [DRC] Kisangani. Holotype, male, in coll. MWM/ZSM.**Material examined (all in coll. ANHRT).**

Côte d'Ivoire. 1 male, Tai NP. Tai Research Station (SRET), 174m, 05°50'00"N, 07°20'32.0W, 25.iii–17.iv.2017, MV light trap, leg. Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P., gen. slide No.: LGNA 980. **Republic of Congo.** Long series of both sexes from the following localities: Sangha Prov., Nouabale-Ndoki National Park, Mbeli camp, (*Gilbertiodendron* forest), 372m, 02°14'23.8"N, 16°23'52.1"E, (1–10.x.2022, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H., 14–20.ii.2023, leg. Bakala, N. M., Dérozier, V., Kirk-Spriggs, A., László, G.); Nouabale-Ndoki National Park, Bomassa camp, 341m, 02°12'36.9"N, 16°11'30.2"E, (20–21.ii.2023, leg. Bakala, N. M., Dérozier, V., Kirk-Spriggs, A., László, G., 16–23.ix.2022, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H.); Nouabale-Ndoki National Park, Mondika camp, 365m, 02°21'50.63"N, 16°16'25.82"E, (07–14.ii.2023, leg. Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G., 27.iv–06.v.2023, leg. Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S.); Sangha Prov., Noubale-Ndoki National Park, Ndoki formation (Secondary forest), 352m, 02°12'47.7"N, 16°23'45.8"E, 29.ix–1.x.2022, leg. Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H.; Odzala-Kokoua National Park, Imbalanga Camp, 480m, 00°45'47"N, 15°15'39"E, 05–11.iv.2024, leg. Bashford, M., László, G., Talani, M., Yaba Ngouma, S.; Odzala-Kokoua National Park, Mbomo HQ, 570m, 00°26'13"N, 14°42'01"E, (19–22.iv.2024, leg. Bashford, M., László, G., Talani, M., Yaba Ngouma S., 28.ix–01.x.2024, leg. Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma S.), gen. slide Nos: ANHRT 02257, ANHRT 2513, ANHRT 02524, ANHRT 02544, ANHRT 02547, ANHRT 02557, ANHRT 02574, ANHRT 02577, ANHRT 02576, ANHRT 02579, ANHRT 02580, ANHRT 02588, ANHRT 02218, ANHRT 02219, ANHRT 02220, ANHRT 02230, ANHRT 02247, ANHRT 02231, ANHRT 02258, ANHRT 02260, ANHRT 02263, ANHRT 02264, ANHRT 02265, ANHRT 02266, ANHRT 02268, ANHRT 02269, ANHRT 02270, ANHRT 02299, ANHRT 02304, ANHRT 03228, ANHRT 03256, ANHRT 03260, ANHRT 03276, ANHRT 03279, ANHRT 03289, LGNA 1355, LGNA 1357, LGNA 1359, LGNA 1378, LGNA 1379, LGNA 1380, LGNA 1391, LGNA 1825 (males), ANHRT 02539, ANHRT 02483, ANHRT 02556, ANHRT 02589, ANHRT 02552, ANHRT 02310, LGNA 1382 (females).

Genetic information. *Meganola aarviki* has been assigned the BIN URI: BOLD AAP3225, and the species is BIN-sharing with both subspecies of *M. furvitincta* and *M. spherographata* **sp. n.** As only one sample was included in the genetic analyses, the intraspecific divergence could not be calculated. The PWD from *M. furvitincta furvitincta*, *M. furvitincta poliographa* and *M. spherographata* **sp. n.** is 1.86–2.02%, 2.17% and 0.00–2.33%, respectively. The pairwise genetic distances between this species and *M. fontainei* and *M. trigonographa* are 2.90–3.21% and 2.99–3.29%, respectively.

Distribution. The species was described from Kisangani (DRC). A female paratype from Odzala National Park, illustrated in Hacker *et al.* (2012), belongs to *M. trigonographa* Hacker, 2012. However, the identity of a second paratype specimen from Kenya, which is not illustrated, remains uncertain. This species is relatively abundant in northern Congo, where a long series was collected in the Nouabale-Ndoki and Odzala-Kokoua National Parks. Additionally, a single, somewhat worn male specimen from Tai National Park in Côte d'Ivoire can be confidently identified as *M. aarviki* based on its genital characteristics.

***Meganola stigmatographa* Hacker, 2012**

(Figs 65–66, 126–127)

Meganola stigmatographa Hacker, 2012, *Esperiana* 17: 453. TL: Tanzania, Matengo Highland, Ugano. Holotype, male, in coll. NHMW.**Material examined (all in coll. ANHRT).**

Zambia. 2 males, Muchinga Prov., Benyanga village, 1250m, 10°40'41"S, 33°27'45"E, 07–12.xii.2023, MV light trap, leg. László, G., Morgan, L., Volynkin, A., gen. slide Nos: LGNA 1673, LGNA 1967.

Genetic information. This species has not been sequenced in this study.

Distribution. *Meganola stigmatographa* was previously known only from the vicinity of Songea in southwestern Tanzania. The specimens collected in a Miombo woodland in northeastern Zambia represent a new country record.

***Meganola palaeographa* Hacker, 2012**

(Figs 67–70, 128–129, 158–160)

Meganola palaeographa Hacker, 2012, Esperiana 17: 417. TL: Tanzania, Iringa, Udzungwa, Mang'ula. Holotype, male, in coll. Hacker/ZSM).

Material examined (all in coll. ANHRT).

Côte d'Ivoire. Long series of both sexes, Mt. Tonkoui Peak, 1171m, 07°27'15.2"N, 07°38'12.5"W, 19–27.xi.2019, actinic, LepiLED and MV light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S., gen. slide Nos: LGNA 1205, LGNA 1536, LGNA 1702 (males), LGNA 1169, LGNA 1206, LGNA 1577, LGNA 1578, LGNA 1704 (females); long series of both sexes from the same site, 1–8.xi.2015, light trap, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide Nos: LGNA 39, LGNA 41, LGNA 148, LGNA 166, LGNA 235, LGNA 236, LGNA 238 (males), LGNA 40, LGNA 87, LGNA 150, LGNA 165, LGNA 167, LGNA 168, LGNA 240, LGNA 252, LGNA 254 (females); 1 female, same site and collectors, 12–18.viii.2015, gen. slide No.: LGNA 24; 2 males, Tai NP. Tai Research Station, 174m, 05°49'59.8"N, 07°20'32.0"W, 14–23.xi.2015, light trap, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide Nos: LGNA 227, LGNA 234; 3 males, 2 females, same site, 25.iii–17.iv.2017, leg. Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P., gen. slide Nos: LGNA 394, LGNA 398 (males), LGNA 1285, LGNA 983 (PT of *M. taiana* László, 2020) (females); 1 male, Denguele Classified Forest, 479m, 09°30'0.6"N, 07°40'51.1"W, 11–18.xi.2019, actinic light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Outtara, S. **Gabon.** 1 female, Mikongo, (Rougier), Monts de Cristal (Anthropised Forest), 430m, 0°29'47"N, 11°10'42"E, 28.vii–12.viii.2019, actinic light trap, leg. Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P. **Guinea.** 1 male, Guinée Forestière Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest), 1400–1752m, 07°36'19"N, 08°25'30"W, 1–7.vii.2019, 250W blended light trap, leg. Dérozier, V., Miles, W., Sáfián, S.; 1 male, Nimba Mts, SMFG concession area (Societe des Mines de Fer de Guinee) 600 Forest, 1500m, 7°39'49.93"N, 8°22'22.19"W, 21–30.viii.2017, Cold Cathode UV light trap (8W), Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 831; 2 females, Seredou camp, Foret Classee de Ziam (upland forest), 872m, 8°21'14.53"N, 9°19'31.93"W, 24.ii–06.iii.2019, general coll., leg. Sáfián, Sz., Simonics, G., Florczyk, K., Koivogui, S. **Liberia.** 6 males, 1 female, Nimba Mts camp, ENNR, Nimba county, 1165m, 7°31'45"N, 8°31'37"W, 03–13.xii.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide Nos: LGNA 544, LGNA 478 (males); 1 male, 1 female, Nimba county, ENNR, Nimba Mts, main ridge (montane forest), 1327m, 7°31'1.3"N, 8°31'1.0"W, 9.xii.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide No.: LGNA 538; 2 males, 2 females, ENNR, Nimba Mts, Cellcom road, little stream, 1250–1350m, 7°31'28"N, 8°30'39.9"W, 14–15.iii.2017, 250W blended bulb and 8W Cold Cathode light bucket trap, leg. Sáfián, Sz., Simonics, G.; 1 female, Mount Nimba Main Ridge, ENNR, Nimba County, 1300m, 7°31'1.53"N, 8°31'1.24"W, 14–28.xii.2017, light trap blended bulb (250W), leg. Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 1700; 2 females, same site and collectors, 31.iii–1.iv.2017; 2 males, 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, leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L.; 1 male, Nimba County, Nimba Mts, ENNR, Cellcom road, 750m, 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.; 1 male, Nimba Mts, Mt. Gangra Summit, 978m, 7°32'45.82"N, 8°38'9.36"W, 17–25.iii.2017, light trap (250w blended bulb) & cold cathode UV light bucket trap (8w), leg. Sáfián,

Sz., Simonics, G.; 3 males, Lofa County, Wologizi Mts, base camp forest, 611m, 8°07'17"N, 9°57'42"W, 20.xi–01.xii.2017, MV light trap (125W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L.; 1 female, Lofa County, Zuwulor Village School, 230m, 7°54'52"N, 9°31'08"W, 8.xi.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L., gen. slide No.: LGNA 543; 2 males, Krahn-Bassa Reserve, Sinoe County, Juboe River, 7.5km South West Pellokon Town, 140m, 5°39'4"N, 8°39'4"W, 14–21.i.2018, light trap (blended bulb 250W), leg. Geiser, M., Sáfián, Sz., Simonics, G. **Republic of Congo**. 1 male, Nouabale-Ndoki National Park, Mombongo camp (Moist mixed forest), 352m, 02°10'30.7"N, 16°8'37.7"E, 28.vi.2022, MV light trap, leg. Dérozier, V., gen. slide No.: ANHRT 02232; 2 males, 1 female, Odzala-Kokoua National Park, Kokoua base, 540m, 00°28'39"N, 15°16'42"E, 05–13.ix.2024, MV light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A., gen. slide Nos: LGNA 1486, LGNA 1775 (males), LGNA 1778 (female). **Tanzania**. 1 female, Mizimu, Mwanihana, Udzungwa Mountains N.P., 850m, 07°48'21.8"S, 36°51'09.5"E, 3–6.viii.2010, light trap leg. Smith, R. & Takano, H., gen. slide No.: LGNA 259.

Genetic information. *Meganola palaeographa* has been assigned the BIN URI: BOLD ABW4980. The intraspecific divergence calculated from 13 samples is 0.00–0.73%. The genetically closest species are *M. fontainei*, *M. trigonographa* and *M. dicranographa* diverging by 2.71–3.47%, 2.66–3.75% and 3.30–3.80%, respectively.

Distribution. This species was initially known only from the Udzungwa Mountains in Tanzania (Hacker *et al.* 2012, Hacker 2014). László (2020) reported records of the species in West Africa, including Côte d'Ivoire and Liberia. In the current study, *M. palaeographa* was also found in Gabon, Guinea, and the Republic of Congo, indicating a wide equatorial distribution.

***Meganola dicranographa* Hacker, 2012**

(Figs 71–74, 130–131, 161–162)

Meganola dicranographa Hacker, 2012, Esperiana 17: 464. TL: [Burkina Faso] Comoe. Holotype, male, in coll. ZSM.

Synonymy.

Meganola parastrigula Hacker, 2012 **syn. n.**, Esperiana 17: 231. TL: Nigeria, Kaduna. Holotype, female, in coll. ZSM.

Material examined (all in coll. ANHRT).

Cameroon. 2 males, 3 females, North Region, Wack (La Falaise), 900m, 07°40'16.5"N, 13°33'18.4"E, 2–21.x.2018, Cold Cathode UV and LepiLED light trap, leg. Sáfián, Sz., Simonics, G., gen. slide Nos: LGNA 1159 (male), LGNA 1160 (female). **Côte d'Ivoire.** 2 males, 3 females, Denguélé Classified Forest, 479m, 09°30'0.6"N, 07°40'51.1"W, 11–18.xi.2019, actinic and MV light trap, leg. Aristophanous, M., Dérozier, V., Moretto, P., Outtara, S., gen. slide Nos: LGNA 1204 (male), LGNA 1246, LGNA 1275 (females). **Zambia.** 1 female, Zambezi Rapids (Miombo/Riverine forest mosaic), 1205m, 11°7'30"S, 24°11'6"E, 4–9.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., gen. slide No.: LGNA 1966.

Genetic information. This species has been assigned the BIN URI: BOLD AEG3087; BIN-sharing with *M. fontainei*. The intraspecific divergence calculated from six samples is 0.00–0.16%. The genetically closest species are *M. fontainei*, *M. trigonographa* and *M. palaeographa*, diverging by 0.82–1.10%, 1.49–1.86% and 3.30–3.80%, respectively.

Taxonomic note. This study has identified the male and female sexes of *M. dicranographa* through DNA barcode analyses. It has been revealed that the true female of this species is conspecific with *M. parastrigula* Hacker, 2012 (which was previously known only from female specimens). Furthermore, the female previously illustrated as *M. dicranographa* actually belongs to *M. trigonographa* Hacker, 2012. As a result, *M. parastrigula* **syn. n.** is hereby synonymized with *M. dicranographa*.

