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## A review of the genus *Antheua* Walker, 1855 with descriptions of 19 new species and one new subspecies (Lepidoptera: Notodontidae: Phalerinae)

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### Abstract

In this paper, the Afrotropical species of the genus *Antheua* Walker, 1855 are revised based on morphological assessments. The genus comprises 44 valid species, 19 of which are described as new to science: *Antheua obtusipuncta* sp. nov., *A. lobo* sp. nov., *A. lemona* sp. nov., *A. nicholsonrobertsi* sp. nov., *A. hirutae* sp. nov., *A. smithi* sp. nov., *A. galbina* sp. nov., *conspicua* sp. nov., *politzari* sp. nov., *A. reducta* sp. nov., *A. lungu* sp. nov., *A. lunda* sp. nov., *A. kaffa* sp. nov., *A. melanotornata* sp. nov., *A. pyrasa* sp. nov., *A. editae* sp. nov., *A. magnipuncta* sp. nov., *A. triloris* sp. nov., *A. interstincta* sp. nov., and *Parazana* Bethune-Baker, 1911 stat. rev. treated formerly as a synonym of *Antheua*, is reinstated as a valid genus comprising two species: *Parazana albifasciata* (Hampson, 1910) comb. nov. and *Parazana rufovitata* (Aurivillius, 1901) comb. nov. Seven new synonyms are introduced: *Antheua gaedei* Kiriakoff, 1962 syn. nov. = *Antheua trivitta* Hampson, 1910, *Antheua olivaceomicans* Strand, 1912 syn. nov. = *Antheua spurcata* Walker, 1864, *Rigema unguolata* Berio, 1938 syn. nov. = *Antheua nigristriga* (de Joannis, 1913), *Antheua birbirana* Viette, 1954 syn. nov. = *Antheua croceipuncta* Hampson, 1910, *Antheua benguelana* Viette, 1954 syn. nov. and *Antheua trimacula* Kiriakoff, 1954 syn. nov. = *Antheua insignata* Gaede, 1928, and *Parazana radiata* Bethune-Baker, 1911 syn. nov. = *Parazana albifasciata* (Hampson, 1910). *Antheua imitata* (Druce, 1896) comb. nov., *Antheua lydenburgi* (Distant, 1899) comb. nov., *Antheua angolana* (Strand, 1912) comb. nov., and *Antheua acholi* Bethune-Baker, 1908 stat. rev., comb. nov. are transferred to *Antheua* from the genus *Phalera* Hübner, 1819, and the latter species is reinstated as valid species from synonymy with *Antheua atrata* (Grünberg, 1907). A new subspecies, *A. imitata hespera* sp. nov. is described for the West African populations of the species. *Antheua nigristriga* (de Joannis, 1913) stat. rev., comb. nov. is reinstated from synonymy with *Antheua atrata* (Grünberg, 1907) and transferred to *Antheua* from *Phalera*. *Antheua anomala* Berio, 1937 is downgraded to subspecies of *Antheua tricolor* Walker, 1855: *Antheua tricolor anomala* Berio, 1937 stat. nov. Adults and genitalia of all taxa are figured through their primary types (where available) and additional specimens demonstrating intraspecific variability. The currently known distribution of all taxa is illustrated on individual dot maps. A dendrogram generated using Maximum Likelihood analysis of DNA barcodes illustrates the phylogenetic relationships between *A. imitata* and closely related taxa.

**Key words** Afrotropics, genitalia morphology, lectotype designation, new combination, new synonym, *Parazana*, revised status, taxonomy.

## Introduction

Since the series of publications by Kiriakoff (1962, 1964, 1965, 1969, 1970, 1979) in the 1960s and 1970s, the Afrotropical Notodontidae has largely been overlooked by taxonomists. However, over the past couple of decades, entomological research in Africa has increased significantly, resulting in a substantial accumulation of Notodontidae material in various institutional and private collections. Preliminary studies of modern material indicate a wealth of undescribed taxa and suggest that the taxonomy and classification of the entire family require revision. This has resulted in a renewed interest in taxonomic and phylogenetic research on the Afrotropical Notodontidae, culminating in several recent publications (Schintlmeister & Witt 2015, László *et al.* 2021, Mulvaney 2021, St Laurent *et al.* 2023, Mulvaney *et al.* 2024, St Laurent *et al.* 2025). To address the numerous taxonomic challenges within the Afrotropical Notodontidae, the authors of this paper plan to review all relevant genera through a series of revisional papers, beginning with the genus *Antheua* Walker, 1855.

*Antheua* is a diverse genus primarily found in the Afrotropics, with a single Asian species, *A. servula* (Drury, 1773). The most recent nomenclatural changes for this genus were made by Kiriakoff (1962), who synonymised *Rigema* Walker, 1855, *Zana* Walker, 1855, and *Eutimia* Wallengren, 1858 with *Antheua*. *Parazana* Bethune-Baker, 1911, a genus closely resembling *Antheua*, was also previously synonymised with it (Gaede 1934). Our research, however, demonstrates that these genera are distinct morpho-taxonomical units that merit recognition at the generic level. A recent phylogenetic study aimed at clarifying intrafamilial relationships within Notodontidae found that species from the *atrata* Grünberg, 1907 complex, previously placed in *Phalera* Hübner, 1819, are nested within *Antheua* and consequently, *atrata* was transferred to *Antheua* (St. Laurent *et al.* 2025).

When the larval morphology is concerned, *P. imitata* and *P. lydenburgi* Distant, 1899 are more consistent with *A. simplex* than with *P. bucephala*, as indicated by the presence of long spine-like setae on their dorsal, subdorsal, and lateral verrucae (Fig. 1). In terms of foodplant preferences, *Antheua* caterpillars, including those of the Asian *A. servula* are oligophagous and feed on Poaceae such as rice, maize, and other grasses. *Antheua simplex* has also been reared on various Fabaceae, including *Desmodium* and *Glycine* (Kroon 1999). Interestingly, the Afrotropical *P. imitata* also feeds on Poaceae. In contrast, Eurasiatic *Phalera* and American *Datana* caterpillars are polyphagous or oligophagous on shrubs and trees, but not on Poaceae (Schintlmeister 2008).

This study provides a comprehensive analysis of the Afrotropical *Antheua* to advance the understanding of global Phalerinae systematics.

## Material and methods

### Morphological studies

This review is based on examinations of nearly all primary types (not examined type specimens are indicated in the text), approximately 3000 specimens, and about 300 mounted genitalia slides. The examined specimens are primarily housed in the ANHRT, NHMUK, MWM/ZSM, and CAS collections (abbreviations explained below), as well as in several other institutional and private repositories.

Recent expedition material was sampled by various means of light trapping using a vertical white sheet or a square ground-plan white tent illuminated with a 125W Mercury vapour or 250W blended bulb, and automatic bucket traps equipped with 8W actinic light tubes, cold cathode light tubes or LepiLED light source (Brehm 2017).

The collection specimens were photographed using either a Panasonic DMC-FZ150 camera equipped with a Leica DC Vario-Elmarit lens or a Nikon D90 DSLR camera equipped with a Nikkor AF Micro 60 mm lens. Genitalia structures were extracted following standard protocols (Robinson 1976) and were embedded in Euparal mounted on microscope slides. The genitalia preparations were photographed using either a Tucsen H series digital microscope camera mounted on a Nikon SMZ 1500 stereomicroscope or a Canon EOS 700D camera mounted on a Wild M7Z stereomicroscope. Genitalia terminology follows Miller (1991) and Volynkin (2024).





**Figure 1.** Caterpillars of *Antheua* and *Phalera*. **a)** *Antheua imitata*, inflated larva preparatum, Zimbabwe, Harare (TMSA). **b)** *Antheua lydenburgi*, inflated larva preparatum, Zimbabwe, Harare (TMSA). **c)** *Antheua lydenburgi*, inflated larva preparatum, Zimbabwe, Harare (TMSA). **d)** *Antheua tricolor*, in situ image, RSA, Westville (Photo: Suncana Bradley). **e)** *Antheua simplex*, inflated larva preparatum, RSA, Durban (TMSA). **f)** *Antheua simplex*, inflated larva preparatum, last instar; RSA, Durban (TMSA). **g)** *Phalera bucephala*, in situ image, Germany, Vollradisroda (Photo: Egbert Friedrich).

Primary type label data are quoted verbatim. A division slash (/) denotes the commencement of a new line, two division slashes (//) data on a further label.

Distribution maps were created using Map Resources Premier International templates (2003 edition, ©Map Portion Map Resources).

## Abbreviations

Acronyms of institutions and collections:

- ANHRT – African Natural History Research Trust, Leominster, UK;
- CAS – Collection of Alexander Schintlmeister, Dresden, Germany;
- CDS – Collection of Dirk Stadie, Eisleben, Germany;
- CGM – Collection of Günter Müller, Freising, Germany;
- CMNH – Carnegie Museum of Natural History, Pittsburgh, USA;
- CRF – Collection of Ralf Fiebig, Roßleben-Wiehe, Germany;
- FLNHM – Florida Museum of Natural History, Gainesville, USA;
- MfN – Museum für Naturkunde, Berlin, Germany;
- MCSN – Museo Civico di Storia Naturale, Milano, Italy;
- MGCL – McGuire Centre for Lepidoptera and Biodiversity, Gainesville, USA;
- MHNG – Muséum d'histoire Naturelle, Geneve, Switzerland;

MNHN – Muséum national d'Histoire naturelle, Paris, France;  
MWM/ZSM – Museum Witt in the collection of ZSM, München, Germany;  
NBC – Naturalis Biodiversity Center, Leiden, The Netherlands;  
NHMW – Naturhistorisches Museum Wien, Austria;  
NHMUK – The Natural History Museum, London, UK;  
NRMS – Naturhistoriska riksmuseet, Stockholm, Sweden;  
MSGD – Museo di storia naturale Giacomo Doria, Genova, Italy;  
SMNS – Staatliches Museum für Naturkunde Stuttgart, Germany;  
RMCA – Royal Museum for Central Africa, Tervuren, Belgium;  
SAMC – Iziko South African Museum, Cape Town, South Africa;  
TMSA – Ditsong National Museum of Natural History, Pretoria, South Africa;  
USNM – Smithsonian National Museum of Natural History, Washington, DC, USA;  
ZSM – Zoologische Staatssammlung, München, Germany.

Abbreviations of countries:

CAR – Central African Republic  
Congo – Republic of the Congo  
DRC – Democratic Republic of the Congo  
RSA – Republic of South Africa.

Other abbreviations:

BIN – Barcode Index Number  
BOLD – Barcode of Life Data Systems  
CSW – genitalia slide prepared by T. Csövényi  
GS – genitalia slide  
LG – genitalia slide prepared by G. László  
LT – lectotype  
HT – holotype  
PT – paratype  
SL – sequence length  
TL – type locality (denoted with a star in the maps)  
URI – Uniform Resource Identifier.

### Molecular studies

DNA barcodes were obtained by removing tarsal segments or whole legs from five adult *Phalera imitata* specimens. 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 standard high through-put protocols (Ivanova *et al.* 2006). DNA barcodes of three additional Phalerinae (*Phalera bucephala*, *Erconvalda styx* and an unidentified species of the *Antheua simplex* group) and *Stauropus fagi* accessed on BOLD were included in the analyses; the latter species was selected as outgroup taxon. 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; dendrogram was annotated in Adobe Photoshop CC 2018 software. The COI-5P sequences are available from the BOLD Systems website (DOI: <https://dx.doi.org/10.5883/DS-ANTIM>).

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

Taxon	Sex	Locality	Sample ID	Process ID	SL	BIN URI	GS
<i>A. imitata</i> <i>imitata</i>	♂	Mozambique, Maputo S.R.	ANHRTUK00017401	ANLMN5164-21	653	BOLD:AAL3100	-
<i>A. imitata</i> <i>imitata</i>	♀	Mozambique, Maputo S.R.	ANHRTUK00035104	ANLMN5165-21	654	BOLD:AAL3100	-
<i>A. imitata</i> <i>imitata</i>	♂	RSA, KwaZulu- Natal	ANHRTUK00105261	ANLMN5166-21	654	BOLD:AEE1206	-
<i>A. imitata</i> <i>hespera</i> ssp. n.	♂	Togo, Fazao- Malfakassa N.P.	ANHRTUK00117462	ANLMN5163-21	654	BOLD:AEJ9639	LG 5497
<i>A. imitata</i> <i>hespera</i> ssp. n.	♂	Sierra Leone, Loma Mts.	ANHRTUK00194516	ANLMN5174-21	651	BOLD:AEJ9639	-
<i>Antheua</i> <i>simplex</i> species group	♂	Tanzania, Dodoma Prov.	BC ZSM Lep 31177	GWORQ631-10	658	BOLD:AAG5382	-
<i>Phalera</i> <i>bucephala</i>	♂	United Kingdom, Surrey	UKLB7C01	CGUKA587-09	658	BOLD:AAC0945	-
<i>Erconvalda</i> <i>styx</i>	♂	Indonesia, Kalimantan Timur	LEPKA742-09	RMNH.INS.145 07	658	BOLD:AAI4362	-
<i>Stauropus fagi</i>	♂	United Kingdom, Hertfordshire	CGUKA285-09	UKLB4A03	658	BOLD:AAD0646	-

## Nomenclatural summary

### *Antheua* Walker, 1855

- = *Sirenopyga* Wallengren, 1858
- = *Diastema* Herrich-Schäffer, 1855
- = *Diastema* Aurivillius, 1904
- = *Diastemina* Gaede, 1928

### *A. simplex* Walker, 1855

- = *Diastema straminea* Herrich-Schäffer, 1855
- = *Sirenopyga ephippiata* Wallengren, 1858
- = *Antheua sericea* Felder & Felder, 1874

### *A. obtusipuncta* Schintlmeister & László, **sp. nov.**

### *A. lobo* László & Schintlmeister, **sp. nov.**

### *A. trivitta* Hampson, 1910

- = *Diastemina ornata* Gaede, 1928
- = *Antheua gaedei* Kiriakoff, 1962, **syn. nov.**

### *A. lemona* Schintlmeister & László, **sp. nov.**

### *A. nicholsonrobertsi* László & Schintlmeister, **sp. nov.**

### *A. hirutae* Schintlmeister & Stadie, **sp. nov.**

### *A. cinerea* Walker, 1855 *A. ellenae* Schintlmeister & Fiebig, **sp. nov.**

### *A. smithi* László & Schintlmeister, **sp. nov.**

### *A. galbina* Schintlmeister & László, **sp. nov.**

### *A. spurcata* Walker, 1864

- = *Antheua olivaceomicans* Strand, 1912, **syn. nov.**

### *A. mixta* Janse, 1920

- = *Antheua radiata* Aurivillius, 1921
- = *Antheua aurivilliusi* Kiriakoff, 1964

### *A. conspicuana* László & Schintlmeister, **sp. nov.**

### *A. imitata imitata* (Druce, 1896), **comb. nov.**

- = *Antheua imitata septentrionalis* Kiriakoff, 1962

- A. imitata hespera* Schintlmeister & László, **ssp. nov.**  
*A. politzari* Schintlmeister & László, **sp. nov.**  
*A. lydenburgi* (Distant, 1899), **comb. nov.**  
*A. atrata* (Grünberg, 1907)  
*A. angolana* (Strand, 1912) **comb. nov.**  
*A. acholi* (Bethune-Baker, 1908), **stat. rev., comb. nov.**  
*A. reducta* Schintlmeister & László, **sp. nov.**  
*A. lungu* Schintlmeister & László, **sp. nov.**  
*A. lunda* Schintlmeister & László, **sp. nov.**  
*A. kaffa* Schintlmeister & László, **sp. nov.**  
*A. extenuata* Walker, 1869  
*A. melanotornata* Schintlmeister & László, **sp. nov.**  
*A. nigristriga* (de Joannis, 1913), **stat. rev., comb. nov.**  
    = *Rigema unguata* Berio, 1938, **syn. nov.**  
*A. tricolor tricolor* Walker, 1855  
    = *Antheua varia* Walker, 1855  
*A. tricolor anomala* Berio, 1937, **stat. nov.**  
*A. consanguinea* Distant, 1903  
*A. pyrasa* Schintlmeister & László, **sp. nov.**  
*A. eximia* Kiriakoff, 1965  
*A. editae* Schintlmeister & László, **sp. nov.**  
*A. croceipuncta* Hampson, 1910  
    = *Antheua basipuncta* Hampson, 1910  
    = *Antheua rodeosemena* Bethune-Baker, 1911  
    = *Antheua birbirana* Viette, 1954, **syn. nov.**  
*A. magnipuncta* Schintlmeister & László, **sp. nov.**  
*A. albida* Hampson, 1910  
*A. aurifodinae* (Distant, 1902)  
*A. triloris* Schintlmeister & László, **sp. nov.**  
*A. ruficosta* (Hampson, 1910)  
*A. liparidioides* (Rothschild, 1910)  
*A. insignata* Gaede, 1928  
    = *Antheua benguelana* Viette, 1954, **syn. nov.**  
    = *Antheua trimacula* Kiriakoff, 1954, **syn. nov.**  
*A. interstincta* Schintlmeister & László, **sp. nov.**  
*A. elongata* Gaede, 1928  
*A. delicata* Bethune-Baker, 1911  
*A. eriostepta* Tams, 1932

*Parazana* Bethune-Baker, 1911, **stat. rev.**

- Parazana albifasciata* (Hampson, 1910), **comb. nov.**  
    = *Parazana radiata* Bethune-Baker, 1911, **syn. nov.**  
*Parazana rufovittata* (Aurivillius, 1901)

## Taxonomic section

### *Antheua* Walker, 1855

*List of the specimens of Lepidopterous Insects in the Collection of the British Museum. Lepidoptera Heterocera* **3**: 981 (key), 1079.

Type species: *Antheua simplex* Walker, 1855.

**Synonyms:**

*Sirenopyga* Wallengren, 1858

*Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar, Stockholm* **15** (1): 210.

Type species: *Sirenopyga ephippiata* Wallengren, 1858 [= *Antheua simplex* Walker, 1855].

*Diastema* Herrich-Schäffer, 1855

*Sammlung neuer und wenig bekannter aussereuropäischer Schmetterlinge* **1** (1): 379.

Type species: *Diastema straminea* Herrich-Schäffer, 1855 [= *Antheua simplex* Walker, 1855].

Homonym of *Diastema* Guenée, 1852.

*Diastema* Aurivillius, 1904

*Arkiv för Zoologi* **2** (4): 4.

Type species: *Antheua simplex* Walker, 1855. Homonym of *Diastema* Guenée, 1852.

*Diastemina* Gaede, 1928

In Seitz, A. (1925–1930), ed.: *Die Großschmetterlinge der Erde. Die Afrikanischen Spinner und Schwärmer*. Band **14**: 431. A replacement name for *Diastema* Aurivillius, 1904.

**Characterisation of the genus**

The genus *Antheua* typically comprises medium-sized moths. In the *A. simplex* group, the antennae of both males and females are bipectinate proximally, gradually featuring shorter rami distad with a filiform apical section. However, in other complexes, such as the *A. atrata*, *A. extenuata*, and *A. insignata* species groups, the male antennae have a similar configuration as in the *A. simplex* group, while the female antennae are filiform in their entire length.

The forewing colouration varies from whitish-yellow to greenish-yellow and greyish-brown. The hindwing is typically whitish or pale brownish, but it can sometimes appear dark brown. The abdomen may be orange-brown or blackish, often adorned with dark brown rings and contrasting black lateral spots. The sexual dimorphism is relatively limited in most groups, where the females tend to be larger, have broader forewings, and usually display darker colouration compared to males. In several species of the *A. simplex* group, the sexual dimorphism is more obvious, expressed by the considerably darker wing colouration of the females.

In males, the genitalia are characterised by a long, slender, and weakly sclerotized uncus, as well as well-developed, bilobate socii. The tegumen is short and relatively broad at the base, tapering distally. The elongate valva includes an extensive costal plate (editum) with a variably developed ampulla process and a flap-like apical lobe. The sacculus is narrow and may possess a short process. The vinculum is short, broad, and medially notched. The phallus is relatively short and straight, with a well-developed carina that varies in configuration. The endophallus contains deciduous caltrop cornuti, which detach during the everting process. The eighth abdominal segment is quadrangular and displays specific sclerotization. The posterior margin of the eighth sternite is notched, and the anterior margin features a pair of central projections (apodemes).

Female genitalia have an expansive and heavily sclerotised eighth abdominal segment. Both pairs of apophyses are short but robust. In most species, the ostium is notably broad, continuing into a large and heavily sclerotized, anteriorly tapered antrum, with an often asymmetrical margin; the ductus bursae is relatively narrow and very short. The corpus bursae often possesses a pair of variably sclerotized, invaginated distal plates near the base of the ductus bursae, a feature characteristic of most Phalerinae species. Additionally, a weakly developed, rounded V-shaped or amorphous signum is present.

***Antheua simplex* Walker, 1855**

Habitus: Figs 2a–l; Genitalia: Figs 3a–f; Lectotype labels: Figs 4a–b; Distribution map: Fig. 5.

*Antheua simplex* Walker, 1855, *List of specimens of Lepidopterous Insects in the Collection of the British Museum* **3**: 687.

Lectotype: ♂, [RSA], Port Natal [= Durban, ca. 29°52'S, 31°01'E] (in coll. NHMUK, by present designation).

Synonyms:

*Diastema straminea* Herrich-Schäffer, 1855, *Sammlung neuer und wenig bekannter aussereuropäischer Schmetterlinge* 1 (1) wrapper, pl. 66, fig. 379.

Lectotype: ♂, [RSA], Port Natal [= Durban, ca. 29°52'S, 31°01'E] (in coll. SMNS, by present designation).

*Sirenopyga ephippiata* Wallengren, 1858, *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar*, Stockholm 15 (1): 211.

Holotype: ♂, [RSA], Caffraria (in coll. NRMS).

*Antheua sericea* Felder & Felder, 1874, in Felder, R. & A. F. Rogenhofer [1865–1875]: *Reise der österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Beihilfen des Commodore B. von Wüllerstorff-Urbair*. Zoologischer Theil, Zweiter Band, Zweiter Abtheilung: Lepidoptera. Atlas: pl. 94: 8; Erklärungen der Tafeln LXXV bis CVII: 1.

Holotype: ♀, [RSA], Port Natal [= Durban, ca. 29°52'S, 31°01'E] (in coll. NHMUK).

**Material examined** (25 ♂♂, 11 ♀♀).

**Eswatini.** 1 ♀, Malagwane Hill, 23.i.1993, NJ Duke (TMSA). **Malawi.** 1 ♀, Karonga, 600 m, 29.i.1989, leg. J. Rawlins & S. Kansengwa (CMNH). **Mozambique.** 2 ♂♂, 120 km South East of Milange, 16°42'39"S, 36°27'01"E, 370m, 16.iv.2011, R. Yakovlev leg., GS: LG 5148 (ANHRT). 2 ♂♂, Gaza, 10 km NE Espungabera, 620 m, 19.ii.2016, leg. Sulak, Naumann, Ott, GS: MWM 35.201 (CAS). **RSA.** 1 ♂, KwaZulu-Natal, Vernon Crookes Nature Reserve, 30°16'29"S, 30°36'32"E, 410m, 11–14.iii.2018, Kovtunovich, V., Yakovlev, R. leg., GS: LG 5147 (ANHRT). 1 ♂, KwaZulu-Natal, Vernon Crookes N.R. 60 km SW Durban, 23–25.i.2008, leg. P. Ustjuzhanin (CAS). 4 ♂♂, KwaZulu-Natal, Ngome State Forst, 17.xi.1995, leg. Krüger, Dobrowsky (TMSA); 1 ♀, Drakensberge, Montrose GS: GU89-23 (MWM). 2 ♂♂, Natal, GS: ZMHU 2014-35, ZMHU 2014-36 (MfN). 1 ♂, 1 ♀, Transvaal, Lydenburg, F. Wilms S.V., GS: ZMHU 2014-37, ZMHU 2014-37 (MfN). 1 ♂, Verwoerdemburg, Eldoraigne, 22.x.1980, leg. L.M. Vari. 1 ♀, Clovelly CP, iv. 1951, D.A. Swanepoel. 1 ♀, N. Province, Farm Abor, 5 km N Levubu, 28.i.1988 leg. Krüger, Dobrowsky. 1 ♂, Natal, Bolgaran, 19.i.1950, KM Pennington. 1 ♀, Durban, 13.xii.1914 E.E. Platt, bred, GS: TM16.881. 1 ♂, Umdoni Park, 13.xii.1978, D.M. Kroon, GS: TM16.882. (TMSA). **Zambia.** 2 ♂♂, North-Western Province, Mutande Region, Georgie's Bar & Grill, 12°24'02.5"S, 26°15'28.7"E, 1250m, 1–9.i.2019, Murzin, S. leg., GS: LG 5280, LG 5281. 1 ♂, Ntumbachushi Falls, Ngona River, Luapula Prov., S09°51'12", E28°56'40", 1166m, 1–3.ii.2019, Dérozier, V., Mulvaney, L., Takano, H. leg.; 3 ♂♂, 1 ♀, Bruce-Miller Farm Choma, 16°38'12"S, 27°01'30"E, 1179m, 28.ii.–8.iii.2019, MV Light Trap, Dérozier, V., Imakando, M., Miles, W., Mulvaney, L. leg. (ANHRT). **Zimbabwe.** 1 ♂, 1 ♀, Salisbury 6.iii.1965, 26.i.1964 A.J. Duke. 1 ♂, 1 ♀, Christon Bank, from larva, F/P Desmodium, em. 11.xii.1975 and 23.i.1975, A.J. Duke. 1 ♀, Mazoe, 6–17.i.1920, AJT Janse. 1 ♂, Shabana, EHR Stevenson, GS: TM16.880. (TMSA).

**Diagnosis.** Forewing length in males is 21–26 mm and in females is 22–27 mm. *Antheua simplex* and seven closely related, externally similar species (*A. obtusipuncta* sp. nov., *A. lobo* sp. nov., *A. hirutae* sp. nov., *A. nicholsonrobertsi* sp. nov., *A. smithi* sp. nov., *A. cinerea*, and *A. galbina* sp. nov.) constitute a well-defined species group. This group is characterised by the yellowish colouration of males, which ranges from lemon to olive or pale greyish-brown, and by forewing veins that are broadly highlighted in pale yellowish-white. In most *A. simplex* specimens, the pale fields along the veins are less contrasting and more diffuse than in other species within the group. Females, which are sexually dimorphic, have nearly uniform forewings without highlighted veins and display colouration similar to that of males. A long, gently curved pale yellowish-white stripe along the forewing anal veins A1+A2 is typical for the group, but in *A. simplex* this stripe is often less distinct than in related species.

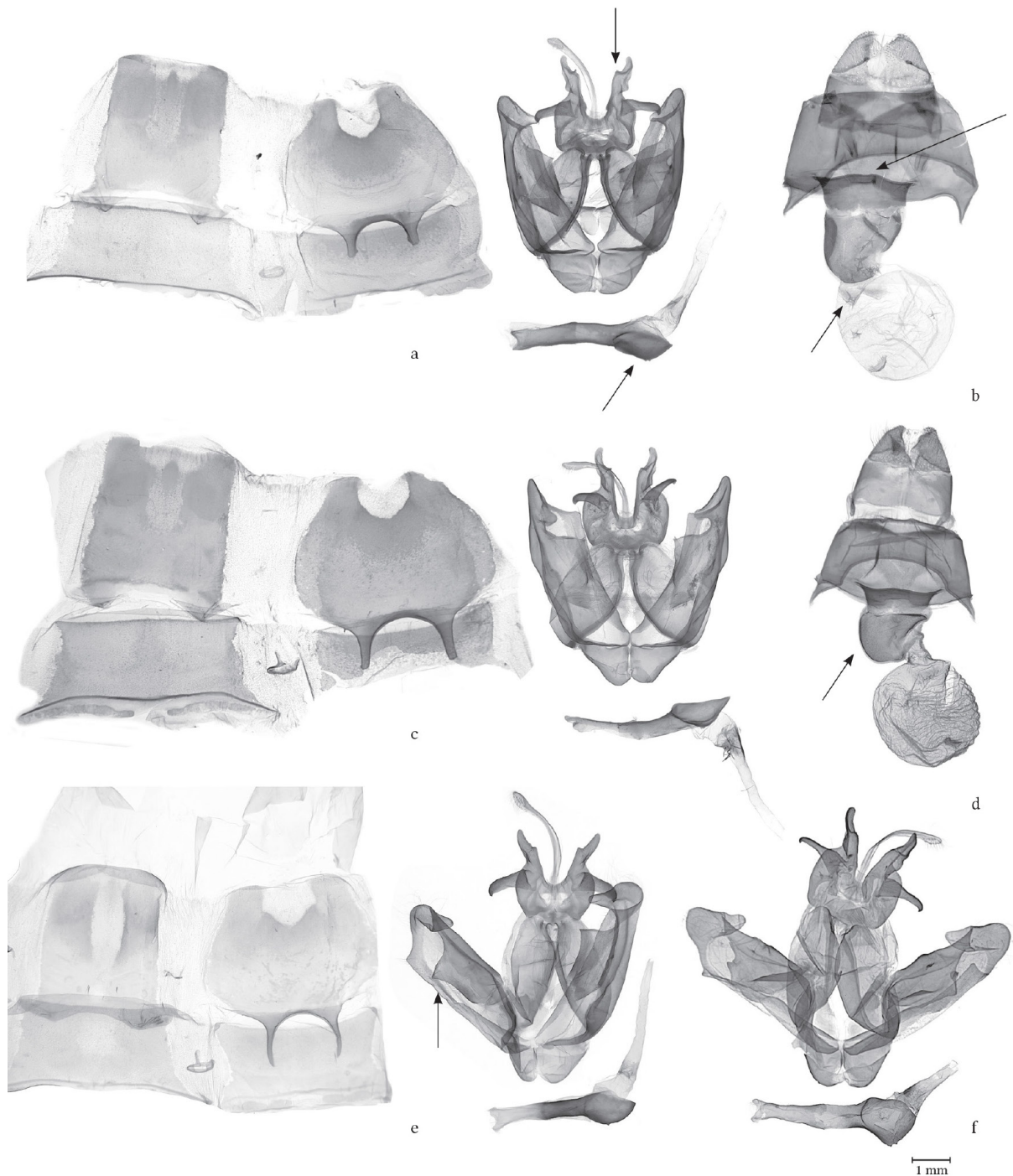
The male genitalia have a long and slender uncus with a slightly dilated tip. The socii are large, bearing long and narrow distal- and medio-ventral processes. The medial notch between the socii is wider than in *A. obtusipuncta* sp. nov. The valvae do not open up entirely owing to the heavily



sclerotized base of the sacculus, which is conjoined with the medial part of the vinculum. The valva has a somewhat shovel-shaped apical lobe connecting the distal sections of the costa and sacculus; the valva costa possesses a large, more or less quadrangular sclerotized plate (editum) produced ventrolaterally into a broad and short triangular ampulla with a pointed tip (that is markedly longer, rectangular in *A. obtusipuncta* **sp. nov.**); the costa lacks digitus. The sacculus is narrow, running to the valva apex, with a short, pointed process. The phallus bears a large, rounded, shield-like carinal plate with one or two short but prominent marginal teeth. The similar phallus of *A. obtusipuncta* **sp. nov.** bears shorter and usually more teeth on the carinal plate. The eighth tergite has a rectangular sclerotization with rounded edges, posteromedially with a narrow, U-shaped, weakly sclerotized area. The sclerotization of the eighth sternite is tapered caudad with rounded lateral margins; the distal margin features a short U-shaped notch; the anterior margin bears two short apodemes separated by a semi-circular notch. The female genitalia are characterised by the medially constricted eighth tergite, the rather broad and slightly sinuous distal margin of the ostium bursae, the extensive, asymmetrical antrum, and the very short, moderately broad ductus bursae. The distal plates of the corpus bursae at the conjunction of the ductus bursae are reduced and weakly sclerotized; the signum bursae is small and inconspicuous.



**Figure 2. *Antheua simplex*, adults. a)** ♂, RSA, Durban, lectotype (NHMUK). **b)** ♂, RSA, Durban, lectotype of *Diastema straminea* Herrich-Schäffer, 1855 (SMNS). **c)** ♂, RSA, holotype of *Sirenopyga ehippiata* Wallengren, 1858 (NRMS). **d)** ♂, RSA, KwaZulu Natal, Ngome State Forest, (TMSA). **e)** ♂, Zimbabwe, Harare, (TMSA). **f)** ♀, RSA, Durban, holotype of *Antheua sericea* Felder & Felder, 1874 (NHMUK). **g)** ♀, RSA, N. Province, Farm Arbor (TMSA). **h)** ♀, RSA, Cape Town, Clovelly (TMSA). **i)** ♀, Eswatini, Mbabane, Malagwane Hill (TMSA). **j)** ♂, Mozambique, Prov. Gaza, 10 km NE Espungabera (genitalia slide MWM 35.201, CAS). **k)** ♀, Malawi, Karonga (CMNH). **l)** ♀, Zimbabwe, Christon Bank, ex larva (TMSA).



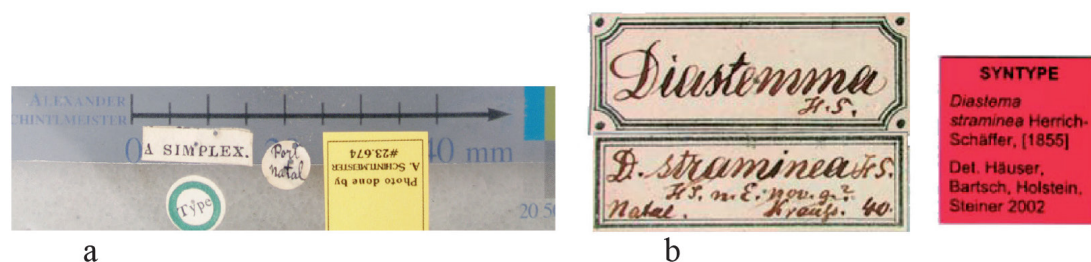
**Figure 3. *Antheua simplex*, genitalia.** **a)** ♂, RSA, KwaZulu Natal, Umdoni Park (GS: TM 16.882, TMSA). **b)** ♀, RSA, Drakensberge, Montrose (GS: GU 89-23, MWM/ZSM). **c)** ♂, RSA, Natal (GS: ZMHU 2014-36, MfN). **d)** ♀, RSA, Lydenburg (GS: ZMHU 2014-37, MfN). **e)** ♂, Zambia, Mutande (GS: LG 5280, ANHRT). **f)** ♂, Mozambique, Prov. Gaza, 10 km NE Espungabera (GS: MWM 35.201, CAS).

### Designation of lectotypes

*Antheua simplex* was originally described based on two male syntypes collected from "Port Natal" and "Cape." The syntype labelled "Port Natal" was located in the collection of the NHMUK and is hereby designated as the lectotype (Fig. 2a). The labels associated with this specimen are illustrated in Fig. 4a; a lectotype label will be added later.

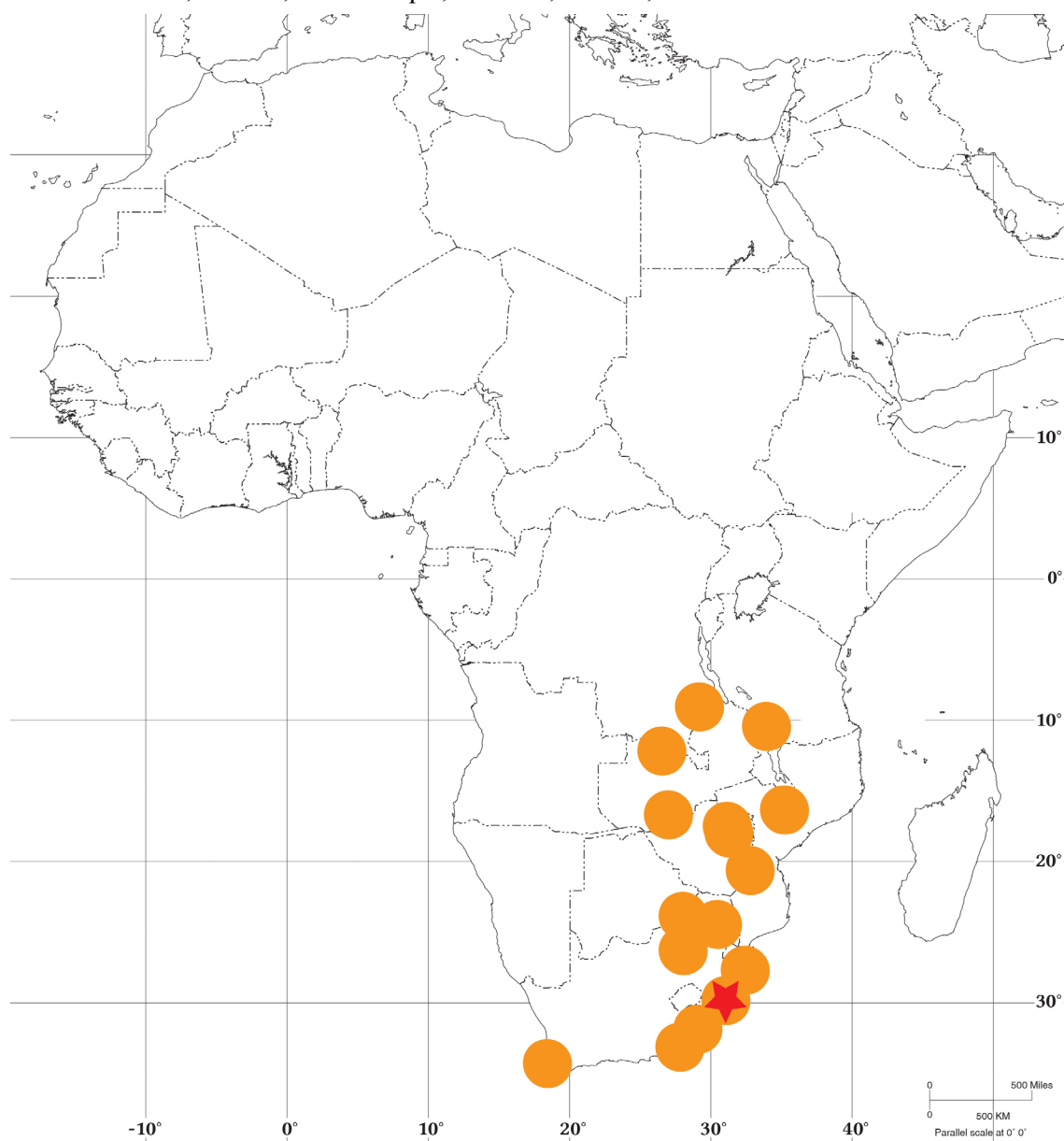
*Diastema straminea* was described from an unspecified number of males collected in Port Natal, without designating a holotype. In the collection of the SMNK, a male syntype is deposited, as reported

and illustrated in Häuser *et al.* (2003). This specimen is hereby designated as the lectotype (Fig. 2b). The labels associated with this specimen are illustrated in Fig. 4b; a lectotype label will be added later.



**Figure 4.** Labels of lectotype specimens. a) Lectotype of *Antheua simplex* (NHMUK). b) Lectotype of *Diastema straminea* (SMNS).

**Distribution.** *Antheua simplex* exhibits a broad distribution across southern Africa, with confirmed records in Eswatini, Malawi, Mozambique, the RSA, Zambia, and Zimbabwe.



**Figure 5.** Distribution of *Antheua simplex*.



***Antheua obtusipuncta* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:B09AD3EF-40EE-4A40-8316-DE9B0E97E77B>

Habitus: Figs 6a–i, Genitalia: Figs 7a–e, Distribution map: Fig. 8.

**Holotype.** ♂, “ZAMBIA 1340 m / Jiwundu Swamp / S11°51'54", E25°33'20" / 21–24.xi.14 Light Trap / leg. Smith, R. & Takano, H.” // “ANHRT: 2017.12” // “ANHRTUK / 00073499” // GS: LG 4329 (ANHRT).

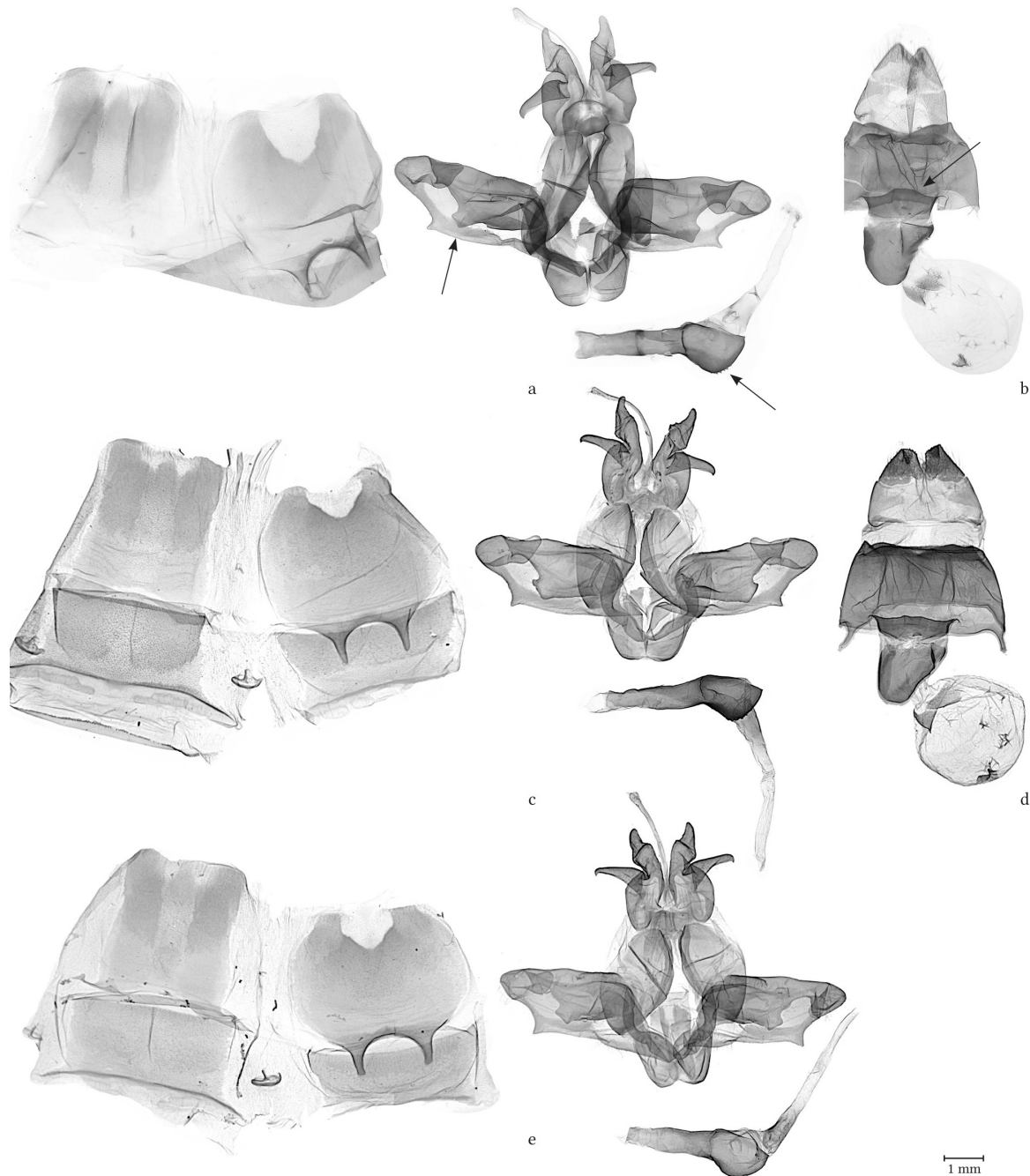
**Paratypes** (143 ♂♂, 8 ♀♀).

**Angola.** 18 ♂♂, Prov. Benguela, btw. Ganda and Dende, 13°07.773'S, 14°42.033'E, 1210m, 25.iii.2014, leg. Sulak, Naumann & Ott, GS: CSW 01-17 (CAS, ANHRT); 4 ♂♂, Prov. Benguela, btw. Cutembo and Caluquembe, 13°47.905'S, 14°01.928'E, 1047m, 23.iii.2014, leg. Sulak, Naumann & Ott (CAS, ANHRT); 5 ♂♂, 1 ♀, Prov. Huambo, 6 km N Chnigenge, Serra do Dembi, 12°46.681'S, 14°54.377'E, 1400m, 26.iii.2014, leg. Sulak, Naumann & Ott (CAS, ANHRT); 13 ♂♂, Prov. Huambo, 2 km S Calanque, 12°52.214'S, 15°28.126'E, 1970m, 27.iii.2014, leg. Sulak, Naumann & Ott (CAS, ANHRT); 9 ♂♂, Prov. Cuanza Sul, 26 km E Casongue, 11°52.257'S, 15°09.320'E, 1650m, 28.iii.2014, leg. Sulak, Naumann & Ott (CAS, ANHRT); 1 ♂, Prov. Cuanza Sul, 1 km N Chipita, 11°16.032'S, 14°09.521'E, 301m, 29.iii.2014, leg. Sulak, Naumann & Ott (CAS); 1 ♂, Prov. Cuanza Sul, 1 km N Chipita, btw. Uku - Sumbe, 11°16.032'S, 14°09.521'E, 301m, 29.iii.2014, leg. Sulak, Naumann & Ott, GS: MWM 35.180 (CAS). 1 ♂, N'Dalla Tando, 2,700 feet, 30.xi.1908, Dr. W. J. Ansorge leg., GS: LG 5236 (ANHRT); 1 ♀, Quirimbo, 75 km E of P. Amboim, 300m, 7–12.v.1934, leg. Dr K. Jordan, GS: NHMUK010315326 (prepared by G. László) (NHMUK). **DRC.** 1 ♀, Lubumbashi, xii.1934, leg. Ch. Seydel (RMCA); 1 ♂, Ht. Katanga, Sakania, 7.ii.1932, leg. J. Romieux, GS: MHNG 01-13 (MHNG). **Kenya.** 2 ♂♂, South Coast, Om, Marenche Forest, viii.–ix.2002, leg. Dr. Politzar, GS: MWM 35.171; 1 ♂, Highland of Kenya, Narok, 2.vi.2002, leg. Dr. Politzar, GS: MWM 35.172 (MWM/ZSM). **Malawi.** 1 ♂, Nkhala Bay, Kolwe Forest Reserve, 540m, 19.iv.2011, R. Yakovlev leg., GS: LG 5154; 1 ♂, Mangochi District, 25 km East of Mangochi, Uzuzu Hill, Manizimu Forest Reserve, 14°24'46"S, 35°22'42"E, 17–18.iv.2011, R. Yakovlev leg. (ANHRT). **Republic of Congo.** 1 ♂, Pool region, Voka, 620m, 4°40'S, 14°41'E, 21–30.v.1993, leg. J. Rawlins, R. Davidson, G. Onore & D. Schlitter (CMNH). **Rwanda.** 1 ♀, Kigali, 1500m, x.1972, ex coll. F. Cuypers, GS: LG 5151 (ANHRT). **Somalia.** 2 ♂♂, Caanale Fluß, 10.i.1989, leg. Dr. Politzar, GS: MWM 35.181 (CGM). 1 ♂, Mogadishu, 18.vii.1987, leg. Dr. Politzar (CGM). **Tanzania.** 1 ♂, Iringa region, Kipengere Range, Lugenge Forest, 2210 m, 9°26.44'S, 34°35.906'E, 19.ii.2006, GS: MWM 35.174 (MWM/ZSM). 1 ♀, Iringa region, Kipengere Range, Lugenge Moorland, 2060m, 9°24.864'S, 34°34.822'E, GS: MWM 35.186 (MWM/ZSM). 1 ♂, Iringa region, Kipengere Mts., Uwemba, 2230 m, 9°29.073'SW, 34°46.880'E, 10.xii.2005, GS: MWM 35.175 (CGM). 1 ♂, Iringa region, Iyayi savanna, 1400 m, 8°51.379'S, 34°31'200"E, 9.ii.2008, GS: MWM 35.178 (ZSM). **Zambia.** 8 ♂♂, 2 ♀♀, with the same data as the holotype, GS: LG 4347, LG 4597, LG 5267, LG 5268, ANHRT 00414, ANHRT 00418; 7 ♂♂, same locality, 25–30.x.2017, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 3 ♂♂, same locality, 29.x.–4.xi.2018, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., GS: ANHRT 00427, LG 5270; 1 ♂, same locality, 21–24.xi.2014, leg. Smith, R. & Takano, H.; 2 ♂♂, Kambishi School, S11°54'42", E25°28'50", 1346m, 10–13.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg., GS: LG 5269; 2 ♂♂, Hillwood, Ikelenge, S11°16'02", E24°18'59", 1400m, 17–24.iii.2013, Light Trap, leg. Smith, R., & Takano, H., GS: LG 4598; 1 ♂, same locality, 30.x.–3.xi.2017, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 1 ♂, 1416m, Lunzua Falls, 20 km South of Mpulungu, Northern Province, 08°55'38"S, 31°09'31"E, 11–16.v.2019, MV Light Trap, Dérozier, V., László, G., Miles, W. leg., GS: LG 5265; 1 ♂, 1566m, Senka Hill, Mukulizi Forest Reserve, Muchinga Province, 09°05'43"S, 32°05'06"E, 1–6.v.2019, MV Light Trap, Dérozier, V., László, G., Miles, W. leg.; 6 ♂♂, Chilambwe Falls, Kafubu River, 09°50'13"S, 30°43'35"E, 1420m, 8–12.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 1 ♂, Chitunta Plain (Miombo/Dambo mosaic), 11°29'12"S, 24°24'18"E, 1396m, 29.xi.–4.xii.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 2 ♂♂, same locality, 11–17.vi.2021, Chizuwa, D. & Choongo, W. leg.; 1 ♂, Nkwaji, Mwinilunga S11°36'22", E24°33'17", 1316m, 3–10.xii.2020, actinic light trap, Chizuwa, D., Choongo, W. leg.; 2 ♂♂, Gwabi River Lodge, Chirundu, 15°57'04.8"S, 28°51'34.4"E, 361m, 8–11.iii.2019, MV Light Trap, Dérozier, V., Imakando, M., Miles, W., Mulvaney, L. leg.; 2 ♂♂, Camp near Kanyama,

(Miombo/Riverine/Dambo mosaic), 11°25'36"S, 24°40'00"E, 1375m, 4–7.xii.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 4 ♂♂, Bruce-Miller Farm, Choma, 16°38'12"S, 27°01'30"E, 1179m, 28.ii.–8.iii.2019, MV Light Trap, Dérozier, V., Imakando, M., Miles, W., Mulvaney, L. leg.; 1 ♂, Bruce-Miller Farm, Choma, 16°38'12"S, 27°01'30"E, 1227m, 28.ii.–8.iii.2019, actinic light trap, Dérozier, V., Imakando, M., Miles, W., Mulvaney, L. leg.; 3 ♂♂, Kalungu, north of Isoka, S9°40'52", E32°42'50", 1280m, 5–8.iii.2017, MV light trap, Oram, D., Miles, W., Smith, L. leg.; 5 ♂♂, 1 ♀, same locality, 12–13.xii.2023, László, G., Morgan, L., Volynkin, A. leg.; 1 ♂, 1140m, Eastern Province, 48 km North of Lundazi, Lake Beu, 11°53'56"S, 33°08'51"E, 26–27.xi.2023, MV light trap, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A. leg.; 10 ♂♂, Muchinga Province, 30 km N of Mpika, Danger Hill, 11°37'38"S, 31°33'56"E, 1684m, 13–15.xii.2023, actinic, LepiLED and MV light trap, László, G., Morgan, L., Volynkin, A. leg.; 2 ♂♂, Mutinondo Wilderness Area, Mpika, Northern Prov., S12°27'06", E31°17'30", 1460m, 16–20.iii.2017, MV light trap, Oram, D., Miles, W., Smith, L. leg.; 3 ♂♂, same locality, 14–17.ii.2019, Dérozier, V., Mulvaney, L., Takano, H. leg.; 3 ♂♂, same locality, 15–17.xii.2023, László, G., Morgan, L., Volynkin, A. leg.; 3 ♂♂, Muchinga Prov., Benyanga village, 10°40'41"S, 33°27'45"E, 1250m, 7–12.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A., leg.; 3 ♂♂, Muchinga Province, Jombo village, 10°27'01"S, 33°14'30"E, 1400m, 30.xi.–05.xii.2023, MV light trap, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A. leg. (ANHRT).



**Figure 6.** *Antheua obtusipuncta* sp. nov., adults. **a)** ♂, Zambia, Jiwundu Swamp, holotype (GS: LG 4329, ANHRT). **b)** ♂, Congo, Pool region, Voka, paratype (CMNH). **c)** ♂, Angola, Cuanza Sul, Chipita, paratype (GS: MWM 35.175, MWM/ZSM). **d)** ♀, Zambia, Jiwundu Swamp, paratype (GS: LG 4347, ANHRT). **e)** ♂, DRC, Ht. Katanga, Sakania paratype (GS: MHNG 01-13, MHNG). **f)** ♀, Tanzania, Kipengere Mts. (GS: MWM 35.186, ZSM). **g)** ♂, Somalia, Canoole Fluß (GS: MWM 35.181, MWM/ZSM). **h)** ♀, Angola, Huambo, Chnigenge, paratype (GS: CSW 01-16, CAS). **i)** ♂, Tanzania, Iringa, Kipengere Mts. (GS: MWM 35.175, MWM/ZSM).



**Figure 7.** *Antheua obtusipuncta* sp. nov., genitalia. **a)** ♂, Zambia, Jiwundu Swamp, holotype (GS: LG 4329, ANHRT). **b)** ♀, Zambia, Jiwundu Swamp, paratype (GS: LG 4347, ANHRT). **c)** ♂, Zambia, Jiwundu Swamp, paratype (GS: ANHRT 00427, ANHRT). **d)** ♀, Zambia, Jiwundu Swamp paratype (GS: ANHRT 00418, ANHRT). **e)** ♂, Angola, Cuanza Sul, 1 km N Chipita, paratype (GS: MWM 35.180, CSW).

**Diagnosis.** Forewing length is 21–27 mm in males and 23–27 mm in females. *Antheua obtusipuncta* sp. nov. closely resembles *A. simplex* externally but can be distinguished by several morphological features. The new species displays a greenish-yellow hue and a slight metallic sheen on the forewings, whereas *A. simplex* exhibits a matte lemon-yellow colouration. The paler regions along the forewing veins in *A. obtusipuncta* sp. nov. are greenish-yellow, in contrast to the off-white areas in *A. simplex*. The new species also possesses a small greyish discal spot on the forewing, which distinguishes it from *A. smithi* sp. nov., a sympatric species in Zambia. In both sexes, the hindwing colouration is consistent with that of the forewings. Moderate sexual dimorphism is present; females have paler stripes on the ventral



margin and on veins A1+A2 and M2 compared to males. Occasionally, the forewing colouration in females appears matte, while males typically exhibit a metallic sheen.

The male genitalia of *A. obtusipuncta* **sp. nov.** resemble those of *A. simplex* but differ in several ways: the distal process of the socii is shorter and thicker, the medio-ventral process of the socii is slightly longer, and the medial notch between the socii is considerably narrower. The large costal plate of the valva (editum) of *A. obtusipuncta* **sp. nov.** bears a quadrangular ventrolateral ampulla process, while *A. simplex* has a very short, triangular ampulla. Both species have a straight, relatively short phallus that features a dilated, shield-like carinal plate; however, *A. simplex* possesses two short, conspicuous lateral teeth, whereas *A. obtusipuncta* **sp. nov.** has a longer lateral dentation with smaller teeth.

In the female genitalia, *A. obtusipuncta* **sp. nov.** has a longer, noticeably narrower eighth segment without medial constriction compared to that of *A. simplex*. Additionally, the distal margin of the ostium bursae is almost straight in the new species, in contrast to the gently undulated ostial margin seen in *A. simplex*. Both species share a large, asymmetrical antrum, a very short ductus bursae, weakly sclerotized distal plates of the corpus bursae, and a small reniform signum bursae.

**Etymology.** The specific epithet is a compound word combining the Latin adjective “obtusus”, meaning “obtuse, dull”, and the Latin noun “punctum”, meaning “dot, point”, referring to the pale forewing discal spot of this new species.

**Distribution.** *Antheua obtusipuncta* **sp. nov.** is widely distributed in southern-central and eastern Africa, with confirmed records from Angola, Congo, DRC, Malawi, Rwanda, Zambia, Tanzania, Kenya, Somalia.



**Figure 8.** Distribution of *Antheua obtusipuncta* **sp. nov.**

***Antheua lobo* László & Schintlmeister, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:EE6A3044-122A-4E88-9B20-47FD2FCBC062>

Habitus: Figs 9a–e, Genitalia: Figs 10a–d, Distribution map: Fig. 11.

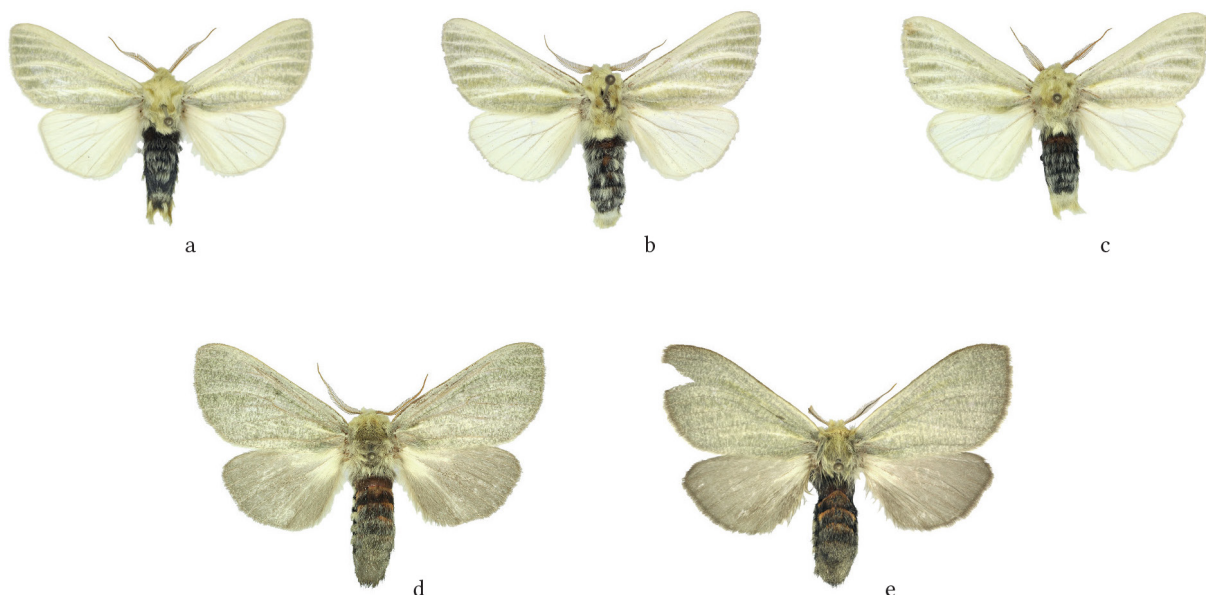
**Holotype.** ♂, “REPUBLIC OF CONGO 390m / Odzala-Kokoua National Park, / Lobo Research Camp / 00°35'04"N, 14°53'12"E / 13–18.iv.2024, MV light trap / Bashford, M., László, G., / Talani, M., Yaba Ngouma, S. leg. / ANHRT:2024.7” // “ANHRTUK / 00214759” // GS: LG 6468 (ANHRT).

**Paratypes** (22 ♂♂, 2 ♀♀).

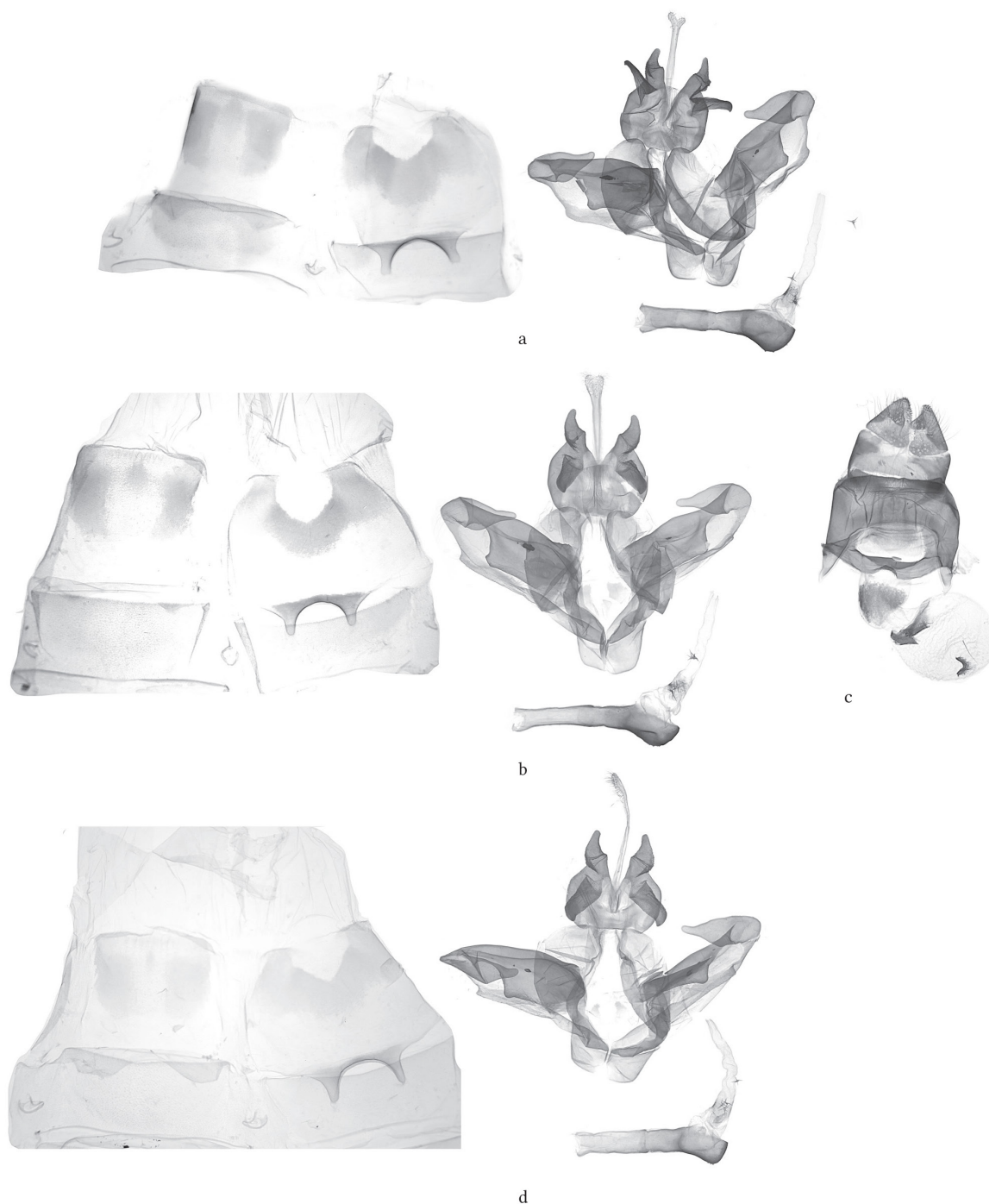
**Republic of Congo.** 15 ♂♂, 1 ♀, with the same data as the holotype; 1 ♂, same locality, 25–26.ix.2024, LepiLED light trap, Bashford, M., László, G., Volynkin, A., Yaba Ngouma, S. leg.; 1 ♀, same locality, 20–27.ix.2024, MV light trap, Bashford, M., László, G., Volynkin, A. leg.; 5 ♂♂, same locality, 22–30.xi.2024, MV light trap, Bashford, M., Elliott, I., Kirk-Spriggs, A. leg.; 1 ♂, Odzala-Kokoua N. P., Mboko, 00°36'16.02"N, 14°53'57.49"E, 379m, 18–21.xi.2024, MV light trap, Bashford, M., Elliott, I., Kirk-Spriggs, A. leg. (ANHRT).

**Diagnosis.** Forewing length is 19–22 mm in males and 23 mm in females. *Antheua lobo* sp. nov. is closely related to *A. obtusipuncta* sp. nov. based on genitalia configuration. However, it can be distinguished by its smaller overall size, shorter forewings, and a blackish shadow at the base of the forewing anal margin. Externally, these features make *A. lobo* sp. nov. most similar to *A. cinerea* and *A. smithi* sp. nov. Most specimens of *A. lobo* sp. nov. lack the pale discal spot that characterises *A. obtusipuncta* sp. nov. In male genitalia, *A. lobo* sp. nov. differs from *A. obtusipuncta* sp. nov. by possessing a bilobed uncus tip rather than a rounded one. The socius processes are shorter, the editum is less extensive, and the ampulla is shorter, narrower, and rounded. The apical valval lobe is more elongated and pointed, and the saccular process is shorter and more evenly rounded. The phallus has a less dilated carinal plate. In the female genitalia, *A. lobo* sp. nov. has a more robust anterior apophysis. The distal margin of the ostium bursae is almost straight, in contrast to the gently convex margin in *A. obtusipuncta* sp. nov. The antrum is very weakly sclerotized and shorter in *A. lobo* sp. nov., whereas it is heavily sclerotized and more elongated in *A. obtusipuncta* sp. nov.

**Etymology.** This new species is named after its type locality, the Lobo research camp in the Odzala-Kokoua National Park.



**Figure 9.** *Antheua lobo* sp. nov., adults (all in coll. ANHRT). **a)** ♂, Congo, Odzala-Kokoua National Park, holotype (GS: LG 6468). **b)** ♂, Congo, Odzala-Kokoua National Park, paratype (GS: LG 6590). **c)** ♂, Congo, Odzala-Kokoua National Park, paratype (GS: LG 6591). **d)** ♀, Congo, Odzala-Kokoua National Park, paratype (ANHRT). **e)** ♀, Congo, Odzala-Kokoua National Park, paratype (GS: LG 6592).



**FIGURE 10.** *Antheua lobo* sp. nov., genitalia (all in coll. ANHRT). **a)** ♂, Congo, Odzala-Kokoua National Park, holotype (GS: LG 6468). **b)** ♂, Congo, Odzala-Kokoua National Park, paratype (GS: LG 6590). **c)** ♀, Congo, Odzala-Kokoua National Park, paratype (GS: LG 6592). **d)** ♂, Congo, Odzala-Kokoua National Park, paratype (GS: LG 6591).

**Distribution.** *Antheua lobo* sp. nov. is an allopatric sibling of *A. obtusipuncta* sp. nov. and appears to be restricted to the isolated savannah and grassland habitats of the Congo Basin. At present, its occurrence is documented only in the vicinity of the Lobo research camp in Odzala-Kokoua National Park, an area characterised by extensive wet savannah and hygrophilous grassland (dembe).



**Figure 11.** Distribution of *Antheua lobo* sp. nov.

***Antheua trivitta* Hampson, 1910**

Habitus: Figs 12a–f, Genitalia: Figs 13a–d, Distribution map: Fig. 14.

*Antheua trivitta* Hampson, 1910, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology (8th series)* **5**: 475.

Holotype: ♂, [Ethiopia], Abyssinia / Degen. / 1902-222. (in coll. NHMUK).

**Synonyms:**

*Diastemina ornata* Gaede, 1928 (secondary homonym), In Seitz, A. (Ed.): *Die Großschmetterlinge der Erde*, Band **10**: 431; pl. 71 e.

Holotype ♂, [Ethiopia], Abessinien, [Addis-Ababa] (in coll. MfN).

***Antheua gaedei* Kiriakoff, 1962 syn. nov.**

*Revue de Zoologie et de Botanique Africaines* **66** (1–2): 4; fig. 2.

A replacement name for *Diastemina ornata* Gaede, 1928.

**Material examined** (6 ♂♂, 3 ♀♀).

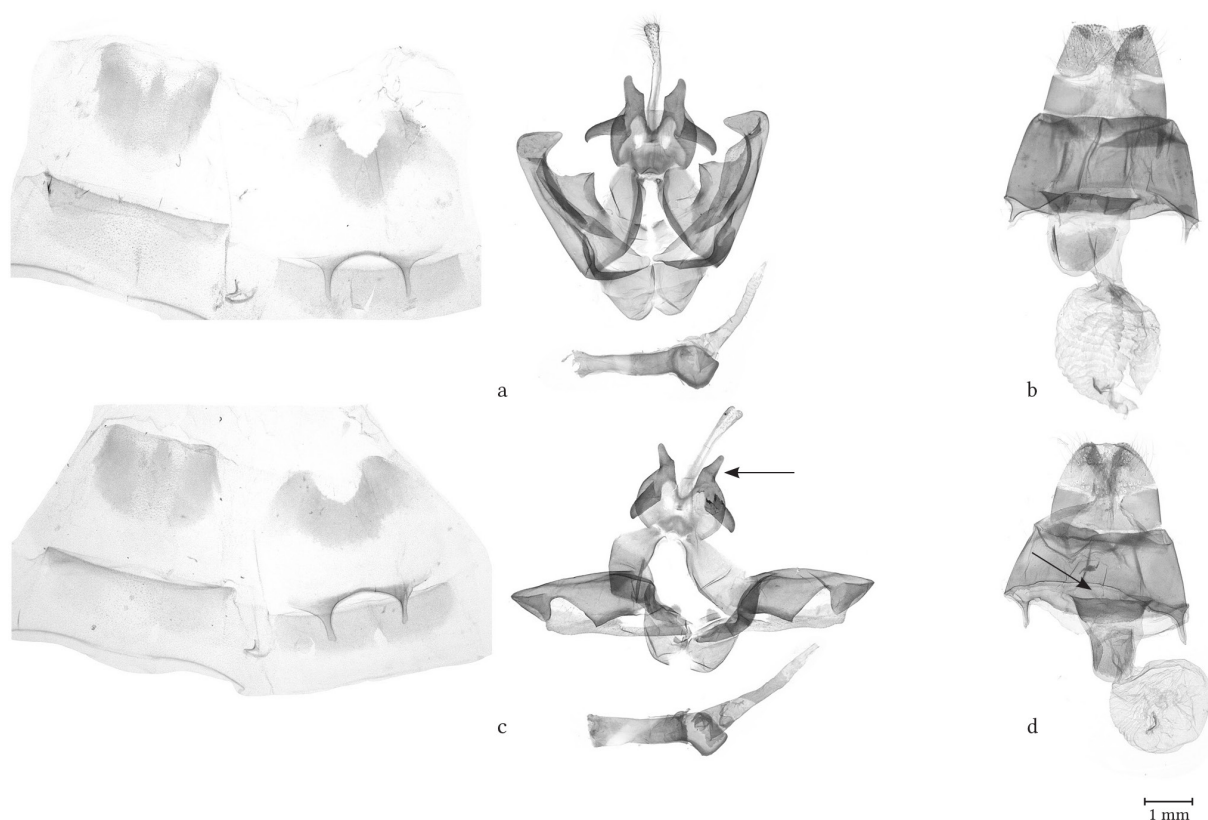
**Ethiopia.** 1 ♂, Abyssinia (holotype). 1 ♂, Addis Ababa (holotype of *Diastema ornata*). 1 ♂, Abyssinia, Dangila, 20.v.1928 R.E. Cheesman. B.M. 1930-208, GS: NHMUK010315318; 1 ♀, Dangila, 6,700', 40



mls S of L. Tana, 9.ix.1926, leg. R.E. Cheeseman, GS: NHMUK014331216; 1 ♀, same locality and collector, 3.viii.1926; 3 ♂♂, same locality and collector, 30.viii.1926, GS: NHMUK014331212, NHMUK014331212, NHMUK014331215; 1 ♀, same locality and collector, 30.ix.1926, GS: NHMUK014331214 (all genitalia slides prepared by G. László) (NHMUK).



**Figure 12. *Antheua trivitta*, adults.** a) ♂, Ethiopia, Abyssinia, holotype (NHMUK). b) ♂, Ethiopia, Addis Abeba, holotype of *Diastemina ornata* (MfN). c) ♂, Ethiopia, Dangila (GS: NHMUK014331212, NHMUK). d) ♂, Ethiopia, Dangila (GS: NHMUK014331215, NHMUK). e) ♀, Ethiopia, Dangila (GS: NHMUK014331216, NHMUK). f) ♀, Ethiopia, Dangila (GS: NHMUK014331214, NHMUK).



**Figure 13. *Antheua trivitta*, genitalia.** a) ♂, Ethiopia, Dangila (GS: NHMUK014331213, NHMUK). b) ♀, Ethiopia, Dangila (GS: NHMUK014331214, NHMUK). c) ♂, Ethiopia, Dangila (GS: NHMUK014331212, NHMUK). d) ♀, Ethiopia, Dangila (GS: NHMUK014331216, NHMUK).

**Diagnosis.** Forewing length in males is 20–22 mm and in females is 21–22 mm. This species demonstrates significant external variability. The typical form possesses two black basal stripes and a black stripe in the postmedial field, consistent with the holotype. Some specimens exhibit uniformly yellow forewings without black markings, whereas the highly variegated form (f. *gaedei*) displays numerous black stripes on lemon-coloured forewings. Hindwing colouration ranges from yellowish-white to grey or black, with a yellow fringe. This species closely resembles *A. tricolor* but is distinguished by the presence of black basal streaks on the wings. Sexual dimorphism is minimal, as all described forms are present in both sexes. The male genitalia of *A. trivitta* resemble those of *A. simplex* but differ in several respects: *A. trivitta* has a more robust uncus, a broader distal socius process, and a more dilated, shorter carinal plate of the phallus. Compared to *A. obtusipuncta* **sp. nov.**, *A. trivitta* exhibits a considerably narrower valva with a larger, more distal apical lobe, as well as a broader and shorter, apically pointed ampulla. The female genitalia are similar to those of *A. simplex* and *A. obtusipuncta* **sp. nov.**; however, *A. trivitta* has a less sclerotized and noticeably shorter antrum. The posterior margin of the antrum in *A. trivitta* is straight, in contrast to the curved or arched margin observed in the other two species.

**Distribution.** *Antheua trivitta* is known solely from Ethiopia.



**Figure 14.** Distribution of *Antheua trivitta*.

**Taxonomic note.** *Diastemina ornata* Gaede, 1928 was originally described from Ethiopia, historically referred to as Abyssinia. Kiriakoff (1962) dissected the holotype male and recorded the type locality as Abyssinia, Addis-Abeba, August 1921. The holotype, currently housed at the MfN, lacks a collecting



data label, and the genitalia prepared by Kiriakoff are missing. Kiriakoff (1962) classified *ornata* as a valid species within the genus *Antheua*, which resulted in secondary homonymy after he also assigned *Rigema ornata* Walker, 1865 to *Antheua* (Kiriakoff 1962). To address this, Kiriakoff (1962) introduced *gaedei* as a replacement name for *ornata* Gaede, maintaining its species status. Examination of NHMUK collections revealed a series of all forms of *trivitta* from Ethiopia (Dangila, Lake Tana, approximately 2000 meters above sea level), collected by Evelyn Cheeseman in 1926. Dissections of several forms, including those resembling the holotype of *D. ornata* Gaede, demonstrated consistent genital morphology across all specimens. These results confirm that *Diastemina ornata* is conspecific with *A. trivitta* and represents only an individual form.

***Antheua lemona* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:DA53A31E-A621-4938-8CDC-9E009A0CFAF8>

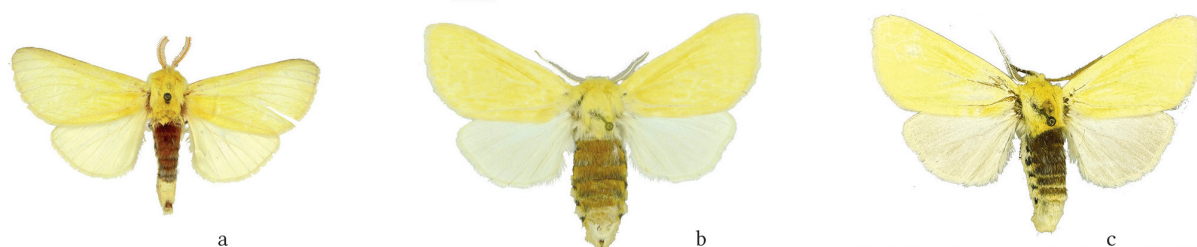
Habitus: Figs 15a–c, Genitalia: Figs 16a, Distribution map: Fig. 17.

**Holotype.** ♂, [Kenya, ca. 2°25'S, 37°58'E] “Kibwezi, B.E.A., / April 1929. / (W. Feather.)” // “Rothschild / Bequest / B.M. 1939-I.” // QR code label with unique id.: NHMUK010292168, GS: NHMUK014331210 (NHMUK).

**Paratypes** (2 ♂♂, 2 ♀♀).

**Kenya.** 2 ♂♂, Kibwezi, xi. and xii. 1928, leg. W. Feather (NHMUK); 2 ♀♀, SE of Voi, 8–12.xii.2009, leg. Snížek (CAS, CGM).

**Diagnosis.** Forewing length is 19–20 mm in males and 23 mm in females. This new species is distinguished by bipectinate antennae with long orange-brown rami in both sexes, a uniform pale lemon thorax and forewings, and unmarked whitish-grey hindwings. Additionally, *A. lemona* sp. nov. has an orange-brown abdomen. Sexual dimorphism is negligible. Externally, the new species resembles only the uniform yellow form of *A. trivitta*, but this latter species displays a warmer yellow colouration and typically has a discernible blackish basal streak.

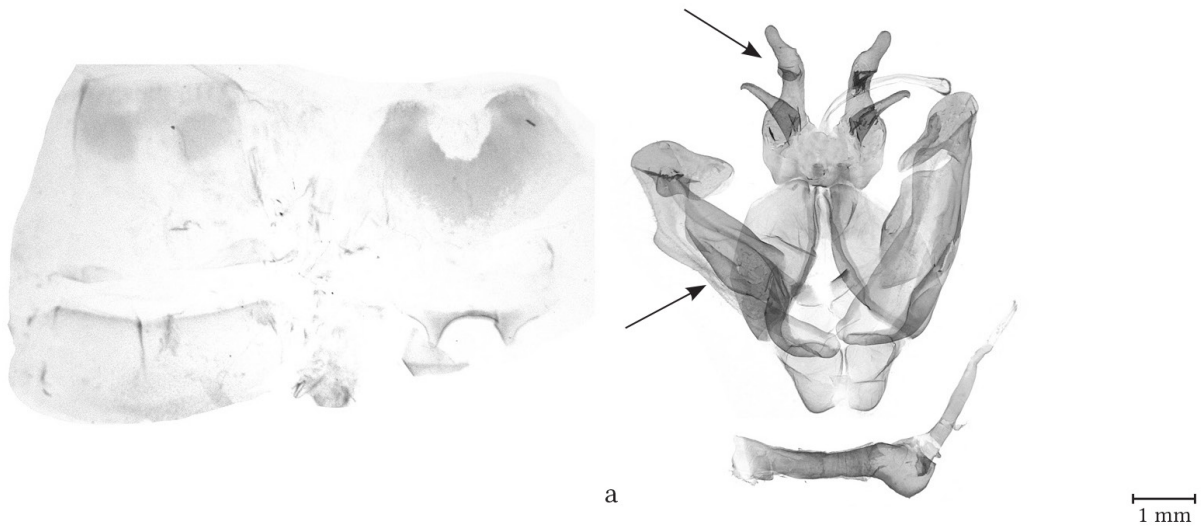


**Figure 15.** *Antheua lemona* sp. nov., adults. a) ♂, Kenya, Kibwezi, holotype (GS: NHMUK014331210, NHMUK). b) ♀, Kenya, Voi, paratype (CAS). c) ♀, Kenya, Voi, paratype (CGM).

In the male genitalia, *A. lemona* sp. nov. has a considerably longer, finger-like distal process of the socius possessing a short, rounded medioventral lobe, compared to the shorter and medially dilated corresponding character found in *A. simplex*, *A. trivitta*, and *A. obtusipuncta* sp. nov. The costal plate of the valva (editum) lacks a pointed or produced ampulla process in contrast to the three related species. The phallus of *A. lemona* sp. nov. has a relatively short and broad dilated carinal plate, similar to *A. trivitta*.

The female genitalia were not examined.

**Etymology.** The specific epithet refers to the uniform lemon colouration of this new species.



**Figure 16.** *Antheua lemona* sp. nov., genitalia. a) ♂, Kenya, Kibwezi, holotype (GS: NHMUK014331210, NHMUK).

**Distribution.** *Antheua lemona* sp. nov. is exclusively known from Kenya.



**Figure 17.** Distribution of *Antheua lemona* sp. nov.

***Antheua nicholsonrobertsi* László & Schintlmeister, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:7F7304F6-CE20-4EF5-A9D5-B3525ECBC54F>

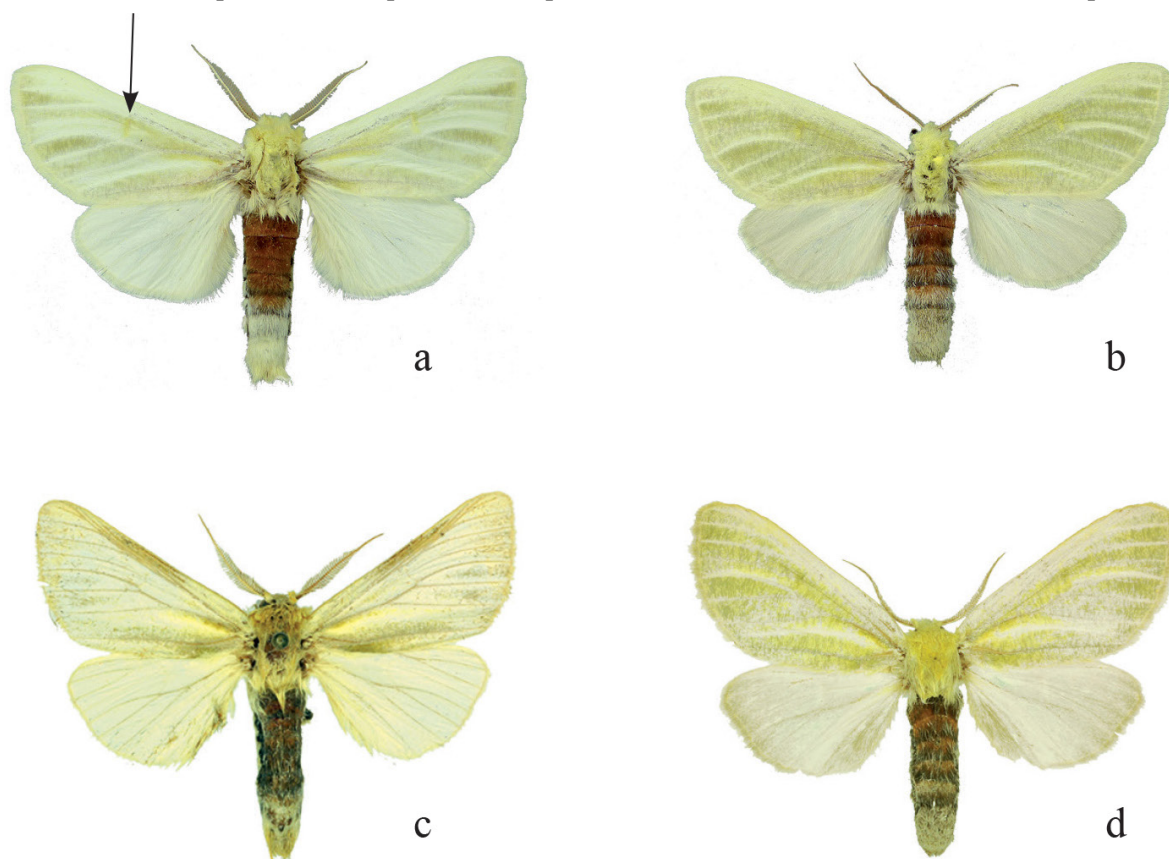
Habitus: Figs 18a–d, Genitalia: Figs 19a–d, Distribution map: Fig. 20.

**Holotype.** ♂, "SOUTH SUDAN 400m / UNMISS Bentiu / N09°19'43", E29°47'18" / 24.vii.2017 / T.C. Nicholson-Roberts" // "ANHRT:2017.34" // "ANHRTUK / 00214820" // GS: LG 5150 (ANHRT).

**Paratypes** (1 ♂, 3 ♀♀).

**South Sudan.** 2 ♀♀, same locality and collector as the holotype, collected at 27.vii.2017 and 7.viii.2017, GS: LG 5149, LG 5152 (ANHRT). **Sudan.** 1 ♂, 1 ♀, Province Blue Nile, Tozi, 12–13.viii.1960, leg. H. Schmutterer, GS: ZSM 01-10, ZSM 01-12 (ZSM).

**Diagnosis.** The forewing length ranges from 21 to 25 mm in males and from 22 to 23 mm in females. *Antheua nicholsonrobertsi* sp. nov. is morphologically similar to *A. simplex* and *A. obtusipuncta* sp. nov., sharing pale fields along the forewing veins. However, it is distinguished by a slightly more metallic sheen over the lemon ground colour. In both sexes, the discal spot is a short, inconspicuous greenish-yellow transverse streak. Males possess forewings and hindwings of the same colour, whereas females have paler, more whitish hindwings relative to their forewings. The female forewing is lemon-coloured with a metallic greenish shine and displays whitish stripes on the dorsum, veins A1+A2, and M2. Sexual dimorphism in this species is less pronounced than in other members of the complex.



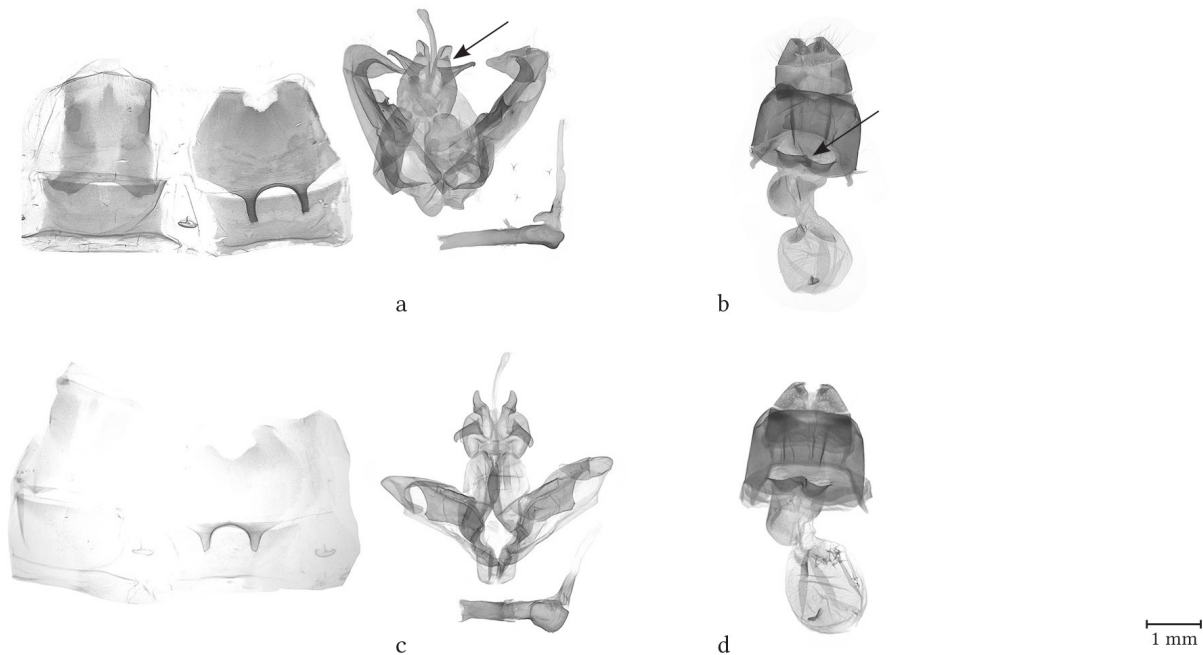
**Figure 18.** *Antheua nicholsonrobertsi* sp. nov., adults. **a)** ♂, Sudan, Tozi, paratype (GS: ZSM01-10, ZSM). **b)** ♀, Sudan, Tozi, paratype (GS: ZSM01-12, ZSM). **c)** ♂, South Sudan, Bentiu, holotype (GS: LG 5150, ANHRT). **d)** ♀, South Sudan, Bentiu, paratype (GS: LG 5149, ANHRT).

The genitalia of both sexes are significantly smaller than those of other taxa within the *A. simplex* species group. In males, *A. nicholsonrobertsi* sp. nov. is characterised by a distinctly shorter and rounded distal process of the socii, which also features a small triangular projection ventrobasally. The editum exhibits a short, pointed, or truncated ampulla projection, as observed in the holotype. The phallus in

the holotype is long and straight and is less swollen at the tip, similar to that of *A. simplex* or *A. obtusipuncta*. The everted endophallus contains a small sac-like diverticulum, a feature otherwise found only in *A. cinerea* within the species group. The eighth abdominal segment closely resembles that of *A. simplex*.

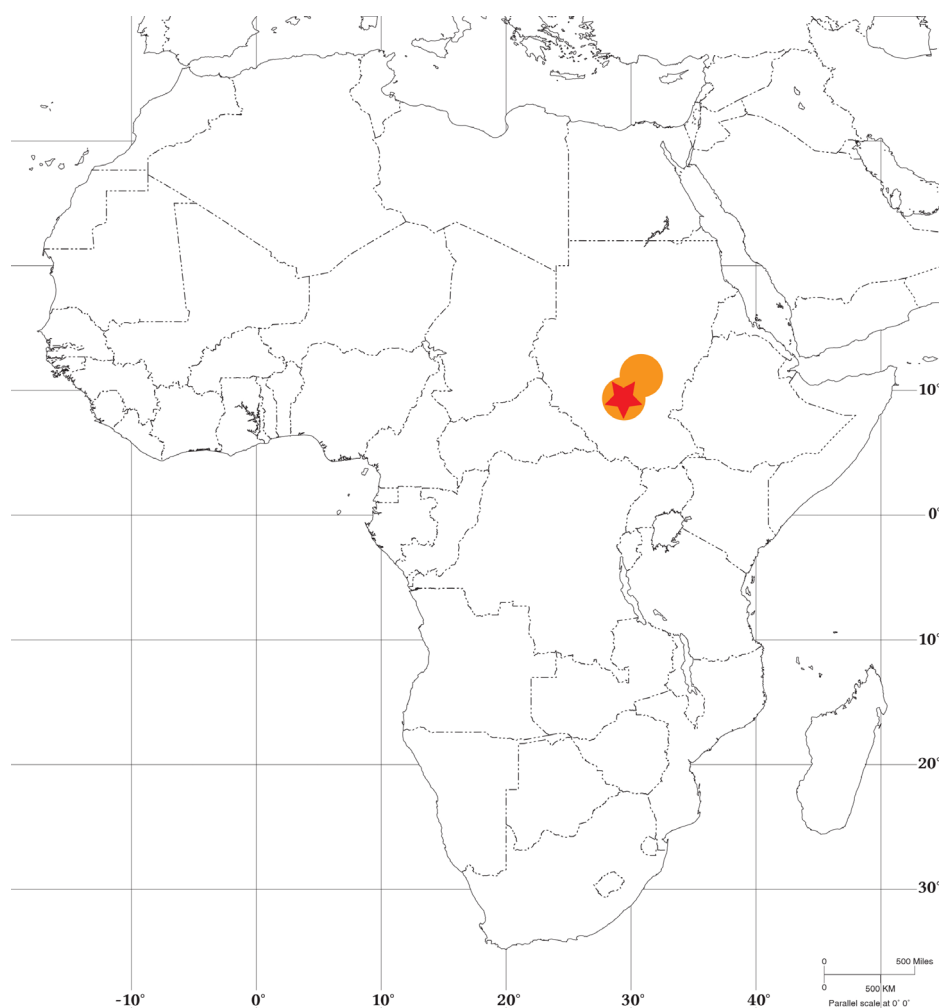
In females, the genitalia are defined by a conspicuously dilated, disc-shaped antrum. The distal margin of the ostium bursae is gently sinuous, with concave lateral and convex medial sections. The invaginated plates of the corpus bursae are large and weakly sclerotized, and the signum bursae exhibits variable shape as illustrated.