Distribution. This species was previously known from Burkina Faso (type locality) and Nigeria (also as *M. parastrigula*) (Hacker *et al.* 2012). The current study confirmed the presence of *M. dicranographa* in Cameroon, Côte d'Ivoire, and NW Zambia.

***Meganola fontainei* Hacker, 2012**

(Figs 75–80, 132–134, 163)

Meganola fontainei Hacker, 2012, Esperiana 17: 450. TL: [DRC] Congo, Lubumbashi. Holotype, male, in coll. RMCA.

Material examined (all in coll. ANHRT).

Gabon. Long series of both sexes, Mikongo (Rougier), Monts de Cristal (Secondary Forest), 430m, 0°29'47"N, 11°10'42"E, 28.vii–12.viii.2019, actinic, LepiLED and MV light trap, leg. Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P., gen. slide Nos: LGNA 1575, LGNA 1580, LGNA 1855 (males), LGNA 1574, LGNA 1581, LGNA 1584, LGNA 1872 (females). **Republic of Congo.** 1 male, Odzala-Kokoua National Park, Kokoua base, 540m, 00°28'39"N, 15°16'42"E, 05–13.ix.2024, MV light trap, leg. Bashford, M., László, G., Talani, M., Volynkin, A., Yaba Ngouma, S., gen. slide No.: LGNA 1772; 1 male, Odzala-Kokoua National Park, Mbomo HQ, 570m, 00°26'13"N, 14°42'01"E, 28.ix–01.x.2024, MV light trap, leg. Bashford, M., László, G., Volynkin, A., gen. slide No.: LGNA 1492, LGNA 1506. **Zambia.** Long series of both sexes, Kasanka River Pontoon, Kasanka N.P., 1191m, 12°34'23"S, 30°14'05"E, 2–4.xii.2012, light trap, leg. Smith, R., Takano, H.; Kabwe, Kasanka N. P., 1187m, 12°32'28"S, 30°12'42"E, 14–17.v.2013, light trap, leg. Smith, Takano & Oram; Chisimbe Falls, Kasama, 1320m, 10°06'31"S, 30°55'02"E, 27–29.iv.2013, light trap, leg. Smith, Takano & Oram; Lukulu River, Lavushi Manda N. P., 1285m, 12°15'05"S, 30°53'43"E, 27–29.xi.2012, light trap, leg. Smith, R., Takano, H.; Kalene Hill (Miombo woodland), 1440m, 11°11'11"S, 24°12'5"E, 6.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; Lungu Forest Reserve, 20 km N of Mbala, Northern Province, 1452m, 08°42'27"S, 31°16'34"E, 6–9.v.2019, actinic light trap, leg. Dérozier, V., László, G., Miles, W.; Nyangombe Falls (Miombo/Riverine forest mosaic), 1300m, 11°48'25"S, 24°32'12"E, 15–17.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; Ikelenge, Hillwood, (Miombo/Riverine forest mosaic), 1400m, 11°16'02"S, 24°18'59"E, 5–11.vi.2021, MV light trap, leg. Chizuwa, D., Choongo, W.; Kalungu, North of Isoka, 1280m, 9°40'52"S, 32°42'50"E, 30.iv–1.v.2019, actinic light trap, leg. Dérozier, V., László, G., Miles, W.; Jiwundu Swamp (Miombo/Riverine forest mosaic), 1340m, 11°51'54"S, 25°33'20"E, 29.x–4.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; Bruce-Miller Farm Nansai (Southern miombo woodland), 1179m, 16°38'32"S, 27°01'47"E, 25.iv–1.v.2022, MV light trap, leg. Miles, W., Mulvaney, L.; Muchinga Province, 30 km N of Mpika, Danger Hill, 1684m, 11°37'38"S, 31°33'56"E, 13–15.xii.2023, MV light trap, leg. László, G., Morgan, L., Volynkin, A.; Chitunta Plain (Miombo/Dambo mosaic), 1396m, 11°29'12"S, 24°24'18"E, 29.xi–4.xii.2019, actinic light trap, leg. Bashford, M., Miles, W., Mulvaney, L.; Senka Hill, Mukulizi Forest Reserve, Muchinga Province, 1566m, 09°05'43"S, 32°05'06"E, 1–6.v.2019, MV light trap, leg. Dérozier, V., László, G., Miles, W.; Zambezi Rapids (Miombo/Riverine forest mosaic), 1205m, 11°7'30"S, 24°11'6"E, 4–9.xi.2018, MV light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., gen. slide Nos: LGNA 1, 2, 4, 9, 10, 11, 16, 75, 76, 77, 693, 754, 1031, 1593, LGNA 1975, LGNA 1976, LGNA 1977, LGNA 1978, LGNA 1979, LGNA 1982, LGNA 1983, (males), LGNA 3, 12, 13, 15, 62, 71, 72, 73, 74, 114, 262, 266, 1981, LGNA 1984 (females).

Genetic information. *Meganola fontainei* has been assigned the BIN URI: BOLD AEG3087, BIN-sharing with *M. dicranographa*. The intraspecific divergence calculated from 13 samples is 0.00–0.16%. The genetically closest taxa are *M. dicranographa*, *M. trigonographa* and the *M. furvitincta-spherographata* sp. n. species pair, diverging by 0.82–1.10%, 1.26–1.73% and 2.40–3.04%, respectively. The pairwise distance between *M. fontainei* and *M. palaeographa* is in the range of 2.71–3.47%.

Taxonomic note. Hacker *et al.* (2012) illustrated a female specimen and its genitalia from Côte d'Ivoire. However, László (2020) expressed doubts about the accuracy of this specimen's locality, noting that no other records of *M. fontainei* have been found in West Africa. After closely examining the image of the female genitalia presented by Hacker *et al.* (2012: 450, fig. G), it is clear that the inverse trapezoidal shape of the antrum, with its straight margins, is characteristic of *M. palaeographa*. In contrast, *M. fontainei* is known to have arcuate antrum margins. This suggests that the record of *M. fontainei* from Côte d'Ivoire is a misidentification and likely refers to *M. palaeographa* instead.

Distribution. Confirmed records of *M. fontainei* have been documented from DRC-Lubumbashi (type locality), the Republic of Congo, Burundi (Hacker *et al.* 2012), and Zambia (Hacker 2014). The specimens reported from Gabon in the current study represent a new country record. The species exhibits a broad distribution throughout central Africa, extending to the Zambian plateau.

***Meganola trigonographa* Hacker, 2012**

(Figs 81–86, 135–137, 165)

Meganola trigonographa Hacker, 2012, Esperiana 17: 465. TL: Burkina Faso, Comoe. Holotype, male, in coll. ZSM.

Material examined (all in coll. ANHRT).

Côte d'Ivoire. 1 male, Tai NP, Tai Research Station (SRET), 174m, 05°50'00"N, 07°20'32.0"W, 25.iii–17.iv.2017, MV Light Trap, Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. **Gabon.** 1 male, Nyonie (Lowland forest), 10m, 0°2'22"S, 9°20'25"E, 23–28.viii.2019, MV light trap, Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P., gen. slide No.: LGNA 1170. **Liberia.** 1 male, 1 female, Nimba Mts, ENNR, Nimba county (Cellcom road), 1000–1100m, 7°32'45.88"N, 8°31'21.04"W, 02–14.xii.2017, Cold Cathode light bucket, leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide No.: LGNA 536 (male); 2 males, 2 females, Nimba Mts camp, ENNR, Nimba county, 1165m, 7°31'45"N, 8°31'37"W, 03–13.xii.2017, MV (125W) and blended bulb (250W) light trap, leg. Aristophanous, M., Sáfián, Sz., Simonics, G., Smith, L., gen. slide Nos: LGNA 862, LGNA 477 (males), LGNA 588, LGNA 1245 (females); 1 male, ENNR, Nimba Mts, Cellcom road, little stream, 1250–1350m, 7°31'28"N, 8°30'39.9"W, 14–15.iii.2017, 250W blended bulb and 8W Cold Cathode light bucket trap, leg. Sáfián, Sz., Simonics, G.; 1 male, Lofa County, Wologizi Mts, Ridge Camp, 883m, 2, 8°07'20.79"N, 9°56'50.75"W, 22–30.xi.2018, Light Trap (blended bulb 250W), Sáfián, Sz., Simonics, G.; 1 male, Lofa County, Wologizi Mts, base camp forest, 611m, 8°07'17"N, 9°57'42"W, 20.xi–01.xii.2017, MV light trap (125W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L., gen. slide No.: LGNA 537. **Republic of Congo.** 1 male, Nouabale-Ndoki National Park, Mombongo camp (Moist mixed forest), 352m, 02°10'30.7"N, 16°8'37.7"E, 28.vi.2022, MV light trap, leg. Dérozier, V., gen. slide No.: ANHRT 02233; 1 female, Nouabale-Ndoki National Park, Mondika camp, 365m, 02°21'50.63"N, 16°16'25.82"E, 07–14.ii.2023, MV light trap, Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G., gen. slide No.: ANHRT 02538; 1 female, Odzala-Kokoua National Park, Lobo Research Camp, 390m, 00°35'04"N, 14°53'12"E, 12–19.iv.2024, actinic light trap, Bashford, M., László, G., Talani, M., Yaba Ngouma, S., gen. slide No.: LGNA 1692. **Zambia.** 1 male, 1400m, Hillwood, Ikelenge, S11°16'02", E24°18'59", 17–24.iii.2013, light trap, leg. Smith, R., Takano, H., gen. slide No.: LGNA 14; 1 male, same site and collectors, 19–21.viii.2013, gen. slide No.: LGNA 115; 1 male, 1 female, same site, 9–16.v.2015, leg. Smith, R., Takano, H., Aristophanous, M., gen. slide No.: LGNA 753 (male); 2 males, 2 females, same site, 5–11.vi.2021, leg. Chizuwa, D., Choongo, W., gen. slide Nos: LGNA 1708, LGNA 1709 (males); 1 male, same site and collectors, 28.v–4.vi.2020, gen. slide No.: LGNA 1974; 1 male, same site, 23–30.xi.2019, leg. Bashford, M., Miles, W., Mulvaney, L., Smith, R., gen. slide No.: 1701; 3 females, Nkwaji, Mwinilunga, 1316m, 11°36'22"S, 24°33'17"E, 21–22.viii.2013, light trap, leg. Smith, R. & Takano, H., gen. slide Nos: LGNA 173, LGNA 265, LGNA 267; 1 male, Zambezi Rapids (Miombo/Riverine forest mosaic), 1205m, 11°7'30"S, 24°11'6"E, 4–9.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., gen. slide No.: LGNA 1965.

Genetic information. This species has been assigned the BIN URI: BOLD AAQ3396. The intraspecific divergence calculated from eight samples is 0.00–0.31%. The genetically closest taxa are *M. fontainei* (PWD=1.26–1.73%), *M. dicranographa* (PWD=1.49–1.86%) and the *M. furvitincta-spherographata* **sp. n.** species pair (PWD=2.49–3.29%).

Distribution. *Meganola trigonographa* was previously known only from Burkina Faso (Hacker *et al.* 2012). The current research indicates that this species is more widespread, extending from West Africa to southern Central Africa, with confirmed records from Côte d'Ivoire, Liberia, Gabon, the Republic of Congo, and Zambia.

Meganola ochromorpha Hacker, 2012

(Figs 87–90, 138–140, 166)

Meganola ochromorpha Hacker, 2012, Esperiana 17: 408. TL: [DRC] Congo, Elisabethville [Lubumbashi]. Holotype, male, in coll. RMCA.

Material examined (all in coll. ANHRT).

Gabon. 1 male, Mikongo (Rougier), Monts de Cristal (Secondary Forest), 430m, 0°29'47"N, 11°10'42"E, 28.vii–12.viii.2019, MV light trap, leg. Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P., gen. slide No.: LGNA 1278. **Mozambique.** 1 male, Zambezia Province, Mt. Namuli, SW slopes near Mucunha village, (forest remnant), 1245m, 15°22'33"S, 37°05'05.7"E, 15–16.viii.2018, actinic light trap, leg. László, G., Miles, W., Vetina, A., gen. slide No.: LGNA 636. **Zambia.** 4 males, Source of the Zambezi, 1494m, 11°22'09"S, 24°18'30"E, 12–13.v.2015, light trap, leg. Smith, R., Takano, H., Aristophanous, M.; 4 males, Hillwood, Ikelenge (Miombo/Riverine forest mosaic), 1400m, S11°16'02", E24°18'59", 23–30.xi.2019, actinic and MV light trap, leg. Bashford, M., Miles, W., Mulvaney, L., Smith, R.; 1 male, same site, 28.v–4.vi.2020, leg. Chizuwa, D., Choongo, W.; 3 males, 1 female, Chitunta Plain (Miombo/Dambo mosaic), 1396m, 11°29'12"S, 24°24'18"E, 4–12.vi.2020, actinic light trap, leg. Chizuwa, D., Choongo, W.; 5 males, 1 female, same site, 29.xi–4.xii.2019, leg. Bashford, M., Miles, W., Mulvaney, L. leg.; 1 male, Kalene Hill (Miombo woodland), 1440m, 11°11'11"S, 24°12'5"E, 12–15.vi.2020, MV light trap, leg. Chizuwa, D., Choongo, W.; 1 female, Nyangombe Falls, 1300m, 11°48'25"S, 24°32'12"E, 17–23.xi.2019, Actinic light trap, leg. Bashford, M., Miles, W., Mulvaney, L., Smith, R.; 1 male, Zambezi Rapids (Miombo/Riverine forest mosaic), 1205m, S11°7'30", E24°11'6", 4–9.xi.2018, actinic light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; 2 males, 1 female, Nkwaji, Mwinilunga, 1316m, 11°36'22"S, 24°33'17"E, 21–22.viii.2013, light trap, leg. Smith, R & Takano, H., gen. slide Nos: LGNA 8 (male), LGNA 20 (female); 1 female, same site and collectors, 27.viii.2013, gen. slide No.: LGNA 117; 1 male, Kambishi, Jiwundu, 1340m, 11°54'39"S, 25°29'05"E, 18–19.x.2014 Light Trap leg. Smith, Takano & Oram, gen. slide No.: LGNA 1045; 1 male, Chilambwe Falls, Kafubu River, 1420m, 09°50'13"S; 30°43'35"E, 8–12.ii.2019, MV light trap, leg. Dérozier, V., Mulvaney, L., Smith, R., Takano, H.; 1 male, Ntumbachushi Falls, Ngona River, Luapula Prov., 1166m, 09°51'12"S, 28°56'40"E, 12–13.v.2013, light trap, leg. Smith, Takano & Oram, gen. slide No.: LGNA 118; 2 males, Kankonde Camp, Mutinondo Stream, 1400m, S12°23'29", E31°19'24", 12–15.xi.2014, light trap, leg. Smith, R. & Takano, H., gen. slide Nos: LGNA 282, LGNA 283; 5 males, 3 females, Mutinondo Wilderness Area, Northern Province, 1460m, 12°27'06"S, 31°17'30"E, 17–20.v.2019, actinic and MV light trap, leg. Dérozier, V., Imakando, M., László, G., Miles, W.; 1 female, same site, 16–20.iii.2017, leg. Oram, D., Miles, W., Smith, L.; 1 male, Muchinga Province, 30 km N of Mpika, Danger Hill, 1684m, 11°37'38"S, 31°33'56"E, 13–15.xii.2023, MV light trap, leg. László, G., Morgan, L., Volynkin, A.; 1 female, Senka Hill, Mukulizi Forest Reserve, Muchinga Province, 1566m, 09°05'43"S, 32°05'06"E, 1–6.v.2019 MV light trap, leg. Dérozier, V., László, G., Miles, W.; 1 female, Kalambo Falls, 30 km N of Mbala, Northern Province, 1189m, 08°35'50"S, 31°14'26"E, 9–11.v.2019, actinic light trap, leg. Dérozier, V., László, G., Miles, W., gen. slide No.: LGNA 1033; 3 males, Muchinga Prov., Benyanga village, 1250m, 10°40'41"S, 33°27'45"E, 07–12.xii.2023, actinic and MV light trap, leg. László, G., Morgan, L., Volynkin, A.; 1 male, Muchinga Province, Jombo village, 1400m, 10°27'01"S, 33°14'30"E, 30.xi–05.xii.2023, actinic light trap, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A.

Genetic information. All but one sample (n=5) of this species belong to the BIN URI: BOLD AEJ7130. One specimen from northeastern Zambia is assigned the BIN URI: BOLD AEJ3272. Despite lacking any obvious morphological differences, this specimen diverges from the others by 2.82–3.00%. The samples under AEJ7130 exhibit significant intraspecific divergence in the range of 0.00–0.46%; however, the PWD between a Gabonese and a Mozambican sample is 1.40%, along with distinct morphological differences (as discussed below). *Meganola ochromorpha* does not appear to have any particularly close relatives, as shown in the ML tree, where this species forms a distinct cluster. The genetically closest taxon is *M. trigonographa*, with a divergence of 3.76–4.92%.

Taxonomic notes. A notably small specimen from Gabon exhibited a considerably smaller mediocostal patch and noticeably paler transverse lines compared to specimens from Zambia and Mozambique. However, when examining the genitalia, the Gabonese specimen did not display any distinct characteristics that differentiate it from the southeastern African specimens. It falls within the same BIN URI as *M. ochromorpha* (BOLD AEJ7130), but it is situated on a distinct branch of the ML tree. Given its unique external appearance, it cannot be ruled out that the Gabonese population of *M. ochromorpha* may represent a distinct subspecies; however, a taxonomic decision can only be made when more specimens from the region are available.

Interestingly, a female specimen collected from Kalambo Falls in northeastern Zambia also appeared on a distinct branch and has been assigned a different BIN URI: BOLD AEJ3273. Since this specimen does not exhibit any distinctive genital or external features, it is considered a genetically divergent individual of *M. ochromorpha*.

Distribution. This species was previously recorded from Lubumbashi (DRC, type locality), as well as from Burundi and Malawi (Hacker *et al.* 2012). However, the record from Malawi was based on a misidentification of a female specimen, which actually belongs to *M. pyrrhomorpha* Hacker, 2012 (see Hacker *et al.* 2012: 408, fig. G). The specimens examined in this study from Gabon, Mozambique, and Zambia represent new country records.

***Meganola canocolorata* Hacker, 2012**

(Figs 91–92, 141–143, 167)

Meganola canocolorata Hacker, 2012, Esperiana 17: 440. TL: Côte d'Ivoire, Katiola. Holotype, female, in coll. ZSM.

Synonymy.

Meganola taiana László, 2020, **syn. n.**, Zootaxa 4853 (2): 164. TL: Côte d'Ivoire, Tai NP, Tai Research Station. Holotype, male, in coll. ANHRT.

Material examined (all in coll. ANHRT).

Côte d'Ivoire. 3 males, Tai NP. Tai Research Station, 174m, 05°49'59.8"N, 07°20'32.0W, 14–23.xi.2015, light trap, leg. Aristophanous, M., Moretto, P., Ruzzier, E., gen. slide Nos: LGNA 142 (holotype of *M. taiana*), LGNA 147, LGNA 209 (paratypes of *M. taiana*); 2 females, same site, 25.iii–17.iv.2017, actinic and MV light trap, leg. Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P., gen. slide Nos: LGNA 400, LGNA 981. **Guinea.** 1 female, Geipa Camp, Foret de Diecke, 435m, 7°26'7.06"N, 8°50'47.87"W, 05–14.iv.2019, light trap, blended bulb (250W), leg. Sáfián, Sz., Koivogui, S., gen. slide No.: LGNA 987. **Liberia.** 1 female, Krahn-Bassa Reserve, Sinoe County, Juboe River, 7.5km South West Pellokon Town, 140m, 5°39'4"N, 8°39'4"W, 14–21.i.2018, Cold Cathode UV bucket light trap, leg. Geiser, M., Sáfián, Sz., Simonics, G., gen. slide No.: LGNA 985; 1 female, Welezu Camp, Wonegizi Nature Reserve, Lofa County, 551m, 8°4'57.11"N, 9°34'47.86"W, 19–27.iii.2019, Cold Cathode UV light trap (8W), leg. Sáfián, Sz., Koivogui, S., gen. slide No.: LGNA 1260; 1 male, Lofa County, Foya Proposed Protected Area, 530m, 7°56'36"N, 10°16'36"W, 10–19.xi.2017, MV light trap (125W), leg. Aristophanous, M., Sáfián, Sz., Simonics, G. & Smith, L., gen. slide No.: LGNA 551 (paratype of *M. taiana*); 1 male, Nimba Mts camp, ENNR, Nimba county, 1165m, 7°31'45"N, 8°31'37"W, 03–13.xii.2017, light trap (blended bulb 250W), leg. Aristophanous, M., Sáfián, Sz.,

Simonics, G., Smith, L., gen. slide No.: LGNA 487 (paratype of *M. taiana*). **Sierra Leone**. 4 males, Tiwai Island, Moa River, 120m, 07°33'00"N, 11°21'09"W, 17–22.vi.2016, light trap, leg. Takano, Miles & Goff, gen. slide Nos: LGNA 409, LGNA 515, LGNA 564 (paratypes of *M. taiana*), LGNA 1252.

Genetic information. This species has been assigned the BIN URI: BOLD AEJ4832. The intraspecific divergence calculated from five samples is 0.00%. Genetic analyses indicate that *M. taiana* László, 2020 **syn. n.**, is conspecific with *M. canocolorata*, which was described based on a female holotype. This species is genetically distinct from all other taxa in the complex and has a similar PDW to *M. fontainei* (4.18–4.42%), *M. bispermutata cryptochra* (4.09–4.41%), *M. trigonographa* (4.25–4.42%), and *M. dicranographa* (4.41–4.42%), making these its closest relatives.

Taxonomic notes. *Meganola canocolorata* was described based on a single female specimen from Côte d'Ivoire. While the external appearance of this species is not particularly distinctive, the configuration of the female genitalia is relatively unique. It is characterized by a short and thick ductus bursae with asymmetrical laterodistal sclerotisation and a relatively large, ovoid corpus bursae that features two flat signa. The only other species exhibiting a similar female genitalia configuration is *M. odzala* Hacker, 2012.

In the collections of the ANHRT, several female specimens from West African localities were found with genital structures that closely match the illustration of *M. canocolorata* in Hacker *et al.* (2012). Thanks to large-scale DNA barcoding of the Nolini material at ANHRT, the male of *M. canocolorata* has been identified from Sierra Leone and, as part of the paratype series of *M. taiana* László, 2020, from Liberia.

The ML analysis revealed that the female specimens included in the paratype series of *M. taiana* actually belong to *M. palaeographa*, as previously discussed.

Consequently, based on the genetic identity of morphologically identified females of *M. canocolorata* and the male type specimens of *M. taiana*, this latter species is synonymised here with the former: *M. taiana* **syn. n.**

Conclusions

This study aimed to revise the taxonomy of a diverse and complex group of species that resemble *Meganola monofascia* and establish a consistent species group classification. The taxa of these species groups are often externally indistinguishable from one another, and, at the same time, several taxa display remarkable polymorphism, further complicating their identification.

The new species grouping system combines diagnostic genital morphology with genetic analyses based on DNA barcodes. This integrative approach has led to a morphology-based classification that identifies three species groups, aligning perfectly with the genetic findings: each morphological group corresponds to a monophyletic cluster in the phylogenetic tree. The molecular studies also clarified male and female individuals for several species, correcting previous taxonomic errors that mistakenly treated different sexes as distinct species or incorrectly paired non-conspecific males and females within a single species.

The *M. monofascia-furvitincta-bispermutata* complexes represent one of the most taxonomically challenging groups within the genus. Preliminary analyses have uncovered additional discrepancies in previous classifications concerning other *Meganola* species groups as well. This indicates the need for further integrative studies on the remaining Afrotropical *Meganola* taxa (László *in prep.*).

It is important to emphasize that, despite the publication of numerous comprehensive works over the past decade, our understanding of Afrotropical Nolini at the species level remains incomplete, with many taxa still awaiting description. Hacker *et al.* (2012) estimated that 70 to 90 species are yet to be discovered in the Afrotropics. Based on material currently being studied at ANHRT, more than 100 Nolini taxa have already been identified as undescribed. Over half of these are from the previously neglected northern region of the Republic of Congo, while the remaining new species are expected to be found in West Africa and the Zambian plateau (László *in prep.*).

Acknowledgements

The author is indebted to Alberto Zilli and Geoff Martin (NHMUK) for facilitating access to the Nolini type material under their care. Image of the lectotype of *M. furvitincta* used with permission and are copyright of the Trustees of the Natural History Museum, London, made available under Creative Commons License 4.0 (<https://creativecommons.org/licenses/by/4.0/>). Anthony Kingston (Albrighton, UK) is thanked for the loan of Nolinae specimens for this study. Paul D.N. Hebert (CBG, Guelph, Canada), Evgeny Zakharov (CCDB, Guelph, Canada) and their competent teams are thanked for their continuous support in DNA barcoding of Nolidae. The genetic analyses would not have been possible without Sujeevan Ratnasingham (CBG, Guelph, Canada), who developed the BOLD database. Oleg Pekarsky (Budapest, Hungary) prepared several genital slides used in this study. The author is especially grateful to Gabriella László (ANHRT) for her exceptional skill in mounting thousands of Nolini specimens.

The following collaborative partners are thanked for facilitating ANHRT field work and issuing the necessary research and export permits.