**Etymology.** This new species is dedicated to Tim Nicholson-Roberts, who collected the holotype and two paratype specimens at a United Nations Mission military base near Bentiu City, South Sudan, and generously donated them to ANHRT.



**Figure 19.** *Antheua nicholsonrobertsi* sp. nov., genitalia. **a)** ♂, South Sudan, Bentiu, paratype (GS: LG 5150, ANHRT). **b)** ♀, South Sudan, Bentiu, paratype (GS: LG 5149, ANHRT). **c)** ♂, Sudan, Tozi, paratype (GS: ZSM01-10, ZSM). **d)** ♀, Sudan, Tozi, paratype (GS: ZSM01-12, ZSM).

**Distribution.** This new species was only collected in Sudan and South Sudan.



**Figure 20.** Distribution of *Antheua nicholsonrobertsi* sp. nov.

***Antheua hirutae* Schintlmeister & Stadie, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:05111CDF-4B5E-469E-8012-0E6E41143351>

Habitus: Figs 21a–f, Genitalia: Figs 22a–d, Distribution map: Fig. 23.

**Holotype.** ♂, “Ethiopia / Oromia region / Harennna forest / 6°42.983'N, 39°43.570'E / 21–24.v. 2013, 2388 m, light / leg. H. Sulak” // GS: MWM 35.183 (MWM/ZSM).

**Paratypes** (38 ♂♂, 7 ♀♀).

**Ethiopia.** 12 ♂♂, with the same data as the holotype (CAS, MWM/ZSM); 3 ♂♂, 2 ♀♀, Oromia, Bale Mts., Harennna Forest, Bale Mountain Lodge, 6°37.270'N, 39°44.259'E, 1850m, 2.v.2016, leg. R. & S. Fiebig/D. Stadie; 1 ♀, Oromia, Harennna Forest Lodge, 6°58.763'N, 39°10.606'E, 2316m, 1–3.v.2016, leg. R. Fiebig & D. Stadie; 1 ♂, Region of Southern Nations, Sheiko Forest Road Teppi to Mizan Teferi, 1530m, 7°02'39.54"N, 35°26'53.59"E, 17.v.2015, leg. D. Stadie, R. & S. Fiebig; 11 ♂♂, Region of Southern Nations, Bonga Guesthouse, 7°15'4.33"N, 36°15'15.51"E, 1750m, 20–23.v.2015, and 12–14.v.2016, leg. D. Stadie & R. Fiebig (CRF); 1 ♂, 2 ♀♀, Oromia, between Leku and Wendo, env. Abosto, 1790m, 6°44.950'N, 38°26.612'E, 15–19.iv.2010, leg. H. Sulak, GS: MWM 22.774, MWM 35.184 (CAS, MWM/ZSM); 2 ♂♂, Kaffa, 11 km NW Jima, 10–15.v.2008, 2060m, leg. G. Riedel, R. Beck, GS: MWM 35.182 (MWM/ZSM); 3 ♂♂, 1 ♀, Kaffa prov., 27 km Bonga, 1900m, 7°18'N, 36°10'E, 1.v.2008, leg. Naumann & Schnitzler, GS: LG 5153 (ANHRT, CAS); 4 ♂♂, Kaffa region, Jimma, 1800m, viii.2011, leg. Cyril de Gennaro (MWM/ZSM); 1 ♂, Arsi region, Zeway, 1700m, viii.2011, leg. Cyril de Gennaro (MWM/ZSM); 1 ♀, West Shewa, Teltele, 1800m, v.2007, leg. V. D. Kravchenko & G. C. Müller (MWM/ZSM).

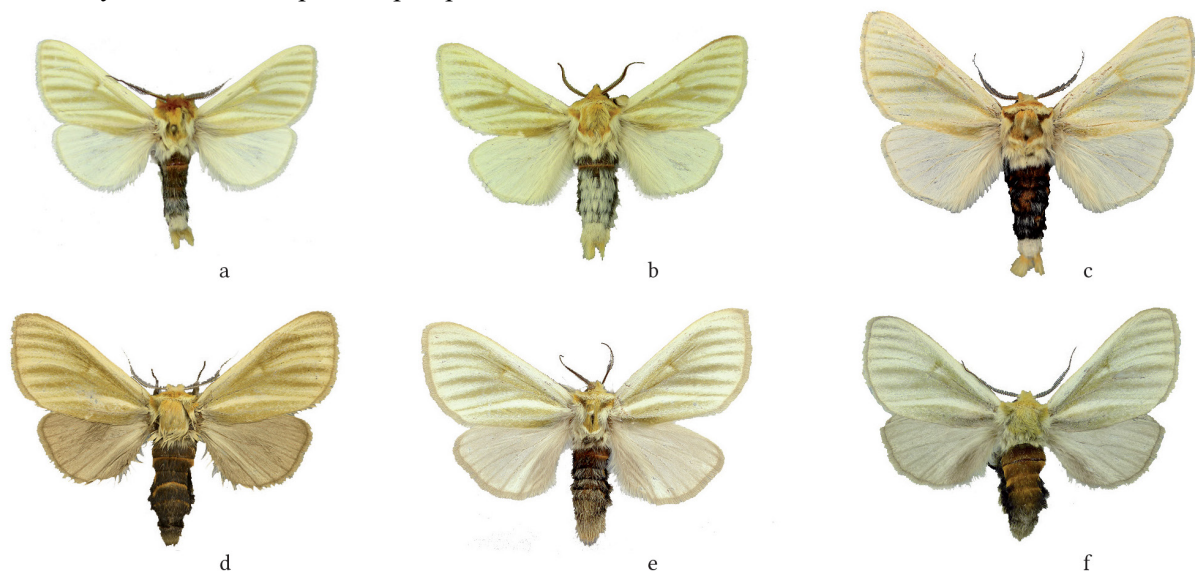


**Diagnosis.** Forewing length is 22–27 mm in males and 23–27 mm in females. This new species closely resembles *A. simplex* and *A. obtusipuncta* **sp. nov.**, but it can be distinguished by its black antennae and the well-defined dark discal spot on the forewing. The pale areas surrounding the veins of the forewings are similar to those in *A. simplex* or *A. obtusipuncta* **sp. nov.** Additionally, the dark basal shadow along the anal margin of the forewing is less pronounced than in *A. cinerea*. Male hindwings are whitish and lighter than the forewings, while females have dark brown hindwings. The forewing colour in females ranges from light greenish-yellow to olive and greenish-brown.

The male genitalia of *A. hirutae* **sp. nov.**, similarly to all other *A. simplex* species group taxa, have a long and slender uncus. The socii are robust and feature two lobes characteristic of the complex. However, the distal lobe is broader at its base than in related species, tapering gradually to a somewhat triangular shape that resembles a carnivore's ear. The medio-ventral process is similarly narrow and long, akin to *A. simplex*, *A. obtusipuncta* **sp. nov.**, and *A. cinerea*. The shape of the valva in the new species is rectangular like that of *A. obtusipuncta* **sp. nov.**, but it has a concave costal margin. The apical lobe of the valva in *A. hirutae* **sp. nov.** is the smallest within the species group, manifesting as a tiny triangular projection rather than a flap. *Antheua hirutae* **sp. nov.** features a short, rounded transtilla, a distinctive trait within the species complex. The digitus process of this new species is the narrowest and most elongated in the entire species group. In addition, the phallus of *A. hirutae* **sp. nov.** is straight and has an elongated dilated carina plate that is markedly narrower than those found in *A. simplex* or *A. obtusipuncta* **sp. nov.**

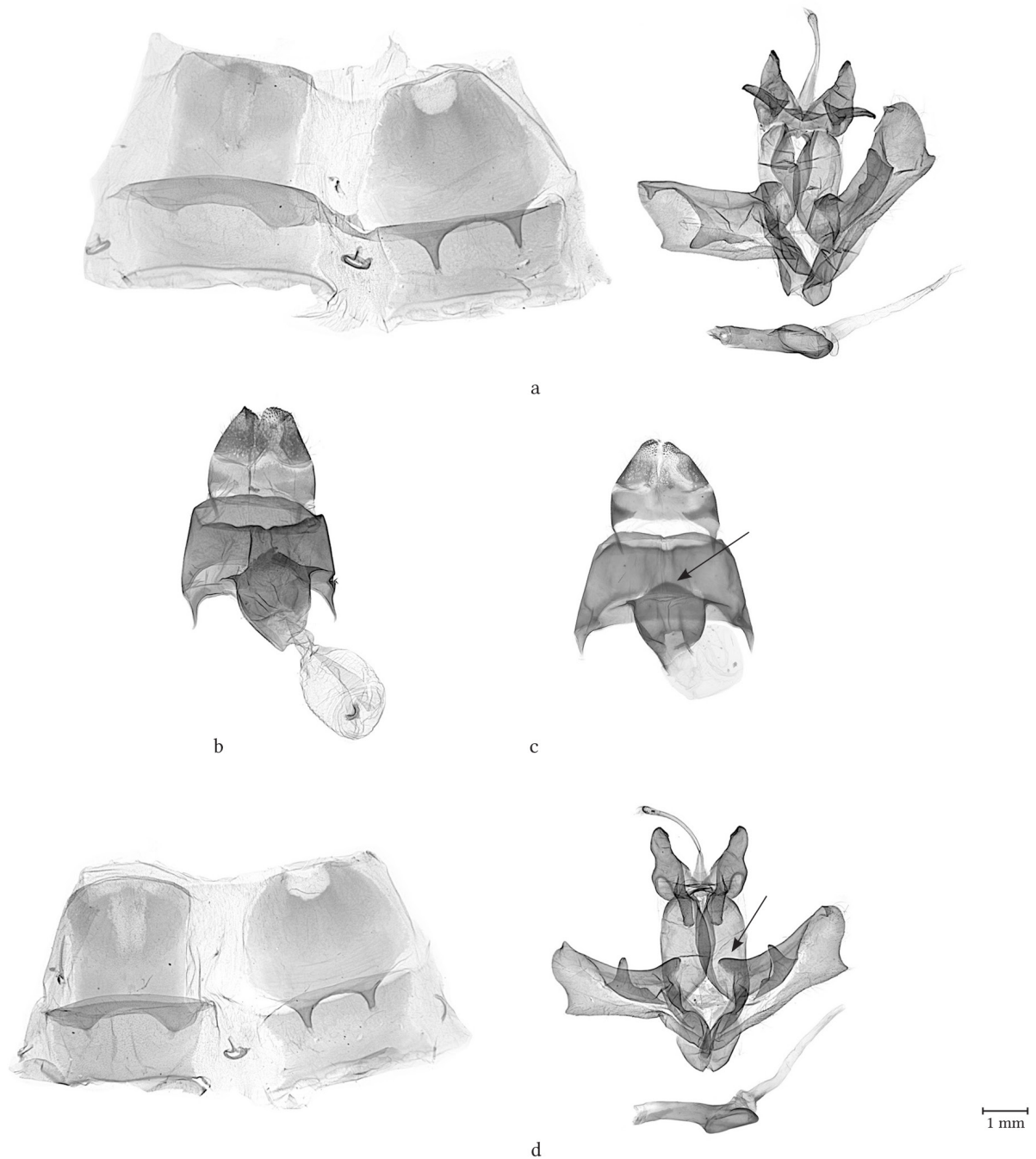
In the female genitalia of *A. hirutae* **sp. nov.**, the distal margin of the ostium bursae is evenly curved and convex. A similar character is found only in the externally distinct *A. galbina* **sp. nov.** The antrum of *A. hirutae* **sp. nov.** is smaller than that of *A. simplex* and *A. obtusipuncta* **sp. nov.**; it is heavily sclerotized and features arcuate lateral margins, while the ductus bursae is notably short. Additionally, the sclerotized distal plates of the corpus bursae are almost entirely reduced in *A. hirutae* **sp. nov.**, with only faint traces remaining. The signum bursae of this new species is small, well-sclerotized, and V-shaped.

**Etymology.** The new species is named in honor of Hiruta Stadie, spouse of lepidopterist Dirk Stadie (Lutherstadt Eisleben, Germany). As a native Ethiopian, she has participated extensively in collecting expeditions across Africa, providing significant organisational support that facilitated the successful discovery of new Afrotropical Lepidoptera.



**Figure 21.** *Antheua hirutae* **sp. nov.**, adults. **a)** ♂, Ethiopia, Oromia, Harennna forest, holotype (GS: MWM 35.183, MWM/ZSM). **b)** ♂, Ethiopia, Kaffa, 11 km NW Jima, paratype (GS: MWM 35.182, MWM/ZSM). **c)** ♂, Ethiopia, Reg.of South Nations, Teppi, paratype (CRF). **d)** ♀, Ethiopia, Oromia, Harennna Forest, paratype (CRF). **e)** ♀, Ethiopia, Kaffa, 11 km NW Jima, paratype (GS: MWM 22.769, MWM/ZSM). **f)** ♀, Ethiopia, Bale Mts., Harennna Forest, paratype (CRF).





**Figure 22. *Antheua hirutae* sp. nov., genitalia. a)** ♂, Ethiopia, Kaffa, 11 km NW Jima paratype (GS: MWM 35.182, MWM). **b)** ♀, Ethiopia, Oromiya, Abosto, paratype (GS: MWM 35.184, CAS). **c)** ♀, Ethiopia, Kaffa, 11 km NW Jima paratype (GS: MWM 22.769, MWM). **d)** ♂, Ethiopia, Oromia, Harenn forest, holotype (GS: MWM 35.183, CAS).

**Distribution.** *Antheua hirutae* sp. nov. is solely known from the Ethiopian Highland.



**Figure 23.** Distribution of *Antheua hirutae* sp. nov.

***Antheua cinerea* Walker, 1855**

Habitus: Figs 24a–i, Genitalia: Figs 25a–e, Labels of the lectotype: Fig. 26, Distribution map: Fig. 27.

*Antheua cinerea* Walker, 1855, *List of specimens of Lepidopterous Insects in the Collection of the British Museum* 3: 767.

Lectotype: ♀, Sierra Leone (in coll. NHMUK, by present designation).

**Material examined** (161 ♂♂, 43 ♀♀).

**Burkina Faso.** 3 ♂♂, 2 ♀♀, Boromo, Ft de Sorobouli, 11°46'53.8"N, 02°54'02.5"W, 247m, 24–25.vii.2014, piège UV, P. Moretto leg., GS: LG 4333, LG 4603, LG 4335, LG 4336; 1 ♂, same locality and collector, 25–26.vi.2014, GS: ANHRT 00415; 5 ♂♂, 2 ♀♀, same locality and collector, 4–5.vii.2013; 5 ♀♀, Dori, 14°04'N, 0°02'E, 285m, 23–27.viii.2013, leg. local collectors; 1 ♀, Pama, 11°15'N, 0°42'W, viii.2005, leg. P. Moretto (all in ANHRT). 1 ♂, 1 ♀, Boromo, Ft. de Souroubouli, 247m, 4.vii.2013, leg. P. Moretto, GS: MWM 23.977, MWM 25.978 (MWM/ZSM). **Cameroon.** 11 ♂♂, Adamawa Region, Adamawa Plateau, 7.3 km West of Bazanga, Chute De Tello, 07°13'50.6"N, 13°56'29.2"E, 1246m, 24–30.ix.2018, MV Light Trap, Sáfián, Sz., Simonics, G. leg.; 12 ♂♂, North

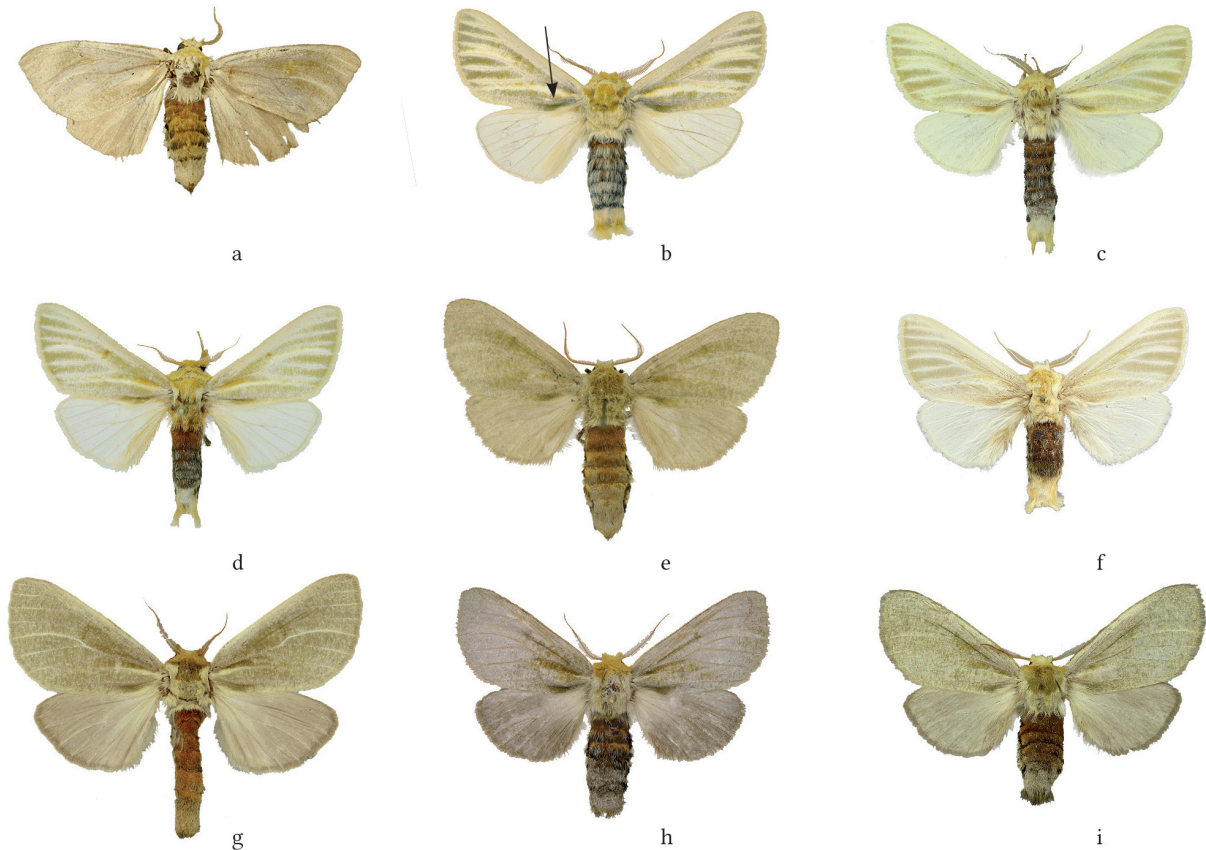
Region, Wack (La Falaise), 07°40'16.5"N, 13°33'18.4"E, 900m, 2–21.x.2018, general collecting and cold cathode UV light trap, Sáfián, Sz., Simonics, G. leg., GS: ANHRT 00424; 1 ♂, East Region, Panoramique, on N1 05°26'37.6"N, 14°03'03"E, 898m, 7–11.v.2016, light trap, Sáfián, Sz., Simonics, G. leg., GS: LG 6593 (ANHRT). **Gambia.** 2 ♂♂, Kotu, 13°27'22"N, 16°14'23"W, 18.vii.2012, leg. R. W. Goff, GS: LG 4600; 1 ♂, same locality and collector, 9.vii.2012, GS: LG 4601; 1 ♀, same locality and collector, 1.viii.2009, GS: LG 4602; 2 ♂♂, Abuko, 13°23'41"N, 16°38'45"W, 03.ix.2009, leg. R.W. Goff, GS: LG 4338 (ANHRT). **Ghana.** 1 ♀, Accra, Archimoto Forest, 14.ix.1988, leg. F. Diemer, GS: MWM 35.196 (MWM/ZSM). **Guinea.** 9 ♂♂, 619 km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, local collectors leg.; 5 ♂♂, Dalaba, Forêt de Goubel, 10°39'27"N, 12°15'44"W, 1413m, 10–18.ix.2019, MV light trap, Geiser, M., Leno, M., Koivagui, S., Miles, W., Mulvaney, L., Sáfián, Sz. leg.; 1 ♂, Dalaba, Forêt de Tinka, 10°43'14"N, 12°15'22"W, 1289m, 25–28.ix.2019, MV Light Trap, Geiser, M., Leno, M., Koivagui, S., Miles, W., Mulvaney, L., Sáfián, Sz. leg. (ANHRT). **Ivory Coast.** 13 ♂♂, 2 ♀♀, Gbando Village, (Sudanian forest with Gallery forest), 9°34'17.1"N, 6°41'1.1"W, 417m, 15–22.vi.2018, MV Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg.; 2 ♂♂, 1 ♀, Denguele Classified Forest (sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 479m, 6–14.vi.2018, LepiLED and MV light trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg.; 3 ♂♂, 1 ♀, Kakpin Village, Comoe 0, Open forest, 08°39'07"N, 03°46'58.8"W, 259m, 27.vi.–2.vii.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg., GS: ANHRT 00416 ♂, LG 4604 ♀; 1 ♂, Comoe NP, Comoe 4, Open Forest, 08°42'54.6"N, 03°47'53.4"W, 238m, 1.vii.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg.; 1 ♂, Mt Tonkoui Peak, N07°27'15.2", W07°38'12.5" 1171m, 1–8.xi.2015, Light Trap, leg. Aristophanous, M., Moretto, P. & Ruzzier, E., GS: LG 4334; 8 ♀♀, Korhogo, Kogo, 04°07'04.6"N, 07°35'04.5"W, 347m, 20.vii.2014, UV light, P. Moretto leg.; 4 ♀♀, Boundiali, M'banto, 9°33'10.4"N, 6°40'56.6"W, 395m, 13–15.vii.2013, leg. Moretto, P.; 1 ♀, Tai NP., Tai Research Station, (SRET), 05°50'00"N, 07°20'32.0W, 174m, 25.iii.–17.iv.2017, MV light, Aristophanous, A., Aristophanous, M., Geiser, M., Moretto, P. leg.; 1 ♀, Yéalé village, Mt. Nimba, 07°31'35.3"N, 8°25'20.1"W, 18–29.iv.2018, light trap, Aristophanous, M., Geiser, M., Moretto, P. leg. (ANHRT). **Liberia.** 1 ♂, 2 ♀♀, Nimba County, Yekepa residential area, 7°34'26.3"N, 8°32'31.6W, 508m, 10–31.iii.2017, Sáfián, Sz. leg. (ANHRT). 1 ♂, 1 ♀, Harbel 24.x.1950, R.M. Fox, GS: USNM02-48 (USNM). **Mali.** 32 ♂♂, 5 ♀♀, Koulikoro Region, near Ouronina village, 12.103085N, 8.411406W, 395m, vi.–ix.2015, leg. GCM Team, GS: MWM 25.200, MWM 35.202, MWM 35.226 (MWM/ZSM, CAS). **Nigeria.** 1 ♂, Kaduna, 24.v.1971, leg. H. Politzar (ZSM). **RCA.** 1 ♀, Ngaoundaye, 700 m, vii.1984, GS: MWM 23.041 (MWM/ZSM). **Senegal.** 3 ♂♂, 5 miles W Digoue vi.1985, leg. H. Friend (CAS). **Sierra Leone.** 3 ♂♂, Kenema Province, Gori Hills, near Moimandu, 08°14'51"N, 10°58'17"W, 470m, 2–9.iii.2020, Kalnoi, G., Sinyaev, V. leg.; 6 ♂♂, Kono Province, Gori Hills, Near Giehum, 08°27'48"N, 10°46'17"W, 375m, 22–29.ii.2020, Kalnoi, G., Sinyaev, V. leg.; 1 ♂, Kalainkay nr. Kamabai, Northern Prov. 3–6.xi.2015, N09°10'52", W11°56'44", 80m, light trap, R. Goff coll., leg. Smith, R. & Takano, H. (ANHRT). **Togo.** 22 ♂♂, 2 ♀♀, Fazao-Malfakassa NP, Mare aux crocodiles campsite (Sudanian savannah/dry forest), 8°44'58.8"N, 0°48'51.8"E, 505m, 26.viii.–7.ix.2018, MV and actinic light trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., GS: ANHRT 00415, ANHRT 00422, ANHRT 00423; 9 ♂♂, 1 ♀, Fazao-Malfakassa NP, Point de vue campsite (Sudanian savannah), 8°48'50"N, 0°49'3.2"E, 415m, 16–23.viii.2018, MV Light Trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., GS: ANHRT 00425 (ANHRT). 3 ♂♂, Fazao Hotel, 8°41'44.1"N, 0°46'32.5"E, 532m, 3–4.viii.2013, leg. local collectors, GS: MWM 25.976 (ANHRT, MWM/ZSM).

**Diagnosis.** Forewing length is 18–23 mm in males and 21–27 mm in females. *Antheua cinerea* is distinguished from other taxa in the *A. simplex* species group by a blackish shadow near the base of the anal margin of the forewing. The species also exhibits a well-developed greyish discal spot, similar to that of *A. hirutae* **sp. nov.** Sexual dimorphism is pronounced: females are uniformly dark brown or dark greenish-brown and display a narrow whitish stripe along vein M2. The brown antennae of females possess longer rami than those of other *Antheua* species.

The male genitalia of *A. cinerea* are characterised by a very long, slender uncus and a notably short distal process of the socius. The medio-ventral process of the socius is similar to that of *A. simplex*, *A. obtusipuncta* **sp. nov.**, and *A. hirutae* **sp. nov.** The editum configuration is distinctive, with a short, rounded proximal ampulla process and a longer, pointed distal ampulla process. The valva apex bears a

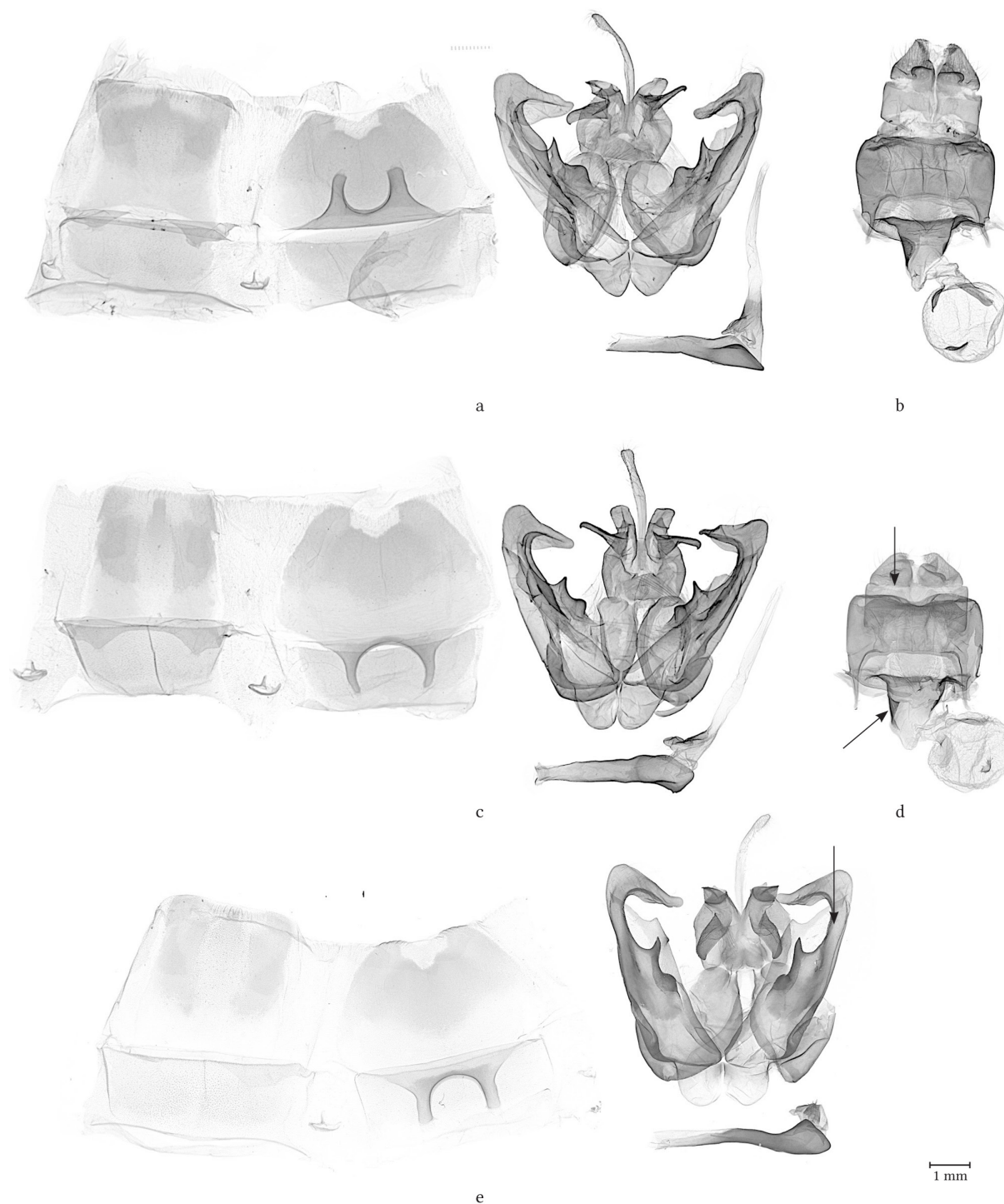
large, bird-head-shaped lobe that is more extensive than the apical flaps in related species. The carina is narrower and less rounded, presenting a shovel-like shape compared to *A. simplex* and *A. obtusipuncta* **sp. nov.**

The female genitalia can be distinguished from other species in the complex by the presence of a dorsal bulge at the base of each anal papilla. The distal margin of the ostium bursae is nearly straight, resembling that of *A. obtusipuncta* **sp. nov.**, whereas it is arcuate in all other species in this group. The asymmetrical, funnel-shaped antrum of *A. cinerea* features a rounded lateral invagination, which is a unique character within the complex. Additionally, the sclerotized distal plates of the corpus bursae differ in size.



**Figure 24. *Antheua cinerea*, adults.** **a)** ♀, West Africa, lectotype (NHMUK). **b)** ♂, Togo, Fazao-Malfakassa National Park (GS: ANHRT 00423, ANHRT). **c)** ♂, Togo, Fazao (GS: MWM 25.976, MWM/ZSM). **d)** ♂, Ivory Coast, Kakpin village, Comoe O. (GS: ANHRT 00427, ANHRT). **e)** ♀, The Gambia, Kotu (GS: LG 4602, ANHRT). **f)** ♂, Nigeria, Kaduna (ZSM). **g)** ♀, Burkina Faso, Boromo, Ft. de Sorobouli (CAS). **h)** ♀, Togo, Fazao-Malfakassa National Park (GS: ANHRT 00425, ANHRT). **i)** ♀, Mali, Mopti region, Dogoa Plateau, Bandagara (GS: MWM 35.226, MWM/ZSM).



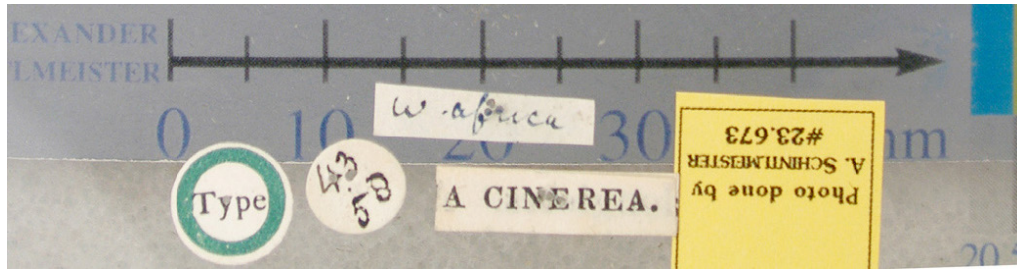


**Figure 25. *Antheua cinerea*, genitalia.** **a)** ♂, Togo, Fazao-Malfakassa National Park (GS: ANHRT 00423, ANHRT). **b)** ♀, Togo, Fazao-Malfakassa National Park (GS: ANHRT 00425, ANHRT). **c)** ♂, Cameroon, North Region, Wack (GS: ANHRT 00424, ANHRT). **d)** ♀, Mali, Mopti region, Dogoa Plateau, Bandagara (GS: MWM 35.226, MWM/ZSM). **e)** ♂, Liberia, Harbel (GS: USNM 02-48, USNM).

#### Designation of lectotype

*Antheua cinerea* was originally described from two female specimens labeled “West Africa” and “Sierra Leone”; however, no holotype was designated at that time. Examination of the NHMUK collections revealed the syntype bearing the “West Africa” label, which is now designated as the lectotype (Fig. 24a). The associated labels for this specimen are shown below (Fig. 26), and a lectotype label will be added subsequently.





**Figure 26.** Labels of the lectotype of *Antheua cinerea*.

**Distribution.** *Antheua cinerea* is widely distributed in West Africa, recorded in Burkina Faso, Cameroon, Gambia, Guinea, Ivory Coast, Liberia, Mali, Nigeria, Senegal, Sierra Leone, and Togo.



**Figure 27.** Distribution of *Antheua cinerea*.

***Antheua ellenae* Schintlmeister & Fiebig, sp. nov.**

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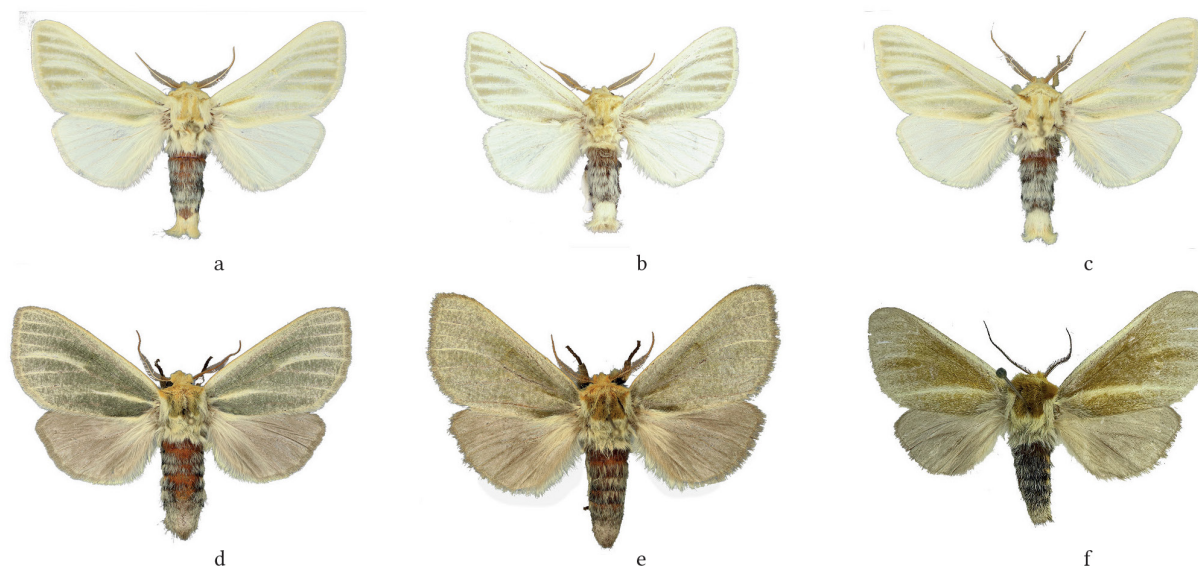
Habitus: Figs 28a–f, Genitalia: Figs 29a–d, Distribution map: Fig. 30.

**Holotype.** ♂, “Uganda western / Bwindi Impenetrable NP / /Cuckooland Lodge / 01°00'05"S, 29°42'27"E, 27.x.–02.xi.2021 / LF 1700m / leg. Fiebig, Stadie & Strutzberg” // “Genitalpräparat RF 2024-365” (CRF).

**Paratypes** (9 ♂♂, 9 ♀♀, in CRF, CAS, CGM).

**Uganda.** 1 ♀, Bwindi Impenetrable NP, Cuckooland Lodge, 1700m, 01°00'05"S, 29°42'27"N, 27–30.iii.2013, leg. R. & S. Fiebig / D. Stadie, GS: RF2021-603. 1 ♂, 4 ♀♀, Bodongo Forest near Masindi, 600m, 01°66.653'N, 31°52.328'E, 14.i.2011, leg. H. Sulak & Tom Kolb, GS: MWM 22.775. 1 ♀, near Bundibugio, 800m, 0.814.277°E, 30.154.102°E, leg. H. Sulak & Tom Kolb; 8 ♂♂, 3 ♀♀, Masindi district, Murchison Falls NP, Red Chilli Rest Camp Area, 660m, 02°16'39"S, 31°33'52"E, 1–3.iv.2022, leg. Fiebig, Stadie & Strutzberg, GS: RF2024-366, RF2024-368.

**Diagnosis.** Forewing length is 21–23 mm in males and 23–26 mm in females. Males closely resemble *A. cinerea* in both colouration and the presence of a greyish discal spot on the forewing. The forewings are slightly paler than those of *A. cinerea*. A fuscous dorsal shadow near the forewing base is present, as in *A. cinerea*, but is less developed and less contrasting. Females, which are sexually dimorphic, more closely resemble *A. spurcata* than *A. cinerea*. They are generally darker than *A. cinerea* females, with forewing colouration ranging from intense olive to dark greenish-brown. Unlike *A. cinerea* females, the forewing costa is tinged with white. The white basal streak on the forewings is more prominent and longer, in one female reaching the tornus. The white stripe on vein M2 is also more contrasting. Hindwings are brown. Female antennae are brown and have shorter rami than those of *A. cinerea*.

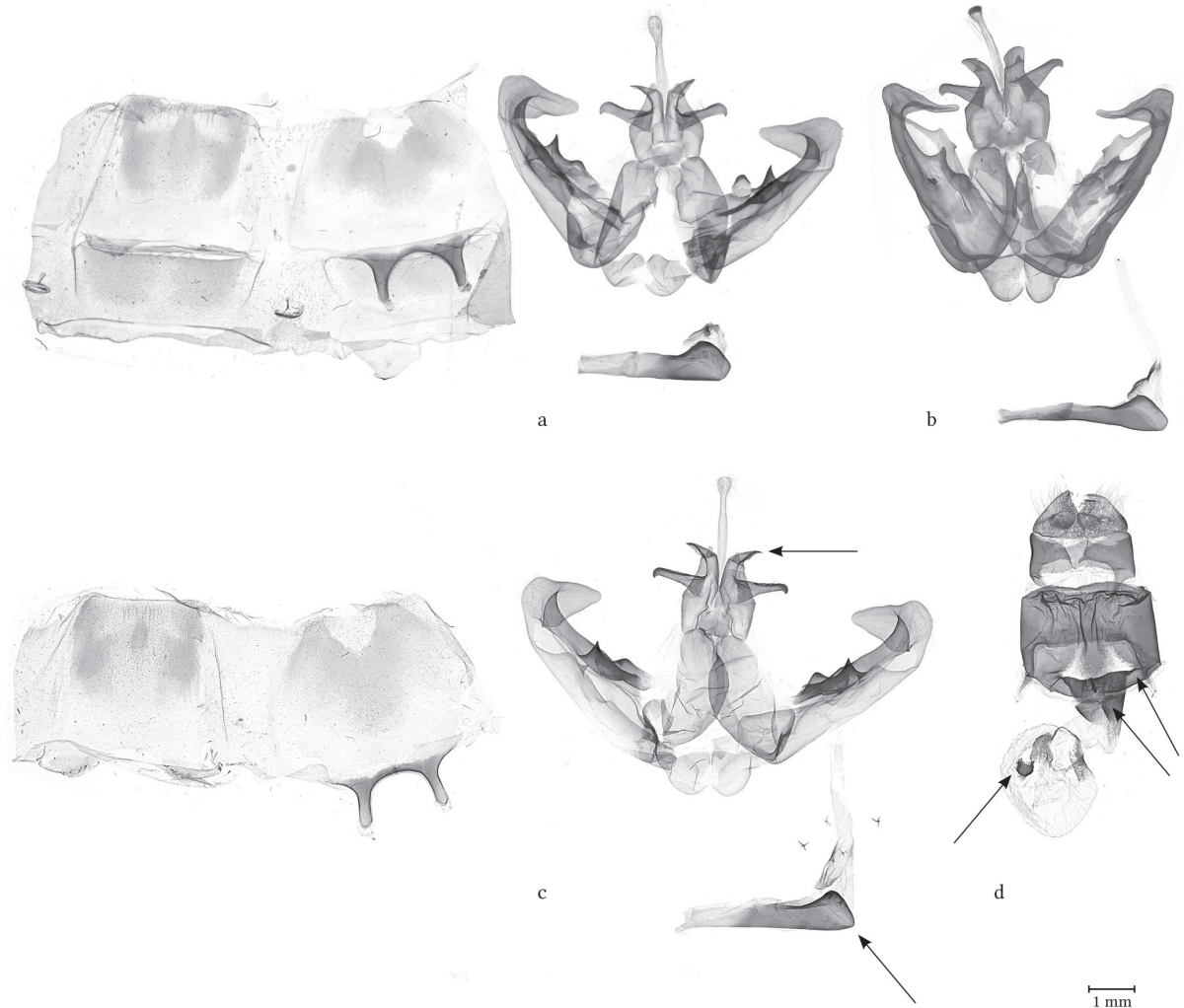


**Figure 28.** *Antheua ellenae* sp. nov., adults. **a)** ♂, Uganda, Bwindi Impenetrable NP, holotype (GS: RF2024-365, CRF). **b)** ♂, Uganda, Bodongo Forest near Misindi, paratype (MWM 22.775, CAS). **c)** ♂, Uganda, Masindi district, Murchison Falls NP, paratype (GS: RF2024-368, CRF). **d)** ♀, Uganda, Masindi district, Murchison Falls NP, paratype (GS: RF2024-366, CRF). **e)** ♀, Uganda, Masindi district, Murchison Falls NP, paratype (CRF). **f)** ♀, Uganda, Bodongo Forest near Masindi, paratype (CAS).

The male genitalia closely resemble those of *A. cinerea*. The uncus is long and slender with a knob-shaped tip. The socius possesses a long medio-ventral process terminating in a hook-shaped tip. Compared to *A. cinerea*, the distal socius process is both longer and slimmer, ending in a pointed tip. The valva, particularly the costal plate, is nearly identical to that of *A. cinerea*. In one specimen (GS: MWM 22.775), the distal socius process is broader and the projections of the costal plate are reduced in

size. The phallus is straight and thicker than that of *A. cinerea*, with a bulbous distal part lacking teeth. The eighth abdominal segments are also similar to those of *A. cinerea*.

The female genitalia differ from those of *A. cinerea* by having a smaller, asymmetrical antrum with edged lateral lobes. The lateral processes of the posterior margin of the antrum are significantly shorter than in *A. cinerea*, and the evaginations at the base of the ductus bursae are larger. While the signum is reniform in *A. cinerea*, it is disc-shaped with a serrated margin in the new species.



**Figure 29.** *Antheua ellenae* sp. nov., genitalia. **a)** ♂, Uganda, Bwindi Impenetrable NP, holotype (GS: RF2024-365, CRF). **b)** ♂, Uganda, Bodongo Forest near Misindi, paratype (MWM 22.775, CAS). **c)** ♂, Uganda, Masindi district, Murchison Falls NP, paratype (GS: RF2024-368, CRF). **d)** ♀, Uganda, Masindi district, Murchison Falls NP, paratype (GS: RF2024-366, CRF).

**Etymology.** The species is dedicated to Ellen Wetzel (Schönfeld, Germany), in gratitude for supporting the entomological research activities of the second author of this new species.

**Distribution.** The species has been recorded exclusively in western Uganda.



**Figure 30.** Distribution of *Antheua ellenae* sp. nov.

***Antheua smithi* László & Schintlmeister, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:C6AE2492-8B01-47AF-AC73-05A1A759369A>

Habitus: Figs 31a–f, Genitalia: Figs 32a–e, Distribution map: Fig. 33.

**Holotype.** ♂, “ZAMBIA 1437m / Kapishya Hot Springs, / Shiwa N'gandu Estate / 11°10'13"S, 31°36'00"E / 22.XI–8.XII.2015 Light Trap / leg. Smith, Takano & Oram / TripRef:ZM-008(ANHRT15)” // “African Natural History / Research Trust / ANHRT:2017.15” // “ANHRTUK / 00075172” // GS: ANHRT 00426 (ANHRT).