Côte d'Ivoire: 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). Gabon. Scientific research was authorised by the Centre National de la Recherche Scientifique (CENAREST) in collaboration with the Université des Sciences et Techniques de Masuku (USTM). Rougier Gabon is thanked for allowing access to concession forest. Guinea: Mamadou Diawara, (Guinée Ecologie); Colonel Layaly Camara, Cece Papa Konde (Ministère de l'Environnement et aux Eaux et Forêts); Jamison Suter (Société des Mines de Fer de Guinée). Liberia. Annika Hiller (Wild Chimpanzee Foundation), Jerry Garteh (Society for the Conservation of Nature), Darlington Tuaben, Mike C. Doryen and Kederick F. Johnson (Forestry Department Authority, Liberia). Mozambique: Bartolomeu Soto, Mateus Mutemba and Antony Chilengue (Administração Nacional das Areas de Conservação, Maputo); Lucilia Chuquela, Kisimenda Muambalo, Anacleto Cossa and Alvaro Vetina (Museu de História Natural de Maputo); Majka Burhardt and Marcos Assane (LEGADO Namuli, Gurue). Republic of Congo: Richard Malonga, Morgane Cournarie, Vittoria Estienne, Ben Evans, Onesie Samba and Yako Valentin (WCS, Parc National de Nouabalé-Ndoki); Jonas Erickson, Gwili Gibbon, Sylvain Yaba Ngouma, Adrich Mouamana (African Parks, Parc National d'Odzala-Kokoua), Merlia Talani (Marien Ngouabi University, Brazzaville), the Ministère de l'Enseignement Supérieur de la Recherche Scientifique et de l'Innovation Technologique, Joseph Moumboulou and Jean Bosco Nganongo (Direction de la Faune et des aires protégées, DEFAP), Joseph Goma-Tchimbakala, Victor Mamonekene (Institut National de Recherche en Sciences Exactes et Naturelles, IRSN). Zambia: Rhoda Kachali (Department of National Parks and Wildlife – ZAWA, Lusaka), Claire Mateke and Martha Imakando (Livingstone Museum, Livingstone).

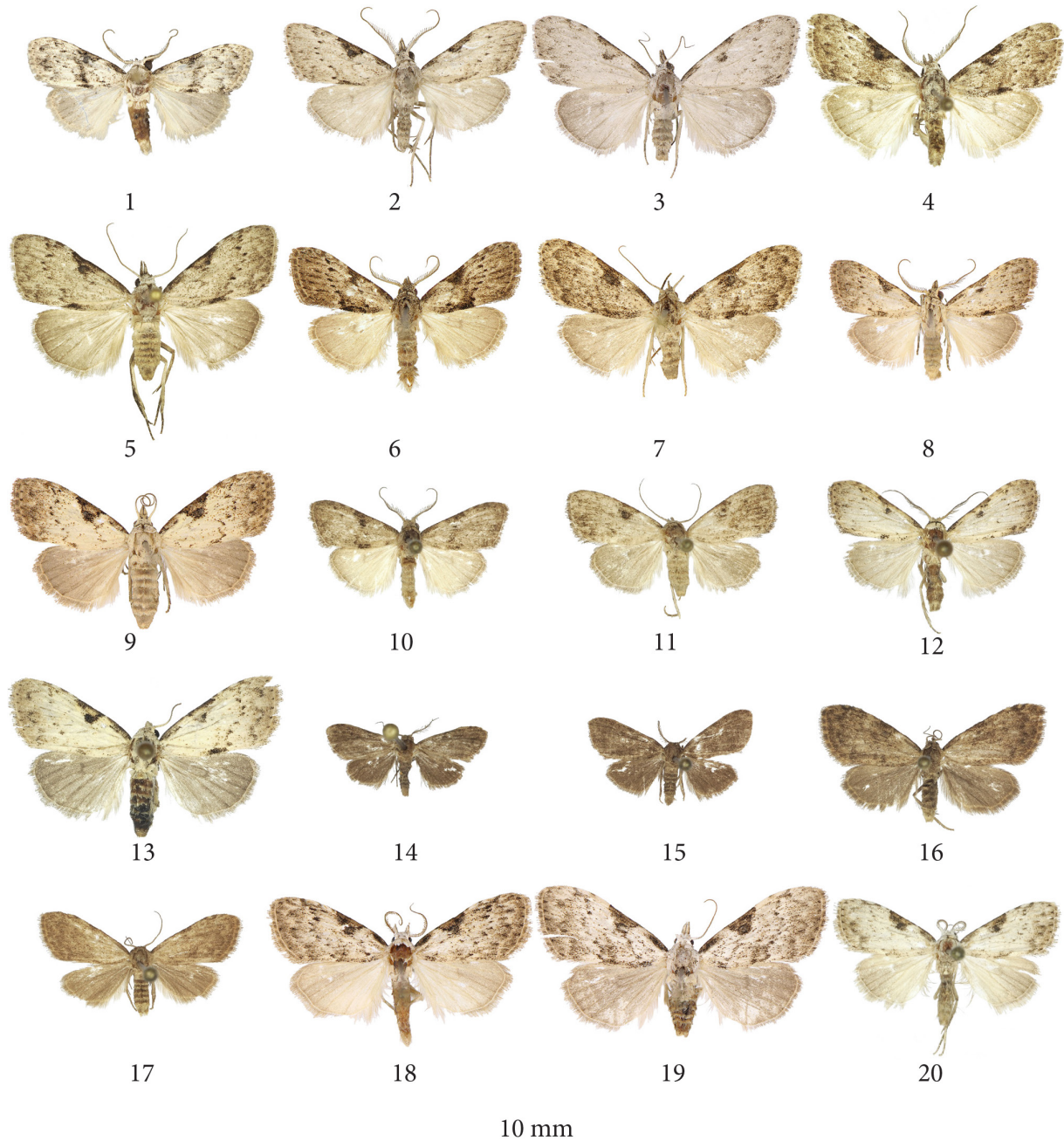
The author declares that, to the best of his knowledge, he conforms to the national regulations and meets with the conditions and requirements of International Conventions concerning collecting/export and handling of the specimens presented in this Article.

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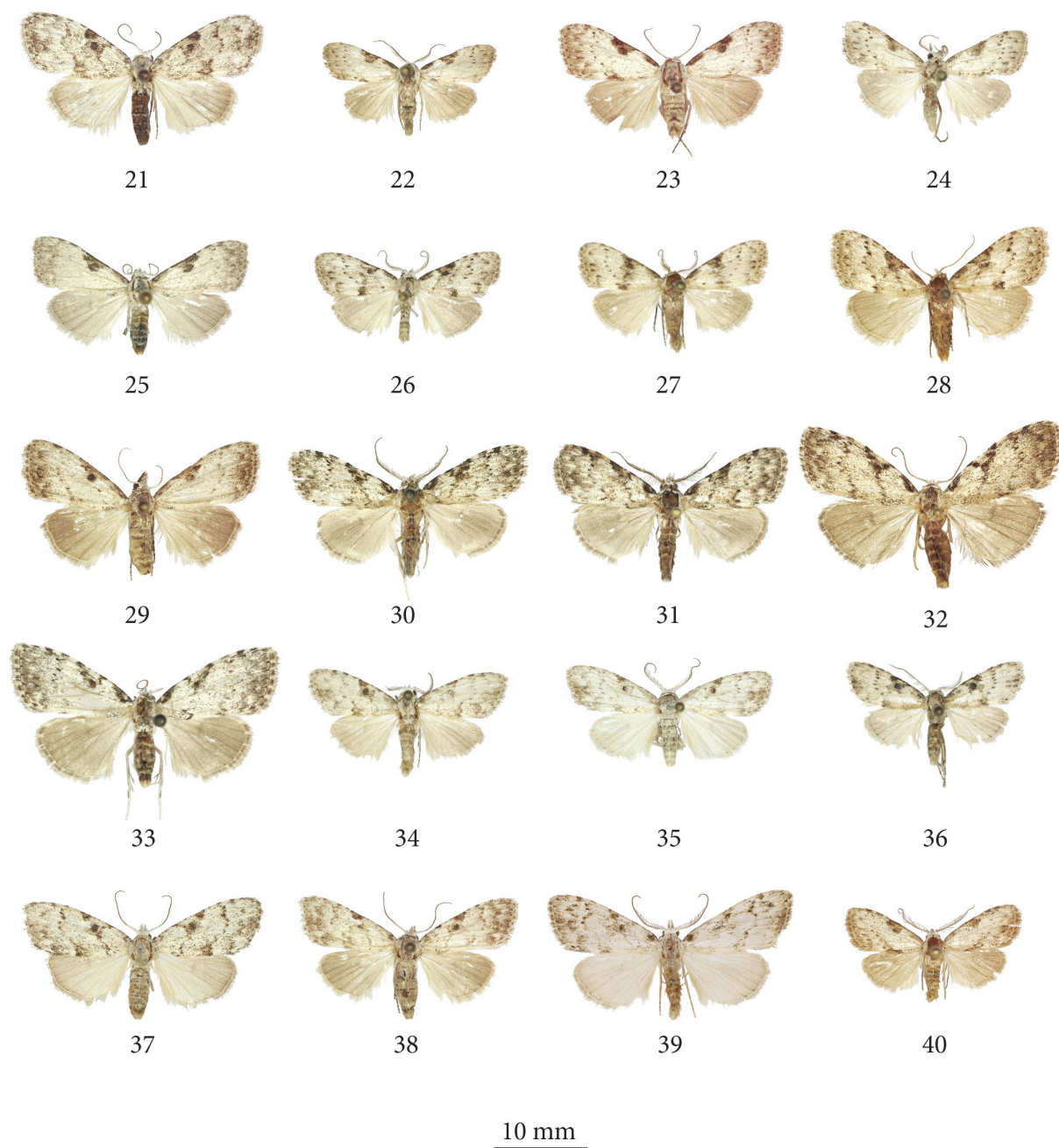
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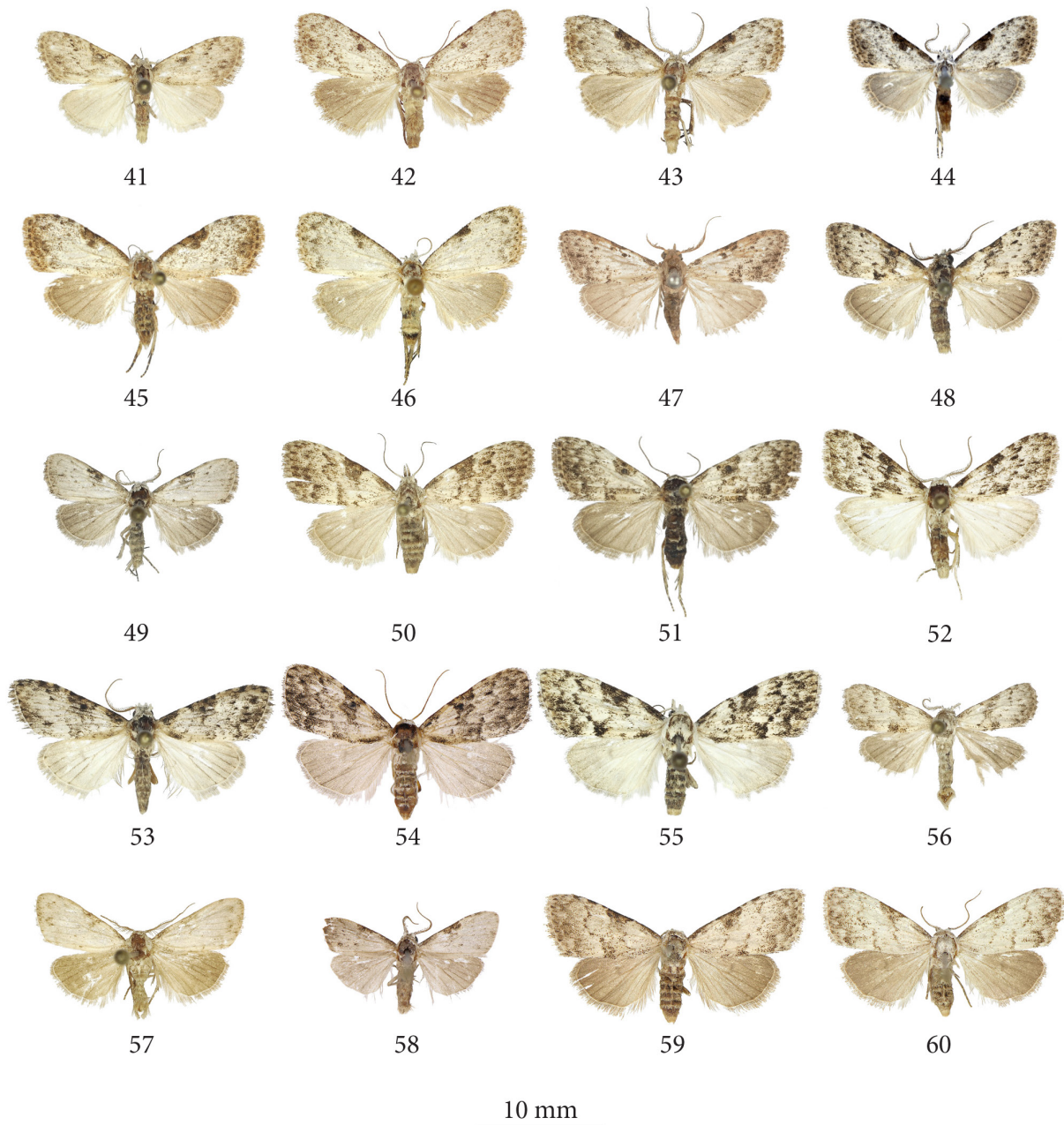
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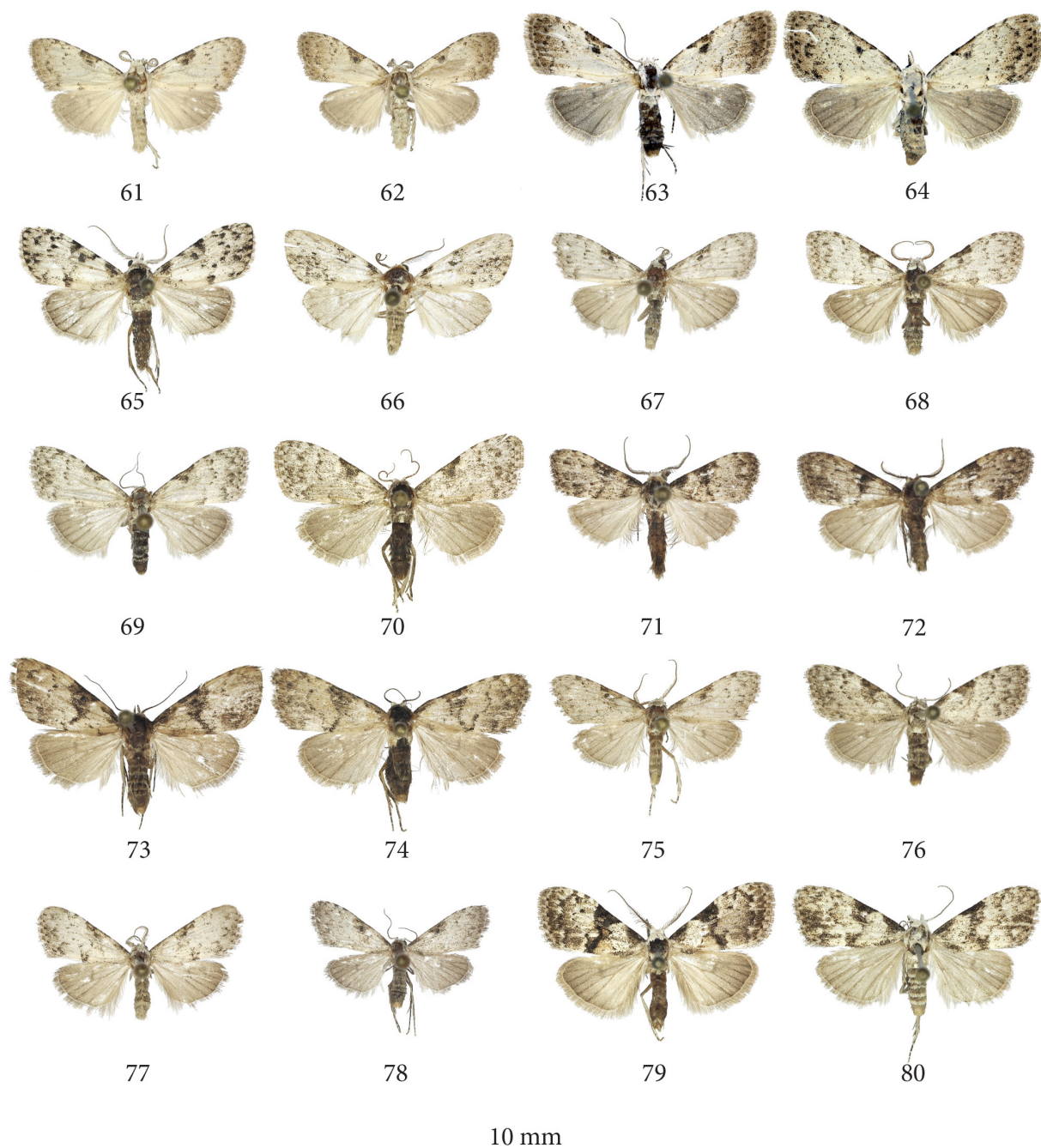
Figures 1–20. Adults (all in coll. ANHRT). 1. *Meganola monofascia monofascia*, ♂, RSA, GS: LGNA 208; 2. *Idem*, ♂, Mozambique, GS: LGNA 638; 3. *Idem*, ♀, Mozambique, GS: LGNA 641; 4. *Idem*, ♂, Zambia, GS: LGNA 1032; 5. *Idem*, ♀, Zambia, GS: LGNA 1028; 6. *M. monofascia dissoluta*, ♂, Cameroon, GS: LGNA 568; 7. *Idem*, ♀, Cameroon, GS: LGNA 866; 8. *Idem*, ♂, Liberia, GS: LGNA 583; 9. *Idem*, ♀, Liberia, GS: LGNA 584; 10. *Idem*, ♂, Senegal, GS: LGNA 1558; 11. *Idem*, ♀, Senegal, GS: LGNA 1562; 12. *Idem*, ♂, Congo, GS: LGNA 1883; 13. *Idem*, ♀, Congo, GS: LGNA 1832; 14. *M. perfusca*, ♂, Côte d'Ivoire, GS: LGNA 1734; 15. *Idem*, ♂, Liberia; 16. *Idem*, ♀, Côte d'Ivoire; 17. *Idem*, ♀, Liberia; 18. *M. bispermutata bispermutata*, ♂, Mozambique, GS: LGNA 637; 19. *Idem*, ♀, Mozambique, GS: LGNA 644; 20. *Idem*, ♂, Malawi, GS: LGNA 1583.