**Paratypes** (110 ♂♂, 4 ♀♀).

**Angola.** 1 ♂, N'Dalla Tando, 2,700 feet, 25.xi.1908, Dr. W. J. Ansorge, GS: LG 5235 (ANHRT). **DRC.** 1 ♀, Lusambo, 16.ix.1949, leg. Dr. M. Fontaine (RMCA). **Tanzania.** 1 ♂, Tanzania, Rukwa Region, Kalambo Forest reserve, 1587m, 8°21.383'S, 31°15.123'E, 4.ii.2008, leg. Ph. Darge, GS: MWM 35.176 (MWM/ZSM). **Zambia.** 5 ♂♂, 1 ♀, with the same data as the holotype, GS: LG 5271 ♀; 4 ♂♂, same locality, 14–16.iii.2017, leg. Oram, D., Miles, W., Smith, L.; 6 ♂♂, same locality, i–iii.2016, M.T. Harvey Coll., Smith, R., Takano, H. leg.; same locality, i–iii.2017, M.T. Harvey Coll., Miles, W., Oram, D., Smith, L. leg.; 2 ♂♂, same locality, i.2015, M.T. Harvey Coll., Smith, R., Takano, H. leg., GS: LG 4607; 1 ♂, same locality, xii.2014, M.T. Harvey Coll., Smith, R., Takano, H. leg.; 3 ♂♂, Mayukuyuku, Kafue NP, S14°54'55", E26°03'47", 1080m, 21–26.xi.2013, Light Trap, leg. Smith, Takano & Oram, GS: LG 4596; 1 ♂, Kankonde Camp, Mutinondo Stream, S12°23'29", E31°19'24", 1400m, 12–



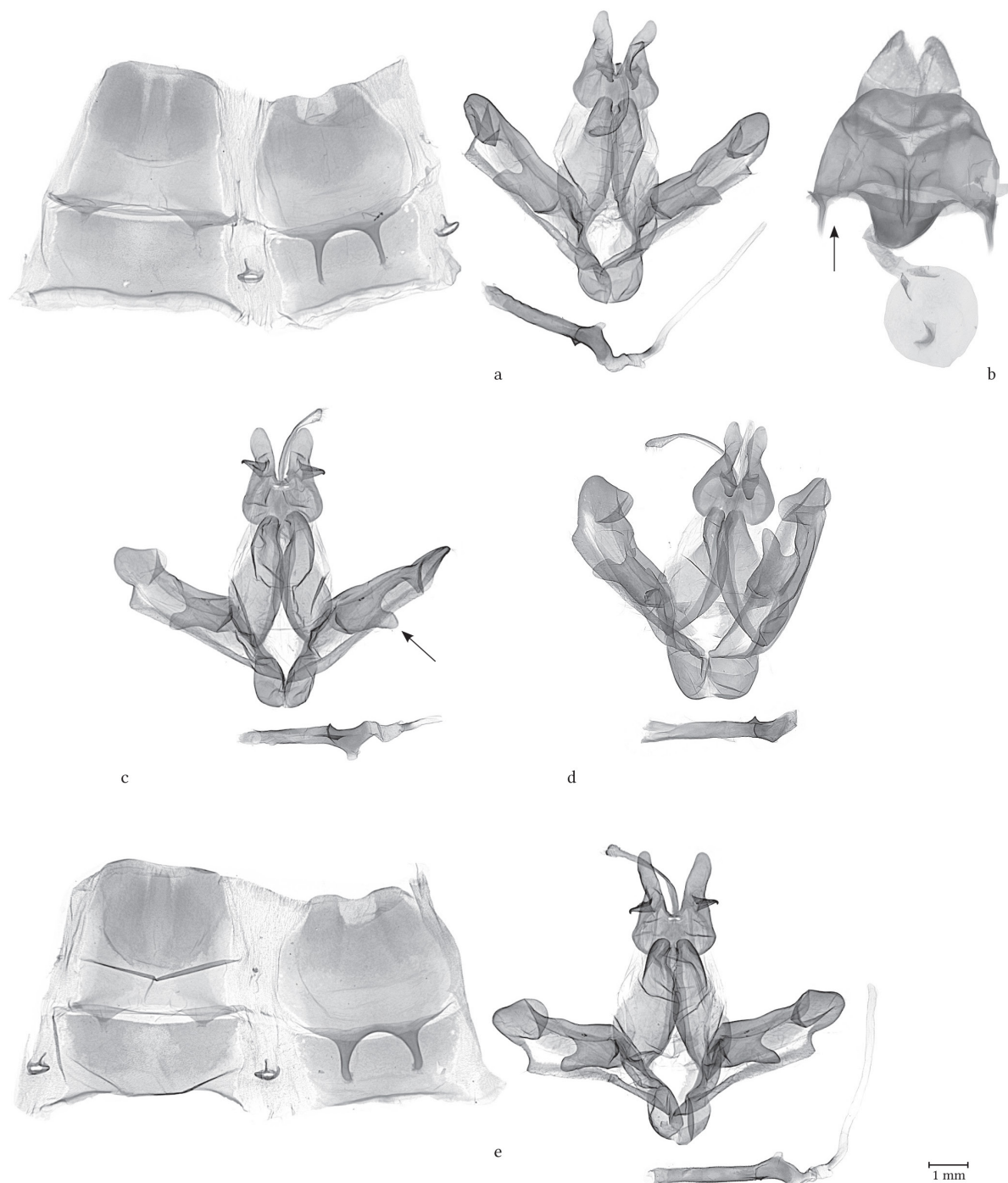
15.xi.2014, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, Mutinondo Wilderness Area, Mpika, Northern Prov., S12°27'06", E31°17'30", 1460m, 14–17.ii.2019, MV light trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 1 ♂, Kalungu, north of Isoka, S9°40'52", E32°42'50", 1280m, 5–8.iii.2017, MV light trap, Oram, D., Miles, W., Smith, L. leg.; 4 ♂♂, Lumangwe Falls, Kalungwishi River, S09°32'33", E29°23'17", 1187m, 4–7.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 1 ♂, Chilambwe Falls, Kafubu River, 09°50'13"S, 30°43'35"E, 1420m, 8–12.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 1 ♂, Ntumbachushi Falls, Ngona River, Luapula Prov. S09°51'12", E28°56'40", 1166m, 1–3.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 11 ♂♂, Nyangombe Falls, (Miombo/Riverine forest mosaic), 11°48'25"S, 24°32'12"E, 1300m, 17–23.xi.2019, actinic, LepiLED and MV light trap, Bashford, M., Miles, W., Mulvaney, R., Smith, R. leg., GS: LG 5264; 2 ♂♂, same locality, 15–17.xi.2018, MV light trap, Aristophanous, M., Dérozier, V., László, G., Oram, D. leg.; 2 ♂♂, Zambezi Rapids (Miombo/Riverine forest mosaic), 11°7'30"S, 24°11'6"E, 1205m, 4–9.xi.2018, MV Light Trap, Aristophanous, M., Dérozier, V., László, G., Oram, D. leg., GS: LG 5266; 4 ♂♂, 1 ♀, 1346 m, Kambishi School, S11°54'42", E25°28'50", 10–13.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 1 ♂, Redcliff Zambezi Lodge, Luangwa, 15°38'34.2"S, 30°16'32.9"E, 350m, 11–17.iii.2019, MV Light Trap, Dérozier, V., Imkando, M., Miles, W., Mulvaney, L. leg.; 9 ♂♂, 1 ♀, Hillwood, Ikelenge, S11°16'02", E24°18'59", 1400m, 21–28.x.2013, Light Trap, leg. Smith, R., Takano, H., Chmurova, L. & Smith, L., GS: LG 4328 ♂, LG 4330 ♀; 8 ♂♂, same locality, 17–24.iii.2013, leg. Smith, R. & Takano, H., GS: ANHRT 00411, LG 5155, LG 5157; 6 ♂♂, same locality and collectors, 25–27.xi.2014, GS: ANHRT 00413; 13 ♂♂, 1 ♀, same locality, 23–30.xi.2019, Bashford, M., Miles, W., Mulvaney, L., Smith, R. leg.; 2 ♂, same locality and collectors, 7–10.xii.2019; 5 ♂♂, same locality, 30. x.–3.xi.2017, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 1 ♂, same locality, 5–11.vi.2021, Chizuwa, D., Choongo, W. leg.; 1 ♂, Nkwaji, Mwinilunga, S11°36'22", E24°33'17", 1316m, 29.x.–3.xi.2013, Light Trap, leg. Smith, R., Takano, H., Chmurova, L. & Smith, L.; 1 ♂, same locality, 3–10.xi.2017, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 4 ♂♂, same locality, 3–10.xii.2020, Chizuwa, D., Choongo, W. leg.; 2 ♂♂, 1340 m, Jiwundu Swamp, S11°51'54", E25°33'20", 25–30.x.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 4 ♂♂, Chitunta Plain (Miombo/Dambo mosaic), 11°29'12"S, 24°24'18"E, 1396m, 29.xi.–4.xii.2019, LepiLED and actinic light trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 1 ♂, same locality, 10–16.xii.2020, Chizuwa, D., Choongo, W. leg. (ANHRT).



**Figure 31.** *Antheua smithi* sp. nov., adults. **a)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, holotype (GS: ANHRT 00426, ANHRT). **b)** ♂, Tanzania, Rukwa Region, Kalambo Forest Reserve, paratype (GS: MWM 35.176, MWM/ZSM). **c)** ♂, Zambia, Hillwood, Ikelenge, paratype (GS: LG 4328, ANHRT). **d)** ♀, DRC, Lusambo, paratype (RMCA). **e)** ♂, Angola, N'dalatando, paratype (GS: LG 5235, ANHRT). **f)** ♀, Zambia, Hillwood, Ikelenge, paratype (GS: LG 4330, ANHRT).



**Diagnosis.** The forewing length is 18–22 mm in males and 20–24 mm in females. *Antheua smithi* **sp. nov.** closely resembles *A. cinerea* in both colouration and forewing pattern, but it lacks the greyish discal spot present in *A. cinerea*. Like *A. cinerea*, this new species displays a fuscous shadow near the base of the anal forewing margin, although this shadow is less pronounced and more diffuse. The forewing contains a yellowish-white stripe between the base and the medial area, similar to *A. cinerea*. In addition, a small but distinct whitish discal spot is present on the forewings, which is either absent or dark greyish in other species within the complex. Females, which are sexually dimorphic, show a nearly uniform olive-grey colouration across all wings and a conspicuous white discal spot on the forewing.



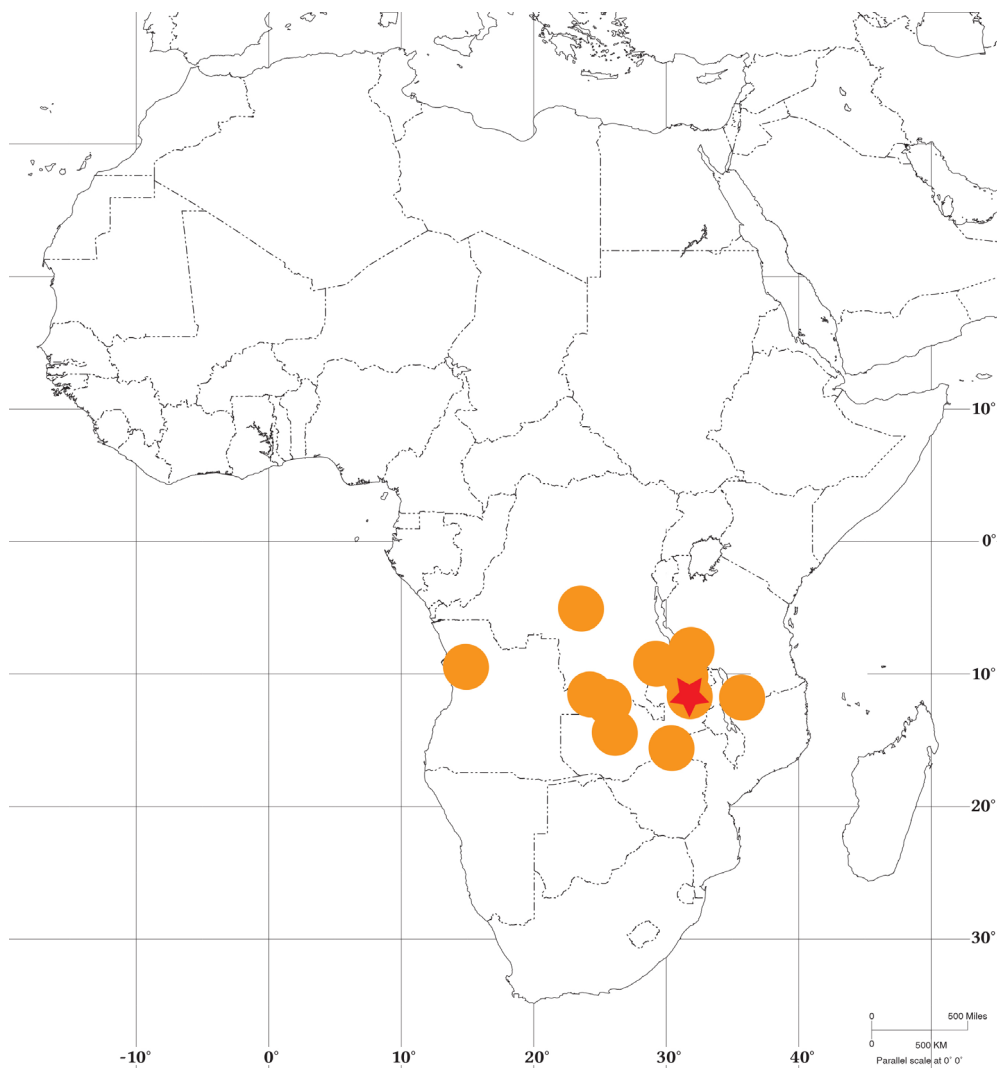
**Figure 32. *Antheua smithi* sp. nov., genitalia.** **a)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, paratype (GS: ANHRT 00426, ANHRT). **b)** ♀, Zambia, Hillwood, Ikelenge, paratype (GS: LG 4330, ANHRT). **c)** ♂, Tanzania, Rukwa Region, Kalambo Forest Reserve, paratype (GS: MWM 35.176, MWM/ZSM). **d)** ♂, Angola, N'dalatando, paratype (GS: LG 5235, ANHRT). **e)** ♂, Zambia, Hillwood, Ikelenge, paratype (GS: ANHRT 00413, ANHRT).

The male genitalia of *A. smithi* **sp. nov.** are characterised by a long and slender uncus. The distal socius process is more elongated and broader than that of *A. simplex* or *A. obtusipuncta* **sp. nov.** In contrast, the medio-ventral process is significantly shorter than in other species within the complex and exhibits a triangular shape with a hooked tip. The costal plate of the valva (editum) is considerably shorter in *A. smithi* **sp. nov.** than in related species and has a broad, rounded ampulla process. The apical lobe of the valva is also broader and more rounded than in allied species. The phallus is noticeably longer and narrower than in its congeners. It is straight along the proximal three-quarters, slightly curved subapically, and lacks a dilated carinal plate. Instead, it features two short subapical spines of varying shapes.

The female genitalia of this new species closely resemble those of *A. cinerea*. Distinguishing features include a slightly longer and more trapezoidal eighth tergite, a considerably shorter and more heavily sclerotised infundibular antrum, a noticeably longer ductus bursae, narrower and more pointed distal plates of the corpus bursae, and a more extensive signum bursae.

**Etymology.** The new species is dedicated to Richard Smith, Chairman of the Board of Trustees of the African Natural History Research Trust, in recognition of his remarkable support for entomological research in Sub-Saharan Africa.

**Distribution.** *Antheua smithi* **sp. nov.** occurs throughout the Zambian Plateau and neighbouring regions, with confirmed records in Angola, the DRC, Tanzania, and Zambia.



**Figure 33.** Distribution of *Antheua smithi* **sp. nov.**

***Antheua galbina* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:C6C92A5B-823F-4909-A064-5EFEBF5DF1AF>

Habitus: Figs 34a–f, Genitalia: Figs 35a–f, Distribution map: Fig. 36.

**Holotype.** ♂, “ZAMBIA 1437m / Kapishya Hot Springs, / Shiwa N'gandu Estate / S11°10'13", E31°36'00" / i.2015 M.T. Harvey coll. / leg. Smith R. & Takano H. / ANHRT:2017.29" // “ANHRTUK / 00000187" // GS: ANHRT 00410 (ANHRT).

**Paratypes** (101 ♂♂, 16 ♀♀).

**Angola.** 1 ♂, prov. Huambo, 2 km S Calanque, 12°52.214'S, 15°28.126'E, 1970m, 27.iii.2014, leg. Sulak, Naumann & Ott, GS: CSW01-18 (CAS). **DRC.** 1 ♂, Haut-Katanga, [Likasi], Tshituru [= Shituru], 4.iv.1929, leg. J. Romieux, GS: MHNG 01-12 (MHNG). **Malawi.** 1 ♂, Chitipa District, Jembya Reserve, 18 km SSE Chisenga, 10°08'S, 33°27'E, 1870m, 21–31.xii.1988, leg. J. Rawlins & S. Thompson (CMNH). **Tanzania.** 1 ♀, Rukwa Region, Kalambo Forest reserve, 1587m, 8°21.383'S, 31°15.123'E, 4.ii.2008, leg. Ph. Darge, GS: MWM 35.177 (ZSM); 1 ♂, Rukwa Province, Mbizi Mts., N de Mpwapwa, 1953m, 8°14.343'S, 31°50.507'E, 13.v.2004, leg. Ph. Darge (MWM/ZSM); 1 ♂, Mbeya Province, Rungwe Mts., 2350m, 9°05.060'33'38.688'E, 24.v.2004, leg. Ph. Darge (MWM/ZSM); 24 ♂♂, 2 ♀♀, Njombe, Masaulwa, 2700m, 09°07'S, 34°35'E, iii.–iv.2013, local collectors leg., GS: ANHRT 02454 ♂, ANHRT 02455 ♂, ANHRT 02456 ♀ (ANHRT). **Zambia.** 4 ♂♂, 1 ♀, with the same data as the holotype, GS: LG 4606 ♂, LG 4605 ♀; 7 ♂♂, 1 ♀, same locality and collectors, i–iii.2016, GS: ANHRT 00420; 5 ♂♂, same locality, i–iii.2017, leg. Oram, D., Miles, W., Smith, L.; 2 ♂♂, same locality and collectors, 14–16.iii.2017, GS: ANHRT 00412; 3 ♂♂, 5 ♀♀, same locality, 22.xi.–8.xii.2015, leg. Smith, Takano & Oram, GS: ANHRT 00421 ♀; 3 ♂♂, same locality, xii.2014, leg. Smith, R. & Takano, H.; 1 ♂, 1 ♀, same locality and collectors, v.2015; 4 ♂♂, 2 ♀♀, same locality, 10–11.xi.2014, leg. Smith, Takano & Oram, GS: LG 4332 ♀; 8 ♂♂, 1 ♀, Kankonde Camp, Mutinondo Stream, S12°23'29", E31°19'24", 1400m, 12–15.xi.2014, Light Trap, leg. Smith, R. & Takano, H.; 2 ♂♂, Mutinondo Wilderness Area, Mpika, Northern Prov., S12°27'06", E31°17'30", 1460m, 14–17.ii.2019, MV light trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 16 ♂♂, same locality, 15–17.xii.2023, actinic, LepiLED and MV light trap, László, G., Morgan, L., Volynkin, A. leg.; 1 ♂, 1 ♀, Kabwe, Kasanka N.P., S12°32'28", E30°12'42", 1187m, 30.xi.–1.xii.2012, Light Trap, leg. Smith, R. & Takano, H., GS: ANHRT 00409 ♀; 1 ♂, Kasanka River Pontoon, Kasanka N.P., S12°34'23", E30°14'05", 1191m, 2–4.xii.2012, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, Ntumbachushi Falls, Ngona River, Luapula Prov. S09°51'12", E28°56'40", 1166m, 3–4.xi.2014, Light Trap, leg. Smith, Takano & Oram; 2 ♂♂, Lumangwe Falls, Kalungwishi River, S09°32'33", E29°23'17", 1187m, 5–7.xi.2014, Light Trap, leg. Smith, Takano & Oram, GS: LG 4327; 2 ♂♂, same locality, 4–7.ii.2019, MV light trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 4 ♂♂, Kalungu, north of Isoka, S9°40'52", E32°42'50", 1280m, 5–8.iii.2017, MV light trap, Oram, D., Miles, W., Smith, L. leg.; 1 ♂, Muchinga Prov., Kahbaira hill, 10°40'37"S, 33°28'11"E, 1440m, 9–11.xii.2023, actinic light trap, László, G., Morgan, L., Volynkin, A. leg.; 5 ♂♂, Muchinga Prov., Benyanga village, 10°40'41"S, 33°27'45"E, 1250m, 7–12.xii.2023, actinic light trap, László, G., Morgan, L., Volynkin, A. leg., GS: LG 6358 (ANHRT); 1 ♀, Abercorn [= Mbala], xi.1963, leg. D. Vesey-Fitzgerald, GS: USNM 02-31 (USNM).

**Diagnosis.** Forewing length: males 19–25 mm, females 21–27 mm. The forewing of *A. galbina* sp. nov. is vibrant lime with a metallic sheen, distinguishing it from other members of the *A. simplex* group. Veins are distinctly pale lemon-yellow. A conspicuous pale lemon-yellow arrow-shaped field is present in the discal area. Males have hindwings ranging from pale brown to off-white, while females exhibit dark greyish-brown hindwings. Sexual dimorphism is restricted to hindwing colouration. The dorsal side of the abdomen is orange-brown, in contrast to the typically blackish abdomen of most *Antheua* species. The male genitalia of *A. galbina* sp. nov. are characterised by a long, slender uncus with a rounded apex, which contrasts with the dilated, knob-shaped uncus tip observed in related species. The socius comprises a large, medially dilated, nearly semicircular proximal lobe and a smaller, posteriorly rounded, laterally pointed distal lobe. The valva is more rectangular and broader than in related species, featuring a large costal plate (editum) with a long, broad, apically truncate ampulla process, the largest within the species complex. The sacculus of *A. galbina* sp. nov., similar to its congeners, is relatively

narrow and possesses a well-developed, pointed distal process. The apical lobe of the valva is much smaller than in related species and is often asymmetrical between the two valvae. The moderately long phallus bears two short, triangular subapical carinal processes, which are distinct from the carina configurations of other species in the complex. The endophallus contains two relatively large subbasal diverticula, whereas related species usually have none or only one small diverticulum.

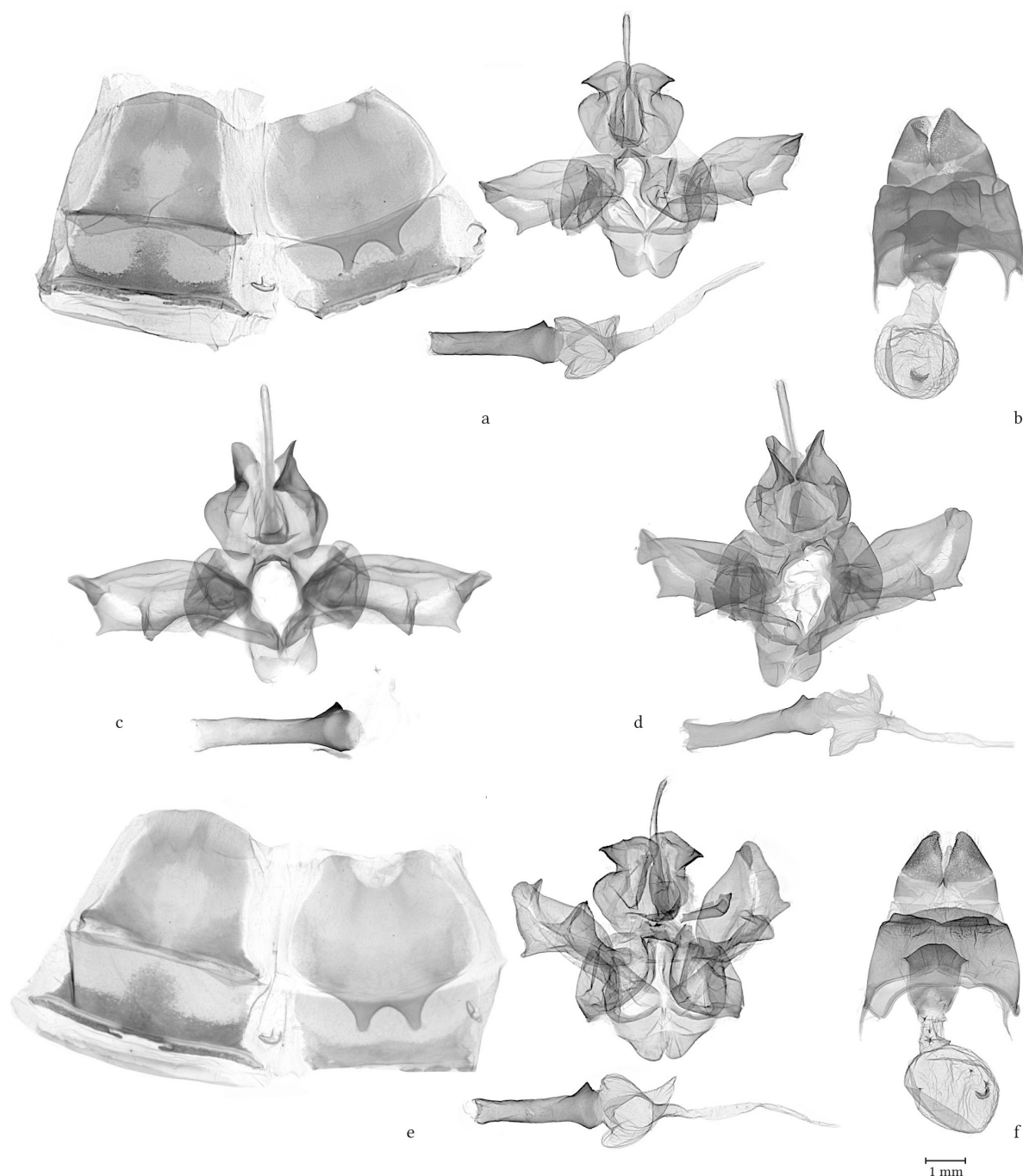
The female genitalia of *A. galbina* **sp. nov.** are characterised by a distinctly semi-circular distal margin of the ostium bursae, whereas related species display a less curved or nearly straight margin. The antrum is much narrower and nearly rectangular, in contrast to the laterally arched shape observed in congeners. Furthermore, the ductus bursae is considerably longer and thicker than those of other species within the complex. This species also lacks the sclerotized distal plates of the corpus bursae, which are present in most related taxa. The signum bursae is heavily sclerotized and exhibits a U-shaped configuration.

**Etymology.** The specific epithet is derived from the Latin adjective “galbinus”, meaning “greenish-yellow”, referring to the distinctive colouration of this new species.



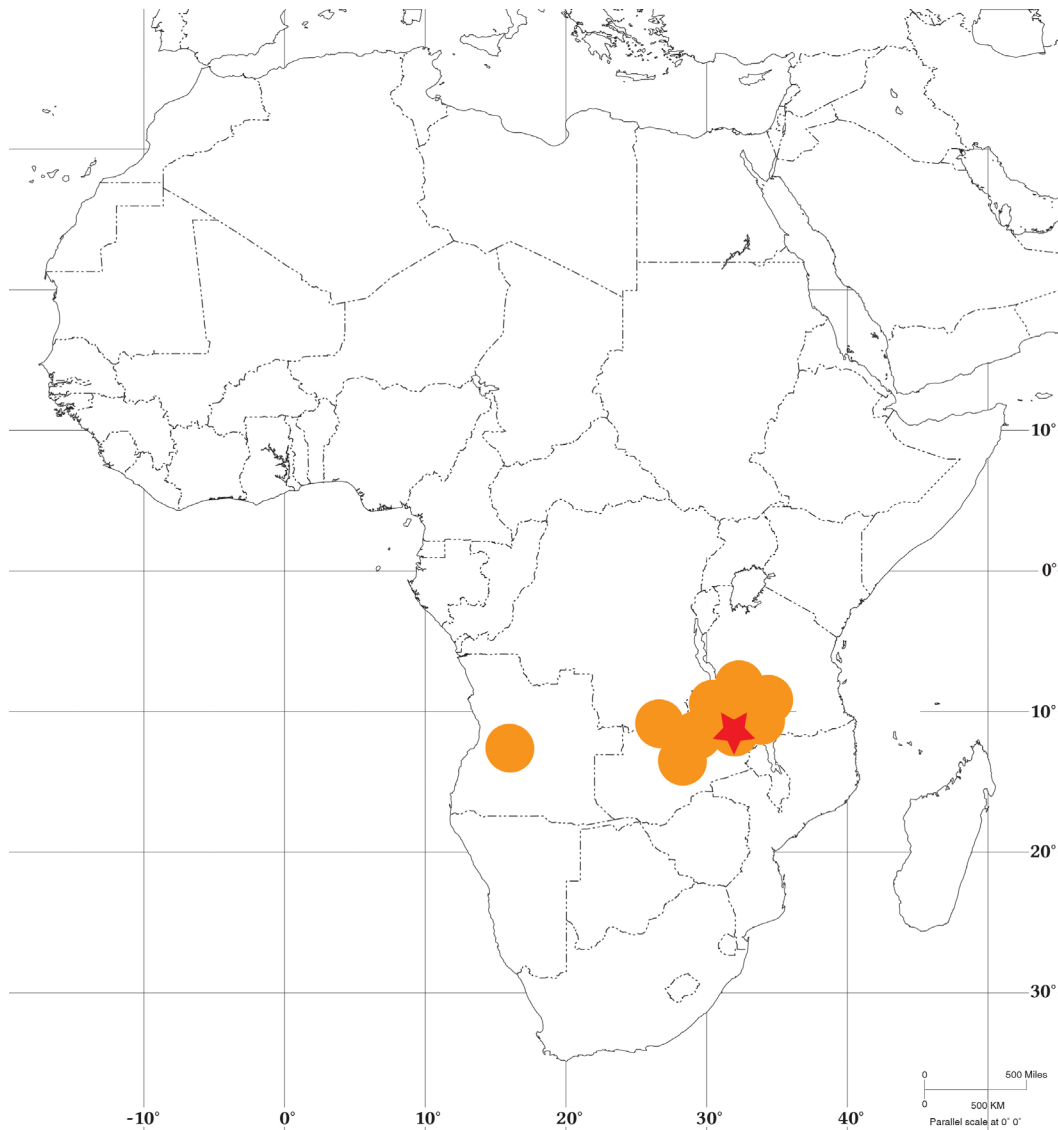
**Figure 34.** *Antheua galbina* **sp. nov.**, adults. **a)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, holotype (GS: ANHRT 00410, ANHRT). **b)** ♂, Lumangwe Falls, Kalungwishi River, paratype (GS: LG 4327, ANHRT). **c)** ♂, DRC, Haut Katanga, Likasi, paratype (GS: MHNG 01-12, MHNG). **d)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, paratype (GS: ANHRT 00421, ANHRT). **e)** ♀, Tanzania, Rukwa Region, Kalambo Forest Reserve, paratype (GS: MWM 35.177, ZSM). **f)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, paratype (GS: LG 4605, ANHRT).





**Figure 35. *Antheua galbina* sp. nov., genitalia.** **a)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, paratype (GS: ANHRT 00412, ANHRT). **b)** ♀, Zambia, Mbala, paratype (GS: USNM 02-31, USNM). **c)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, paratype (GS: LG 4606, ANHRT). **d)** ♂, DRC, Haut Katangam Likasi, paratype (GS: MHNG 01-21, MHNG). **e)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, holotype (GS: ANHRT 00410, ANHRT). **f)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, paratype (GS: ANHRT 00421, ANHRT).

**Distribution.** *Antheua galbina* sp. nov. is distributed throughout the Zambian Plateau and adjacent regions, with confirmed records in Angola, the DRC, Malawi, Tanzania, and Zambia.



**Figure 36.** Distribution of *Antheua galbina* sp. nov.

***Antheua spurcata* Walker, 1864**

Habitus: Figs 37a–i, Genitalia: Figs 38a–h, Distribution map: Fig. 39.

*Antheua spurcata* Walker, 1864, *List of specimens of Lepidopterous Insects in the Collection of the British Museum Supplement* **31**: 298.

Holotype: ♂, Sierra Leone (in coll. NHMUK).

Synonym:

*Antheua olivaceomicans* Strand, 1912 **syn. nov.**

*Archiv für Naturgeschichte* **78A** (6): 157.

Syntypes: 2 ♀♀, [Equatorial Guinea], Spanisch-Guinea and Bibundi.

**Material examined** (large series of both sexes).

**Angola.** 1 ♀, Cuanza-Norte, N'dalatando, 620m, 18.xi.2015, leg. T. Léger (MfN). **Burundi.** 1 ♂, Gitega, 9.xii.1968 (RMCA). **Cameroon.** 2 ♂♂, Bokwaongo, Mt. Cameroon (farmland-secondary forest), 04°09'14"N, 09°14'36"E, 950m, 3–6.iii.2018, MV Light Trap, Ishmael, K., Miles, W., Sáfián, Sz. leg.; 3 ♂♂, North Region, Wack (La Falaise), 07°40'16.5"N, 13°33'18.4"E, 900m, 2–21.x.2018, general collecting, Sáfián, Sz., Simonics, G. leg.; 5 ♂♂, Adamawa Region, Adamawa Plateau, 7.3 km

West of Bazanga, Chute De Tello, 07°13'50.6"N, 13°56'29.2"E, 1246m, 24–30.ix.2018, MV light trap, Sáfián, Sz., Simonics, G. leg., GS: ANHRT 00430; 1 ♂, 1 ♀, East Region, Panoramique, on N1 05°26'37.6"N, 14°03'03"E, 898m, 7–11.v.2016, light trap, Sáfián, Sz., Simonics, G. leg. (ANHRT). 1 ♀, Lolodorf, 6.vi.1925 (CMNH). 12 ♂♂, 4 ♀♀, Mt. Cameroon, 5km SW Ekona, 900m, 7–19.iv.2008, leg. Schintlmeister, GS: MWM 35.190, MWM 35.191 (CAS, MWM/ZSM). **DRC.** 5 ♂♂, Kanyambia, N-Kivu, 0°13'S, 29°10'E, 2100m, x.2015; 5 ♂♂, Kasuo, Nord-Kivu, 0°14'S, 29°03'E, 1800m, iv.2017; 6 ♂♂, Biakato, Ituri, 0°51'N, 29°15'E, 900m, iv.–v.2015; 1 ♂, 1 ♀, Lobango, Nord-Kivu, 0°19'S, 29°12'E, 2150m, vii.2017, GS: LG 6594 ♀; 7 ♂♂, 950m, Mamove, Nord-Kivu, 0°49'N, 29°27'E, v.2017; 3 ♂♂, Kirima, Nord-Kivu, 0°11'N, 29°07'E, 1650m, iii.2015; 2 ♂♂, Kanyatsi, Nord-Kivu, 1°22'S, 28°59'E, 1700m, vi.2017 (ANHRT). 1 ♀, Sankuru: Katako-Kombe, 14.ii.1953, leg. Dr. Fontaine (RMCA). **Gabon.** 13 ♂♂, Mikongo (Rougier), Monts de Cristal (Secondary Forest), 0°29'47"N, 11°10'42"E, 430m, 28.vii.–12.viii.2019, actinic, LepiLED and MV light trap, Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P. leg.; 4 ♂♂, Dilo ANPN camp, Ivindo (Secondary Forest), 0°14'1"S, 12°17'49"E, 185m, 14–19.viii.2019, MV Light Trap, Albert, J-L., Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P. leg. (ANHRT). 1 ♂, Ngounié, Mbigou, 9.xii.2001, leg. J.J. Wieringa (NBC). **Ghana.** 1 ♂, Ashanti region, Kumasi, iv.1970, leg. D. Schröder (ZSM); 1 ♂, Ashanti region, Kubeasi, x.2011, GS: MWM 35.195 (MWM/ZSM). **Guinea.** 3 ♂♂, Nimba Mts, SMFG concession area, (Societe des Mines de Fer de Guinee), Cite 1, 7°42'2.83"N, 8°23'58.60"W, 700m, 16–25.vii.2017, 25.viii.–05.ix.2017, at light, Sáfián Sz., Simonics, G. leg.; 1 ♂, 1400–1752m, Guinée Forestière Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest) 07°36'19"N, 08°25'30"W, 1–7.vii.2019, 250W Blended Light Trap, Dérozier, V., Miles, W., Sáfián, S. leg.; 7 ♂♂, 1 ♀, Dalaba, Foret de Goubel, 10°39'27"N, 12°15'44"W, 1413m, 10–18.ix.2019, MV Light Trap, Geiser, M., Leno, M., Koivagui, S., Miles, W., Mulvaney, L., Sáfián, Sz. leg.; 4 ♂♂, Dalaba, Foret de Tinka, 10°43'14"N, 12°15'22"W, 1289m, 25–28.ix.2019, MV Light Trap, Geiser, M., Leno, M., Koivagui, S., Miles, W., Mulvaney, L., Sáfián, Sz. leg.; 5 ♂♂, 1 ♀, Guinée Forestière, Bossou Forest and Institut de Recherche Environnementale de Bossou (Lowland Forest-Farmland), 07°38'32"N, 08°30'30"W, 690m, 24–30.vi.2019, MV Light Trap, Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R. leg.; 1 ♂, Ditinn, Chute de Ditinn, 10°49'08"N, 12°11'30"W, 771m, 18–25.ix.2019, Pheromones, Geiser, M., Koivagui, S., Leno, M., Miles, W., Mulvaney, L., Sáfián, Sz. leg.; 1 ♂, 1 ♀, Geipa Camp, Foret de Diecke, 7°26'7.06"N, 8°50'47.87"W, 435m, 5–14.iv.2019, Cold Cathode UV Light Trap (8W), Sáfián, Sz., Koivogui, S. leg.; 1 ♀, Guinée Forestière, Foret Classee de Ziam, Seredou (Lowland Forest-Farmland), 08°21'26"N, 09°17'48"W, 625m, 9–16.vii.2019, LepiLED Light Trap, Dérozier, V., Koivagui, S., Miles, W., Sáfián, S., Warner, L. leg.; 16 ♂♂, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env. x.2017, 540–600m, 7°42'N, 8°21'W, local collectors leg. (ANHRT). **Ivory Coast.** Long series of both sexes, Tai NP, Tai Research Station, 05°49'59.8"N, 07°20'32"W, 174m, 5–10.vii.2015, 14–23.xi.2015, 25.iii.–17.iv.2017, GS: ANHRT 00428 ♂, LG 4339 ♂, LG 4341 ♀; 8 ♂♂, 2 ♀♀, Mt Tonkouli Peak, 07°27'15.2"N, 07°38'12.5"W, 1171m, 12–18.vii.2015, 9–16.iv.2016, 3–7.v.2017, 20–21.vii.2013, GS: ANHRT 00429 ♂; 3 ♂♂, 1 ♀, Denguele Classified Forest (sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 479m, 6–14.vi.2018, MV Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg.; 1 ♂, Gbando Village, (Sudanian forest with Gallery forest), 9°34'17.1"N, 6°41'1.1"W, 417m, 15–22.vi.2018, MV Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg.; 1 ♂, Parc National du Mont Sângbé (Forest/savannah mosaic), 08°07'05"N, 07°19'09"W, 422m, 14–20.xi.2021, MV light trap, Moretto, P., Mulvaney, L., Takano, H. leg.; 1 ♀, Toulou village, 5 km N of PN du Mont Sângbé, 08°09'02"N, 07°23'53"W, 421m, 13–20.xi.2021, MV light trap, Moretto, P., Mulvaney, L., Takano, H. leg.; 1 ♂, Kakpin Village, Comoe 0, Open forest, 08°39'07"N, 03°46'58.8"W, 259m, 27.vi.–02.vii.2015, Light Trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg.; 2 ♂♂, Banco National Park, 05°23'3.8"N, 04°03'11.2"W, 40m, 29.xi.–5.xii.2019, MV Light Trap, Aristophanous, M., Dérozier, V., Moretto, P., Ouattara, S. leg.; 1 ♀, Dolla Ranch, (tree savannah), 07°58'7.7"N, 07°34'35.7"W, 481m, 1–5.vi.2018, LepiLED Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg. (ANHRT). **Kenya.** 2 ♂♂, Western, Kakamega Forest Reserve, 0.16°N, 34.53°E, 1650m, MV light, 4–8.v.1997, leg. Maes, K. (ANHRT). 1 ♀, Chyulu Hills, 1941 m, 20.ii.2015, leg. H. Staude. 1 ♀, Transmara, Lolgorien, 2000m, iv.2000, leg. Politzar, GS: MWM 35.173 (MWM/ZSM). **Liberia.** 1 ♂, ENNR, Nimba Main Ridge, Depression behind Cellcom tower, 7°31'1.53"N, 8°31'1.24"W, 1300m, 31.iii.–1.iv.2017, Light Trap (250W blended bulb), Sáfián, Sz., Simonics, G. leg.; 1 ♂, Nimba

Mountains, Nimba West, Mount Gangra summit, 7°32'45.82"N, 8°38'9.36"W, 978m, 17–25.iii.2017, Light Trap (250W blended bulb), Sáfián, Sz., Simonics, G. leg. (ANHRT). **Malawi.** 1 ♂, Chitipa District, Misuku Hills near Chuwa River, 1510m, 26.i.1989, leg. Rawlins, Thompson (CMNH). **Namibia.** 2 ♂♂, Caprivi Region, Kongola env., 17.807993°S, 23.343688°E, 1050m, 11–12.xi.2012, leg. E. Ott & H. Sulak (ANHRT). **RCA.** 1 ♂, Ndoki N.P. 50m, 14.ii.2012, leg. P. Moretto (CAS). **Republic of Congo.** Long series of both sexes, Odzala-Kokoua National Park, Lobo Research Camp, 00°35'04"N, 14°53'12"E, 390m, 13–18.iv.2024, 20–27.ix.2024, 22–30.xi.2024, LepiLED, MV light trap, Bashford, M., Elliott, I., Kirk-Spriggs, A., László, G., Talani, M., Yaba Ngouma, S., Volynkin, A. leg.; 1 ♀, Odzala-Kokoua National Park, Mboko, 00°36'16.02"N, 14°53'57.49"E, 379m, 18–21.xi.2024, MV light trap, Bashford, M., Elliott, I., Kirk-Spriggs, A. leg.; 6 ♂♂, Nouabale-Ndoki National Park, Mombongo camp, 02°10'30.7"N, 16°8'37.7"E, 352m, 2–7.ii.2023, actinic light trap, Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G. leg.; 1 ♂, Sangha Prov., Noubale-Ndoki National Park, Ndoki formation (Secondary forest), 02°12'47.7"N, 16°23'45.8"E, 352m, 29.ix.–1.x.2022, MV Light Trap, Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H. leg.; long series of ♂♂, Nouabale-Ndoki National Park, Bomassa camp, 02°12'36.9"N, 16°11'30.2"E, 341m, 6–14.v.2023, 16–23.ix.2022, 10–16.x.2022, actinic, LepiLED and MV light trap, Dérozier, V., Fouka, B., Kirk-Spriggs, A., László, G., Mvouende, S., Takano, H. leg.; 9 ♂♂, Sangha Prov., Nouabale-Ndoki National Park, Bomassa forest, (Secondary forest), 02°11'58.1"N, 16°11'16.9"E, 358m, 17–23.ix.2022, actinic light trap, Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H. leg.; 3 ♂♂, Nouabale-Ndoki National Park, Mbeli camp, 02°14'23.8"N, 16°23'52.1"E, 372m, 14–20.ii.2023, actinic and MV light trap, Bakala N., M., Dérozier, V., Kirk-Spriggs, A., László, G. leg.; 3 ♂♂, same locality, 1–10.x.2022, Dérozier, V., Fouka, B., Kirk-Spriggs, A., Takano, H. leg., GS: ANHRT 02459; 1 ♂, 1 ♀, Nouabale-Ndoki National Park, Wali forest, 02°13'56.8"N, 16°12'13.9"E, 338m, 10–14.v.2023, actinic light trap, Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S. leg.; 1 ♂, Likouala Prov., Nouabale-Ndoki National Park, Makao forest, 02°36'42.5"N, 17°09'23.8"E, 349m, 15–21.v.2023, actinic light trap, Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S. leg.; 3 ♂♂, Nouabale-Ndoki National Park, Makao camp (Secondary forest), 2°35'42.2"N, 17°10'08.3"E, 377m, 15–21.v.2023, MV Light Trap, Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S. leg.; 6 ♂♂, Nouabale-Ndoki National Park, Mondika camp, 02°21'50.63"N, 16°16'25.82"E, 365m, 27.iv.–06.v.2023, MV light trap, Dérozier, V., Kirk-Spriggs, A., László, G., Mvouende, S. leg. (ANHRT). 1 ♂, Likouala Reg., Impfonfo, 19–22.vi.1993 (CMNH). **Rwanda.** 4 ♂♂, 2 ♀♀, Kigali, 1500m, v.1972, x.1972, v.1973, GS: LG 5145 ♂, LG 5146 ♀ (ANHRT). **Sierra Leone.** 6 ♂♂, Mansonia village at the foothills of Loma Mts, N09°07'47", W11°05'06", 420m, 6.vi.2016, Light Trap, leg. Takano, Miles & Goff; 6 ♂♂, 1 ♀, Loma Mountains, farmland/forest mosaic, N09°07'47", W11°05'24", 420m, 11–15.vi.2016, Light Trap, leg. Takano, Miles & Goff; 2 ♂♂, 1 ♀, Kalainkay nr. Kamabai, Northern Prov., N09°10'52", W11°56'44", 80m, 3–6.xi.2015, Light Trap, R. Goff coll., leg. Smith, R. & Takano, H., GS: LG 4340 ♂; 3 ♂♂, Tiwai Island, Moa River, N07°33'00", W11°21'09", 120m, 17–22.vi.2016, Light Trap, leg. Takano, Miles & Goff; 3 ♂♂, Kono Province, Gori Hills, Near Giehum, 08°27'48"N, 10°46'17"W, 380m, 14–21.ii.2020, Kalnoi, G., Sinyaev, V. leg.; 1 ♂, Kono Province, Gori Hills, Near Giehum, 08.4625°N, 10.8020°W, 685m, 11–15.iii.2020. Kalnoi, G., Sinyaev, V. leg. (ANHRT). **South Sudan.** 18 ♂♂, Akotos Prov., Lolibai Mts., 1300 m, 15.viii.–10.ix.2010, leg. V. Gurko, GS: MWM 35.194 (MWM/ZSM). **Tanzania.** 3 ♂♂, Mount Meru, Arusha NP, S03°14'51", E36°50'38", 1679m, 2–4.iv.2012, Light Trap, leg. Smith, R. & Takano, H., GS: LG 4342; 2 ♂♂, Maskati, Nguru Mountains, S06°03'29.3", E37°29'08.4", 1759m, 31.iii.–2.iv.2011, Actinic Light, leg. Smith, R. & Takano, H.; 1 ♂, Miombo Mwanihana Peak, Udzungwa Mountains N.P., S07°48'34.0", E36°49'26.3", 1350m, 15.iv.2011, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, 1 ♀, Mizimu, Mwanihana, Udzungwa Mountains N.P., S07°48'21.8", E36°51'09.5", 850m, 9–11.iv.2011, Light Trap, leg. Smith, R. & Takano, H., GS: LG 4343 ♀; 2 ♂♂, Mahenge Scarp Forest, S08°37'10.6", E36°42'46.3", 562m, 24.iv.2011, Light Trap, leg. Smith, R. & Takano, H.; 2 ♂♂, Njombe, Masaulwa, 2700m, 09°07'S, 34°35'E, iii.–iv.2013, local collectors leg., GS: ANHRT 02457, ANHRT 02458; 1 ♂, Prov. Arusha, 20 km S Marangu, 03°17.476'S, 37°31.298'E, 1340m, 14.v.2010, leg. J. Cave & T.A. Newton-Chance; 1 ♂, Rukwa District, Sitalike env., Katavi NP. 6.629602°S, 31.146231°E, 900m, 28–29.x.2012, leg. E. Ott & H. Sulak (ANHRT). 1 ♂, Ugano b. Songea, 18.i.1932, F. Zimmer (NHMW). **Togo.** 3 ♂♂, Fazao Hotel, 8°41'44.1"N, 0°46'32.5"E, 532m, 3–4.viii.2013, leg. local collectors; 4 ♂♂, Kpalimé, Ft. de Missahohe, 6°56'41.5"N, 0°34'30.2"E, 610m, 31.vii.2013, leg. Moretto, P.; 1 ♂, Wamé, Cascade de Wamé, 6°51'29.2"N, 0°33'22.7"E, 359m, 1.viii.2013, leg. Moretto, P. (ANHRT). **Uganda.** 1 ♂, Bwindi