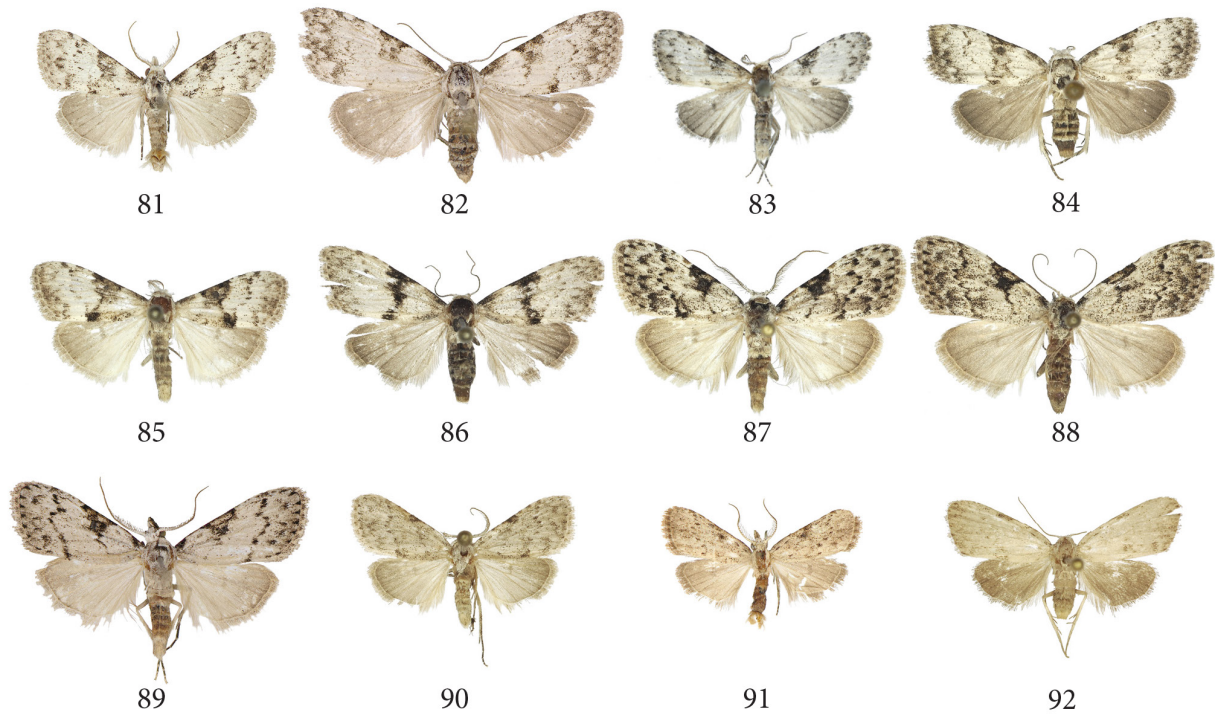
Figures 21–40. Adults (all in coll. ANHRT). 21. *Meganola bispermutata bispermutata*, ♀, Uganda, GS: LGNA 1716; 22. *M. bispermutata cryptochra*, ♂, Guinea; 23. *Idem*, ♀, Guinea, GS: LGNA 1247; 24. *Idem*, ♂, Congo, GS: LGNA 1388; 25. *Idem*, ♀, Congo, GS: LGNA 1491; 26. *M. diagrapha*, ♂, Côte d'Ivoire, GS: LGNA 1592; 27. *Idem*, ♂, Guinea, GS: LGNA 1565; 28. *Idem*, ♀, Guinea, GS: LGNA 1164; 29. *Idem*, ♀, Liberia, GS: LGNA 978; 30. *M. saotomeana* sp. n., HT, ♂, São Tomé, GS: LGNA 1605; 31. *Idem*, PT, ♂, São Tomé; 32. *Idem*, PT, ♀, São Tomé, GS: LGNA 1288; 33. *Idem*, ♀, São Tomé, GS: LGNA 1606; 34. *M. pachygrapha*, ♂, Côte d'Ivoire, GS: LGNA 1549; 35. *Idem*, ♂, Côte d'Ivoire; 36. *Idem*, ♂, Congo, GS: LGNA 1777; 37. *Idem*, ♀, Cameroon; 38. *Idem*, ♀, Liberia, GS: LGNA 977; 39. *Idem*, ♂, Kenya, GS: LGNA 806; 40. *M. dananae*, ♂, Guinea, GS: LGNA 1151.



Figures 41–60. Adults (all in coll. ANHRT, unless otherwise indicated). **41.** *Meganola dananae*, ♂, Côte d'Ivoire, GS: LGNA 1963; **42.** *Idem*, ♀, Guinea, GS: LGNA 988; **43.** *M. baaka* **sp. n.**, HT, ♂, Gabon, GS: LGNA 1582; **44.** *Idem*, PT, ♂, Congo, GS: ANHRT 02216; **45.** *Idem*, PT, ♀, Congo, GS: LGNA 1384; **46.** *Idem*, PT, ♀, Congo, GS: LGNA 1490; **47.** *M. furvitincta furvitincta*, LT, ♂, Sierra Leone, GS: BM Arct 6469 (prep. by László) (NHMUK); **48.** *Idem*, ♂, Côte d'Ivoire, GS: LGNA 1964; **49.** *Idem*, ♂, Congo, GS: LGNA 1774; **50.** *Idem*, ♀, Guinea, GS: LGNA 1604; **51.** *Idem*, ♀, Côte d'Ivoire, GS: LGNA 1589; **52.** *M. furvitincta polyographa*, ♂, Zambia, GS: LGNA 1010; **53.** *Idem*, ♂, Malawi, GS: LGNA 1788; **54.** *Idem*, ♀, Zambia, GS: LGNA 758; **55.** *Idem*, ♀, Zambia, GS: LGNA 1971; **56.** *M. spherographata* **sp. n.**, HT, ♂, Gabon, GS: LGNA 1576; **57.** *Idem*, PT, ♂, Liberia, GS: LGNA 1176; **58.** *Idem*, ♂, Liberia, GS: LGNA 861; **59.** *Idem*, ♀, Liberia, GS: LGNA 587; **60.** *Idem*, ♀, Liberia, GS: LGNA 864.