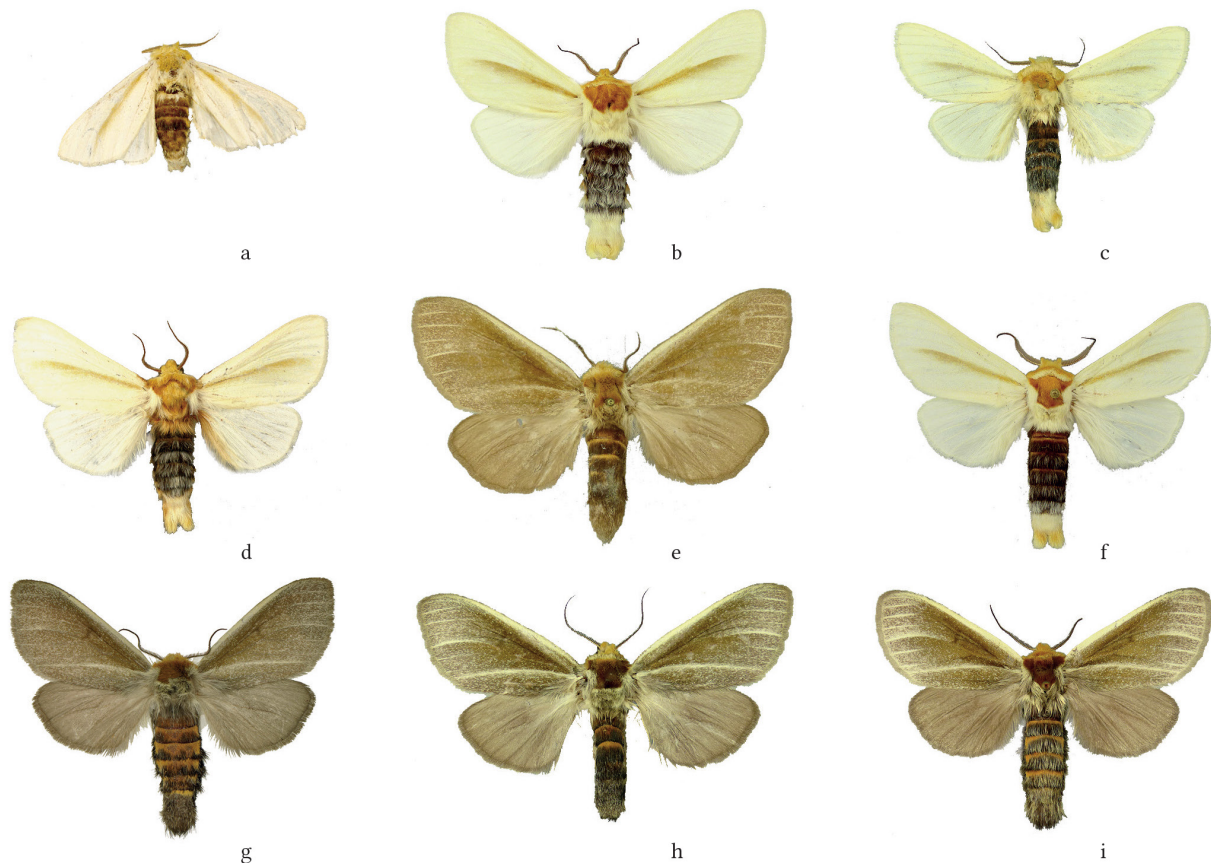
Impenetrable N.P., Cuckooland Lodge, 01°00'17"S, 29°43'06"E, 1700m, 28–29.vi.2022, Naumann, S., Ott, E., Schintlmeister, A., Sulak, H. leg.; 1 ♂, Western District, Kibale NP, 00.24177°N, 30.23001°E, 1500m, 17–21.x.2012, leg. E. Ott & H. Sulak (ANHRT). 8 ♂♂, Rwenzori N.P. main gate, 1700m, 11.–20.iii.2023, leg. Schintlmeister (CAS). **Zambia.** Long series of both sexes, Nyangombe Falls, 11°48'25"S, 24°32'12"E, 1300m, 17–23.xi.2019, actinic light trap, Bashford, M., Miles, W., Mulvaney, L., Smith, R. leg.; long series of both sexes, Hillwood, Ikelenge (Miombo/Riverine forest mosaic), S11°16'02", E24°18'59", 1400m, 23–30.xi.2019, 7–10.xii.2019, 25–27.xi.2014, 17–24.iii.2013, Actinic, LepiLED and MV Light Trap, leg. Bashford, M., Miles, W., Mulvaney, L., Smith, R., Takano, H., GS: LG 4344; 2 ♂♂, 1 ♀, Jan Fisher's Farm, Chingola (Miombo/Riverine forest mosaic, 12°36'10"S, 27°55'48"E, 1365m, 14–17.xi.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 5 ♂♂, Kambishi School, S11°54'42", E25°28'50", 1346m, 10–13.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 7 ♂♂, 1 ♀, Bruce-Miller Farm Choma, 16°38'12"S, 27°01'30"E, 1179m, 28.ii.–8.iii.2019, MV Light Trap, Dérozier, V., Imakando, M., Miles, W., Mulvaney, L. leg.; 1 ♂, Camp near Kanyama, (Miombo/Riverine/Dambo mosaic), 11°25'36"S, 24°40'00"E, 1375m, 4–7.xii.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 2 ♂♂, Nkwaji, Mwinilunga S11°36'22", E24°33'17", 1316m, 3–10.xi.2017, MV Light Trap, leg. Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R.; 3 ♂♂, same locality, 3–10.xii.2020, MV light trap, Chizuwa, D., Choongo, W. leg.; 4 ♂♂, Chilambwe Falls, Kafubu River, 09°50'13"S, 30°43'35"E, 1420m, 8–12.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 2 ♂♂, Mutinondo Wilderness Area, Mpika, Northern Prov., S12°27'06", E31°17'30", 1460m, 14–17.ii.2019, MV light trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 1 ♂, same locality, 15–17.xii.2023, László, G., Morgan, L., Volynkin, A. leg.; 1 ♂, Kankonde Camp, Mutinondo Stream, S12°23'29", E31°19'24", 1400m, 12–15.xi.2014, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, Ndole Bay, on the shores of the lake Tanganyika, S08°28'42", E30°26'59", 777m, 30.iv.–5.v.2013, Light Trap, leg. Smith, Takano & Oram; long series of both sexes, Jiwundu Swamp, (Miombo/Riverine forest mosaic), 11°51'54"S, 25°33'20"E, 1340m, 29.x.–4.xi.2018, 25–30.x.2017, 21–24.xi.2014, 18–19.x.2014, MV Light Trap, Aristophanous, M., Carter, M., Dérozier, V., László, G., Lloyd, A., Miles, W., Oram, D., Smith, R., Takano, H. leg., GS: LG 4345 ♂, LG 4331 ♀, LG 4337 ♀; 4 ♂♂, Zambezi Rapids (Miombo/Riverine forest mosaic), 11°7'30"S, 24°11'6"E, 1205m, 4–9.xi.2018, MV Light Trap, Aristophanous, M., Dérozier, V., László, G., Oram, D. leg.; 5 ♂♂, Lumangwe Falls, Kalungwishi River, S09°32'33", E29°23'17", 1187m, 4–7.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 2 ♀♀, same locality, 5–7.xi.2014, Light Trap, leg. Smith, Takano, Oram, GS: LG 4346; 1 ♂, Ntumbachushi Falls, Ngona River, Luapula Prov., S09°51'12", E28°56'40", 1166m, 3–4.xi.2014, Light Trap, leg. Smith, Takano & Oram; 1 ♂, Lukwakwa, West Lunga NP, S12°39'40", E24°26'13", 1147m, 4–8.xi.2013, Light Trap, leg. Smith, Takano & Oram; 1 ♂, 1 ♀, Mayukuyuku, Kafue NP, S14°54'55", E26°03'47", 1080m, 21–26.xi.2013, Light Trap, leg. Smith, Takano & Oram; 1179m, Greystone, Kitwe, Copperbelt Province, S12°55'50", E28°14'29", 1–4.xi.2012, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, Kasanka River Pontoon, Kasanka N.P., S12°34'23", E30°14'05", 1191 m, 2–4.xii.2012, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, Lunzua Falls, 20 km S of Mpulungu, Northern Province, 08°55'38"S, 31°09'31"E, 1416m, 11–16.v.2019, MV Light Trap, Dérozier, V., László, G., Miles, W. leg.; 1 ♂, Kalungu, North of Isoka, S9°40'52", E32°42'50", 1280m, 5–8.iii.2017, Actinic Light Trap, Oram, D., Miles, W., Smith, L. leg.; long series of both sexes, Kapishya Hot Springs, Shiwa N'gandu Estate, S11°10'13", E31°36'00", 1437m, 10–11.xi.2014, xii.2014, i.2015, iii.2015, 22.xi.–8.xii.2015, i–iii.2016, i–iii.2017, 14–16.iii.2017, Light Trap, leg. M.T. Harvey. Smith, R., Takano, H., Oram, D., Miles, W., Smith, L., GS: LG 4359 ♂, ANHRT 00419 ♂, ANHRT 00417 ♀; long series of both sexes, Muchinga Province, Jombo village, 10°27'01"S, 33°14'30"E, 1400m, 30.xi.–05.xii.2023, MV light trap, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A. leg. (ANHRT). **Zimbabwe.** 1 ♂, Vumba, Laurenceville, 12.iii.1964, Vári & van Son. 1 ♂, Vumba Mts., Woodlands road, 19°07'08"S, 32°46'14"E, 1690m, 21.ii.2016, leg. Sulak Naumann & Ott., GS: CSW01-14 (CAS, ANHRT). 1 ♂, Northwood, 16.xii.1977, A.J. Duke. 1 ♂, Umtali, Xmas Pass, 26.i.1927 EW Lannin. (TMSA).

**Diagnosis.** Forewing length in males is 20–25 mm, and in females is 23–27 mm. Male *A. spurcata* are distinguished from other *Antheua* species by a broad brown longitudinal band extending from the apex to the termen of the forewing. Females display sexual dimorphism, with dark brown wings marked by whitish stripes along the A1+A2 veins, the M2 vein, and the forewing costa. Although females of *A.*

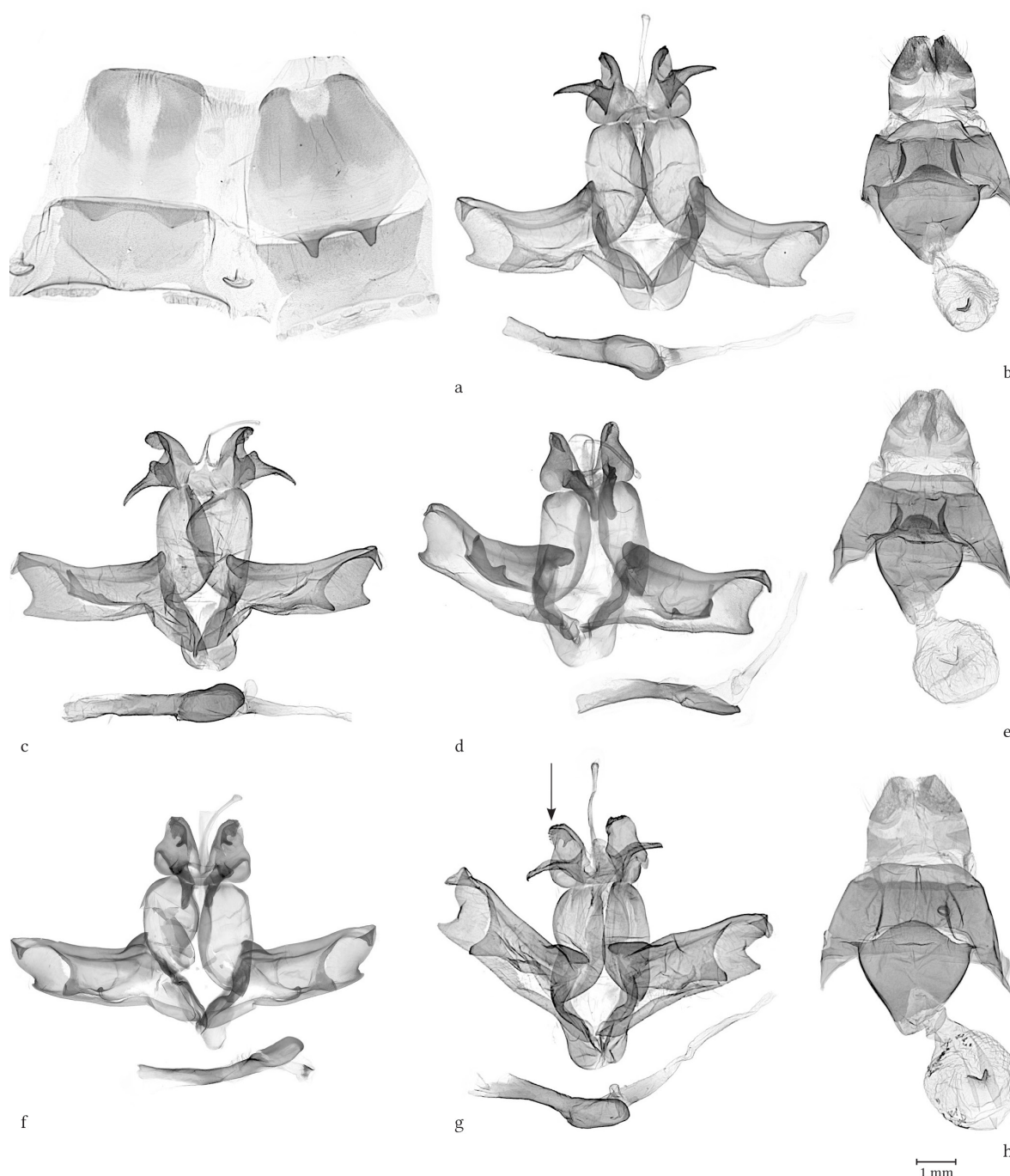
*spurcata* resemble those of *A. cinerea*, females of the former species have significantly darker forewings, brighter white stripes, and a deeper rusty-brown mesothorax. In contrast, *A. cinerea* exhibits a greenish-orange mesothorax.

The male genitalia display significant variability, especially in the configuration of the socii lobes and the shapes of the ampulla and phallus. The primary diagnostic characteristic of this species is a serrated crest on the distal socius process, which itself varies in form. Distinct differences in male genital morphology are evident across the range of the species. Specimens from West Africa typically possess an additional hump-shaped lobe at the base of the proximal socius process and a reduced crest on the distal socius process compared to those from eastern populations. Despite these differences, substantial individual variability results in overlapping morphological characteristics. As a result, eastern and western African *A. spurcata* populations cannot be taxonomically distinguished.

The female genitalia also show comparable variability. Nevertheless, the combination of an extremely broad antrum with nearly semi-circular distal and gently arched lateral margins make this species readily distinguishable from related taxa. Additional distinguishing features in the female genitalia include a relatively small, disc-shaped corpus bursae with a V-shaped signum. The distal plates of the corpus bursae are absent in this species, as is also observed in *A. galbina* **sp. nov.**



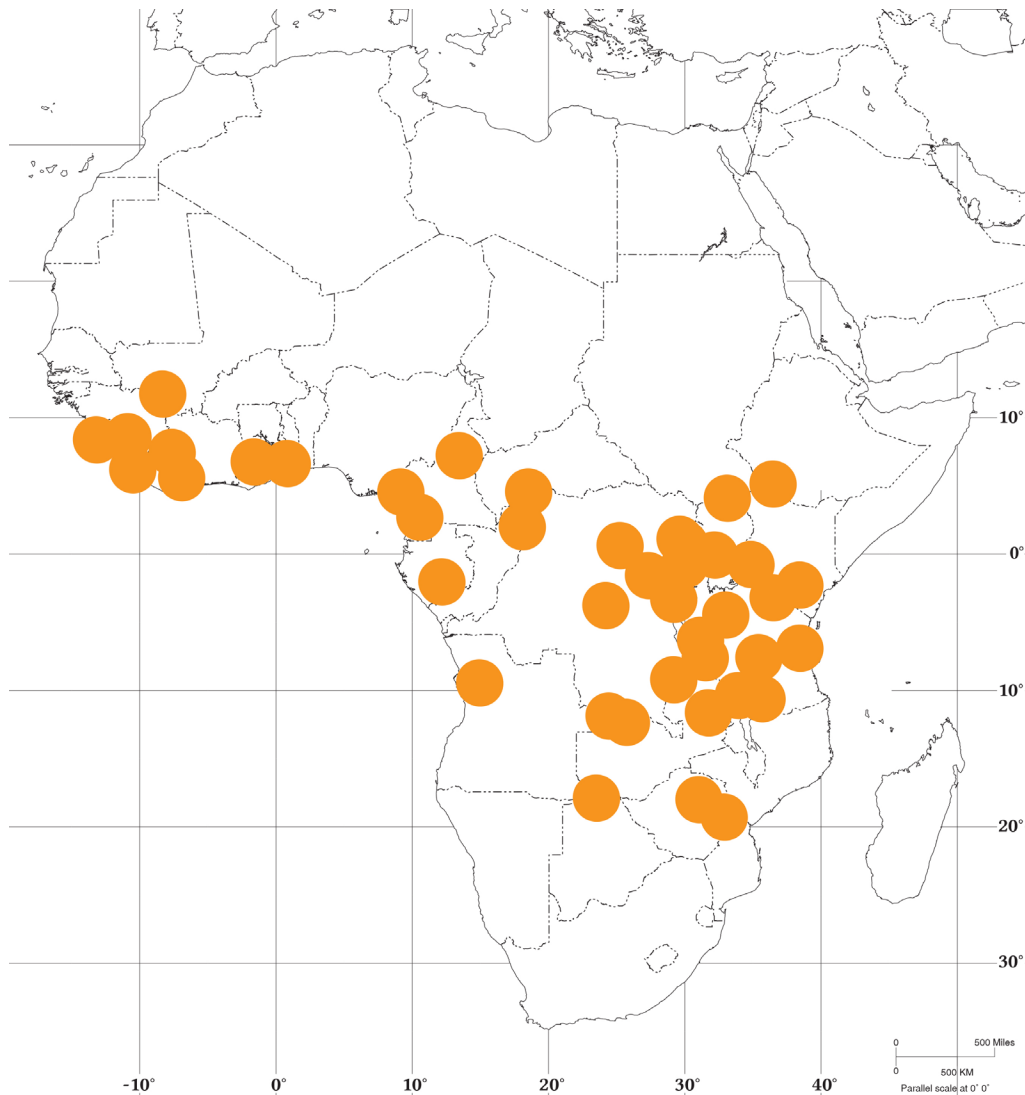
**Figure 37. *Antheua spurcata*, adults.** **a)** ♂, Sierra Leone, holotype (NHMUK). **b)** ♂, Congo, Likouala Reg., Impfonfo (CMNH). **c)** ♂, South Sudan, Akotos prov., Lolibai Mts. (GS: MWM 35.193, MWM/ZSM). **d)** ♂, Zimbabwe, Vumba Mts., Laurenceville, (TMSA). **e)** ♀, Cameroon, Lolodorf (CMNH). **f)** ♂, Malawi, Chuwa (CMNH). **g)** ♀, Zambia, Shiwa N'gandu Estate, (GS: ANHRT 00417, ANHRT). **h)** ♀, Cameroon, Mt. Cameroon, 5 km SW Ekona, (GS: MWM 35.191, MWM/ZSM). **i)** ♀, Kenya, Transmara, Lolgorieh, (GS: MWM 35.173, MWM/ZSM).



**Figure 38. *Anthea spurcata*, genitalia.** **a)** ♂, Togo, Kpalimé, Ft. de Missahohe (GS: MWM 25.975, MWM/ZSM). **b)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, (GS: ANHRT 00417, ANHRT). **c)** ♂, Sierra Leone, Mobai, Potoru (GS: MWM 35.192, MWM/ZSM). **d)** ♂, Sierra Leone, Kalainkay nr. Kamabai (GS: LG 4340, ANHRT). **e)** ♀, Cameroon, Mt. Cameroon, 5km SW Ekona (GS: MWM 35.191, MWM/ZSM). **f)** ♂, Tanzania, Tadore Region, Igunga, (GS: MWM 23.042, MWM/ZSM). **g)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu Estate, (GS: ANHRT 00419, ANHRT). **h)** ♀, DRC, 17 km N Kisangani (GS: MWM 35.199, MWM/ZSM).

**Taxonomic note.** *Anthea olivaceomicans* was originally described from two female syntype specimens. The authors were unable to locate these syntypes in the MfN holdings. Gaede (1928) illustrated *olivaceomicans* on plate 71 (fig. e) in Seitz, although it is uncertain whether a syntype was used for this illustration. Nevertheless, Strand's original description is sufficiently precise and detailed to support the identification of *A. olivaceomicans* **syn. nov.** as conspecific with *A. spurcata*.

**Distribution.** *Antheua spurcata* exhibits a wide equatorial distribution and extends southward, although its range does not include South Africa. It has been recorded from Angola, Cameroon, Congo, the DRC, Ethiopia, Gabon, Ghana, Guinea, Ivory Coast, Kenya, Liberia, Malawi, Namibia, RSA, Rwanda, Sierra Leone, South Sudan, Togo, Tanzania, Uganda, Zambia and Zimbabwe.



**Figure 39.** Distribution of *Antheua spurcata*. TL is “Sierra Leone” without precise collecting site provided.

***Antheua mixta* Janse, 1920**

Habitus: Figs 40a–f, Genitalia: Figs. 41a–b, Distribution map: Fig. 42.

*Antheua mixta* Janse, 1920, *Annals of the Transvaal Museum* 7: 182; pl. 13: 9.

Holotype: ♂, [RSA], Natal, Charlestown [ca. 27°24'S, 29°52'E], GS: TM 11.191 (in coll. TMSA).

**Synonyms:**

*Antheua radiata* Aurivillius, 1921 (secondary homonym)

*Annals of the South African Museum* 18: 240.

Holotype: ♂, RSA, Transvaal, Pilgrim’s Rest [ca. 24°53'S, 30°45'E] (in coll. SAMC).

***Antheua aurivilliusi* Kiriakoff, 1964**

In: P. Wytsman (ed.) *Genera Insectorum* 217 A: 114.

A replacement name for *Antheua radiata* Aurivillius, 1921.



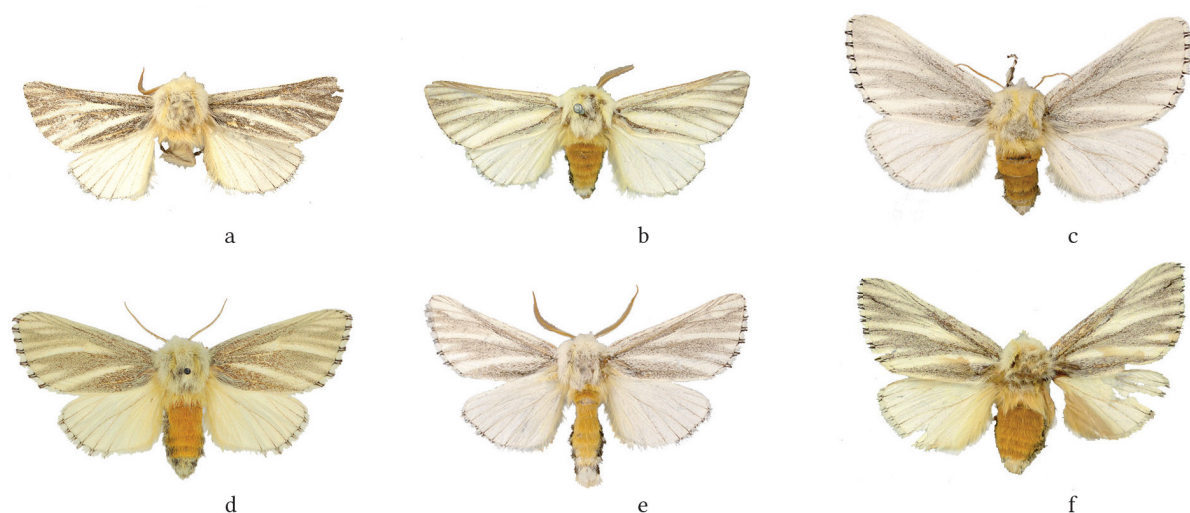
**Material examined** (1 ♂, 4 ♀♀).

**Lesotho.** 1 ♀, Basutold, Likhoele, leg. Dierlin, paratype (SAMC). **RSA.** 1 ♀, Mooi R., GS: NHMUK014331247 (NHMUK). 1 ♀, Blaney C.P., 6.x.1943 Clark; 1 ♂, Mooi R.; 1 ♂, Zululand, Kranzkloof (TMSA). 1 ♀, East Pondoland (TMSA).

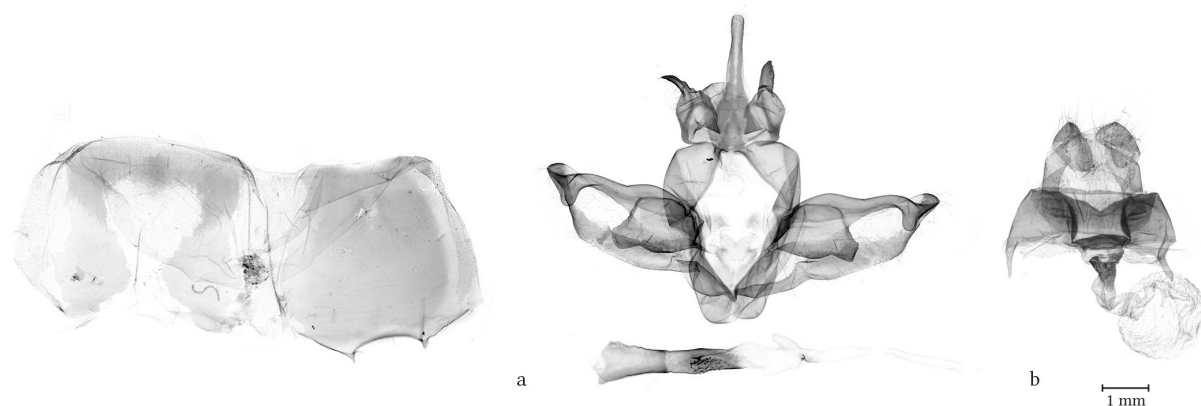
**Diagnosis.** Forewing length: males 17–20 mm, females 18–19 mm. *Antheua mixta* is readily distinguished from related species by its greyish-brown forewings with several cream-coloured longitudinal stripes and contrasting black and cream chequered fringes on both wings. A row of orange-yellow hairs marks the border between the patagia and thorax and between the thorax and abdomen. Sexual dimorphism is limited, with females being slightly larger than males.

The male genitalia are unique, featuring a relatively thick uncus, a short, pointed socius without a distinct basal lobe, and a notably short but broad editum of the valva. The phallus is relatively short with a robust, spine-shaped subapical carina process and a distal field of tiny spines.

The female genitalia are defined by a gently convex distal margin of the very short, undilated antrum, a long and relatively slender ductus bursae, and small distal sclerotized plates within the corpus bursae.



**Figure 40.** *Antheua mixta*, adults. **a)** ♂, RSA, Natal, Charlestown, holotype (GS: TM11191, TMSA). **b)** ♂, RSA, KwaZulu Natal, Pilgrim's Rest, holotype of *Antheua radiata* (SAMC). **c)** ♀, RSA, East Pondoland, (NHMUK). **d)** ♀, RSA, Mooi River (GS: NHMUK014331247, NHMUK). **e)** ♂, RSA, KwaZulu Natal, Mooi river, (NHMUK). **f)** ♀, Lesotho, Likhoele, paratype (TMSA).



**Figure 41.** *Antheua mixta*, genitalia. **a)** ♂, RSA, Blaney (GS: TM16.831, TMSA). **b)** ♀, RSA, Mooi River (GS: NHMUK014331247, NHMUK).

**Distribution.** *Antheua mixta* is a southern African species, with documented occurrences restricted to the RSA and Lesotho.

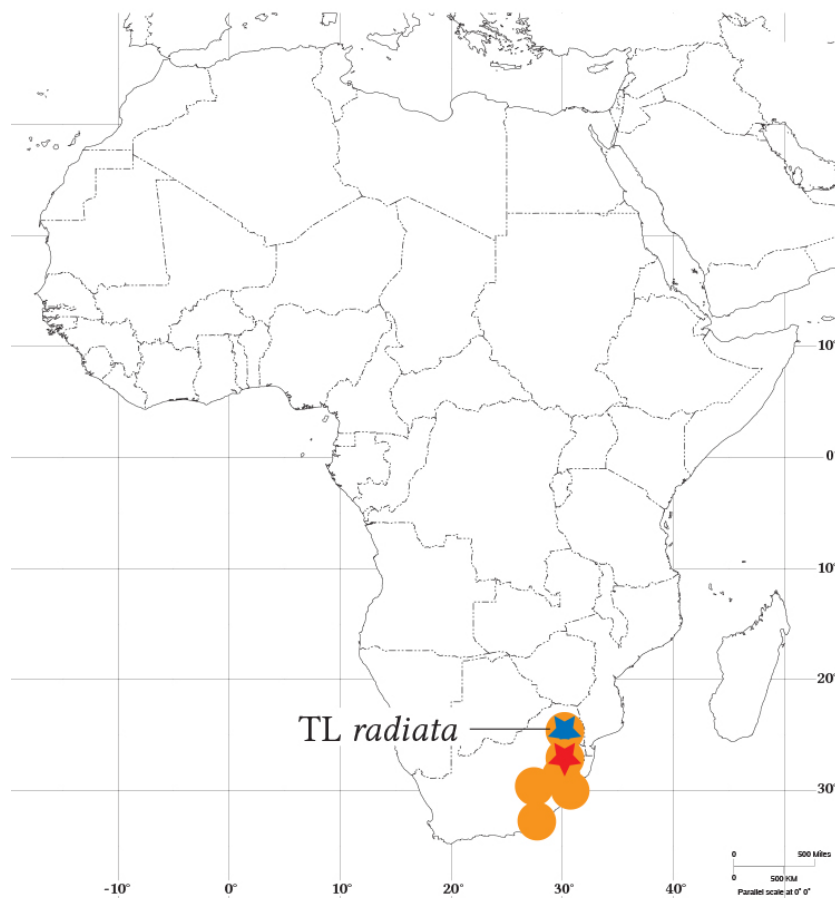


Figure 42. Distribution of *Antheua mixta*.

***Antheua conspicuana* László & Schintlmeister, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:61FC0024-4C15-49B0-9D8F-62D57912C5BE>

Habitus: Figs 43a–b, Genitalia: Figs 44a–b, Distribution map: Fig. 45.

**Holotype.** ♂, Holotype: ♂, "Zambia, 1970m / Muchinga Province, Makutu / Mountains upper end of gully / 10°27'30.32"S, 33°12'00.25"E / 03–04.xii.2023, arctinic light / trap. Bashford, M., László, G. / Morgan, L., Volynkin A. leg. / ANHRT: 2024.3" // "ANHRTUK / 000368269" // GS: LG 6357 (ANHRT).

**Paratype.**

**Malawi.** 1 ♀, Rumphi district, Nyika N.P., Juniper Forest, 2190m, 10°45'00"S, 33°53'00"E, 29.xii.2011, leg. V. Anikin, GS: MWM 23.345 (CAS).

**Diagnosis.** Forewing length: male 17 mm, female 15 mm. This new species resembles *A. mixta* but differs in several key features. The male exhibits a brighter lime forewing with sharply contrasting dark green highlights along the R and M veins, which are separated by greenish-white fields. In *A. mixta*, the dark vein highlights are more diffuse. The female of *A. conspicuana* **sp. nov.** has smaller white fields on the forewing, and the veins are marked with bright lime, unlike the more greyish veins in *A. mixta* females. The fringe in *A. conspicuana* **sp. nov.** is uniformly pale lemon, whereas in *A. mixta* it is chequered black and white, with the black areas forming two thin parallel lines. The male's bipectinate orange-brown antenna is brighter in the new species. Females of both species possess similarly whitish filiform antennae.

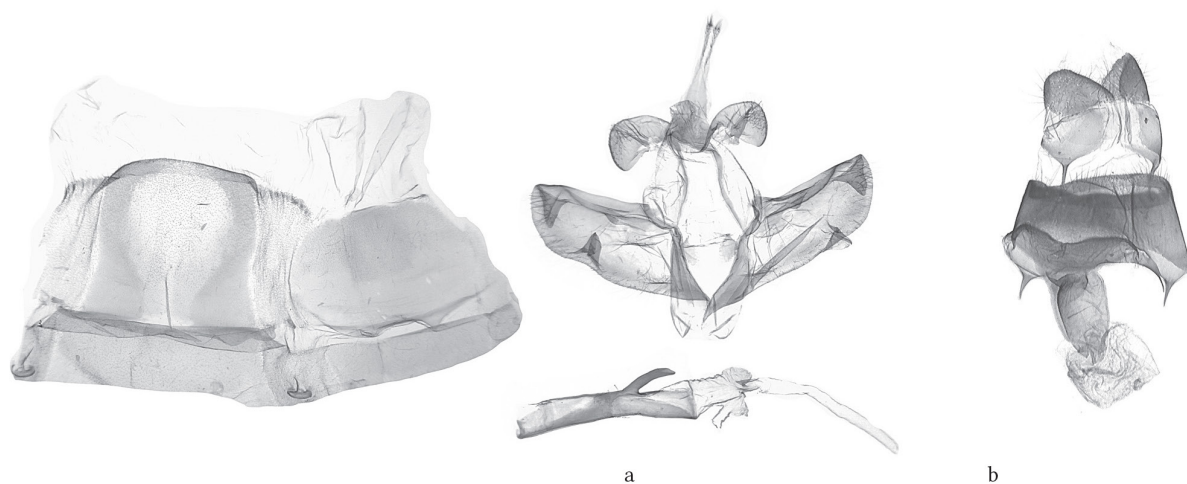
The male genitalia of *A. conspicuana* **sp. nov.** can be distinguished from those of *A. mixta* by several morphological features. These include rounded, bulbous socii, in contrast to the pointed distal process observed in *A. mixta*, a significantly reduced editum represented by a narrow costal plate, a slightly longer and more pointed apical flap of the valva, and the presence of a triangular saccular lobe, which is not found in *A. mixta*. Additionally, the phallus of *A. conspicuana* **sp. nov.** exhibits a markedly larger carina process compared to *A. mixta*, a feature absent in other species within the *A. simplex* species group.

In comparison to *A. mixta*, the female genitalia of *A. conspicuana* **sp. nov.** exhibit a narrower and longer eighth tergite with markedly smaller anterior apophysis, a considerably thicker and shorter ductus bursae, and a markedly smaller corpus bursae with a disc-shaped small signum.

**Etymology.** The specific epithet is derived from the Latin adjective “*conspicuus*”, meaning “*striking*”, referring to the conspicuous appearance of this new species.

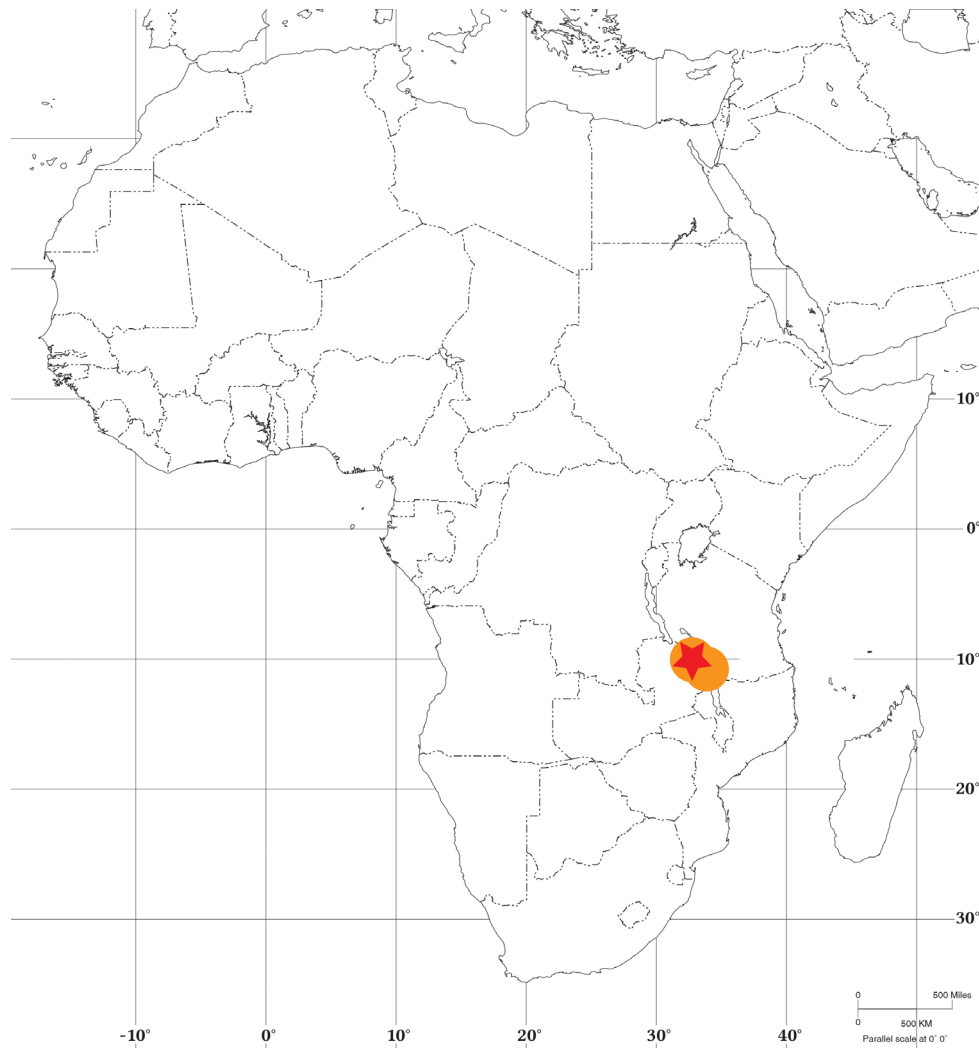


**Figure 43.** *Antheua conspicuana* **sp. nov.**, adults. a) ♂, Zambia, Makutu Mts., holotype (GS: LG 6357, ANHRT). b) ♀, Malawi, Nyika N.P., paratype (GS: MWM 23.345, CAS).



**Figure 44.** *Antheua conspicuana* **sp. nov.**, genitalia. a) ♂, Zambia, Makutu Mts., holotype (GS: LG 6357, ANHRT). b) ♀, Malawi, Nyika N.P., paratype (GS: MWM 23.345, CAS).

**Distribution.** *Antheua conspicuana* **sp. nov.** appears to be endemic to the Nyika Plateau and the adjacent mountains in Zambia and Malawi, based on current distribution records.



**Figure 45.** Distribution of *Antheua conspicuana* sp. nov.

***Antheua imitata* (Druce, 1896), comb. nov.**

Habitus: Figs 46a–i, Genitalia: Figs 47a–e, Distribution map: Fig. 48.

*Phalera imitata* Druce, 1896, The Annals and Magazine of Natural History including Zoology, Botany, and Geology (6th series) 17: 356.

Holotype: ♂, [Tanzania], Dar-es-Salaam [6°48'S, 39°12'E] / East Africa (in coll NHMUK).

Synonym:

*Phalera imitata septentrionalis* Kiriakoff, 1962

Anales du Musée royal de l'Afrique centrale Tervuren, Belgique. Série in-8°. Sciences Zoologiques 114: 50.

Holotype: ♂, [DRC], Uele, Paulis [= Isiro, ca. 2°48'N, 27°35'E] (in coll. RMCA).

**Material examined** (142 ♂♂, 11 ♀♀).

**Angola.** 3 ♂♂, Huila Prov., 5 km SSW Bonga, 1.xii.2013, 1053 m, leg. S. Naumann, E. Ott & H. Sulak, GS: MWM 35.227 (MWM/ZSM). 1 ♂, Prov. Benguela, 14 km E Cutembo, 965m, 2.iv.2014, leg. Sulak, Naumann & Ott (CGM). 1 ♂, Huila Prov., 17 km WNW Ndongwe, 15°21.564'S, 13°55.132'E, 1356m, 02.xii.2013, leg. Naumann, Ott & Sulak; 2 ♂♂, Huila Prov., ca. 3 km N Camawa, 14°49.446'S, 14°13.594'E, 1414m, 30.xi.2013, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Benguela, btw. Catenque and Cubai, 13°00.329'S, 13°48.236'E, 830m, 24.iii.2014, leg. Naumann, Ott & Sulak; 2 ♂♂, same site and



collectors, 31.iii.2014 (ANHRT). **Botswana.** 1 ♂, 10km S. Ghanzi, 1080 m, 21.xii.2012 (CGM). **Ethiopia.** 3 ♂♂, 3km N Turmi, 8.v.2008, 910m, leg. Hacker & Schreier (CGM). **Kenya.** 1 ♂, 1 ♀, Transmara, Lolgorien, 2000m, iv.2000, leg. Politzar, GS: MWM 35.228, MWM 35.229 (MWM/ZSM). 1 ♂, Kibwezi, 700 m, 15–30.iv.2002, leg. Dr. Politzar, GS: GU 60-94 (CAS). 2 ♂♂, Nairobi, Ololua Forest, NMK-IPR Compound, 01°22'S, 36°43'E, 1800m, MV light, 11.iv.1999, leg. B. Bytebier (ANHRT). **Malawi.** 1 ♂, Chitipa Distr., Jemova Reserve, 18 km SSE Chisenga, 1870m, 10°08'S, 33°27'E, 1–10.i.1989, leg. Rawlins & Thompson (CMNH). **Mozambique.** 1 ♂, Maputo Special Reserve, Mangrove Camp, Mangrove-Woodland Mosaic, 26°19'35.9"S, 32°42'35.7"E, 9m, 7–9.xii.2016, Light Trap, Aristophanous, M., Cristovão, J., László, G., Miles, W. leg.; 2 ♂♂, Maputo Special Reserve, West Gate, Sand Thicket, Sand Forest, 26°30'14.2"S, 32°42'59.6"E, 22m, 9–17.ii.2018, MV and Actinic Light Trap, László, G., Mulvaney, J., Smith, L. leg., DNA barcode id.: ANHRTUK00017401, BOLD process id.: ANLMN5164-21; 1 ♀, same site and collectors, 24.ii.2018, DNA barcode id.: ANHRTUK00035104, BOLD process id.: ANLMN5165-21 (ANHRT). **RSA.** 1 ♂, 8 km S Louis Trichardt, Bem Lavin Nature Reserve, 1000m, 7–21.xii.2007, leg. de Freina, GS: MWM 23.343; 1 ♀, KwaZulu-Natal, Royal Natal N.P., 1800m, 15.xii.2004, leg. de Freina, GS: MWM 23.342; 1 ♂, Mpumalanga Prov., Hazyview, 1100 m, 15.i.2002, leg. S. Murzin, GS: GU 89-89 (MWM/ZSM). 3 ♂♂, 2 ♀♀, Soutpansberg, 1400 m, 2–13.ii.2013, leg. Stadie & Schintlmeister (CAS). 2 ♂♂, Krüger N.P., P. Krüger Gate, Garden of Protea Hotel, 300m, 22–23.iii.2014, leg. M. Hluchy & G. László; 2 ♂♂, 1 ♀, KwaZulu-Natal, Pietermaritzburg, Cumberland Nature Reserve, 660m, 28°30'50"S, 30°30'17"E, 15–16.ii.2018, R.V. Yakovlev & V. Kovtunovich leg., DNA barcode id.: ANHRTUK00105261, BOLD process id.: ANLMN5166-21; 1 ♂, Limpopo Prov., Soutpansberg Mts, 11 km N Louis Trichardt, The Ultimate Guesthouse, 1200m, 22.983415°S, 29.912823°E, 22.xi.2016, leg. H. Sulak, A. Prozorov & R. Yakovlev; 1 ♂, Limpopo Prov., Ohringstadt, 750m, 24°34'52"S, 30°37'53"E, 13.ii.2016, leg. H. Sulak, S. Naumann & E. Ott (ANHRT). **South Sudan.** 14 ♂♂, Akotos Prov., Lolibai Mts., 1300 m, 15.viii.–10.ix.2010, leg. V. Gurko, GS: MWM 35.231, MWM 23.344 (CAS, MWM/ZSM, CGM). **Tanzania.** 1 ♂, Morogoro Prov., Route de Malolo, 594m, 5.v.2004, leg. Ph. Darge, GS: MWM 23.044 ; 1 ♀, Dodoma region, Chunyu, 881m, 5.i.2008, GS: MWM 22.757 (MWM/ZSM); 2 ♂♂, Njombe, Masaulwa, S09°07', E34°35', 2700m, iii–iv.2013, local coll. (ANHRT). **Zambia.** 12 ♂♂, Jiwundu Swamp, 11°51'54"S, 25°33'20"E, 1340m, 21–24.xi.2014, light trap, leg. Smith, R., Takano, H., Oram, D., GS : ANHRT 00249; 17 ♂♂, same site, 25–30.x.2017, leg. Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R.; 6 ♂♂, same site, 29.x.–4.xi.2018, actinic and MV light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; 2 ♂♂, Kambishi, Jiwundu, 11°54'39"S, 25°29'05"E, 1340m, 18–19.x.2014, light trap, leg. Smith, R., Takano, H., Oram, D.; 7 ♂♂, Kambishi School, 11°54'42"S, 25°28'50"E, 1346m, 10–13.xi.2017, MV light trap, leg. Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R.; 5 ♂♂, Nyangombe Falls, (Miombo/Riverine forest mosaic), 11°48'25"S, 24°32'12"E, 1300m, 17–23.xi.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, R., Smith, R. leg.; 3 ♂♂, same site, 15–17.xi.2018, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D.; 1 ♂, Chitunta Plain (Miombo/Dambo mosaic), 11°29'12"S, 24°24'18"E, 1396m, 29.xi.–4.xii.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 1 ♂, Hillwood, Ikelenge (Miombo/Riverine forest mosaic), S11°16'02", E24°18'59", 1400m, 23–30.xi.2019, LepiLED Light Trap, Bashford, M., Miles, W., Mulvaney, L., Smith, R. leg.; 5 ♂♂, Chilambwe Falls, Kafubu River, 09°50'13"S, 30°43'35"E, 1420m, 8–12.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 1 ♂, Nkwaji, Mwinilunga S11°36'22", E24°33'17" 1316m, 29.x.–3.xi.2013, Light Trap leg. Smith, R., Takano, H., Chmurova, L., Smith, L.; 2 ♂♂, Mayukuyuku, Kafue NP, 14°54'55"S, 26°03'47"E, 1080m, 21–26.xi.2013, Light Trap, leg. Smith, Takano & Oram; 1 ♂, Ndole Bay, on the shores of the lake Tanganyika, 08°28'42"S, 30°26'59"E, 777m, 30.iv.–5.v.2013, Light Trap, leg. Smith, Takano & Oram; 2 ♂♂, Kapishya Hot Springs, Shiwa N'gandu Estate, 11°10'13"S, 31°36'00"E, 1437m, i–iii.2016, M. T. Harvey coll., leg. Smith, R. & Takano, H.; 3 ♂♂, 1 ♀, same site, 22.xi.–8.xii.2015, leg. Smith, Takano & Oram; 1 ♀, Chilambwe Falls, Kafubu River, 09°50'13"S, 30°43'35"E, 1420m, 8–9.xi.2014, Light Trap, leg. Smith, Takano & Oram, GS : ANHRT 00250; 1 ♀, Kabweluma Falls, Kalungwishi River, 09°31'28"S, 29°21'10"E, 1120m, 6–7.ii.2019, Actinic Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 1 ♂, Mutinondo Wilderness Area, Mpika, Northern Prov., S12°27'06", E31°17'30", 1460m, 16–20.iii.2017, MV, Oram, D., Miles, W., Smith, L. leg.; 13 ♂♂, Muchinga Province, Jombo village, 10°27'01"S, 33°14'30"E, 1400m, 30.xi.–05.xii.2023, MV light trap, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A. leg.; 3 ♂♂, 1 ♀, Muchinga Province, Kalungu, King's Highway Rest Camp, 09°40'52"S, 32°42'50"E, 1280m, 12–

13.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A. leg.; 6 ♂♂, Bruce-Miller Farm Choma, 16°38'12"S, 27°01'30"E, 1179m, 28.ii.–8.iii.2019, MV Light Trap, Dérozier, V., Imakando, M., Miles, W., Mulvaney, L. leg. (ANHRT).

**Diagnosis.** The forewing length is 20–24 mm in males and 26–29 mm in females. This unmistakable species closely resembles the Palaearctic *Phalera bucephala* Linnaeus, sharing the distinctive “buff tip” of the forewing. Due to this external similarity, this species has formerly been assigned to *Phalera* Hübner. However, genital morphology indicates its closer relationship to *Antheua*, consistent with other dark-coloured Afrotropical taxa that were formerly classified under *Phalera*. Besides the conspicuous buff forewing apex, this species is characterised by a yellow anal field and black tinged veins of the hindwings. The female is sexually dimorphic, possessing forewings markedly broader than those of males, dark brown hindwings, and a uniform black 7th abdominal segment.

The male genitalia have a variably long, narrow, and weakly sclerotized uncus with a tip of variable shape; it can be apically pointed, rounded, spatulate, or knob-shaped. The socii are conspicuously robust, with a large, more or less quadrangular basal lobe and an additional, smaller, elongate-triangular distal process; these characters also exhibit significant intraspecific variability. The valva is short, medially dilated with an evenly rounded costa bearing a short, broadly rounded digitus process and a short, rounded-triangular editum. The sacculus is short and weakly sclerotized with a hump- or crest-like medial lobe. The phallus is short and narrow, with a pair of heavily sclerotized triangular carina process, projecting apically and subapically. The size and shape of the carina process are largely variable.

The female genitalia are characterised by a short but wide, dome-like ovipositor with a triangular anal papilla, a variably long, rather broad ribbon-like 8th tergite with short, thin anterior apophyses, a pair of narrow, anteriorly rounded antevaginal plates, a very short and rather thick, membranous ductus bursae, and a small, sub-spherical, membranous corpus bursae without signum.

***Antheua imitata hespera* Schintlmeister & László, ssp. nov.**

Habitus Figs. 46j–l, Genitalia Figs. 47f–g,

**Holotype.** ♂, “Mali W-Africa / Kangaba, [ca. 11°57'N, 8°25'W] / 80 km West of Bamako / 1700 m, vii.2007 / leg. local collector” (CGM).

**Paratypes** (5 ♂♂).

**Mali.** 2 ♂♂, with the same data as the holotype, GS: 38901; 1 ♂, Monts Mandingues, SW Sandama, 550–600m, x.2011, GS: 38902 (CGM). **Sierra Leone.** 1 ♂, Mansonia village at the foothills of Loma Mts, 09°07'47"N, 11°05'06"W, 420m, 6.vi.2016, Light Trap, leg. Takano, Miles & Goff, DNA barcode id.: ANHRTUK00194516, BOLD process id.: ANLMN5174-21 (ANHRT). **Togo.** 1 ♂, Fazao-Malfakassa NP, Point de vue campsite (Sudanian savannah), 8°48'50"N, 0°49'3.2"E, 415m, 16–23.viii.2018, Actinic Light Trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., GS: LG 5497, DNA barcode id.: ANHRTUK00117462, BOLD process id.: ANLMN5163-21 (ANHRT).

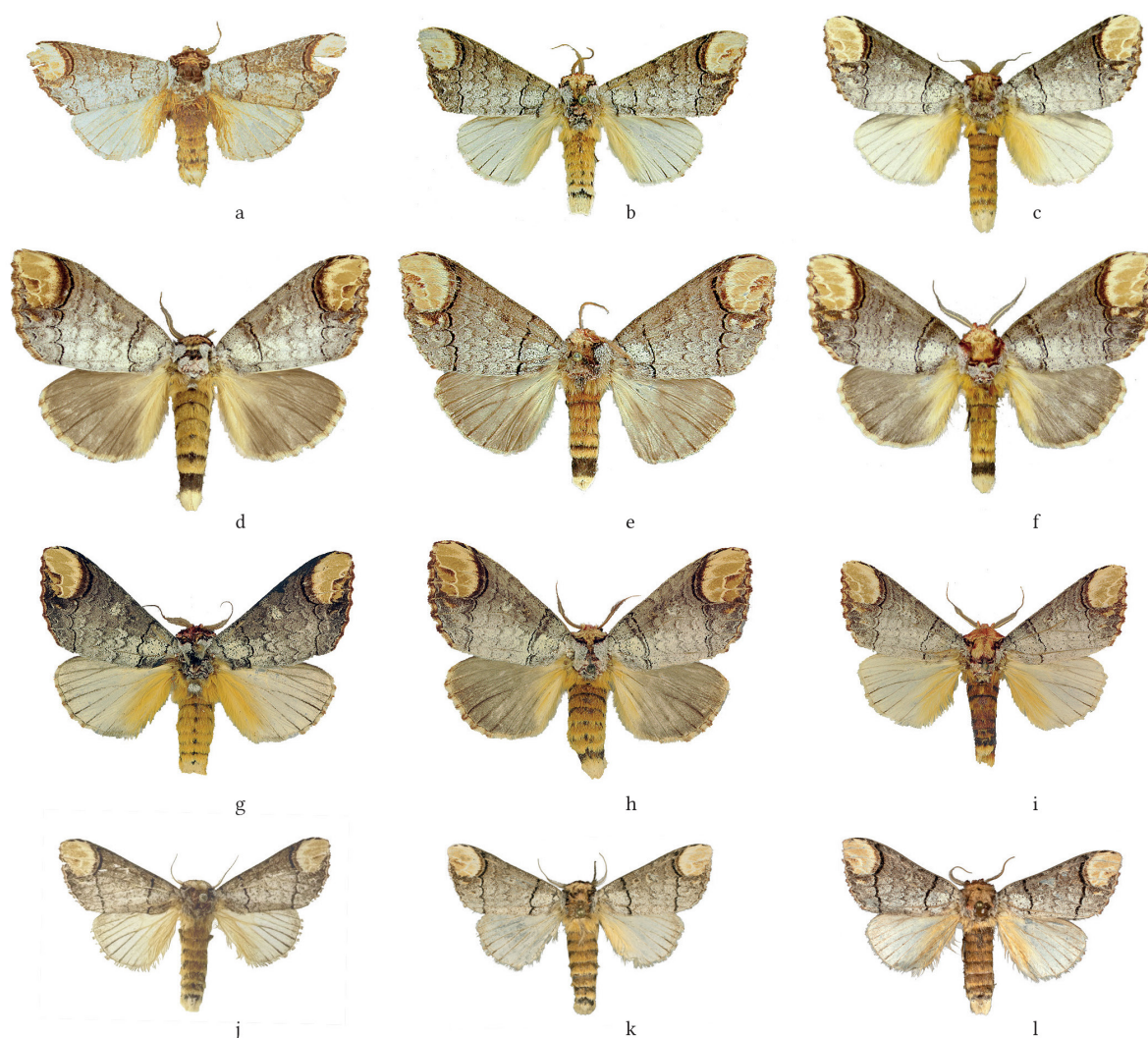
**Diagnosis.** The forewing length of males ranges from 19 to 23 mm; the majority of specimens are smaller (approximately 15–20%) than the nominotypical *A. imitata*. The pattern of the new subspecies is as in ssp. *imitata*, but the black basal, antemedial, and postmedial lines of the forewing are more contrasting and markedly thicker. The hindwings show blackish-tinged veins and a yellow shade along the anal margin as in ssp. *imitata*.

Variation in male genitalia, especially in phallus shape and carinal processes, is similar to that observed in the nominotypical subspecies. Therefore, these features are not reliable for diagnostic purposes.

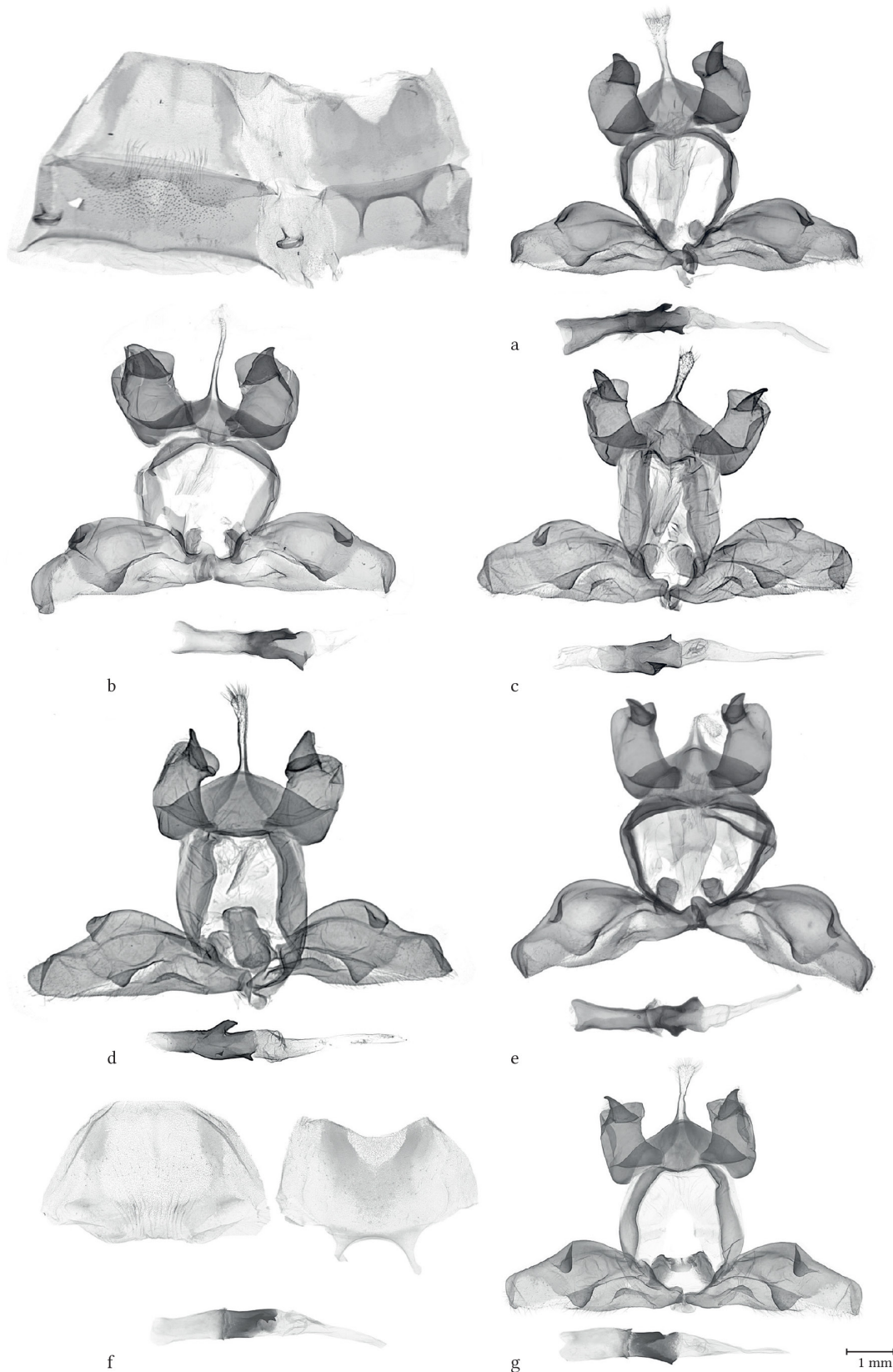
The female is unknown.

**Genetic divergence.** *Antheua imitata imitata* is associated with two BIN URIs: BOLD:AAL3100 from Mozambique (Maputoland) and BOLD:AEE1206 from South Africa (KwaZulu-Natal). The newly described subspecies, *Antheua imitata hespera* **ssp. nov.**, is assigned the BIN URI BOLD:AEJ9639. Analysis of two *A. imitata hespera* **ssp. nov.** samples from Sierra Leone and Togo, and three nominotypical *A. imitata* samples from southern Mozambique and South Africa, revealed pairwise distance (PWD) values between the two taxa ranging from 1.72% to 3.00%. Intraspecific divergence between the Togo and Sierra Leone specimens of the new subspecies is 1.09%. Southern African specimens exhibit divergence values ranging from 0.15% to 2.19%. The PWD between the two Mozambican samples is 0.15%, while the divergence between Mozambican and South African specimens ranges from 2.03% to 2.19%. These findings indicate substantial genetic heterogeneity within *A. imitata*, as evidenced by the presence of two BINs in the southern African population, despite the absence of diagnostic morphological differences.

**Etymology.** The name of this new subspecies is derived from the ancient Greek noun “hesperos” meaning “West”, indicating the western African distribution of the taxon.

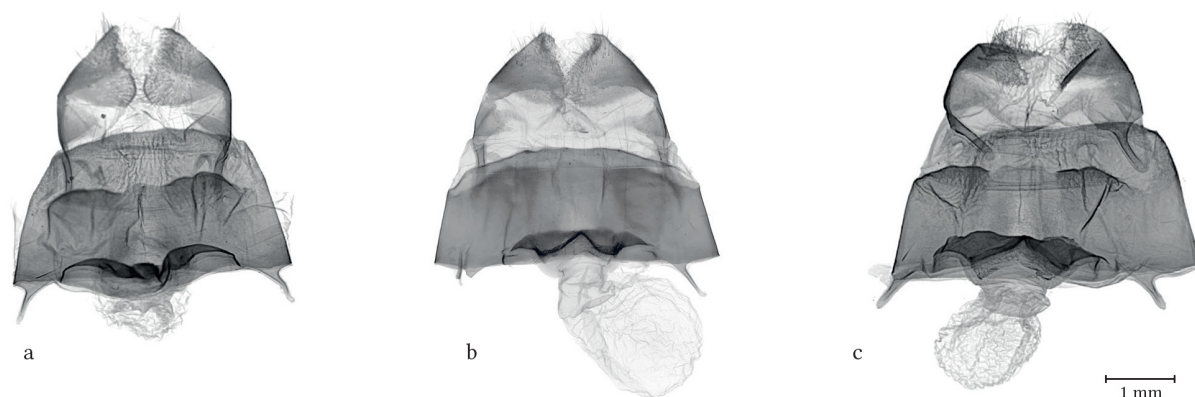


**Figure 46.** *Antheua imitata imitata* (a–i), *A. imitata hespera* **ssp. nov.** (j–l) adults. **a**) ♂, Tanzania, Dar es Salaam, holotype (NHMUK). **b**) ♂, DRC, Uele, Paulis, paratype of *Phalera imitata septentrionalis* (RMCA). **c**) ♂, RSA, Soutpansberg (MWM/ZSM). **d**) ♀, Tanzania, Dodoma, Chunya (GS: MWM 22.757, MWM/ZSM). **e**) ♀, DRC, Uele, Paulis (RMCA). **f**) ♀, RSA, Drakensberg, Royal Natal NP (GS: MWM 23.342, MWM/ZSM). **g**) ♂, Zambia, Nyangombe Falls (ANHRT). **h**) ♀, Mozambique, Maputo Special Reserve (ANHRT). **i**) ♂, Mozambique, Maputo Special Reserve (ANHRT). **j**) ♂, Mali, Kangaba, holotype (GS: CGM). **k**) ♂, Mali, Kangaba, paratype (GS: GS 38901, CGM). **l**) ♂, Mali, Monts Madingues, paratype (GS: GS 38902, CGM).



**Figure 47.** *Antheua imitata imitata* (a–e), *A. imitata hespera* ssp. nov. (f–g), male genitalia. **a)** ♂, RSA, Louis Trichardt (GS: MWM 23.343, MWM/ZSM). **b)** ♂, Tanzania, Mbeya, Igurusi savanna (GS: MWM 23.043, MWM/ZSM). **c)** ♂, Angola, Huila, Bonga (GS: MWM 35.227, MWM/ZSM). **d)** ♂, Zambia, Jiwundu swamp (GS: ANHRT 00249, ANHRT). **e)** ♂, South Sudan, Akotos, Lolibai Mts. (GS: MWM 23.344, MWM/ZSM). **f)** ♂, Mali, Kangaba, paratype (GS: GS 38901, phallus; CGM). **g)** ♂, Mali, Monts Madingues, paratype (GS: GS 38902, CGM).

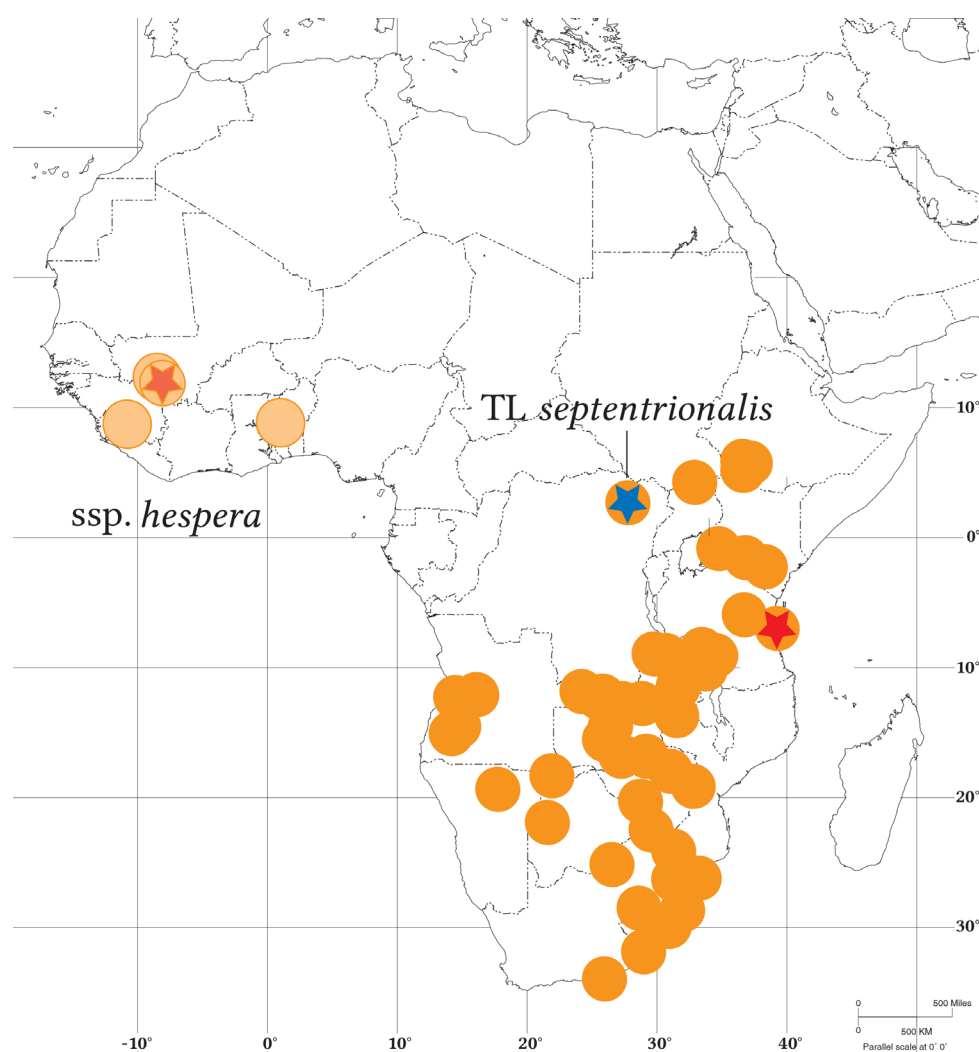




**Figure 48.** *Antheua imitata imitata*, female genitalia. **a)** ♀, Kenya, Transmara, Lolgorien (GS: MWM 35.229, MWM/ZSM). **b)** ♀, RSA, Drakensberge, Royal Natal NP (GS: MWM 23.342, MWM/ZSM). **c)** ♀, Zambia, Chilambwe Falls, Kafubu River (GS: ANHRT 00250, ANHRT).

**Distribution.** *Antheua imitata imitata* is widely distributed in southern, southern-central, and eastern Africa, recorded from Angola, Botswana, DRC, Ethiopia, Kenya, Malawi, Mozambique, Namibia, RSA, South Sudan, Tanzania, Zambia, and Zimbabwe.

*Antheua imitata hespera* **ssp. nov.** is confined to the dryer savannah habitats of western Africa with occurrences in Mali, Sierra Leone and Togo.



**Figure 49.** Distribution of *Antheua imitata*.

***Antheua politzari* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:DD4B3487-17CC-4893-B390-D9D897A34BCA>

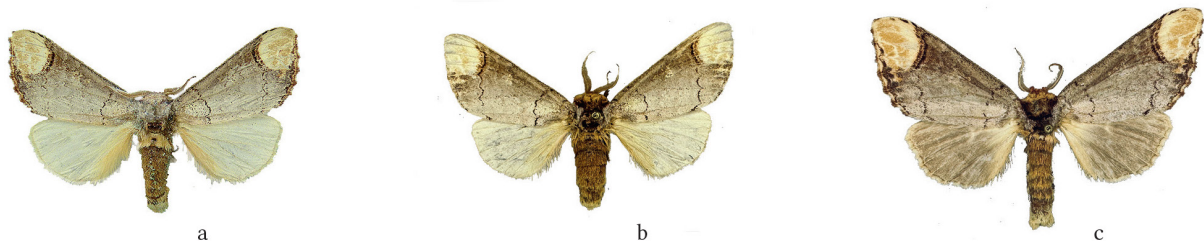
Habitus: Figs 50a–c, Genitalia: Fig. 51a, Distribution map: Fig. 52.

**Holotype.** ♂, “Somalia m. / Canole Fluß [= Caanoole, 1°57'N, 40°28'W] / 10.i.1989 / leg. Dr. Politzar”  
// GS: MWM 35.230 (CAS).

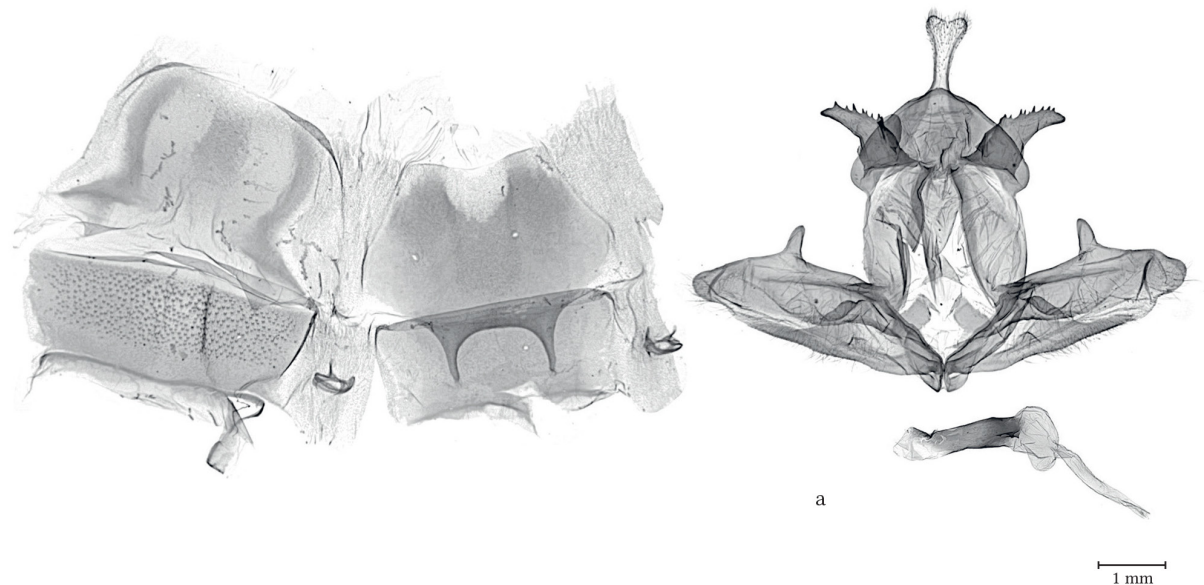
**Paratypes** (1 ♂, 1 ♀).

**Somalia.** 1 ♂, 1 ♀, Caanoole Fluß, 17.iv.1988 and 10.i.1989, leg. Dr. Politzar (CGM).

**Diagnosis.** Forewing length is 21 mm in males and 23 mm in the female paratype. *Antheua politzari* sp. nov. is considerably smaller than *A. imitata*. Antennae are pale brown in both sexes, with long rami, as in *A. imitata*. The ground colour of forewings is pale silvery grey, somewhat darkened towards the costa. The basal and postmedian fasciae are fine, slightly undulating, blackish; the apical patch is buff, similar to that in *A. imitata*. The marginal fascia is brown; the fringe is chequered with dark brown and yellowish-brown. The hindwing is pale yellow (that is whitish in *A. imitata*) with a more intense yellow shade along the anal margin. The veins of the hindwing are not tinged with black as in *imitata*. The female has a forewing pattern similar to that of the males, but hindwings are brown.



**Figure 50.** *Antheua politzari* sp. nov., adults. **a)** ♂, Somalia, Caanoole, holotype (GS: MWM 35.230, CAS). **b)** ♂, Somalia, Caanoole, paratype (CGM). **c)** ♀, Somalia, Caanoole, paratype (CGM).



**Figure 51.** *Antheua politzari* sp. nov., genitalia. **a)** ♂, Somalia, Caanoole, holotype (GS: MWM 35.230, CAS).

The male genitalia of the new species are readily distinguished from those of *A. imitata* by the smaller, roughly serrated, elongate-triangular socii. In contrast, *A. imitata* exhibits larger, quadrangular socii with smooth margins. The uncus is somewhat thicker and shorter, with a slightly broader and

shortly bilobate apex compared to *A. imitata*. The shape of the uncus likely exhibits variation similar to that observed in *A. imitata*. The tegumen is broader than in the related species, while the vinculum remains similarly small. The valvae are elliptical, more elongated, and considerably narrower, with a longer and narrower costal process and a markedly larger saccular lobe than those of *A. imitata*. The phallus is slightly shorter than that of *A. imitata* and bears a short, heavily sclerotized triangular carina with two small acute projections. The eighth sternite is similar to that of *A. imitata*, but the eighth tergite displays an  $\Omega$ -shaped sclerotization pattern.

**Etymology.** The species is named in honor of Karlheinz Politzar (October 5, 1938 – October 20, 2007), a veterinary surgeon and distinguished entomologist recognized for his extensive collection of Lepidoptera specimens from various African countries.

**Distribution.** This species is solely known from Somalia.



**Figure 52.** Distribution of *Antheua politzari* sp. nov.

***Antheua lydenburgi* (Distant, 1899), comb. nov.**

Habitus: Figs 53a–f, Genitalia: Figs 54a–f, Distribution map: Fig. 55.

*Phalera lydenburgi* Distant, 1899, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (7th series) 3: 463.

Holotype: ♀, [South Africa] Transvaal. / Lydenburg Distr. [ca. 25°05'S, 30°27'E] / (in coll. NHMUK).

**Material examined** (large series of both sexes).

**Angola.** 3 ♂♂, Huila Prov., 5 km N Camava, 1434 m, 29.xi.2013 leg. Naumann, Ott & Sulak, GS: MWM 35.233 (CAS). 2 ♂♂, SSW Bonga, 1.xii.2013, 1053 m, leg. S. Naumann, E. Ott & H. Sulak, GS: MWM 35.227 (MWM). Large series of ♂♂ and ♀♀, Prov. Benguela, btw. Catenque and Cubai, 13°00.329'S, 13°48.236'E, 830m, iii–iv.2014, leg. Naumann, Ott & Sulak; 3 ♂♂, Prov. Benguela, 5 km E Sumbe, btw. Sumbe – Benguela, 12°08.078'S, 13°54.448'E, 280m, 30.iii.2014, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Benguela, btw. Cutembo & Caluquembe, 14 km E Cutembo, 13°47.905'S, 14°01.928'E, 1047m, 23.iii.2014, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Benguela, btw. Ganda & Dende, 13°07.773'S, 14°42.033'E, 1210m, 25.iii.2014, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Cuanza Sul, 1 km N Chipita, btw. Uku & Sumbe, 11°16.032'S, 14°09.521'E, 301m, 29.iii.2014, leg. Naumann, Ott & Sulak; 2 ♂♂, Prov. Cuanza Sul, 26 km E Cassongue, 11°52.257'S, 15°09.320'E, 1650m, 28.iii.2014, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Huambo, btw. Cacula & Benguela, 14°49.302'S, 14°13.690'E, 1447m, 22.iii.2014, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Cunene, ca. 15 km NNW Humbe, 16°32.819'S, 14°52.318'E, 03.xii.2013, 1140m, leg. Naumann, Ott & Sulak (ANHRT).

**Ethiopia.** 1 ♂, Reg. of South. Nations, Bonga Guesthouse, 1750m, 12–14.v.2016 (CRF). 1 ♂, Oromiya, betw. Leku and endo, env. Abosto, 15–19.iv.2010, leg. H. Sulak, GS: MWM 35.234 (CAS). 1 ♀, Kaffa Prov., 5 km E Jima, 1800m, 28.iv.2008, leg. Naumann & Schnitzler, GS: MWM 35.235 (CAS).

**Kenya.** 1 ♀, Donjo Orok, 20–28.iii.1994, leg. Dr. Politzar, GS: MWM 23.038 (MWM). 1 ♂, Nairobi, Ololua Forest, NMK-IPR Compound, 01°22'S, 36°43'E, 1800m, MV light, 11.iv.1999, leg. B. Bytebier (ANHRT).

**Malawi.** Rumphu Distr., Nyika N.P., Juniper Forest, 2390 m, 28.xii.2011, leg. Anikin, V. GS: MWM 22.779 (MWM).

**Namibia.** 5 ♂♂, Khomas Region, Farm Sonnleiten, 22°31'29"S, 17°23'51"E, 1735m, 23–25.iii.2015, leg. Naumann, Ott & Sulak (ANHRT).

**RSA.** 1 ♂, Limpopo, Sandriver valley, Medike, 1000m, 26.xii.–4.i.2009, leg. de Freina, genitalia slide MWM 23.338; 1 ♂, Limpopo, 6.5km NNW Gramadoela, 19.i.2007, leg. J.-P. Rudloff, GS: MWM 23.339 (MWM). Large series of ♂♂ and ♀♀, KwaZulu-Natal, Pongola, Belvedere Game Ranch, 27°31'S, 31°45'E, 430m, 22–26.ii.2018, Kovtunovich, V., Yakovlev, R. leg.; 3 ♂♂, 1 ♀, Limpopo, 10 km S Mokopane, Trailer Camp, 24°15'44"S, 28°59'27"E, 1095m, 28.ii.2016, leg. Naumann, Ott & Sulak (ANHRT).

**Somalia.** 2 ♂♂, Caanoole Fluß, 17.iv.1988, leg. Dr. Politzar (CGM).

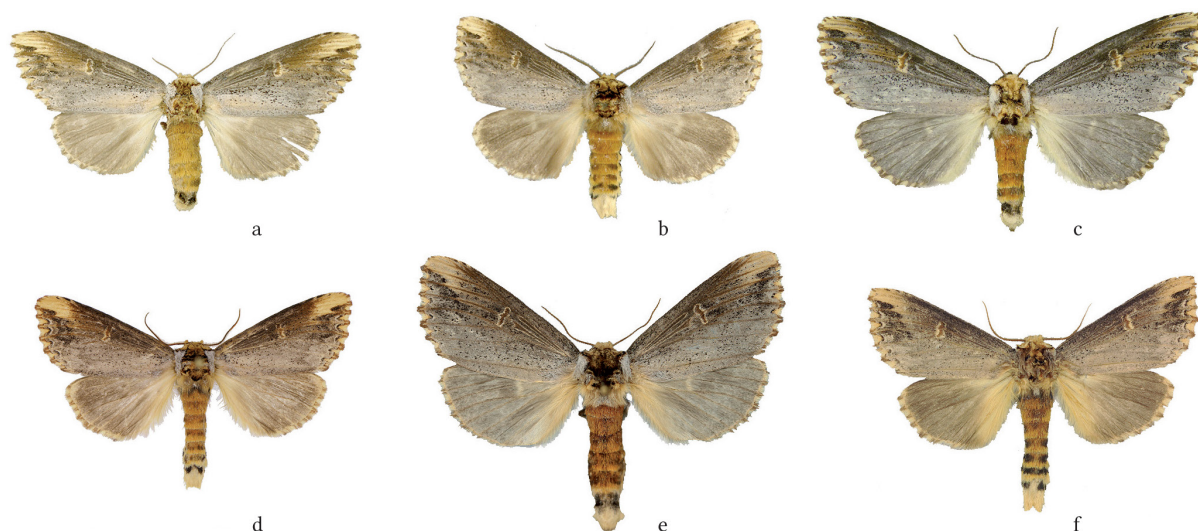
**Tanzania.** 1 ♂, West Usambara, 15 km N de Lushoto, Mullers Mountain Lodge, 1568m, xii.2003, Ph. Darge (MWM/ZSM). 5 ♂♂, Mizimu, Mwanihana, Udzungwa Mountains N.P., S07°48'21.8", E36°51'09.5", 850m, 9–11.iv.2011, Light Trap, leg. Smith, R. & Takano, H., GS: ANHRT 00260; 3 ♂♂, Nambiga Forest, Ulanga, S08°34'53.1", E36°29'20.7", 348m, 28.iv.2011, Light Trap, leg. Smith, R. & Takano, H.; 2 ♂♂, Mahenge Scarp Forest, S08°37'10".6", E36°42'46.3", 562m, 24.iv.2011, Light Trap, leg. Smith, R. & Takano, H.; 2 ♂♂, Njia Panda, Mwanihana, Udzungwa Mts N.P., S07°47'27.7", E36°49'33.7", 970m, 12–14.iv.2011, Light Trap, leg. Smith, R. & Takano, H.; 1 ♀, Mount Meru, Arusha NP, S03°14'51", E36°50'38", 1679m, 18–24.vii.2012, Light Trap, leg. Smith, R. & Takano, H., GS: ANHRT 00261 (ANHRT).

**Zambia.** 10 ♂♂, Kambishi, Jiwundu, S11°54'39", E25°29'05", 1340m, 18–19.x.2014, Light Trap leg. Smith, Takano & Oram; 7 ♂♂, Kambishi School, S11°54'42", E25°28'50", 1346m, 10–13.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 3 ♂♂, Jiwundu Swamp, 11°51'54"S, 25°33'20"E, 1340m, 25–30.x.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 4 ♂♂, Kasanka River Pontoon, Kasanka N.P., S12°34'23", E30°14'05", 1191m, 2–4.xii.2012, Light Trap, leg. Smith, R & Takano, H., GS: ANHRT 00258; 5 ♂♂, Ndole Bay, on the shores of the lake Tanganyika, S08°28'42", E30°26'59", 777m, 23–25.xi.2012, Light Trap, leg. Smith, R. & Takano, H.; 21 ♂♂, 1 ♀, Mayukuyuku, Kafue NP, S14°54'55", E26°03'47", 1080m, 21–26.xi.2013, Light Trap, leg. Smith, Takano & Oram, GS: ANHRT 00259 ♀; 1 ♂, Ijobwe, Sioma Ngwezi NP, S16°53'55", E23°35'54", 1020m, 19–20.xi.2013, Light Trap, leg. Smith, Takano, & Oram; 1 ♂, Kabwe, Kasanka N.P. S12°32'28", E30°12'42" 1187m, 30.xi.–1.xii.2012, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, Kapishya Hot Springs, Shiwa N'gandu Estate, S11°10'13", E31°36'00", 1437m, iii.2015, M. T. Harvey coll., leg. Smith, R. & Takano, H.; 1 ♂, Kalungu, north of Isoka, S9°40'52", E32°42'50", 1280m, 5–8.iii.2017, MV, Oram, D., Miles, W., Smith, L. leg.; 1 ♂, Muchinga Prov., Benyanga village, 10°40'41"S, 33°27'45"E, 1250m, 7–12.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A., leg.; 2 ♂♂, Muchinga Prov., Muyombe, Mama Muwowo's Lodge, 10°32'40"S, 33°26'05"E, 1230m, 6–7.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A. leg.; 2 ♂♂, 1 ♀, Muchinga Province, Kalungu, King's Highway Rest Camp, 09°40'52"S, 32°42'50"E, 1280m, 12–13.xii.2023, MV light trap,



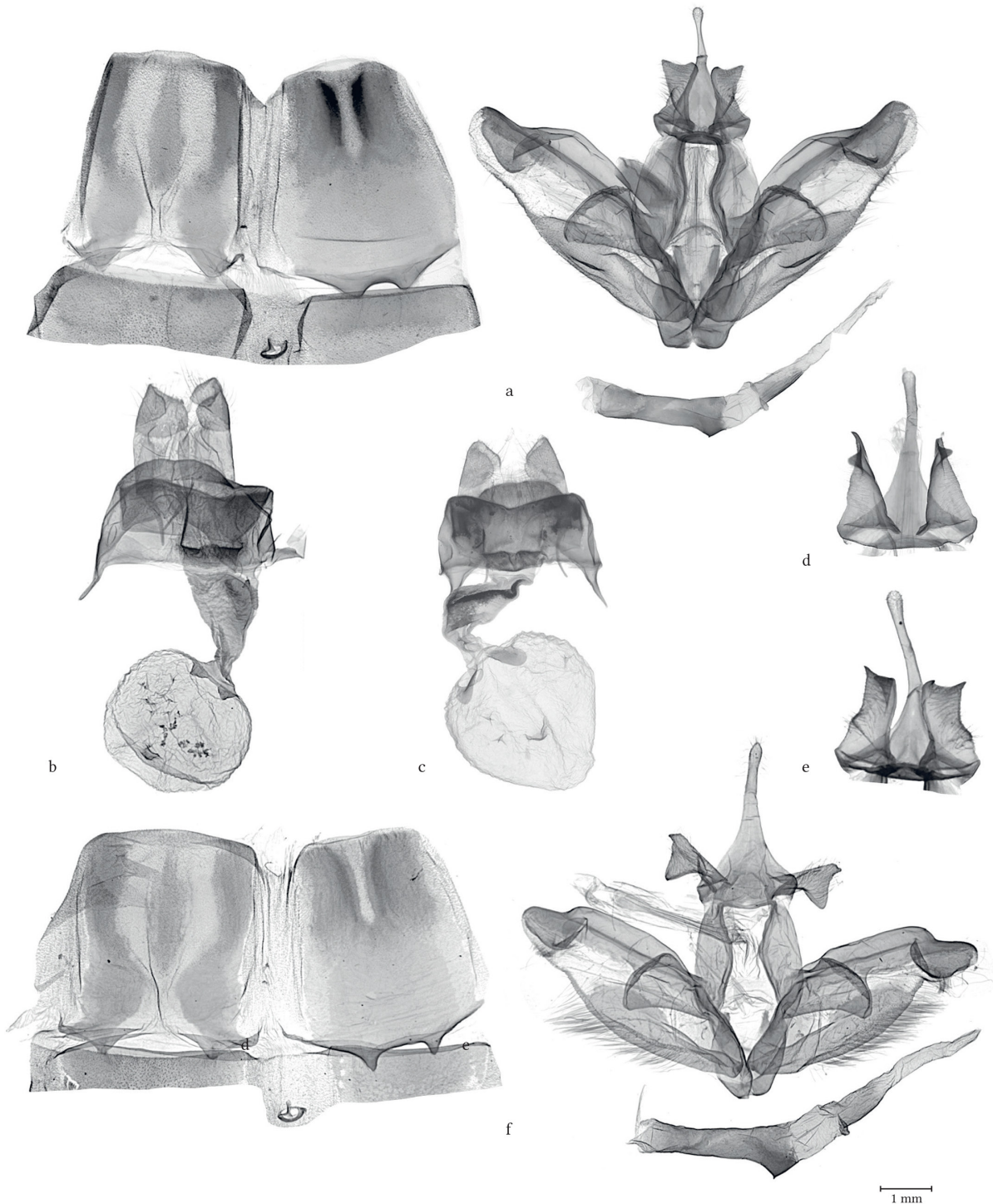
László, G., Morgan, L., Volynkin, A. (ANHRT). **Zimbabwe**. 1 ♂, Harare, 26.ii.1963, A.J. Duke (TMSA).

**Diagnosis.** Forewing length is 19–25 mm in males, and 23–27 mm in females. The species is distinguished from all other *Antheua* by its prominent yellow and brown chequered fringes, the distinctive cream zig-zagged terminal line, and the small, but conspicuous yellowish-brown, elongated apical patch. Sexual dimorphism is negligible.



**Figure 53. *Antheua lydenburgi*, adults. a)** ♀, RSA, Lydenburg, holotype (NHMUK). **b)** ♂, Zimbabwe, Harare (TMSA). **c)** ♀, RSA, Soutpansberg (MWM/ZSM). **d)** ♂, Zambia, Kasanka N.P. (GS: ANHRT 00258, ANHRT). **e)** ♀, Ethiopia, Reg. of South Nations, Bonga Guesthouse (CRF). **f)** ♂, Zambia, Lake Tanganyika, Ndole Bay (ANHRT).