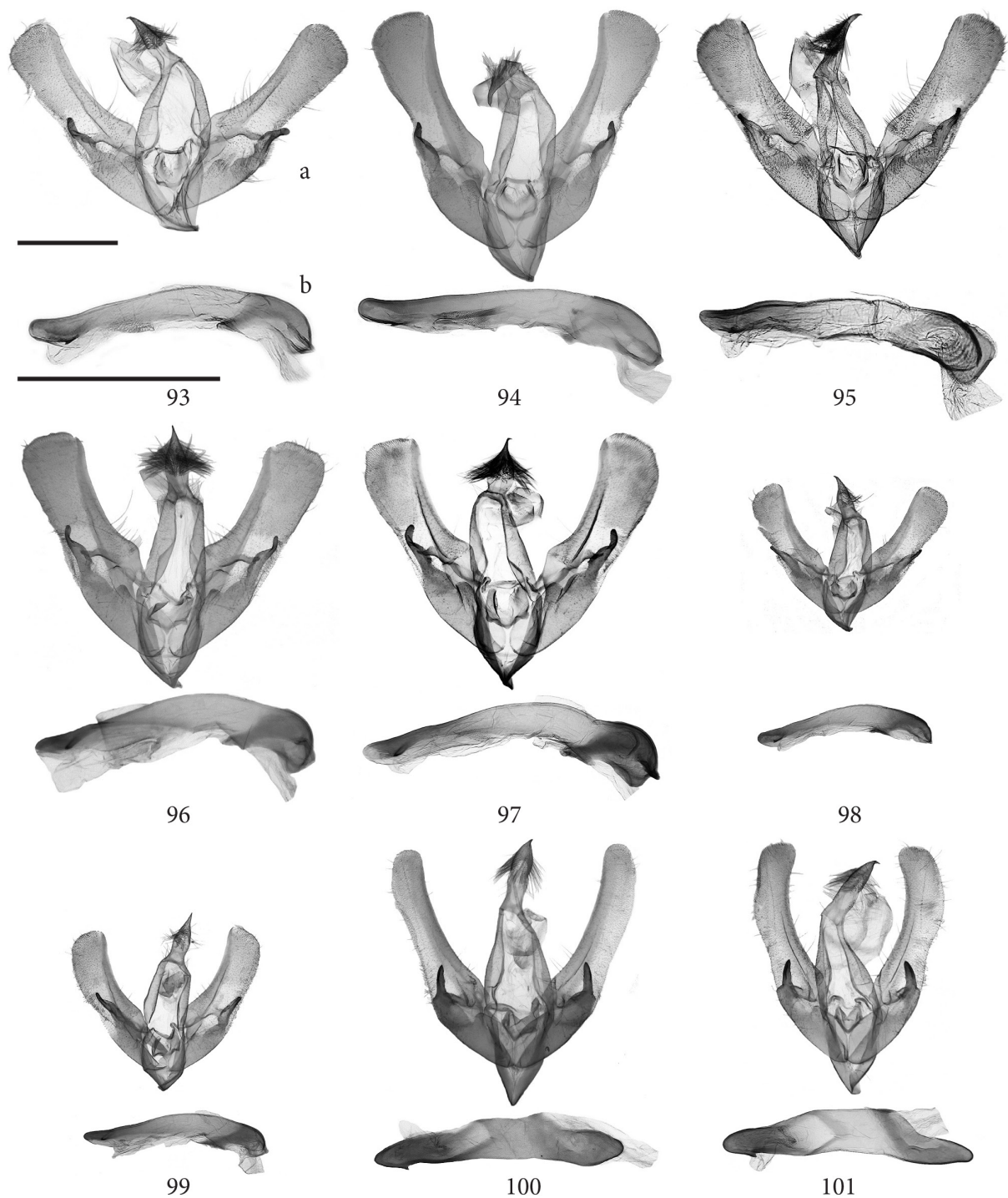


Figures 61–80. Adults (all in coll. ANHRT). 61. *Meganola aarviki*, ♂, Congo, GS: LGNA 1359; 62. *Idem*, ♂, Congo, GS: LGNA 1355; 63. *Idem*, ♀, Congo, GS: ANHRT 02310; 64. *Idem*, ♀, Congo, GS: ANHRT 02552; 65. *M. stigmatographa*, ♂, Zambia, GS: LGNA 1967; 66. *Idem*, ♂, Zambia, GS: LGNA 1673; 67. *M. palaeographa*, ♂, Congo, GS: LGNA 1775; 68. *Idem*, ♂, Côte d'Ivoire; 69. *Idem*, ♀, Congo, GS: LGNA 1778; 70. *Idem*, ♀, Côte d'Ivoire, GS: LGNA 1169; 71. *M. dicranographa*, ♂, Cameroon; 72. *Idem*, ♂, Côte d'Ivoire; 73. *Idem*, ♀, Cameroon; 74. *Idem*, ♀, Côte d'Ivoire; 75. *M. fontainei*, ♂, Gabon, GS: LGNA 1575; 76. *Idem*, ♀, Gabon, GS: LGNA 1574; 77. *Idem*, ♂, Congo, GS: LGNA 1772; 78. *Idem*, ♀, Congo, GS: LGNA 1506; 79. *Idem*, ♂, Zambia, GS: LGNA 1976; 80. *Idem*, ♀, Zambia, GS: LGNA 1981.

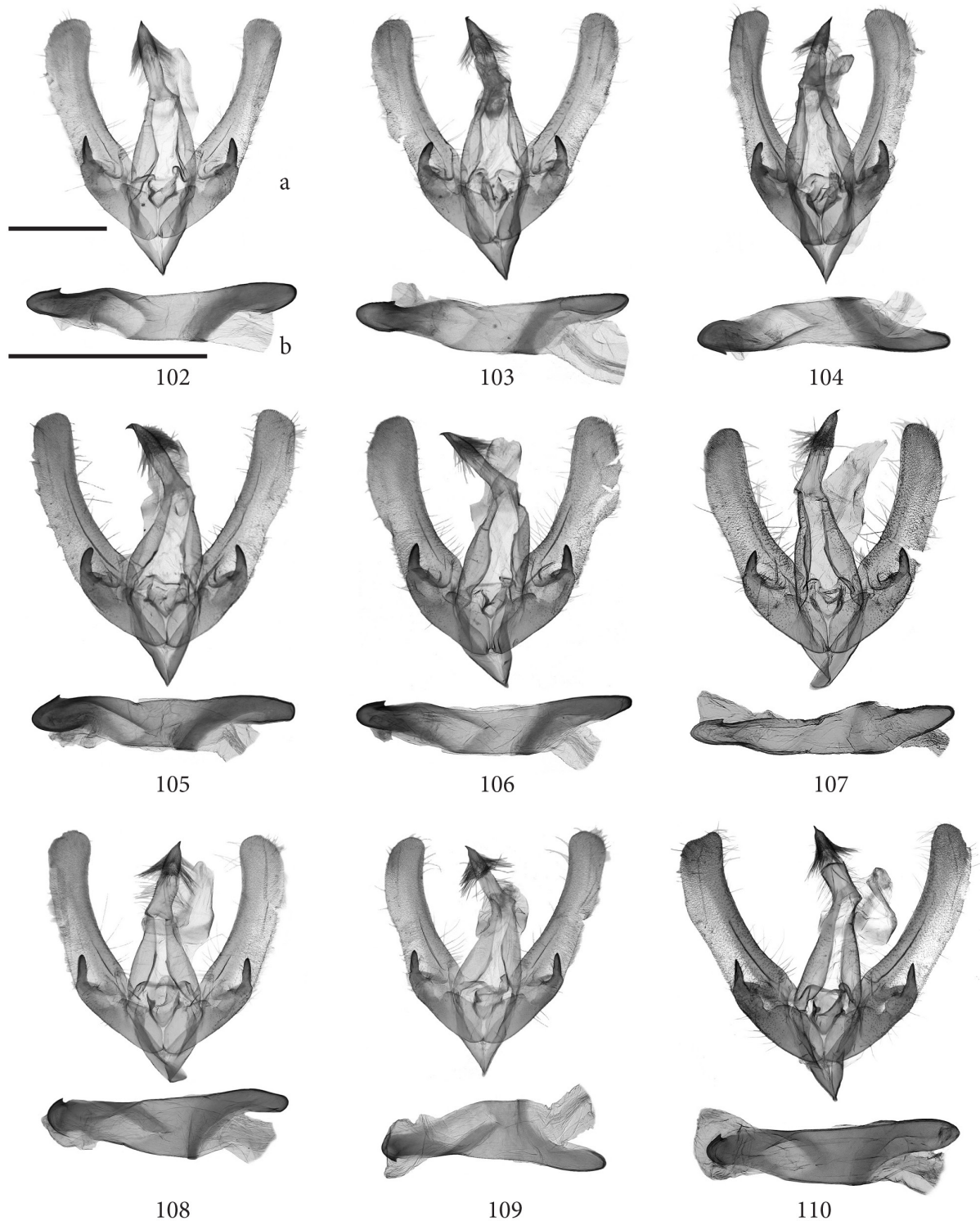


10 mm

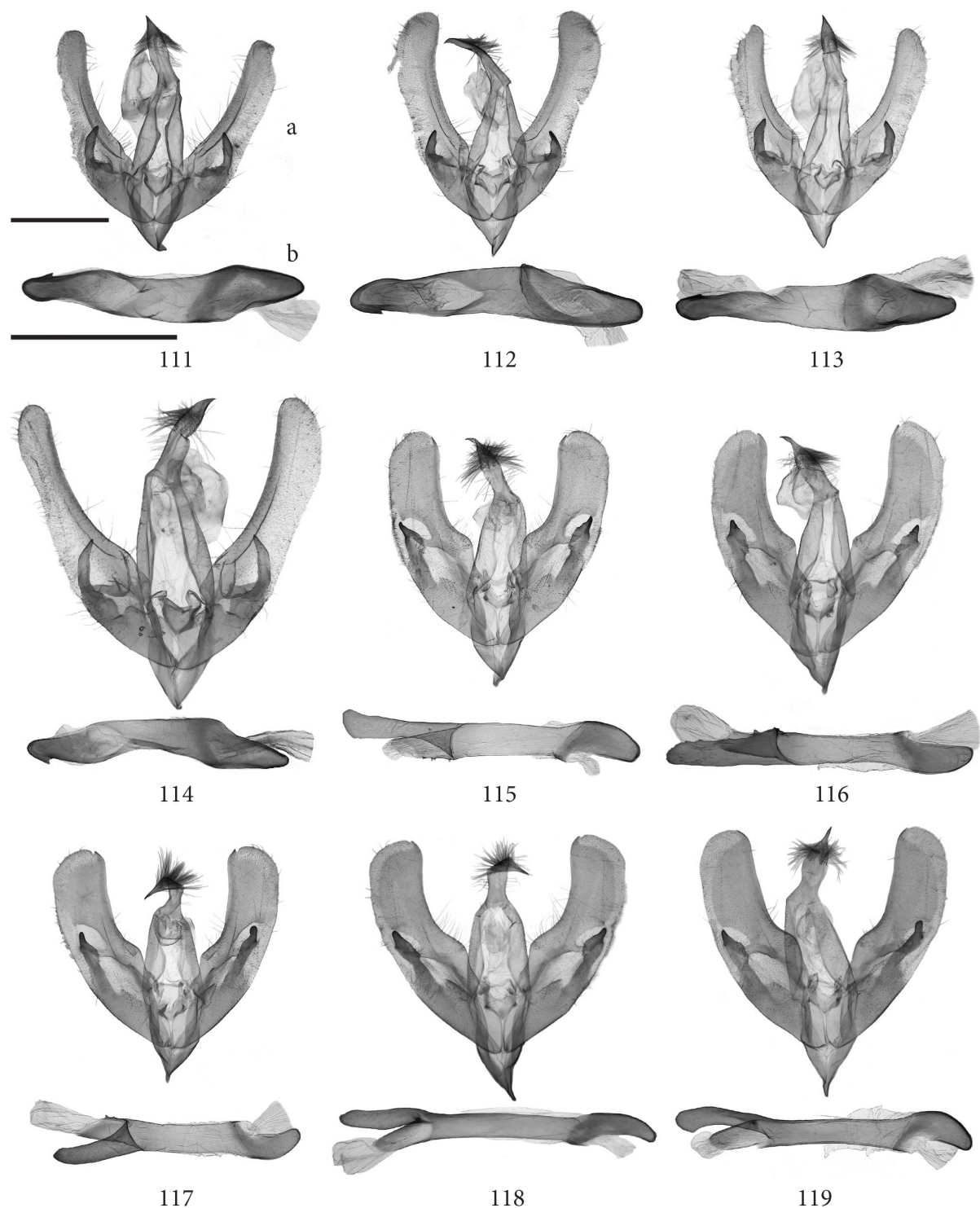
Figures 81–92. Adults (all in coll. ANHRT). **81.** *Meganola trigonographa*, ♂, Liberia, GS: LGNA 862; **82.** *Idem*, ♀, Liberia; **83.** *Idem*, ♂, Congo, GS: ANHRT 02233; **84.** *Idem*, ♀, Congo, GS: LGNA 1692; **85.** *Idem*, ♂, Zambia, GS: LGNA 1965; **86.** *Idem*, ♀, Zambia, GS: LGNA 1966; **87.** *M. ochromorpha*, ♂, Zambia; **88.** *Idem*, ♀, Zambia; **89.** *Idem*, ♂, Mozambique, GS: LGNA 636; **90.** *Idem*, ♂, Gabon, GS: LGNA 1278; **91.** *M. canocolorata* (PT of *M. taiana* **syn. n.**), ♂, Liberia, GS: LGNA 487; **92.** *Idem*, ♀, Liberia, GS: LGNA 985.



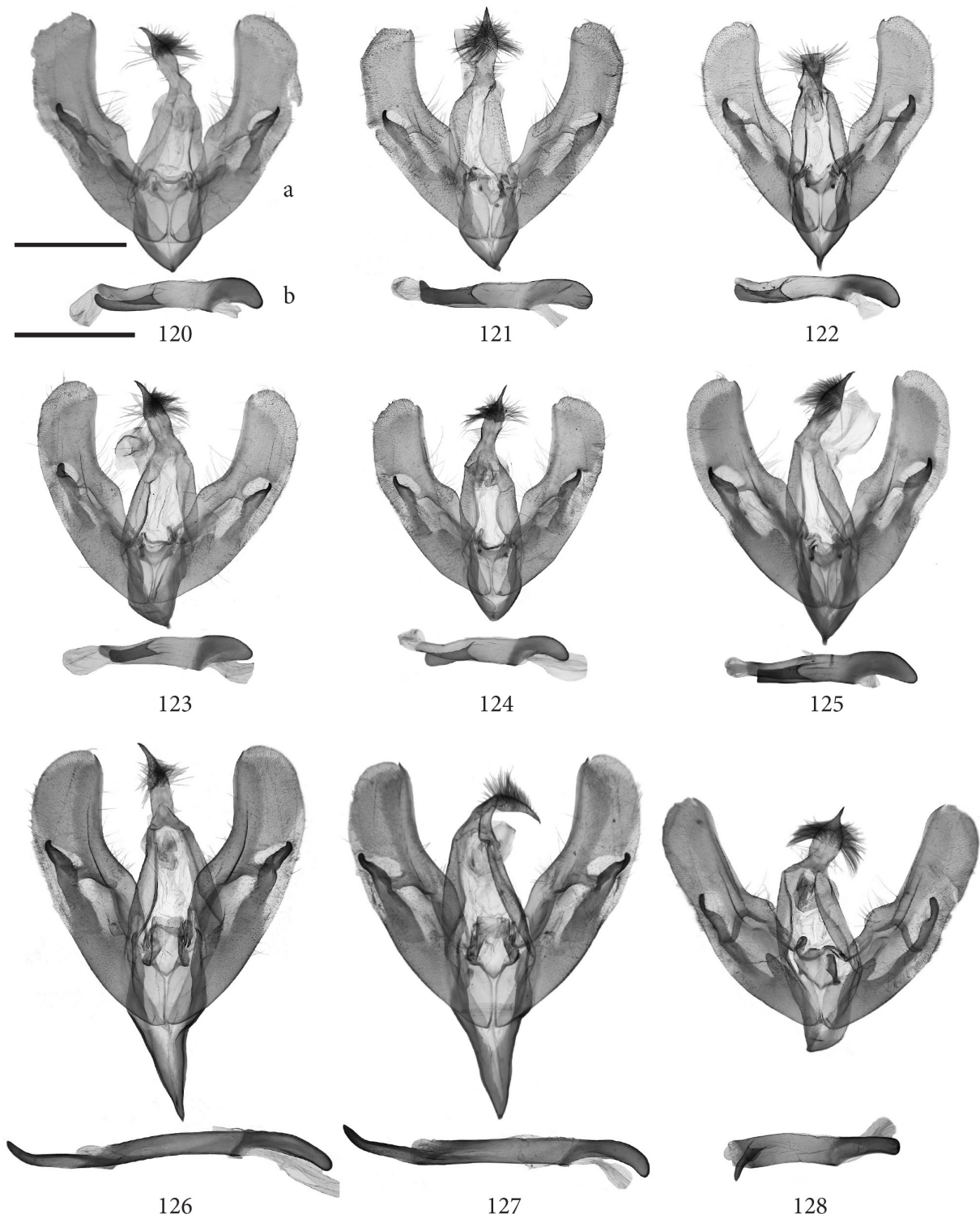
Figures 93–101. Male genitalia, a: clasper apparatus, b: aedeagus (all in coll. ANHRT). 93. *Meganola monofascia monofascia*, RSA, GS: LGNA 208; **94.** *Idem*, Zambia, GS: LGNA 1032; **95.** *M. monofascia dissoluta*, Cameroon, GS: LGNA 568; **96.** *Idem*, Guinea, GS: LGNA 1555; **97.** *Idem*, Congo, GS: LGNA 1693; **98.** *M. perfusca*, Côte d'Ivoire, GS: LGNA 1734; **99.** *Idem*, Congo, GS: LGNA 1468; **100.** *M. bispermutata bispermutata*, Mozambique, GS: LGNA 640; **101.** *Idem*, Malawi, GS: LGNA 1583 (scale bars = 1 mm).