The male genitalia of *A. lydenburgi* exhibit considerable variation in the shape and width of the narrow, apically rounded uncus and the generally quadrangular socii. A large, fan-shaped lobe is present near the base of the valva, projecting from the costal margin. The medial section of the valva costa is notably dilated. The distal section contains a large, sclerotized, rounded trapezoidal subapical lobe that folds over the membranous medial plate of the valva. The phallus is short and narrow, featuring a broad-based, triangular, apically pointed carina. The endophallus does not possess diverticula. The female genitalia are relatively small, with a short, thick, quadrangular ovipositor and a medium-length eighth tergite. The ostium bursae is broad, very short, and heavily sclerotized, while the ductus bursae is short, gradually tapering proximally, and moderately sclerotized. At the distal end of the corpus bursae, a pair of triangular sclerotized plates of variable size is present near the connection to the ductus bursae. The signum bursae consists of a small, quadrangular scobinated plate.



**Figure 54. *Antheua lydenburgi*, genitalia. a)** ♂, RSA, Limpopo, Gramadoela (GS: MWM 23.339, MWM/ZSM). **b)** ♀, Ethiopia, Kaffa, Jima (GS: MWM 35.235, CAS). **c)** ♀, RSA, Limpopo, Blouberg Nature Reserve (GS: MWM 23.341, MWM/ZSM). **d)** ♂, Tanzania, West Usumbara (GS: MWM 23.037, uncus and socii, MWM/ZSM). **e)** ♂, RSA, Soutpansberg (GS: MWM 23.338, uncus and socii, MWM/ZSM). **f)** ♂, Ethiopia, Oromiya, Abosto (GS: MWM 35.234, CAS).

**Distribution.** This species is widely distributed in southern, southern-central and eastern Africa with records from Angola, Ethiopia, Kenya, Malawi, Namibia, the RSA, Eswatini, Tanzania, Uganda, Zambia and Zimbabwe.



Figure 55. Distribution of *Antheua lydenburgi*.

***Antheua atrata* (Grünberg, 1907)**

Habitus: Figs 56a–f, Genitalia: Figs 57a–e, Labels of the lectotype: Fig. 58, Distribution map: Fig. 59.

*Anticyra atrata* Grünberg, 1907, *Deutsche Entomologische Zeitschrift* 1907: 432, pl. 4: 2.

**Lectotype:** ♂, Togo, Bismarckburg [ca. 8°28'S, 31°08'E] (in coll. MfN, by present designation).

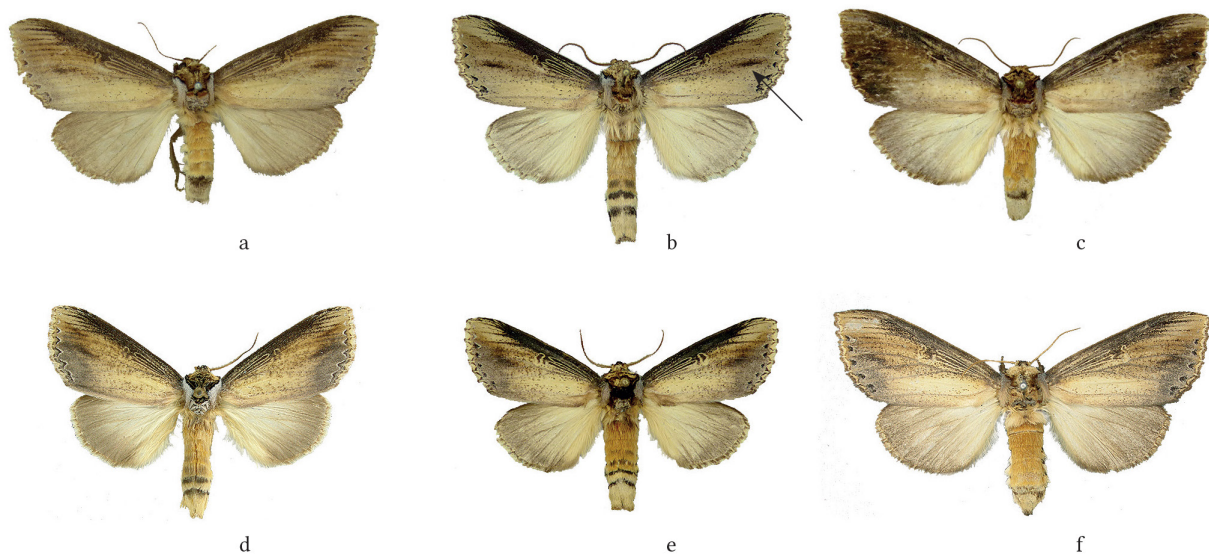
**Material examined** (52 ♂♂, 3 ♀♀).

**Cameroon.** 1 ♀, North Region, Wack (La Falaise), 07°40'16.5"N, 13°33'18.4"E, 900m, 2–21.x.2018, general coll., Sáfián, Sz., Simonics, G. leg., GS: ANHRT 01590 (ANHRT).

**Guinea.** 4 ♂♂, Guinée Forestière, Bossou Forest and Institut de Recherche Environnementale de Bossou (Lowland Forest-Farmland), 07°38'32"N, 08°30'30"W, 690m, 24–30.vi.2019, MV light trap, Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R. leg.; 1 ♂, Guinée Forestière Monts Nimba UNESCO World Heritage Site, Mont Richard Molard camp and ridge (High-Altitude Grassland & Forest) 07°36'19"N, 08°25'30"W, 1400–1752m, 1–7.vii.2019, 250W Blended Light Trap, Dérozier, V., Miles, W., Sáfián, S. leg.; 1 ♂, Nimba Mts, SMFG concession area, (Société des Mines de Fer de Guinée), Cite 1, 7°42'2.83"N, 8°23'58.60"W, 700m, 16–25.vii.2017, general coll. at light, Sáfián Sz. leg.; 1 ♂, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, local collectors leg. (ANHRT). **Ivory Coast.** 6 ♂♂, Mt. Tonkoui Peak, 07°27'15"N; 07°38'13"W, 1171m, 12–18.vii.2015, 28.vi.–1.vii.2014, UV light trap, leg. Aristophanous, M., Moretto,



P., Ruzzier, E., GS: ANHRT 00254; 5 ♂♂, Denguele Classified Forest (sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 479m, 6–14.vi.2018, actinic light trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg.; 1 ♂, Comoe NP, Comoe 4, Open Forest, 08°42'54.6"N, 03°47'53.4"W, 238m, 1.vii.2015, light trap, Aristophanous, M., Moretto, P., Ruzzier, E. leg.; 3 ♂♂, Gbando Village, (Sudanian forest with Gallery forest), 9°34'17.1"N, 6°41'1.1"W, 417m, 15–22.vi.2018, MV Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg.; 2 ♂♂, Dolla Ranch, (tree savannah), 07°58'7.7"N, 07°34'35.7"W, 481m, 27.v.–5.vi.2018, MV Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg. (ANHRT). **Liberia.** 1 ♂, Nimba County, Yekepa residential area, 7°34'26.3"N, 8°32'31.6"W, 508m, 10–31.iii.2017, Sáfián Sz. leg.; 1 ♂, Nimba Mountains, Nimba West, Mount Gangra summit, 7°32'45.82"N, 8°38'9.36"W, 978m, 17–25.iii.2017, Light Trap (250W blended bulb), Sáfián, Sz., Simonics, G. leg. (ANHRT). **Mali.** 1 ♂, Mopti region, Dogom Plateau, Bandagara, 450–850m, v.2013, leg. Müller & Kravchenko, GS: MWM 35.237 (MWM). **Nigeria.** 1 ♂, Kaduna, 13.vii.1971, leg. H. Politzar (ZSM). **Senegal.** 3 ♂♂, 5 miles W Diouguel, early to mid July 1985, leg. H. Friend (CAS). **Sierra Leone.** 1 ♀, Baoma, 21.ix.2014, leg. Goff, R., GS: ANHRT 00257; 3 ♂♂, Loma Mountains, farmland/forest mosaic, N09°07'47", W11°05'24", 420m, 11–15.vi.2016, light trap, leg. Takano, Miles & Goff; 1 ♂, Kalainkay nr. Kamabai, Northern Prov., 80m, 3–6.xi.2015, N09°10'52", W11°56'44", light trap, R. Goff. coll., leg. Smith, R. & Takano, H., GS: ANHRT 00255; 2 ♂♂, Mansonia village at the foothills of Loma Mts N09°07'47", W11°05'06", 420m, 6.vi.2016, Light Trap, leg. Takano, Miles & Goff (ANHRT). **Togo.** 10 ♂♂, 1 ♀, Fazao-Malfakassa NP, Point de vue campsite (Sudanian savannah), 8°48'50"N, 0°49'3.2"E, 415m, 16–23.viii.2018, actinic and MV light trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., GS: ANHRT 00432 ♀; 2 ♂♂, Fazao-Malfakassa NP, Mare aux crocodiles campsite (Sudanian savannah/dry forest), 8°44'58.8"N, 0°48'51.8"E, 505m, 26.viii.–7.ix.2018, MV light trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., GS: ANHRT 00431; 3 ♂♂, Fazao Hotel, 8°41'44.1"N, 0°46'32.5"E, 532m, 3–4.viii.2013, leg. local collectors (ANHRT).

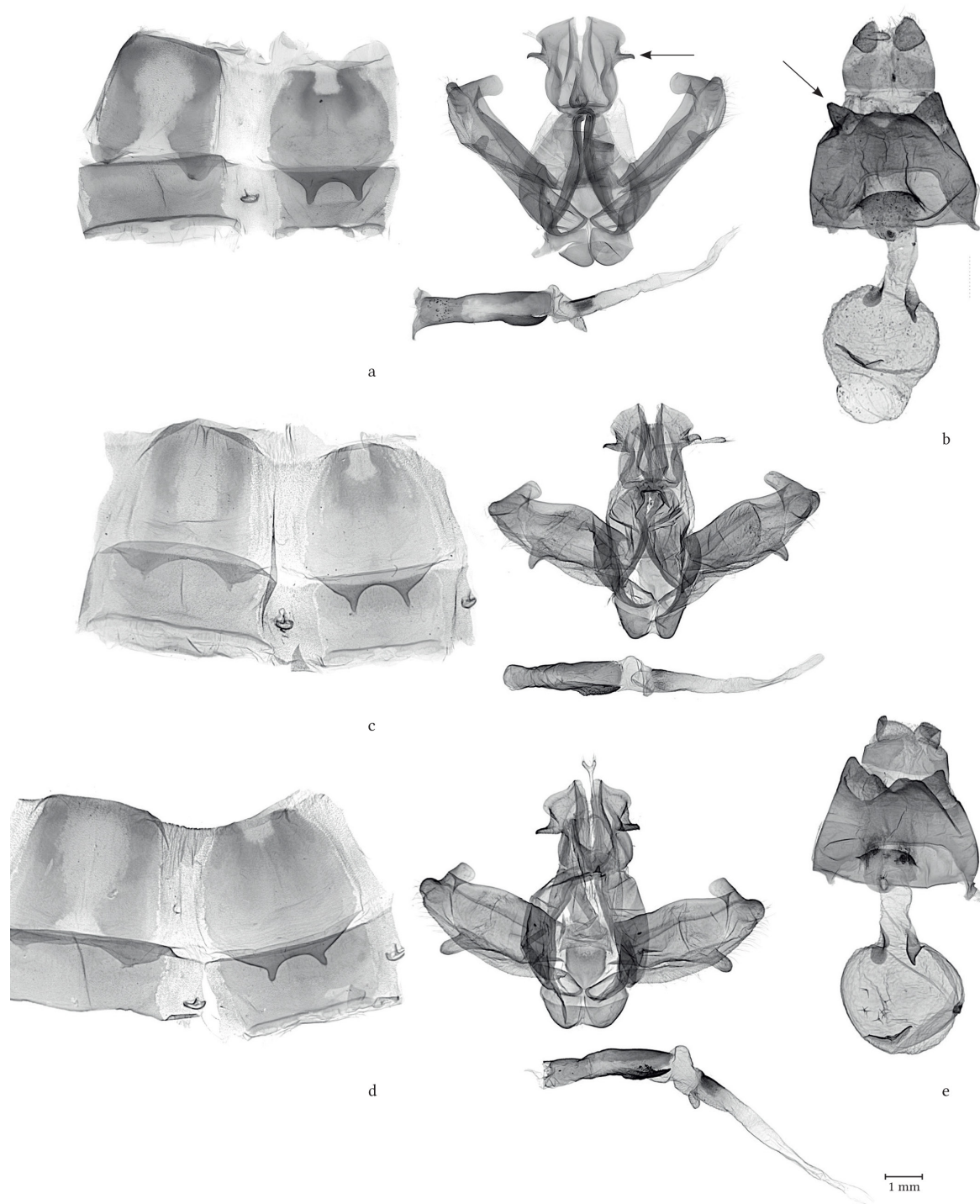


**Figure 56.** *Antheua atrata*, adults. **a)** ♀, Togo, Bismarckburg, lectotype (MfN). **b)** ♂, Togo, Fazao (CAS). **c)** ♀, Sierra Leone, Potoru, Kailahun (MWM/ZSM). **d)** ♂, Nigeria, Kaduna (ZSM). **e)** ♂, Sierra Leone, Western Area, Black Johnson (GS: MWM 24.259, MWM/ZSM). **f)** ♀, Ghana, Kumasi (NHMUK).

**Diagnosis.** Forewing length of males is 20–25 mm; that of females is 24–26 mm. *Antheua atrata* belongs to a complex of seven closely related species, which, besides this species, includes *A. angolana*, *A. acholi*, *A. reducta* sp. nov., *A. lungu* sp. nov., *A. lunda* sp. nov., and *A. kaffa* sp. nov. This species complex is characterised by an overall fuscous brown colouration and a small discal spot surrounded by pale yellowish-brown scales. Although these species lack the characteristic apical blotch on the forewing, they were previously classified under the genus *Phalera* Hübner, 1819, likely due to their dark colouration. Recent morphological and genetic studies (St Laurent *et al.* 2025) demonstrate that these species are more closely related to the genus *Antheua*. The fuscous colouration, previously considered



the sole justification for their placement in *Phalera*, is not a valid taxonomic character. As a result, these species are now transferred from *Phalera* to *Antheua*. Because of their high phenotypic similarity, reliable identification within this complex often requires genitalia dissections, although some species possess distinct external diagnostic features. Such taxon is *A. atrata* from West Africa characterised by a distinctive blackish longitudinal dash in the postmedial area of the forewing; additionally, the subterminal fascia is clearly defined by a series of blackish spots. The pale brownish-greyish male hindwings have a dark brownish terminal area, while the females possess almost uniformly brownish-grey hindwings.

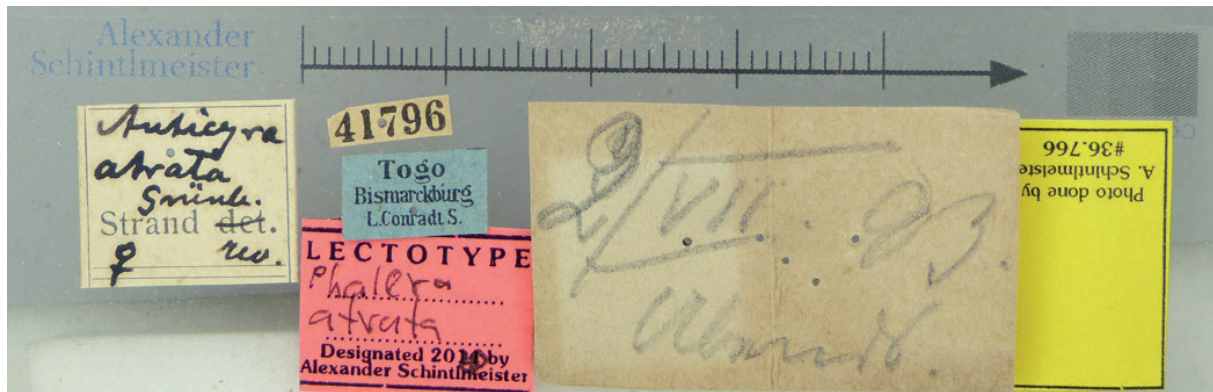


**Figure 57. *Antheua atrata*, genitalia.** **a)** ♂, Sierra Leone, Western Area, Black Johnson (GS: MWM 24.259, MWM/ZSM). **b)** ♀, Sierra Leone, Baoma (GS: ANHRT 00257, ANHRT). **c)** ♂, Mali, Mopti reg., Dogon Plateau (GS: MWM 35.237, MWM/ZSM). **d)** ♂, Togo, Fazao-Malfakassa NP (GS: ANHRT 00432, ANHRT). **e)** ♀, Togo, Fazao-Malfakassa NP (GS: ANHRT 00431, ANHRT).

The male genitalia of *A. atrata* are characterised by a weakly sclerotized and slender uncus, which is shorter than that of *A. angolana*. The socii are large and roughly quadrangular, featuring prominent, beak-like mediolateral processes that are noticeably slimmer than those found in *A. angolana* and *A. acholi*. The apical lobe of the valva is more elongated and broader compared to other species in this group. The phallus has a robust, heavily sclerotized spine-like carina, which is slightly smaller than in *A. angolana* but larger than in other closely related species. In the female genitalia, *A. atrata* has the longest and most robust eighth segment, possessing a pair of triangular laterodistal lobes of the sternite that are not observed in related species. The arcuate signum bursae is the longest and narrowest among the known females of the *A. atrata* species group.

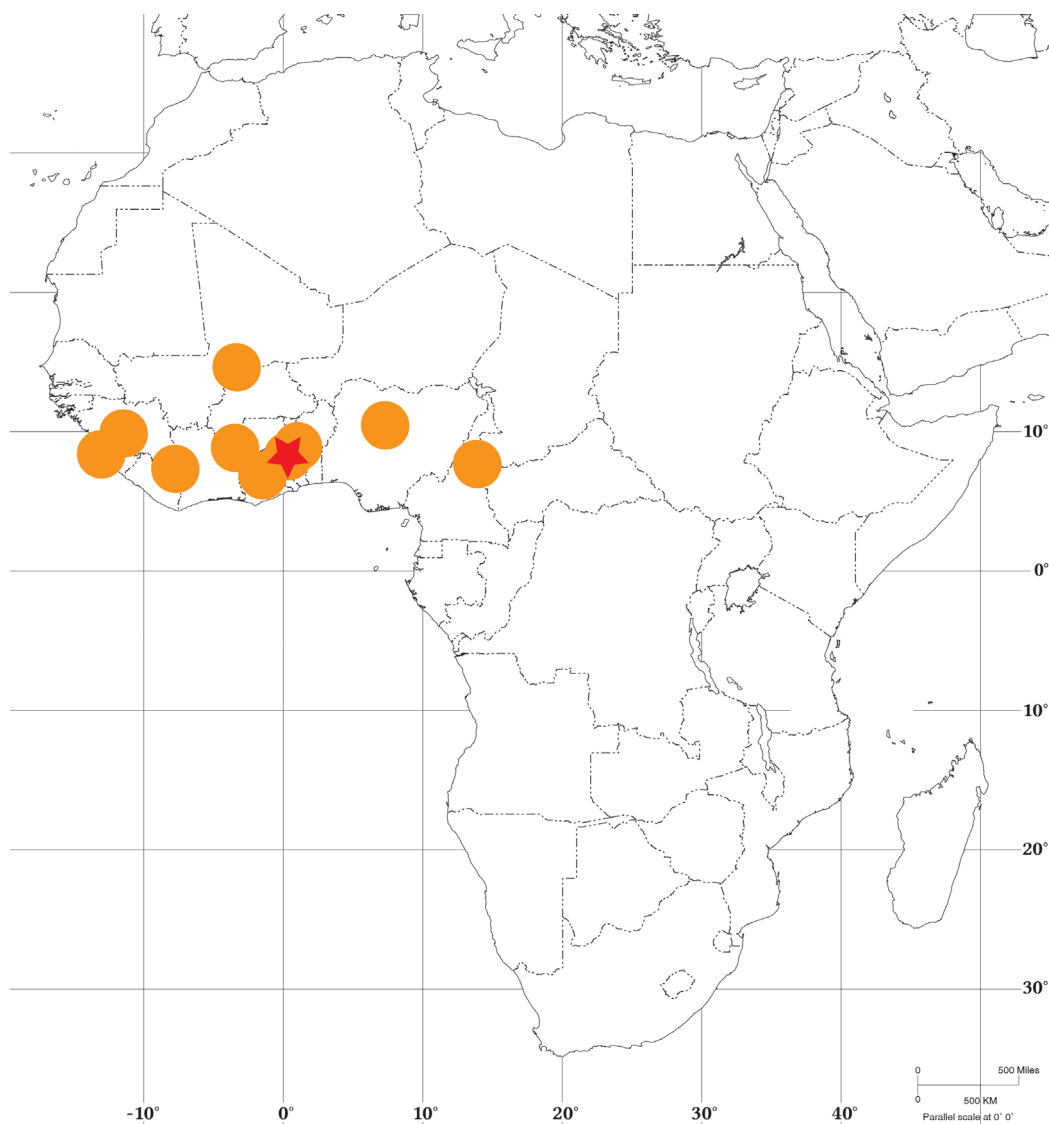
### Designation of lectotype

*Anticyra atrata* was originally described based on an unspecified number of males and females collected from the following localities: [Tanzania] "D.-O. Afrika, Tanganijka-See, Udiji; Togo, Yendi und Bismarckburg; [Nigeria] Benuë; [Cameroon] Kamerun, Deidodorf, Yaunde, Chinchoxo; Angola, Quisoll; [Namibia] D.-S.-W. Afrika, Outjo". Although Grünberg (1907) did not mark these specimens as types, they have been located in the holdings of the MfN. Since the syntypes represent several different species, to stabilise the nomenclature, a female specimen from Bismarckburg, Togo, is hereby designated as the lectotype (Fig. 56a). The labels for this specimen are illustrated below (Fig. 58). The additional specimens of the original syntype series become paralectotypes.



**Figure 58.** Labels of the lectotype of *Antheua atrata*.

**Distribution.** *Antheua atrata* is a West African species, with confirmed records from Cameroon, Ghana, Guinea, Ivory Coast, Mali, Nigeria, Senegal, Sierra Leone, and Togo.



**Figure 59.** Distribution of *Antheua atrata*.

***Antheua angolana* (Strand, 1912), comb. nov.**

Habitus: Figs 60a–f, Genitalia: Figs. 61a–f, Distribution map: Fig. 62.

*Anticyra angolana* Strand, 1912, *Archiv für Naturgeschichte* 78A (6): 159.

Holotype: ♂, Angola / Quisoll [ca. 9°30'S, 16°18'E] / 23 km v. Malange / Kaml S.V. (in coll. MfN).

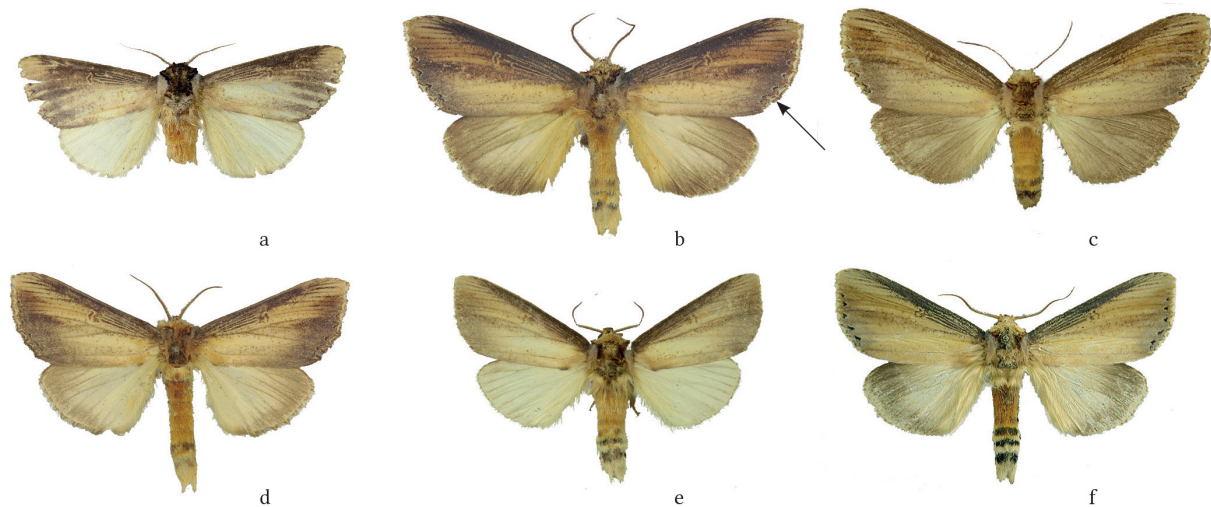
**Material examined** (31 ♂♂, 3 ♀♀).

**Angola.** 8 ♂♂, N'Dalla Tando, 2,700 feet, 23.xi.1908, 25.xi.1908, 30.xi.1908, 2.xii.1908, Dr. W. J. Ansorge, GS: LG 5231, LG 5232, LG 5252 (ANHRT). **Cameroon.** 1 ♂, Bang Manenguba-Geb. 700m, viii.1910 Schäfer S.G. (MfN). 1 ♂, Yaunde, 7.v.1897, G. Zenker (Paralectotype of *Anticyra atrata*) (MfN). 1 ♂, Mt. Cameroon, 5km SW Ekona, 900 m, 7.–19.iv.2008, leg. A. Schintlmeister (CAS). **CAR.** 1 ♀, Mongouomba, Ubangi River, vii.1929–iv.1930, 3°38'N, 18°36'E, leg. Arnold Schultze (MfN). **Equatorial Guinea.** 1 ♂, Span. Guinea, Nkolentangan, 30.ix.1907, G. Teßmann, GS: ZMHU 04-05 (Paralectotype of *Anticyra atrata*) (MfN). **Namibia.** 1 ♂, Caprivi Region, Kongola, 1050m, 12.xi.2012, leg. Ott & Sulak (CGM). **Republic of Congo.** 4 ♂♂, Odzala-Kokoua National Park, Lobo Research Camp, 00°35'04"N, 14°53'12"E, 390m, 20–27.ix.2024, MV and LepiLED light trap, Bashford, M., László, G., Volynkin, A. leg.; 4 ♂♂, same locality, 13–18.iv.2024, MV light trap, Bashford, M., László, G., Talani, M., Yaba Ngouma, S. leg., GS: LG 6471; 1 ♂, same locality and collectors, 16–17.iv.2024, GS: LG 6472; 4 ♂♂, 2 ♀, same locality, 22–30.xi.2024, Bashford, M., Elliott, I., Kirk-Spriggs, A. leg.,



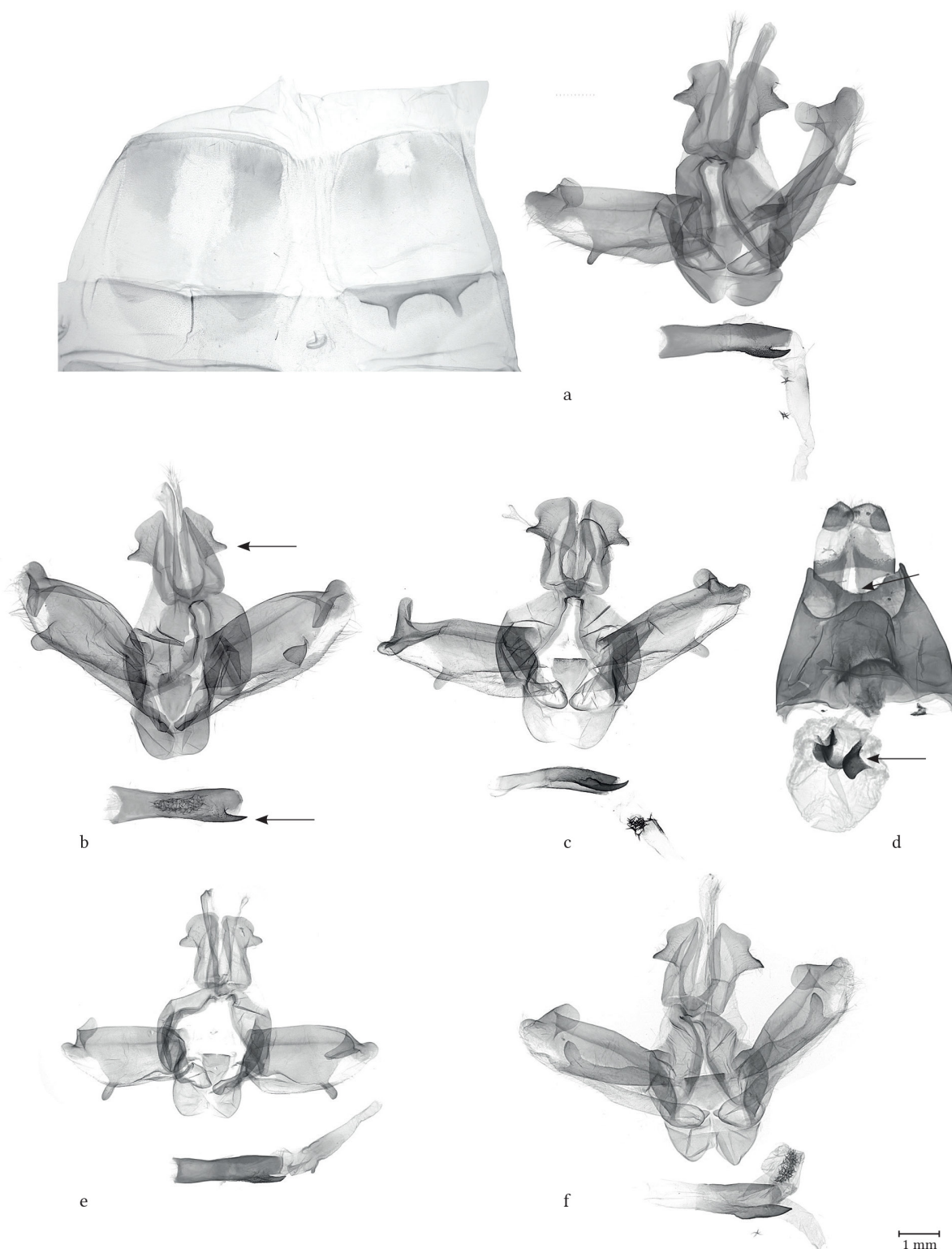
GS: LG 6606 ♀; 1 ♂, Odzala-Kokoua National Park, Bangassou Forest near Lobo, 00°32'50"N, 14°51'47"E, 400m, 13–14.iv.2024, actinic light trap, Bashford, M., László, G., Talani, M., Yaba Ngouma, S. leg. (ANHRT). 4 ♂♂, Odzala-Kokoua National Park, 400–500m, 29.i.–3.iii.1997, leg. S. Murzin & V. Sinjaev, GS: MWM 01-03 (CAS).

**Diagnosis.** Forewing length is 20–24 mm in males; it is 25–27 mm females. *Antheua angolana* is difficult to distinguish from its related species, *A. atrata*; however, the blackish longitudinal dash in the postmedian area of the forewing is narrower and paler in the former species. *Antheua angolana* exhibits a narrower pale field in the anal half of the forewing bordered by dark areas costally and terminally, and a less contrasting row of subterminal spots compared to the other members of the complex. The female resembles the male, but it has considerably broader forewings and posteriorly darkened hindwings. The male genitalia of *A. angolana* are similar to those of *A. atrata* but they can be distinguished by several key features. *Antheua angolana* has a longer uncus and a more elongated socius, with a broader, triangular lateral process. In contrast, the lateral process of the socius in *A. atrata* is much narrower and beak-like. Additionally, the apical lobe of the valva in *A. angolana* is positioned more proximally than in its sister species. The phallus of *A. angolana* is also shorter, with a slightly longer and more robust carinal process compared to that of *A. atrata*. Based on the similar shape of the socius, *A. angolana* is also closely related to *A. acholi*. However, the latter species has a considerably longer ampulla process and a markedly shorter, less robust carinal process of the phallus when compared to *A. angolana*. The female genitalia of *A. angolana* closely resemble those of *A. acholi*. Both species possess a robust eighth abdominal segment with a strongly sinuous distal margin. In *A. angolana*, the antrum exhibits a rounded posterior margin, whereas in *A. acholi*, it is centrally notched. The pair of strongly sclerotized plates at the base of the ductus bursae are larger and rounded in *A. angolana*, in contrast to the rhomboidal and apically pointed plates observed in *A. acholi*. Additionally, the signum bursae is U-shaped in *A. angolana*, while it is V-shaped in *A. acholi*.



**Figure 60. *Antheua angolana*, adults. a)** ♂, Angola, Quisoll, 23 km of Malanje, holotype (MfN). **b)** ♂, Angola, N'dalatando (GS: LG 5231, ANHRT). **c)** ♀, RCA, Mongoumba, Ubangi River (MfN). **d)** ♂, Angola, N'dalatando (GS: LG 5232, ANHRT). **e)** ♂, Congo, Odzala-Kokoua National Park (GS: MWM 01-03, CAS). **f)** ♂, Cameroon, Mt. Cameroon, 5km SW Ekona (GS: GU89-94, CAS).





**Figure 61. *Antheua angolana*, genitalia. a)** ♂, Angola, N'dalatando (GS: LG 5231, ANHRT). **b)** ♂, Angola, N'dalatando (GS: LG 5232, ANHRT). **c)** ♂, Cameroon, Mt. Cameroon, Ekona (GS: GU89-94, CAS). **d)** ♀, Congo, Odzala-Kokoua National Park (GS: LG 6606, ANHRT). **e)** ♂, Congo, Odzala-Kokoua National Park (GS: MWM 01-03, CAS). **f)** ♂, Equatorial Guinea, Nkolentangan (GS: ZMHU 04-05), paralectotype of *Anticyra atrata* (MfN).

**Taxonomic notes.** The holotype of *A. angolana* is part of the syntype series of *Anticyra atrata*. The taxon was classified by Gaede (1934) as an aberration of *Phalera atrata*. Kiriakoff (1962) later reinstated it as a valid species within the genus *Phalera*, but mistakenly referred to the original combination as

*Anticyra atrata* ab. *angolana* Strand, 1912 and illustrated the genitalia of the following new species, *P. lunda* **sp. nov.**

**Distribution.** *Antheua angolana* exhibits a central African distribution with confirmed records from Angola, Cameroon, the CAR, Congo, the DRC, Equatorial Guinea, and Namibia.

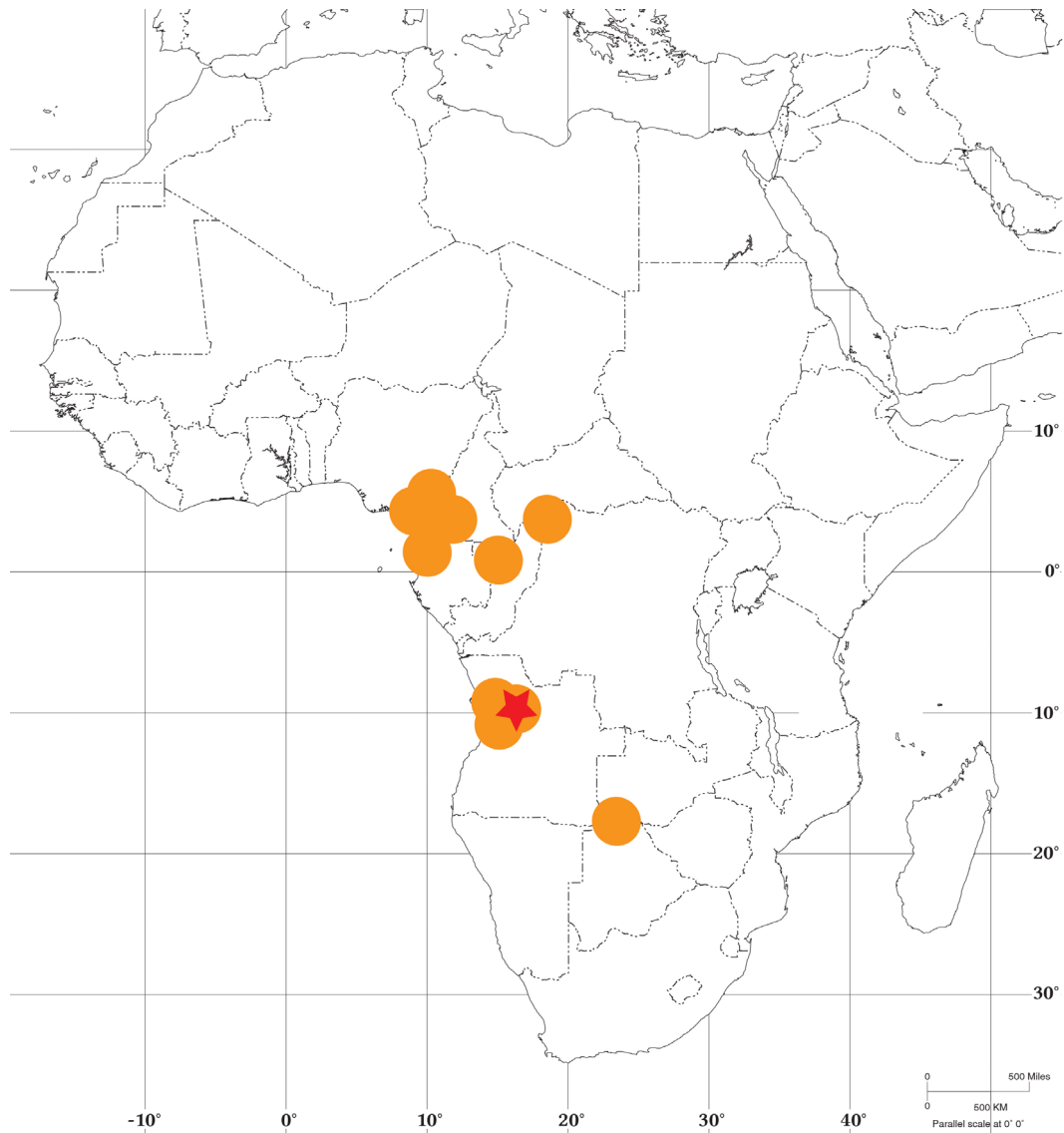


FIGURE 62. Distribution of *Antheua angolana*.

*Antheua acholi* (Bethune-Baker, 1908), **stat. rev., comb. nov.**

Habitus: Figs 63a–f, Genitalia: Figs 64a–b, Distribution map: Fig. 65.

*Dinara acholi* Bethune-Baker, 1908, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology* 2 (8th series): 256.

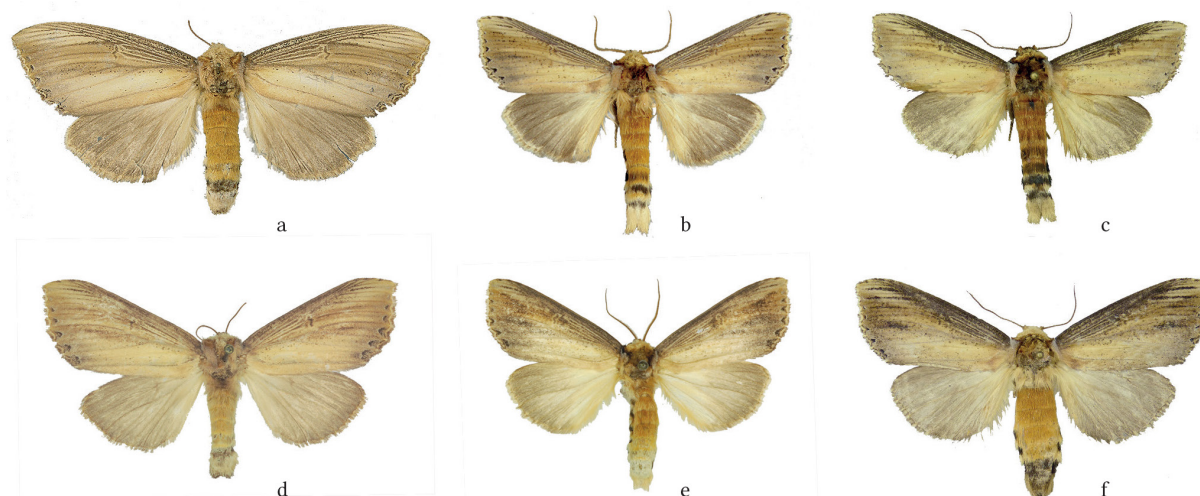
Holotype: ♀, [Uganda] / Patigo, / Acholi Country. / Equat. Africa / 4000 feet. (in coll. NHMUK).

**Material examined** (31 ♂♂, 2 ♀♀).

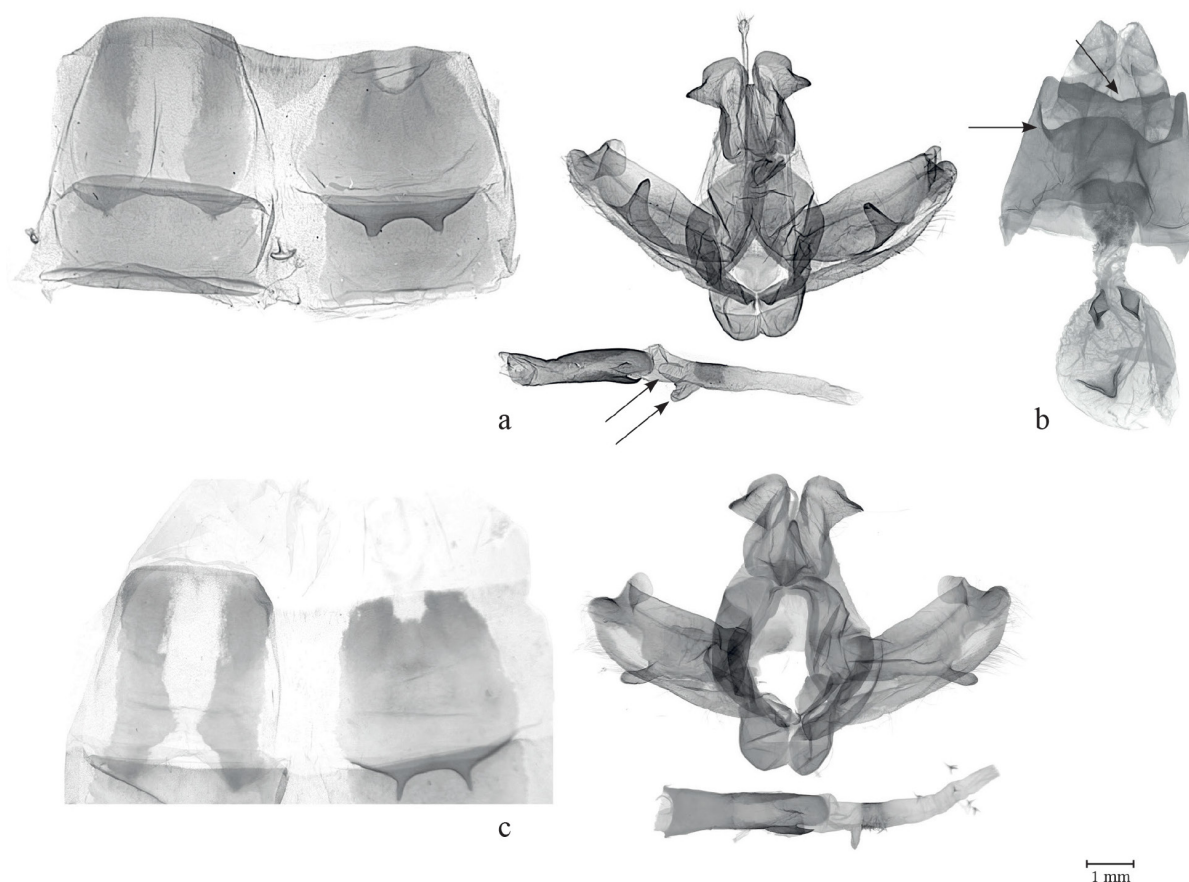
**DRC.** 1 ♀, Uele, Paulis [= Isiro], 11.viii.1959, leg. Dr. M. Fontaine, GS: LG 5804; 1 ♂, same data, GS: 5802. 1 ♂, same locality and collector, 30.vii.1957, GS: LG 5803 (RMCA).

**South Sudan.** 1 ♂, UNMISS Bentiu, N09°19'43", E29°47'18", 400m, 16.ix.2017, leg. T.C. Nicholson-Roberts, GS: LG 5138 (ANHRT); 28 ♂♂, 1 ♀, East Equatoria State, Akotos province, Lolibai Mts,

1300m, 15.viii.–10.ix.2010, Vladimir Gurko leg., GS: LG 5498, MWM 22.741, MWM 35.236 (ANHRT, CAS, CGM, MWM/ZSM).



**FIGURE 63. *Antheua acholi*, adults. a)** ♀, Uganda, Acholi, Patiko, holotype (NHMUK). **b)** ♂, South Sudan, East Equatorial State, Lolibai Mts. (GS: MWM 22.741, MWM/ZSM). **c)** ♂, South Sudan, East Equatorial State, Lolibai Mts. (MWM/ZSM). **d)** ♀, DRC, Haut-Uele, Isir (GS: LG 5804, RMCA). **e)** ♂, South Sudan, UNMISS Bentiu (GS: LG 5138, ANHRT). **f)** ♀, South Sudan, East Equatorial State, Lolibai Mts. (CGM).



**Figure 64. *Antheua acholi*, genitalia. a)** ♂, South Sudan, East Equatorial State, Lolibai Mts. (GS: MWM 35.238, MWM/ZSM). **b)** ♀, DRC, Haut-Uele, Isiro (GS: LG 5804, RMCA). **c)** ♂, South Sudan, UNMISS Bentiu (GS: LG 5138, ANHRT).