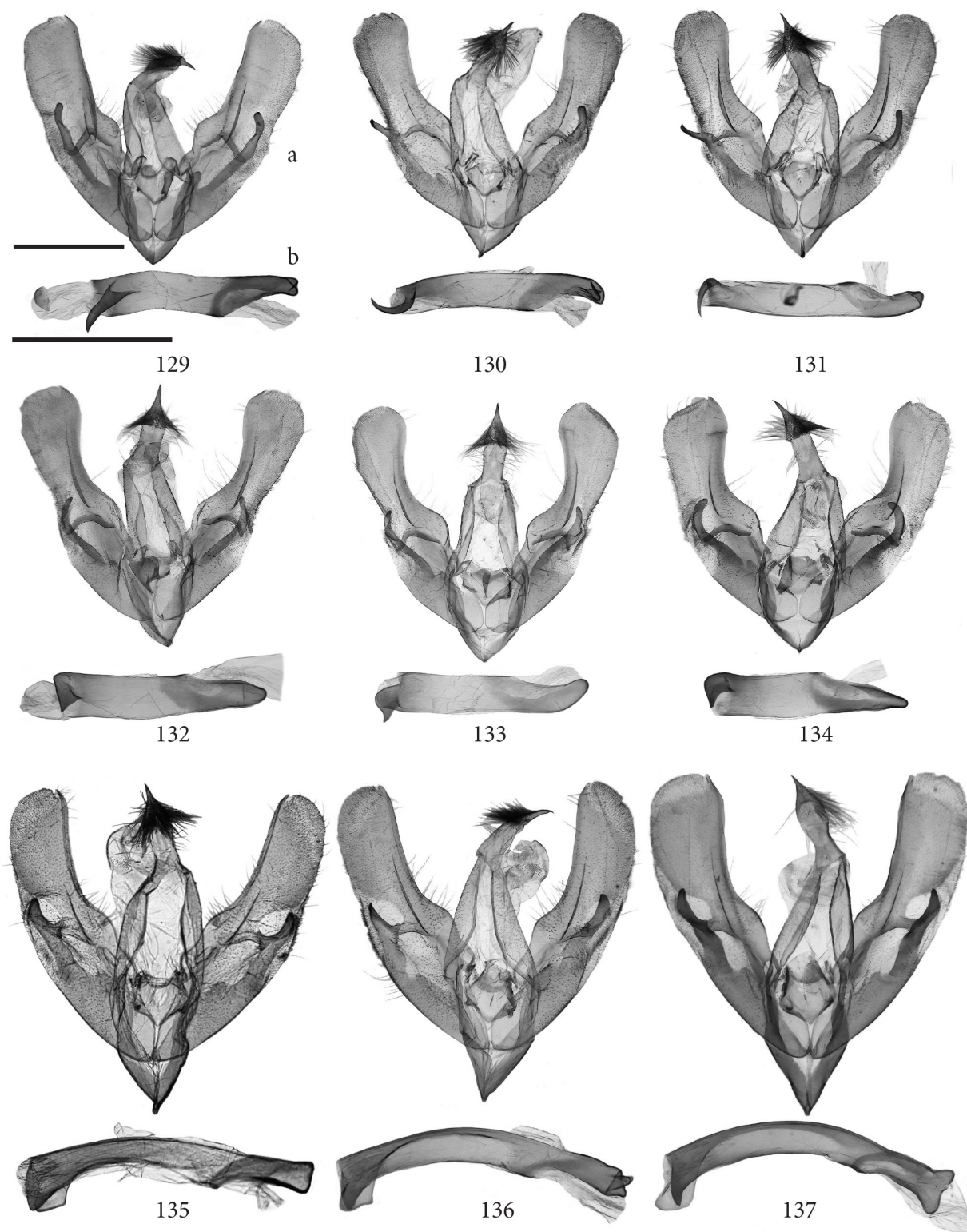
Figures 102–110. Male genitalia, a: clasping apparatus, b: aedeagus (all in coll. ANHRT). 102. *Meganola bispermutata cryptochra*, Guinea, GS: LGNA 1571; **103.** *Idem*, Congo, GS: LGNA 1388; **104.** *M. diagrapha*, Côte d'Ivoire, GS: LGNA 1592; **105.** *Idem*, Guinea, GS: LGNA 1565; **106.** *M. saotomeana* **sp. n.**, HT, São Tomé, GS: LGNA 1605; **107.** *Idem*, PT, São Tomé, GS: LGNA 388; **108.** *M. pachygrapha*, Côte d'Ivoire, GS: LGNA 1549; **109.** *Idem*, Congo, GS: LGNA 1777; **110.** *Idem*, Kenya, GS: LGNA 806 (scale bars = 1 mm).



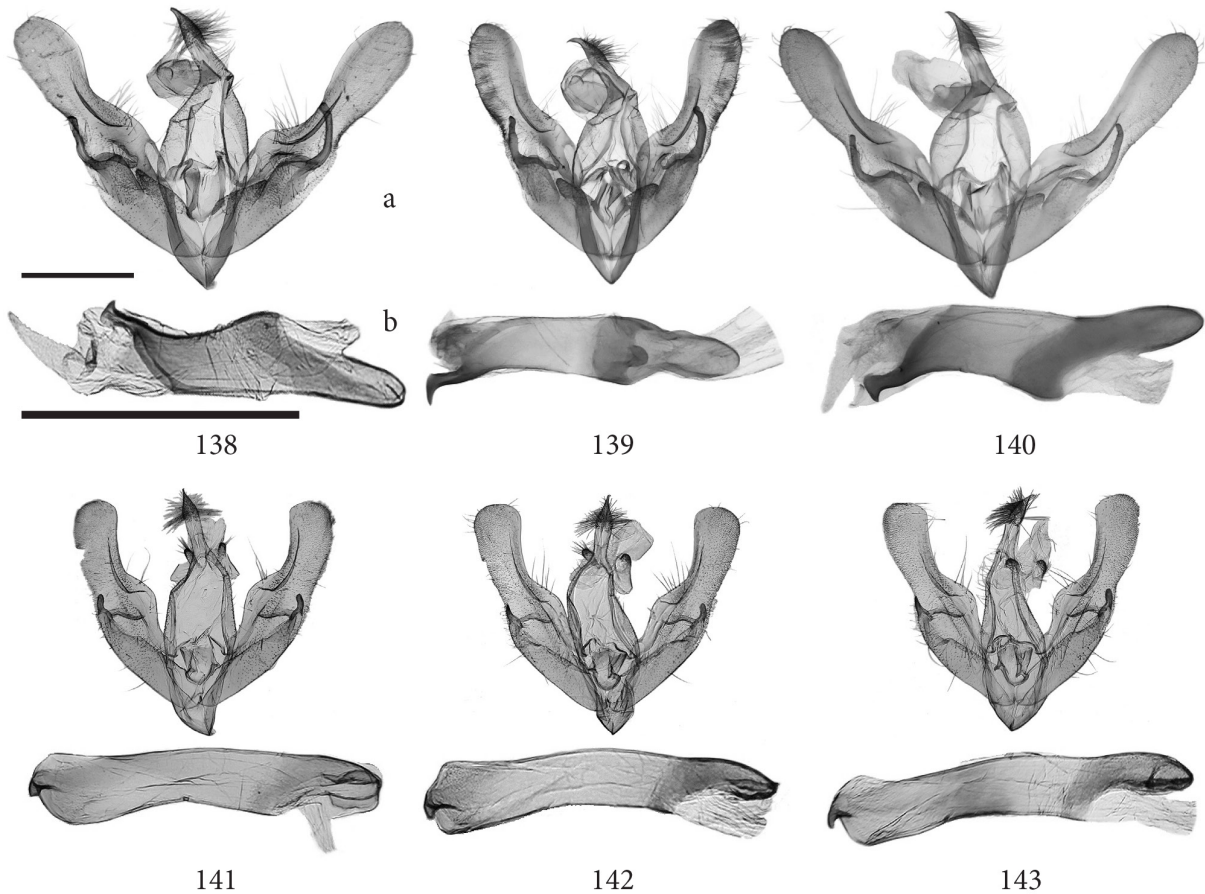
Figures 111–119. Male genitalia, a: clasper apparatus, b: aedeagus (all in coll. ANHRT). 111. *Meganola dananae*, Guinea, GS: LGNA 1538; 112. *Idem*, Côte d'Ivoire, GS: LGNA 1962; 113. *M. baaka* sp. n., HT, Gabon, GS: LGNA 1582; 114. *Idem*, PT, Congo, GS: LGNA 1318; 115. *M. furvitincta furvitincta*, Côte d'Ivoire, GS: LGNA 1964; 116. *Idem*, Liberia, GS: LGNA 1591; 117. *Idem*, Congo, GS: LGNA 1774; 118. *M. furvitincta polyographa*, Zambia, GS: LGNA 1010; 119. *Idem*, Malawi, GS: LGNA 1788 (scale bars = 1 mm).



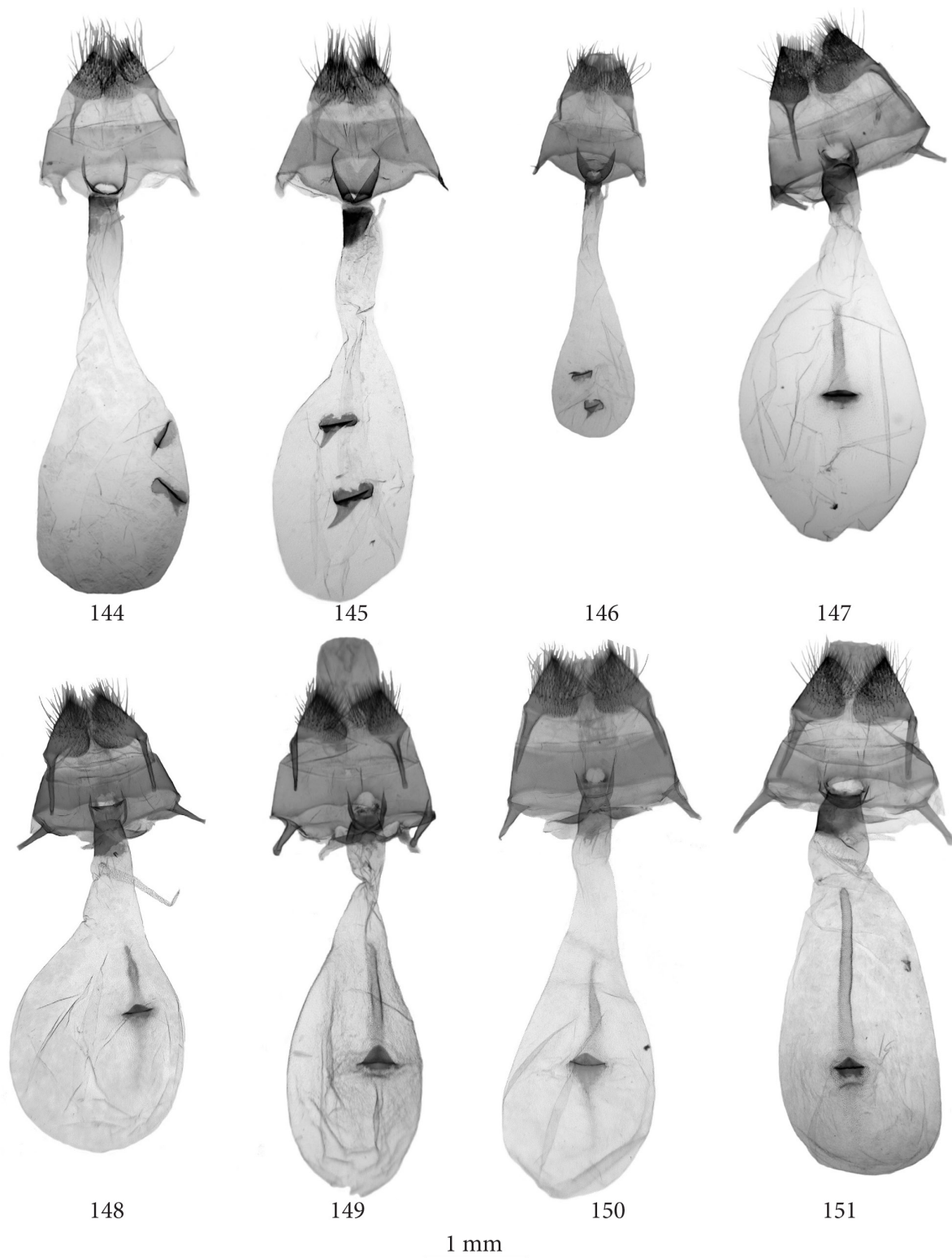
Figures 120–128. Male genitalia, a: clasping apparatus, b: aedeagus (all in coll. ANHRT). 120. *Meganola spherographata*, sp. n., HT, Gabon, GS: LGNA 1576; **121.** *Idem*, PT, Liberia, GS: LGNA 1176; **122.** *Idem*, PT, Côte d'Ivoire, GS: LGNA 228; **123.** *M. aarviki*, Congo, GS: LGNA 1359; **124.** *Idem*, Congo, GS: LGNA 1355; **125.** *Idem*, Côte d'Ivoire, GS: LGNA 980; **126.** *M. stigmatographa*, Zambia, GS: LGNA 1673; **127.** *Idem*, Zambia, GS: LGNA 1967; **128.** *M. palaeographa*, Congo, GS: LGNA 1775 (scale bars = 1 mm).



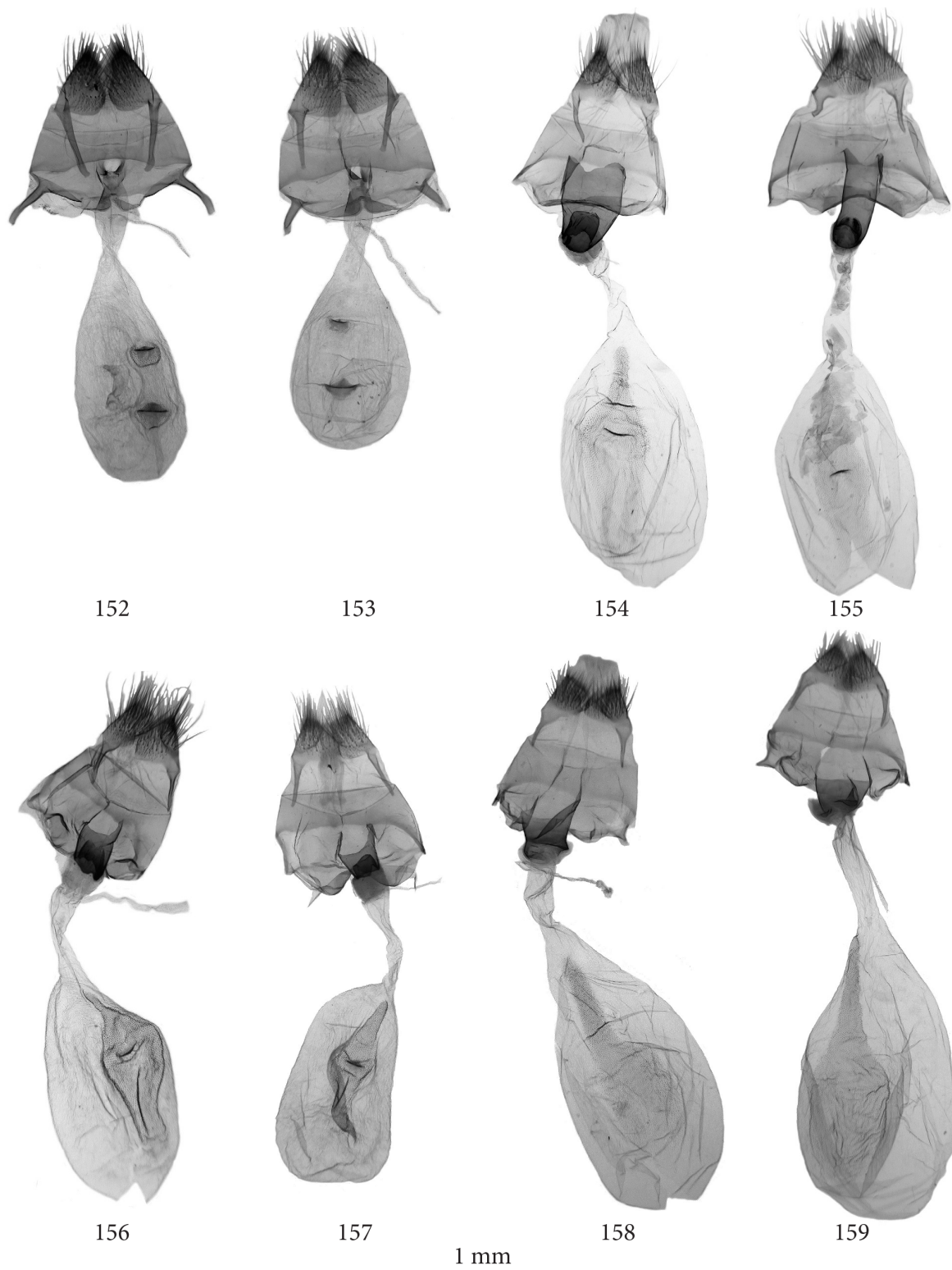
Figures 129–137. Male genitalia, a: clasp apparatus, b: aedeagus (all in coll. ANHRT). 129. *Meganola palaeographa*, Côte d'Ivoire, GS: LGNA 1536; **130.** *M. dicranographa*, Cameroon, GS: LGNA 1159; **131.** *Idem*, Côte d'Ivoire, GS: LGNA 1204; **132.** *M. fontainei*, Gabon, GS: LGNA 1575; **133.** *Idem*, Congo, GS: LGNA 1772; **134.** *Idem*, Zambia, GS: LGNA 1976; **135.** *M. trigonographa*, Liberia, GS: LGNA 537; **136.** *Idem*, Gabon, GS: LGNA 1170; **137.** *Idem*, Zambia, GS: LGNA 1965 (scale bars = 1 mm).



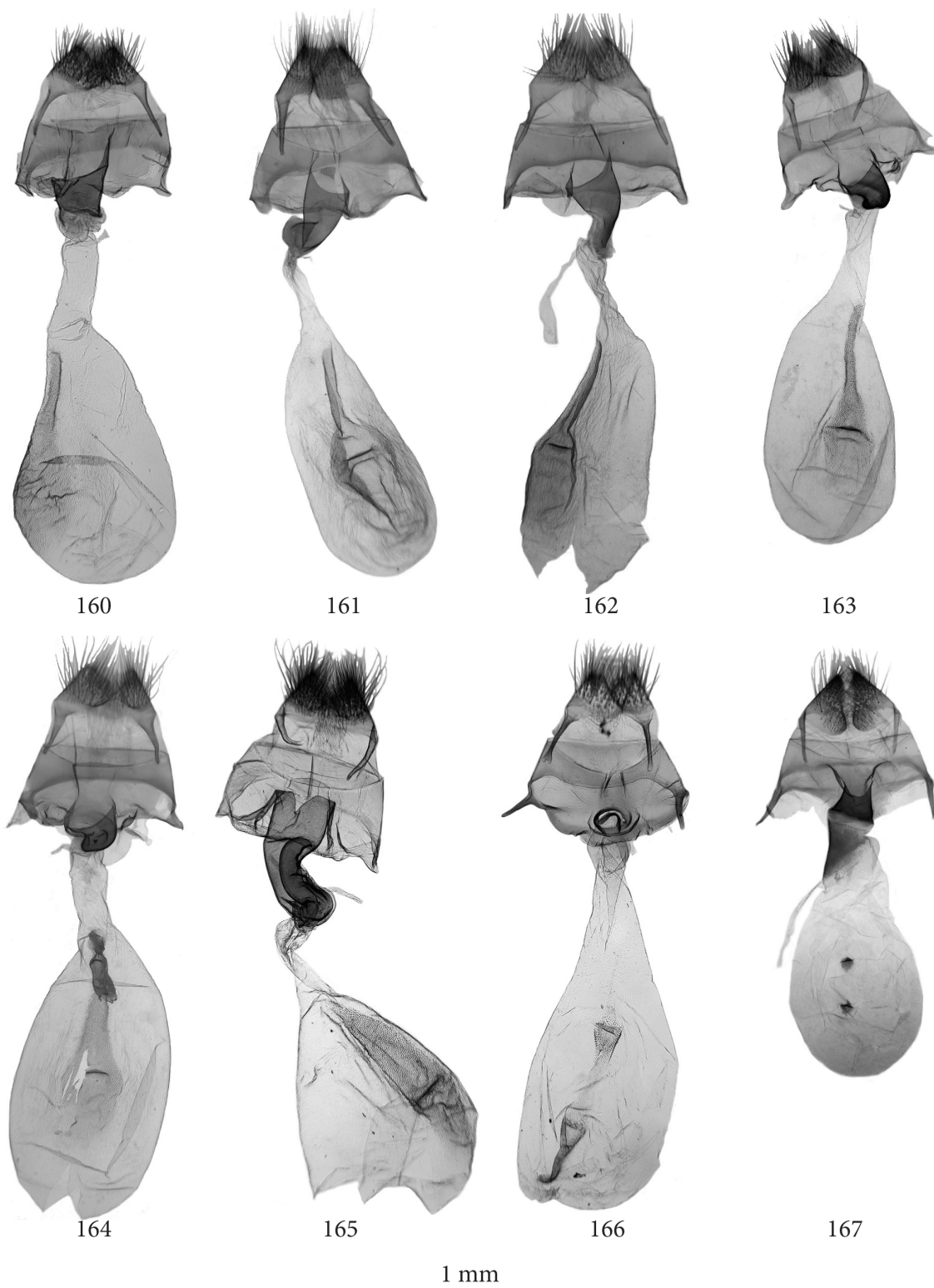
Figures 138–143. Male genitalia, a: clasp apparatus, b: aedeagus (all in coll. ANHRT). 138. *Meganola ochromorpha*, Zambia, GS: LGNA 8; **139.** *Idem*, Gabon, GS: LGNA 1278; **140.** *Idem*, Mozambique, GS: LGNA 636; **141.** *M. canocolorata*, Liberia, GS: LGNA 487; **142.** *Idem*, Sierra Leone, GS: LGNA 409; **143.** *Idem*, HT of *M. taiana*, Côte d'Ivoire, GS: LGNA 142 (scale bars = 1 mm).



Figures 144–151. Female genitalia (all in coll. ANHRT). **144.** *Meganola monofascia monofascia*, Mozambique, GS: LGNA 641; **145.** *M. monofascia dissoluta*, Cameroon, GS: LGNA 1787; **146.** *M. perfusca*, Congo, GS: LGNA 1517; **147.** *M. bispermutata bispermutata*, Mozambique, GS: LGNA 644; **148.** *M. bispermutata cryptochra*, Guinea, GS: LGNA 1247; **149.** *M. diagrapha*, Guinea, GS: LGNA 1164; **150.** *M. saotomeana*, **sp. n.**, PT, São Tomé, GS: LGNA 1288; **151.** *M. pachygrapha*, Liberia, GS: LGNA 977.



Figures 152–159. Female genitalia (all in coll. ANHRT). **152.** *Meganola dananae*, Guinea, GS: LGNA 1696; **153.** *M. baaka* **sp. n.**, PT, Congo, GS: LGNA 1490; **154.** *M. furvitincta furvitincta*, Guinea, GS: LGNA 1604; **155.** *M. furvitincta poliographa*, Zambia, GS: LGNA 1971; **156.** *M. spherographata* **sp. n.**, PT, Liberia, GS: LGNA 1167; **157.** *M. aarviki*, Congo, GS: LGNA 1382; **158.** *M. palaeographa*, Congo, GS: LGNA 1778; **159.** *Idem*, Côte d'Ivoire, GS: LGNA 1578.



Figures 160–167. Female genitalia (all in coll. ANHRT). 160. *Meganola palaeographa*, Tanzania, GS: LGNA 259; 161. *M. dicranographa*, Côte d'Ivoire, GS: LGNA 1246; 162. *Idem*, Zambia, GS: LGNA 1966; 163. *M. fontainei*, Gabon, GS: LGNA 1581; 164. *Idem*, Zambia, GS: LGNA 1981; 165. *M. trigonographa*, Liberia, GS: LGNA 588; 166. *M. ochromorpha*, Zambia, GS: LGNA 20; 167. *M. canocolorata*, Guinea, GS: LGNA 987.