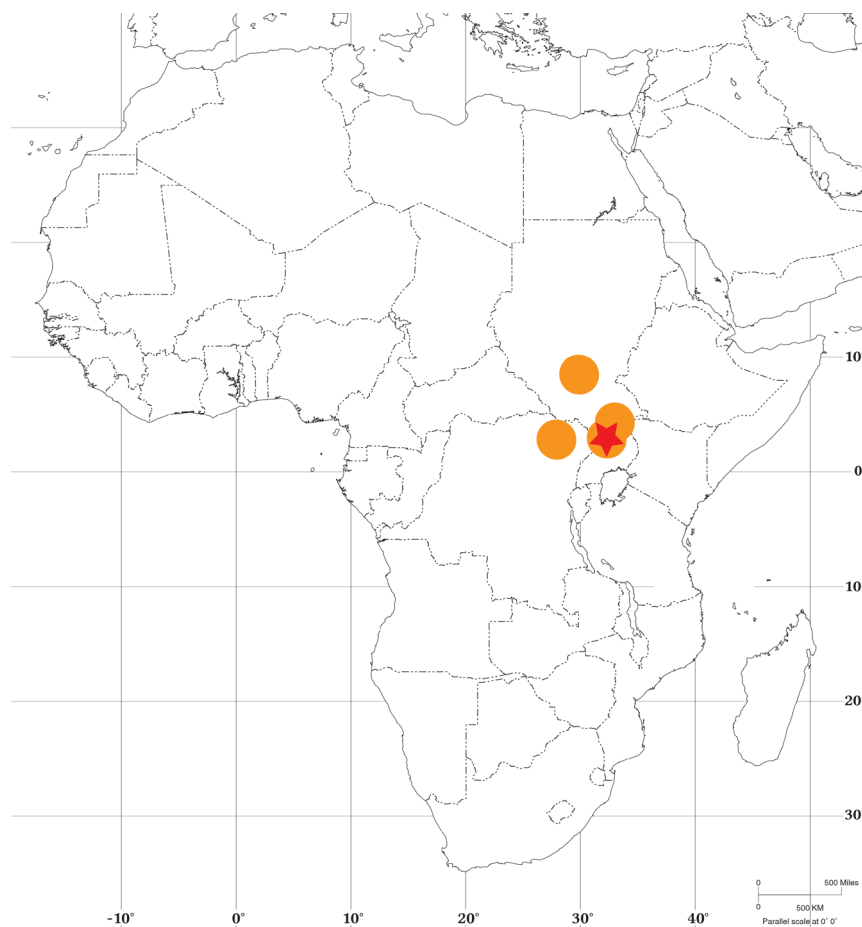
**Diagnosis.** Forewing length is 21–23 mm in males and is 25–27 mm in females. *Antheua acholi* closely resembles *A. atrata*, *A. angolana*, and *A. reducta* **sp. nov.** However, it exhibits several distinctive external features, including a somewhat paler forewing, a darker hindwing, and a conspicuously sharper, dentate-undulate terminal fascia on the forewing.

In terms of male genitalia, *A. acholi* is characterised by a distally dilated socius with a broad, rounded apex and a large triangular lateral projection, which is somewhat reminiscent of a bird's head. While these features are similar in *A. atrata* and *A. angolana*, there are notable differences as follows: the uncus of *A. acholi* is longer than that of *A. atrata* and has a knob-shaped tip, whereas in *A. atrata* and *A. angolana*, the uncus is bifurcate. Additionally, the ampulla projection of the valva is larger and positioned more proximally in *A. acholi* compared to *A. atrata* and *A. angolana*. The spine-like subapical carina process of the phallus is shorter and less robust in *A. acholi* than in its related species. The endophallus bears two diverticuli of equal size.

The female genitalia of *A. acholi* are similar to those of *A. angolana*, but can be differentiated by a shallower distal notch on the eighth sternite and a broader posteromedial protrusion of the eighth tergite. In *A. acholi*, the posterior margin of the antrum is medially notched, whereas in *A. angolana* it is evenly convex. The sclerotized plates at the base of the ductus bursae are rhomboidal with a pointed tip in *A. acholi*, in contrast to the rounded quadrangular plates in *A. angolana*. Additionally, the signum bursae is V-shaped in *A. acholi* and U-shaped in *A. angolana*.

**Taxonomic note.** Gaede (1934) treated *Dinara acholi* as an infrasubspecific form of *A. atrata*. However, the configurations of the genitalia indicate that these taxa are not conspecific; consequently, *A. acholi* is treated here as a valid species.

**Distribution.** *Antheua acholi* is an allopatric sibling of *A. angolana* recorded from northeastern DRC, South Sudan and northern Uganda.



**Figure 65.** Distribution of *Antheua acholi*.



***Antheua reducta* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:39F1C81F-73A3-4756-8AB7-454203E33DAF>

Habitus: Figs 66a–f, Genitalia: Figs. 67a–c, Distribution map: Fig. 68.

**Holotype.** ♂, “Kenya / South Coast, Om / Marenche Forest [2°50'N, 34°04'E], / viii.–ix. 2002, leg. Dr. Politzar” // GS: MWM 01-01 (CAS).

**Paratypes** (11 ♂♂, 4 ♀♀).

**Kenya.** 1 ♂, South Coast, Marenche Forest, 1.ix.2001, leg. Dr. Politzar; 1 ♀, Transmara, Lolgorien, 2000m, iv.2000, leg. Dr. Politzar, GS: MWM 01-02. (MWM/ZSM). 1 ♀, Suna, S. Kavironde, iv.1930, leg. W. Feather, GS: NHMUK010315327 (prepared by G. László) (NHMUK). **Tanzania.** 1 ♂, Tanga region, West Usambara Mts., Gogoi Forest, 1450m, 23.v.2005, leg. Ph. Darge, GS: GU 60-92; 1 ♀, Tanga region, Amami Forest Reserve, 210m, 5°07.313'S, 38°41.374'E, 5.xi.2005, leg. Ph. Darge; 1 ♂, Arusha Region, Mt. Meru, Campsite 3, 1680m, 20.x.2004, leg. Ph. Darge, GS: MWM 01-05; 1 ♀, Uluguru Mts., Bunduki Forest, 1275m, 7°01.679'S, 37°37.945'E, 25.i.2008, leg. Ph. Darge; 1 ♂, Iringa region, Ulembwe Forest, 2079m, 9°18'.709'S, 34°38.078'E, 5.iii.2011, leg. Ph. Darge; 1 ♂, Ntombe, Chadodole Forest, 3.i.2020; 1 ♂, Iringa region, Kipengere Range, Lugenge Forest, 2210m, 9°26'.44 S, 34°35.906'E, 19.ii.2006, leg. local collectors; 1 ♂, Ruvuma Region, Kitai savanna, 1020m, 10°42.40'S, 35°12.339'E, 24.iii.2006, leg. Ph. Darge; 1 ♂, Tabora region, Igunga, 1989m, 4°18.323'S, 36°48.582'E, 10.xi.2008, leg. Ph. Darge; 1 ♂, Morogoro, Nguru Mts., iv.2004, leg. Ph. Darge; 1 ♂, Mbeya Province, Rungwe Mt., 1710m, 25.vi.2004, leg. local collectors; 1 ♂, Pwani Region, savane de Mandera, 170m, 15.i.2005, leg. Ph. Darge (CAS, CGM, MWM/ZSM).

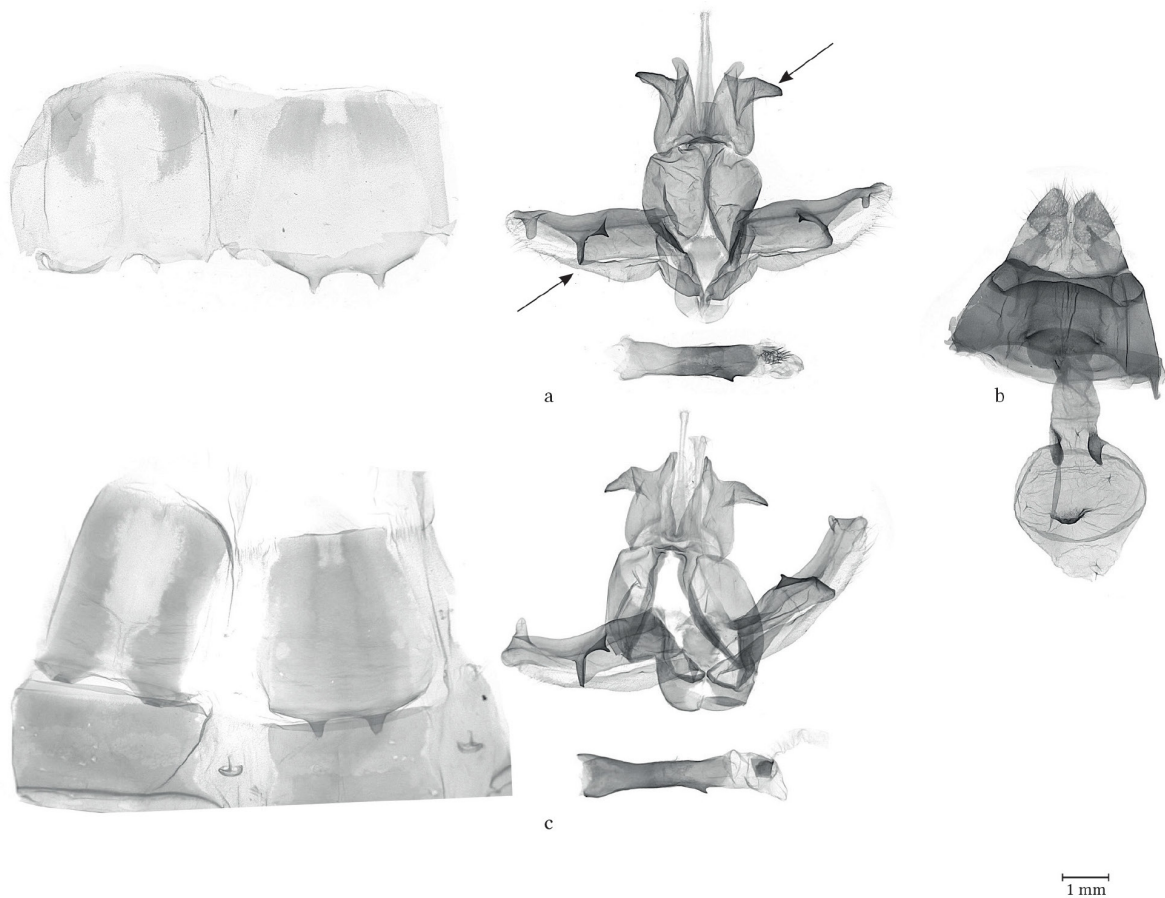
**Diagnosis.** Forewing length ♂♂ 21–23 mm, ♀♀ 24–26 mm. *Antheua reducta* sp. nov. resembles *A. acholi* in its external appearance but is noticeably paler, exhibiting a more yellowish colouration. This new species is distinguished from its related taxa by the reduced black markings on its forewings. Specifically, the terminal line of the forewing, which is characterised by a row of tiny black dots, is weakly developed and is absent in approximately 50% of the specimens. Additionally, the black longitudinal dash in the postmedial area of the forewing is nearly completely absent. The sexual dimorphism in this species is negligible.



**Figure 66. *Antheua reducta* sp. nov., adults.** a) ♂, Kenya, South Coast, Om, Marenche Forest, holotype (GS: MWM 01-01, CAS). b) ♂, Tanzania, Tanga region, West Usambara Mts., Gogoi Forest, paratype (GS: GU60-92, CAS). c) ♀, Kenya, Transmara, Lolgorien, paratype (GS: MWM 01-02, CAS). d) ♀, Tanzania, Iringa Region, Ulembwe, paratype (NHMUK014331082, NHMUK). e) ♂, Tanzania, Ntombe, Chadolelo Forest, paratype (CAS). f) ♀, Tanzania, Morogoro Region, Uluguru Mts., paratype (CAS).

The male genitalia of *A. reducta* **sp. nov.** exhibit a distinctly different configuration compared to those of *A. atrata*, *A. acholi*, and *A. angolana*. The socii are not rounded apically; instead, they feature a finger-like distal and a prominent triangular lateral projection. The ampulla is bilobate and asymmetrical between the two valvae: the left side has two pointed projections (a shorter proximal one and a longer distal one), while the right side has a single short projection. The apical lobe of the valva in *A. reducta* **sp. nov.** is significantly smaller and narrower than in the related species, somewhat digitiform. Additionally, the pointed carina process of the phallus is noticeably shorter than in other species of the *A. atrata* complex, and the endophallus lacks a diverticulum.

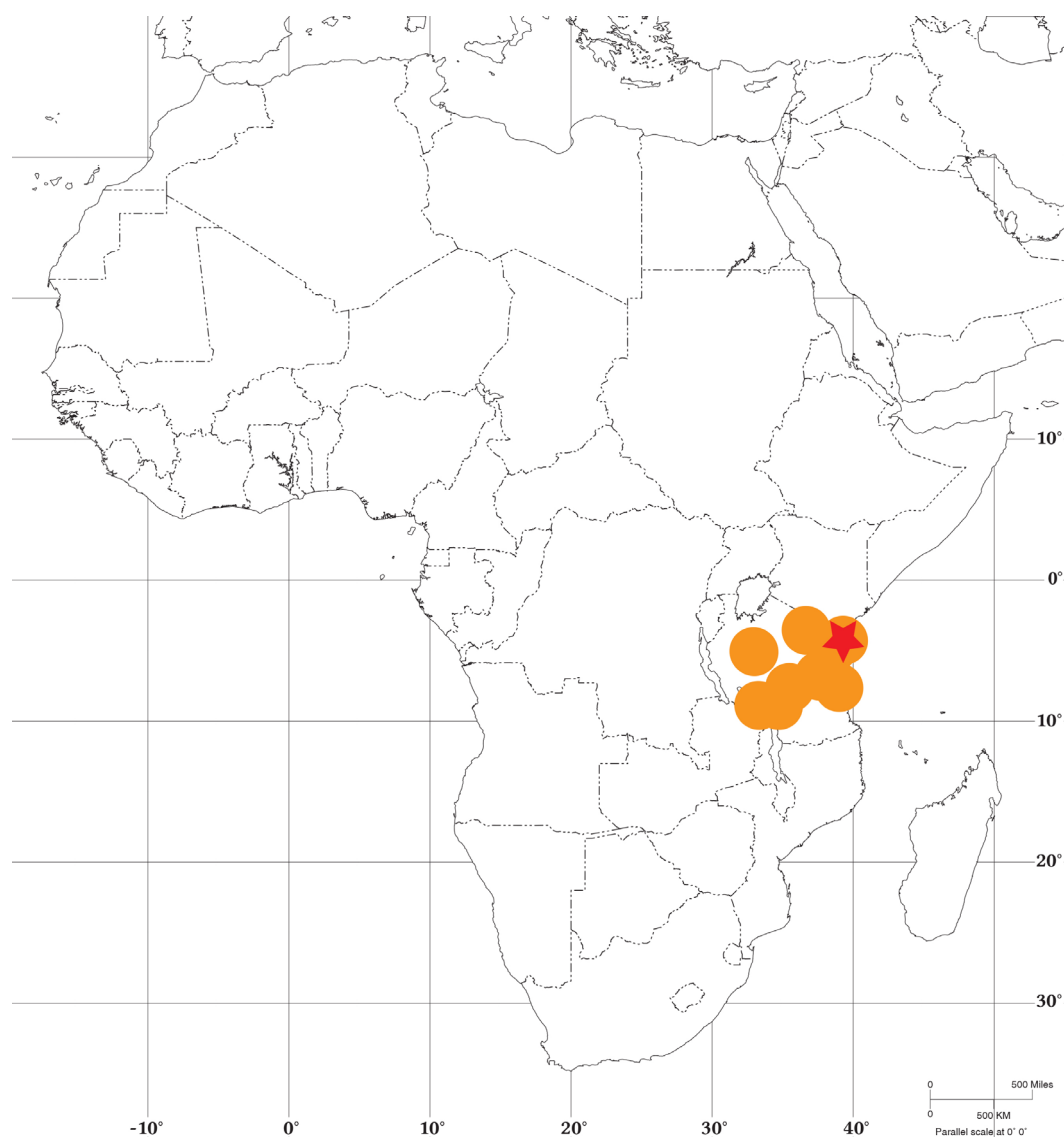
In terms of female genitalia, *A. reducta* **sp. nov.** shares similarities with *A. lungu* **sp. nov.**; however, the eighth tergite is considerably broader, with a more sinuous posterior margin. The antrum is more heavily sclerotized, the distal plates of the corpus bursae are slightly larger, and the signum bursae is more pronounced.



**Figure 67.** *Antheua reducta* **sp. nov.**, genitalia. **a)** ♂, Kenya, South Coast, Om, Marenche Forest, holotype (GS: MWM 01-01, CAS). **b)** ♀, Kenya, Transmara, Lolgorien, paratype (GS: MWM 01-02, CAS). **c)** ♂, Tanzania, Arusha region, Mt. Meru, paratype (GS: MWM 01-02, CAS).

**Etymology.** The specific epithet refers to the feminine form of the Latin adjective “reductus”, meaning “reduced”, and denotes the pale colouration and diminished forewing markings characteristic of this new species.

**Distribution.** *Antheua reducta* **sp. nov.** has a limited distribution, with confirmed records exclusively from Kenya and Tanzania. In Tanzania, it occurs sympatrically with *A. lungu* **sp. nov.**



**Figure 68.** Distribution of *Antheua reducta* sp. nov.

***Antheua lungu* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:56324394-25A4-47CE-803F-64CA938E1337>

Habitus: Figs 69a–f, Genitalia: Figs 70a–g, Distribution map: Fig. 71.

**Holotype:** ♂, “ZAMBIA 1437m / Kapishya Hot Springs, / Shiwa N'gandu Estate / S11°10'13", E31°36'00" / i–iii.2016, M. T. Harvey coll. / leg. Smith, R. & Takano, H. / ANHRT:2017.29" // “ANHRTUK / 00006523" // GS: LG 5137 (ANHRT).

**Paratypes** (105 ♂♂, 15 ♀♀).

**Burundi.** 1 ♂, Kitega, 20.xii.1965, leg. Dr M. Fontaine, GS: LG 5799; 1 ♂, same locality and collector, 23.ii.1963, gen. slide No.: LG 5800 (RMCA). **DRC.** 1 ♀, 60 km SE Kisangani, Batianioka vill., 0°05.8'N, 23°32.8'E, 19–21.ii.2008, leg. Gurkovich & Zolotuhin, GS: MWM 01-04 (CAS); 1 ♀, Secteur Nord, riv. Talya, affl. dr., 1260m, 26.ix.1956. 1 ♂, Sankuru, Dimbelenge, 14.i.1951, leg. Dr. M. Fontaine, GS: LG 5805; 1 ♂, same locality and collector, 13.i.1951, GS: LG 5806; 1 ♂, Kil. 345 de Kindu, nuit, leg. Dr. Russo, GS: LG 5807 (RMCA); 1 ♂, Upper Lowa Valley, Nr. Masisi, W. Kivu, 5000–6000 ft., forest & long grass, ii.1924, wet season, leg. T.A. Barns, GS: NHMUK014331086 (prepared by G. László) (NHMUK); 7 ♂♂, Kirima, Nord-Kivu, 0°11'N, 29°07'E, 1650m, iii.2015, ex coll. A. Colley, GS: LG 5499, ANHRT 01586; 1 ♂, Mutwanga, Nord-Kivu, 0°20'N, 29°45'E, 1650m,

iii.2015, ex coll. A. Colley, GS: ANHRT 01587; 4 ♂♂, Kanyatsi, Nord-Kivu, 1°22'S, 28°59'E, 1700m, vi.2017 ex coll. A. Colley, GS: ANHRT 01585; 1 ♂, Maliva, Ituri, 0°10'N, 29°01'E, 1400m, iii.2015, ex coll. A. Colley; 1 ♂, Lobango, Nord-Kivu, 0°19'S, 29°12'E, 2150m, vi.2017, ex coll. A. Colley (ANHRT). **Malawi.** 1 ♀, Nyasaland, Mt. Mlanje, 13.ii.1914, leg. S. A. Neave, GS: NHMUK014331082 (prepared by G. László) (NHMUK). 1 ♂, Chitipa District, Jembya Reserve, 18 km SSE Chisenga, 10°08'S, 33°27'E, 1870m, 1–10.i.1989, leg. J. Rawlins & S. Thompson (CMNH). **Rwanda.** 1 ♂, Rugege Forest, Lake Kivu, 7000 ft., Dec. 1921, leg. T.A. Barns, GS: NHMUK014331083 (prepared by G. László) (NHMUK). **Tanzania.** 5 ♂♂, Iringa region, Kipengere Range, Lugenge Forest, 2210m, 9°26.44'S, 34°35.906'E, 19.ii.2006, leg. local collectors; 2 ♂♂, Iringa region, Ulembwe Forest, 2079m, 9°18.709'S, 34°38.078'E, 26.xii.2010 and 5.iii.2011, leg. Ph. Darge; 1 ♂, Njombe District, Itago Utengule village, iii.2008, GS: GU 60-93; 1 ♀, Iringa Region Amani Forest Reserve, 210m, 5°07.313'S, 38°41.374'E, 5.xi.2005, leg. Ph. Darge, GS: GU 60-91; 1 ♂, Iringa Region, Kidugala savana, 1754m, 9°08.523'S, 34°37.531'E, 3.i.2001, leg. Ph. Darge; 1 ♀, Morongoro Region, Mikesse Hills, 420m, 6°40.154'S, 37°57.577'E; 1 ♂, Uluguru Mts., Bondwa, 2000m, xii.2004; 1 ♂, Morogoro, Nguru Mts., iv.2004 (CAS, CRF, ZSM); 1 ♂, Njombe, Masaulwa, S09°07', E34°35', 2700m, iii.–iv.2013, local coll. leg., GS: LG 6600 (ANHRT). 1 ♂, Mbya District, Utengule Village, 7°58'30"S 33°17'31"E, 2290m, 1–31.i.2014, leg. W. Kilumile (ZSM). 1 ♀, Morogoro Region, Mikesse Hills, 6°40.154'S, 37°57.577'E, 28.xi.2005, leg. Darge (ZSM). 1 ♂, Ugano bei Songea, 18.ii.1933, leg. F. Zimmer (NHMW). **Uganda.** 19 ♂♂, 3 ♀♀, Kibale NP, 0°24'17"N, 30°23'00"E, 17–21.x.2012, 1500m, leg. Elk Ott & H. Sulak, GS: CSW 01-10, 01-12, MWM 35.238; 3 ♂♂, Western Region, District Karabole, Planet Ringwo, 0°26'00"N, 30°17'50"E, 17–19.vi.2011, 240m, leg. H. Sulak, GS: CSW 01-11 (CAS, CDS, CGM, CRF, ZSM). 1 ♀, Semliki Nat. Park, Bundibugyo, 4°42'N, 30°03'E, viii.2005, leg. local collectors (CAS). 2 ♂♂, 1 ♀, Kibale NP, Biological Field Station, 1510m, 0°33'44.6"N, 30°21'24.7"W, 22–24.x.2014, leg. K.-R. Beck, GS: MWM 24.354 (CAS). 1 ♂, Rwenzori NP., Kasese district, Main Entrance Gate, 1740m, 0°21'18"N 30°01'41"E, 30.vi.–8.vii.2022, leg. P. Akite, S. Naumann, E. Ott, A. Schintlmeister & H. Sulak, GS: GU 60-08. 1 ♂, Rwenzori NP., Kasese district, Mubuku River, 0°21'33"N 30°00'10"E, 2000m, 13–18.iii.2023, leg. N. Ignatiev & A. Schintlmeister (CAS). 1 ♂, St. Emina, Busiro, 23.iii.1899 leg. Ansorge; 1 ♂, Ruwenzori Range, Bundibugyo, 3,440 ft., 22.viii.–3.ix.1952, leg. D.S. Fletcher, GS: NHMUK014331084; 1 ♀, Kikandoye, 31.iii.1906, leg. W.L. Slater, GS: NHMUK014331085 (prepared by G. László) (NHMUK). **Zambia.** 5 ♂♂, with the same data as the holotype, GS: ANHRT 00252; 5 ♂♂, same locality, i–iii. 2017, leg. Miles, W., Oram, D., Smith, L.; 1 ♂, 1 ♀, same locality, i.2015, leg. Smith, R., Takano, H., GS: ANHRT 00253 ♀; 4 ♂♂, same locality, 22.xi.–8.xii.2015, leg. Smith, R., Takano, H., Oram, D.; 2 ♂♂, Muchinga Province, 30 km N of Mpika, Danger Hill, 11°37'38"S, 31°33'56"E, 1684m, 13–15.xii.2023, LepiLED light trap, László, G., Morgan, L., Volynkin, A. leg.; 1 ♂, Ntumbachushi Falls, Ngona River, Luapula Prov., (Miombo woodland), S09°51'12", E28°56'40", 1166m, 1–3.ii.2019, LepiLED light trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 12 ♂♂, Chilambwe Falls, Kafubu River, 09°50'13"S, 30°43'35"E, 1420m, 8–12.ii.2019, actinic, LepiLED and MV light trap, Dérozier, V., Mulvaney, L., Takano, H. leg., GS: ANHRT 01589; 1 ♂, Zambezi Rapids (Miombo/Riverine forest mosaic), 11°7'30"S, 24°11'6"E, 1205m, 4–9.xi.2018, MV light trap, Aristophanous, M., Dérozier, V., László, G., Oram, D. leg., GS: ANHRT 00433; 1 ♀, Kalene Hill (Miombo woodland), S11°11'11", E24°12'5", 1440m, 27.xi.–3.xii.2020, MV Light Trap, Chizuwa, D., Choongo, W. leg., GS: LG 6605; 1 ♂, Nyangombe Falls, (Miombo/Riverine forest mosaic), 11°48'25"S, 24°32'12"E, 1300m, 17–23.xi.2019, Actinic Light Trap, Bashford, M., Miles, W., Mulvaney, R., Smith, R. leg., GS: LG 6604; 7 ♂♂, Muchinga Province, Jombo village, 10°27'01"S, 33°14'30"E, 1400m, 30.xi.–05.xii.2023, MV light trap, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A. leg., GS: LG 6601, 6602; 1 ♂, Muchinga Prov., Benyanga village, 10°40'41"S, 33°27'45"E, 1250m, 7–12.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A. leg.; 1 ♂, Muchinga Prov., Muyombe, Mama Muwowo's Lodge, 10°32'40"S, 33°26'05"E, 1230m, 6–7.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A. leg. (ANHRT). **Zimbabwe.** 1 ♀, Mozie, 15.xii.1973, leg. N. J. Duke (TMSA).

**Diagnosis.** Forewing length ♂♂ 20–27 mm, ♀♀ 17–27 mm. *Antheua lungu* **sp. nov.** externally resembles *A. atrata*, *A. angolana*, and *A. acholi*. However, its forewing is slightly darker, and the short blackish longitudinal dash in the postmedial area of the forewing is paler compared to its related species. *Antheua lungu* **sp. nov.** can be distinguished from the sympatric *A. lunda* **sp. nov.** by its noticeably paler

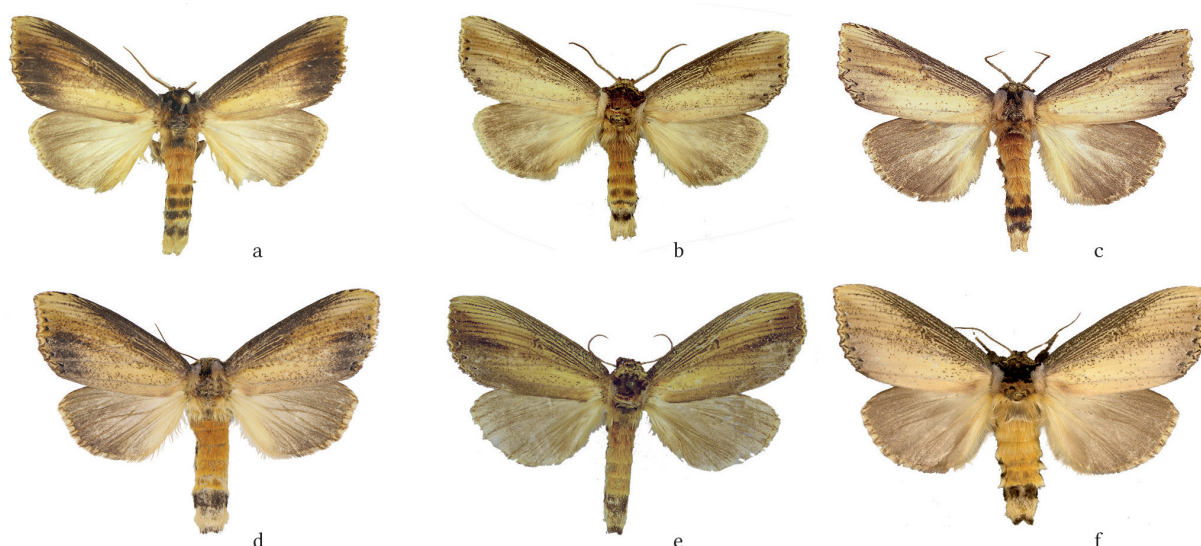


forewing and significantly darker hindwing. Sexual dimorphism is minimal, with females being somewhat darker than males.

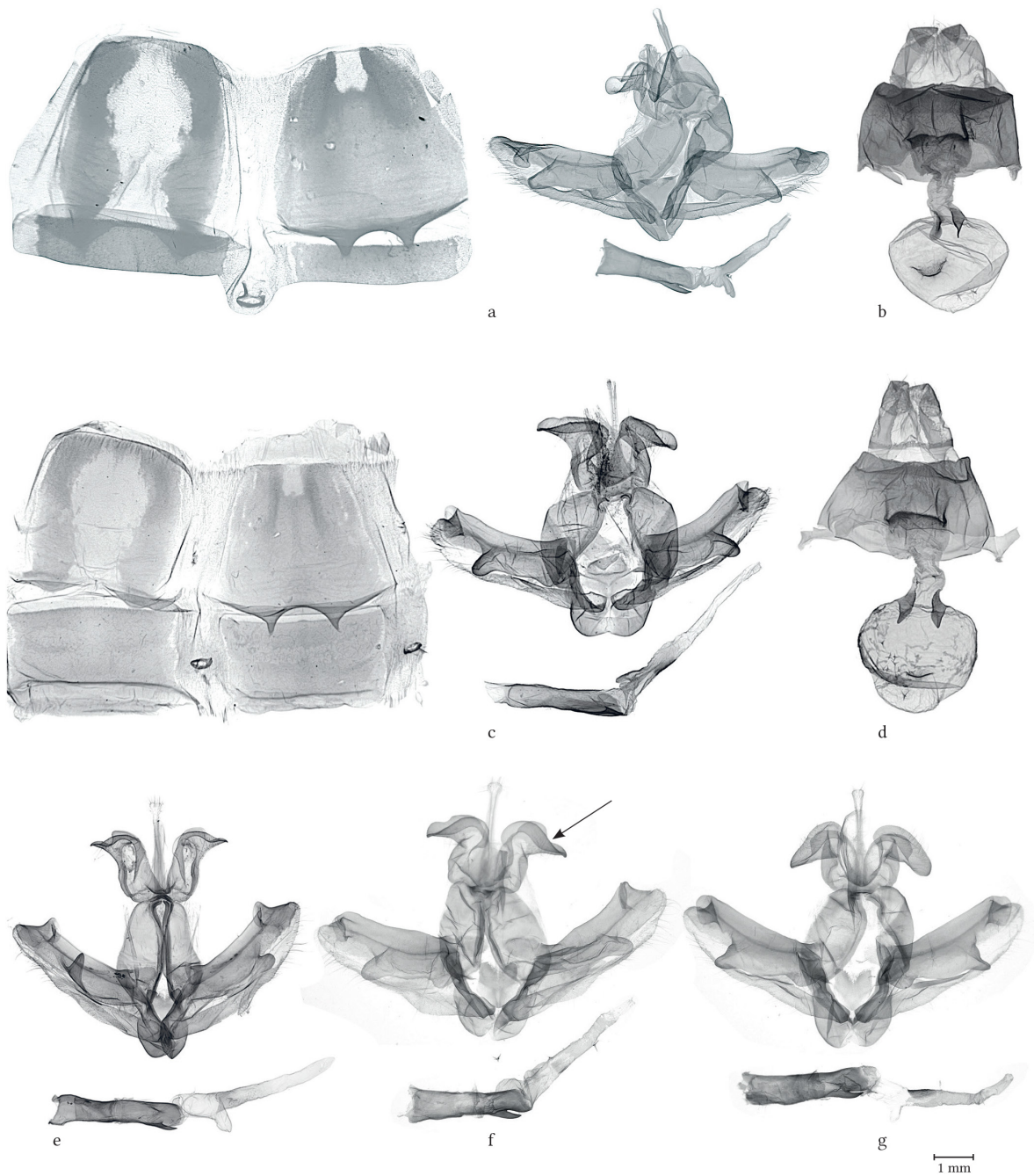
In the male genitalia, this new species differs from its relatives in several key features. It has an apically rounded, unilobate uncus, whereas related species such as *A. atrata* and *A. angolana* exhibit a bilobate, fork-like uncus, while *A. acholi* has an apically dilated uncus. The new species also has a flag-like socius that is apically enlarged and angled, contrasting with the distally nearly straight socius that has a short, acute lateral process in *A. atrata*, and the evenly rounded socius with a triangular lateral process found in *A. angolana* and *A. acholi*. Additionally, *A. lungu* **sp. nov.** has somewhat longer and narrower valvae, characterised by a considerably narrower, quadrangular costal lobe (editum) that features a short, broad, thumb-like ampulla medially. In comparison, *A. atrata* and *A. angolana* have a more prominent editum with a narrow, longer, and more distally erected, finger-like ampulla, while *A. acholi* presents a similarly developed, but longer ampulla. Furthermore, the straight and short phallus of *A. lungu* **sp. nov.** possesses a smaller carina spine than those of its relatives. The endophallus of *A. lungu* **sp. nov.** contains a small subbasal diverticulum.

In terms of female genitalia, *A. lungu* **sp. nov.** is distinguished by a quadrangular eighth segment, which is trapezoidal in the other species of the complex. Additionally, it has a sinuous distal margin of the ostium bursae, unlike its congeners, which typically have an evenly arcuate concave or convex margin.

**Etymology.** This new species is named after the Lungu people, who primarily inhabit northeastern Zambia and southwestern Tanzania.



**Figure 69.** *Antheua lungu* **sp. nov.**, adults. **a)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu, holotype (GS: LG 5137, ANHRT). **b)** ♂, Malawi, Chitipa District, Jembya Reserve, paratype (CMNH). **c)** ♂, Tanzania, Iringa region, Kipengere Range, Lugenge Forest, paratype (MWM/ZSM). **d)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu, paratype (GS: ANHRT 00253, ANHRT). **e)** ♀, Tanzania, Tanga Region, Amani Forest Reserve, paratype (GS: GU 60-91, CAS). **f)** ♀, Zimbabwe, Mozie, paratype (TMSA).



**Figure 70. *Antheua lungu* sp. nov., genitalia.** **a)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu, paratype (GS: ANHRT 00252, ANHRT). **b)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu, paratype (GS: ANHRT 00253, ANHRT). **c)** ♂, Zambia, Kapishya Hot Springs, Shiwa N'gandu, holotype (GS: LG 5137, ANHRT). **d)** ♀, Uganda, Kibale NP, paratype (GS: MWM 35.238, CAS). **e)** ♂, Uganda, Kibale Forest, paratype (GS: MWM 24.354, CAS). **f)** ♂, Rwanda, Lake Kivu, paratype (GS: NHMUK014331083, NHMUK). **g)** ♂, DRC, W Kivu, paratype (NHMUK014331086, NHMUK).

**Distribution.** *Antheua lungu* sp. nov. has confirmed records from Burundi, the DRC, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe.

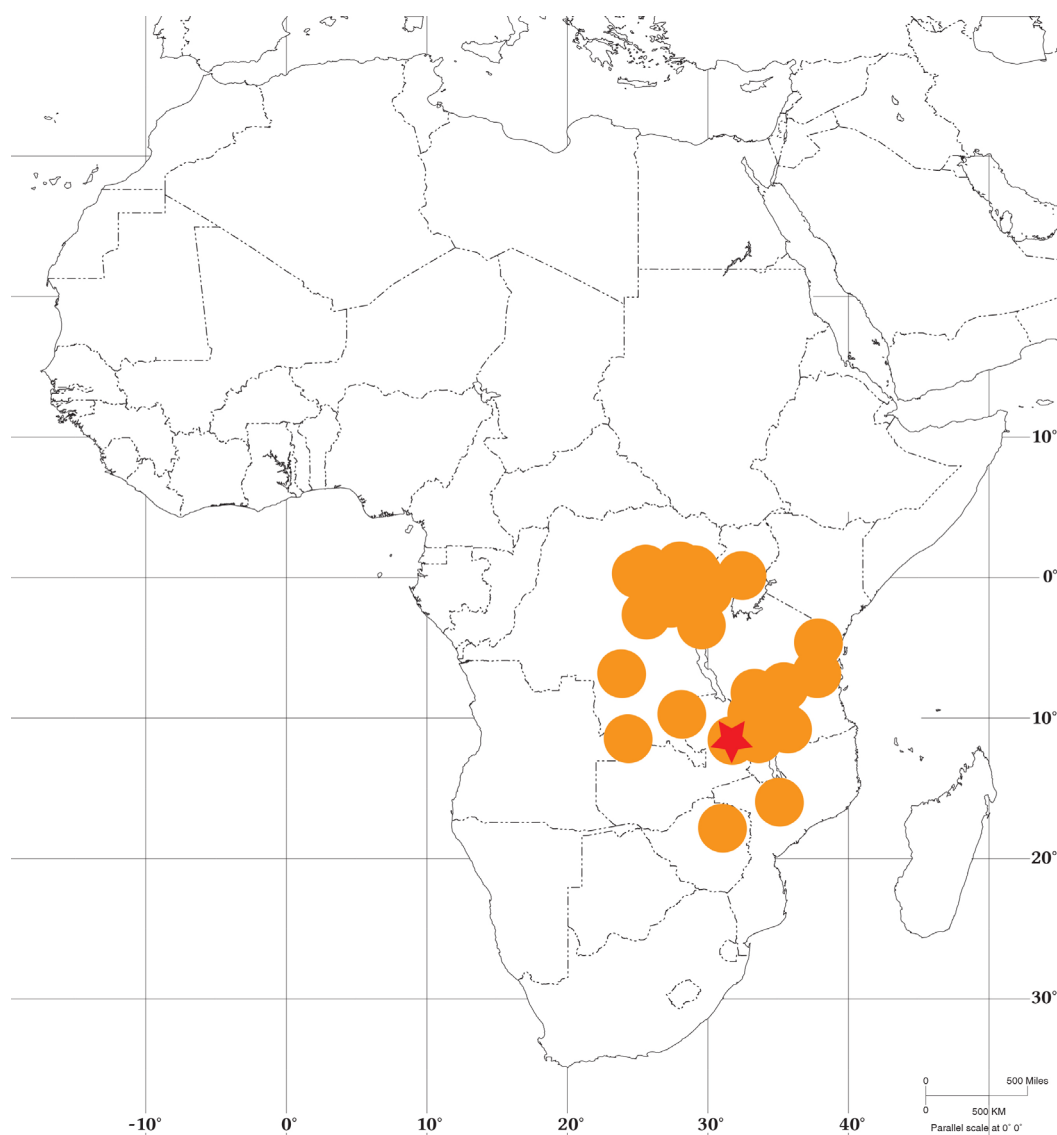


Figure 71. Distribution of *Antheua lungu* sp. nov.

***Antheua lunda* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:D355AF56-649E-4BEB-91CF-185834291564>

Habitus: Figs 72a–f, Genitalia: Figs 73a–c, Distribution map: Fig. 74.

**Holotype.** ♂, “ZAMBIA 1400m / Hillwood, Ikelenge / (Miombo/Riverine forest mosaic) / 11°16'02"S, 24°18'59"E / 23–30.xi.2019 Actinic Light Trap / Bashford, M., Miles, W., / Mulvaney, L., Smith, R. Leg. / ANHRT:2019.25” // “ANHRTUK / 00141870” // GS: LG 5253 (ANHRT).

**Paratypes** (65 ♂♂, 2 ♀♀).

**Burundi.** 1 ♂, Gitega, 11.iii.1968, leg. Dr M. Fontaine, GS: LG 5808. 1 ♂, same locality and collector, 22.xii.1967, GS: LG 5809. 1 ♂, same locality and collector, 2.xi.1965, GS: LG 5810 (RMCA). **Tanzania.** 1 ♂, Tanga Region, Tamota Forest, 731m, 5°35.531'S, 37°33.129'E, 27.xi.2015, leg. Darge (CRF). **Zambia.** 14 ♂♂, with the same data as the holotype, collected at actinic, LepiLED and MV light trap, GS: LG 6603; 1 ♂, same locality and collectors, 7–10.xii.2019; 1 ♂, same locality, 25–27.xi.2014, leg. Smith, R. & Takano, H.; 1 ♂, Nkwaji, Mwinilunga, S11°36'2", E24°33'17", 1316m, 29.x.–3.xi.2013, light trap, leg. Smith, R. & Takano, H.; 1 ♂, same locality, 3–10.xi.2017, MV light trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 2 ♂♂, same locality, 3–10.xii.2020, Chizuwa, D., Choongo, W. leg; 1 ♂, Chitunta Plain (Miombo/Dambo mosaic), 11°29'12"S, 24°24'18"E, 1396m,

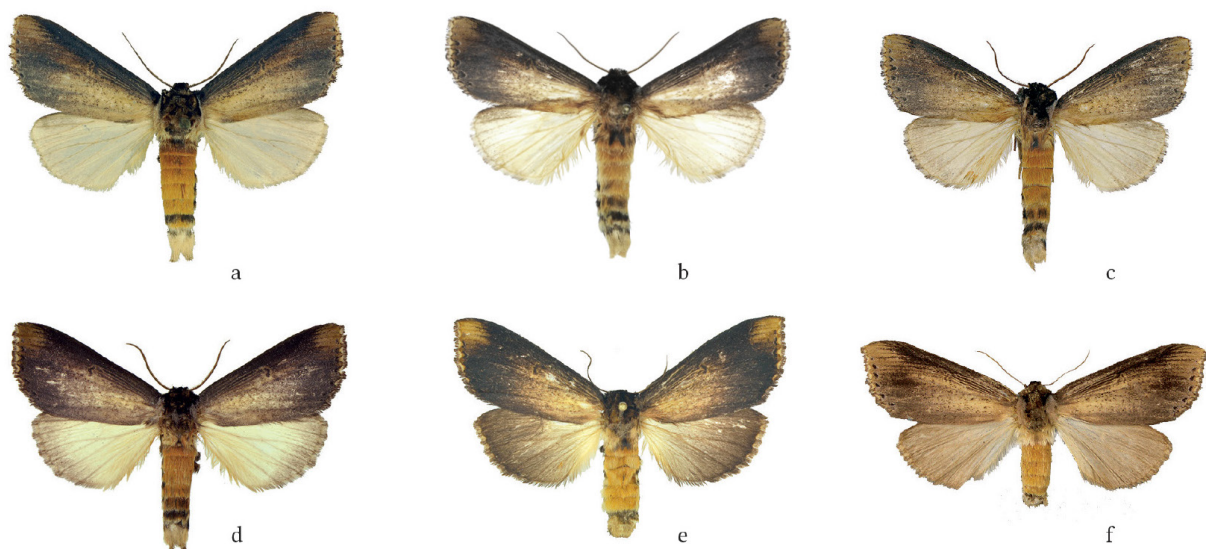


10–16.xii.2020, Actinic Light Trap, Chizuwa, D., Choongo, W. leg.; 1 ♂, Kalene Hill (Miombo woodland), S11°11'11", E24°12'5", 1440m, 27.xi.–3.xii.2020, MV Light Trap, Chizuwa, D., Choongo, W. leg.; 12 ♂♂, Jiwundu Swamp, S11°51'54", E25°33'20", 1316m, 21–24.xi.2014, light trap, leg. Smith, R. & Takano, H., GS: ANHRT 00251; 1 ♂, same locality, 25–30.x.2017, MV light trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 2 ♂♂, Lukwakwa, West Lunga NP, S12°39'40", E24°26'13", 1147m, 4–8.xi.2013, light trap, leg. Smith, Takano & Oram; 1 ♀, same site, 9–15. xi.2018, MV light trap, leg. Aristophanous, M., Dérozier, V., László, G., Oram, D., GS: LG 5139; 1 ♂, Kambishi School, S11°54'42", E25°28'50", 1346m, 10–13.xi.2017, MV light trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 23 ♂♂, 1205m, Zambezi Rapids (Miombo/Riverine forest mosaic), 11°7'30"S, 24°11'6"E, 4–9.xi.2018, actinic, LepiLED and MV light trap, Aristophanous, M., Dérozier, V., László, G., Oram, D. leg., GS: LG 5136 (ANHRT). 1 ♀, Ndola, Fatima School, 1.i.1965 (CGM).

**Diagnosis.** Forewing length of males is 20–24 mm, that of females is 23–28 mm. *Antheua lunda* **sp. nov.** shares phenotypic similarities with other taxa in the *A. atrata* species group. However, it is distinguished by its notably darker forewings, which feature a well-defined blackish discal spot, and a more contrasting pale apical patch compared to its relatives. The hindwings of *A. lunda* **sp. nov.** are significantly paler, presenting a yellowish hue that sets it apart from allied species. The sexual dimorphism is minimal, primarily indicated by the darker colouration of females. Based on male genitalia configuration, the closest relative of *A. lunda* **sp. nov.** is *A. lungu* **sp. nov.**, with the primary difference being the shorter flag-like socius that has a triangular distal lobe which feature is absent in *A. lungu* **sp. nov.** The ampulla process is the shortest within the species complex, characterised by a wide-based triangular shape. The apical lobe of the valva is the shortest and broadest in the group. Notably, *A. lunda* **sp. nov.** is unique within the *A. atrata* complex in that its phallus lacks a subapical carinal spine.

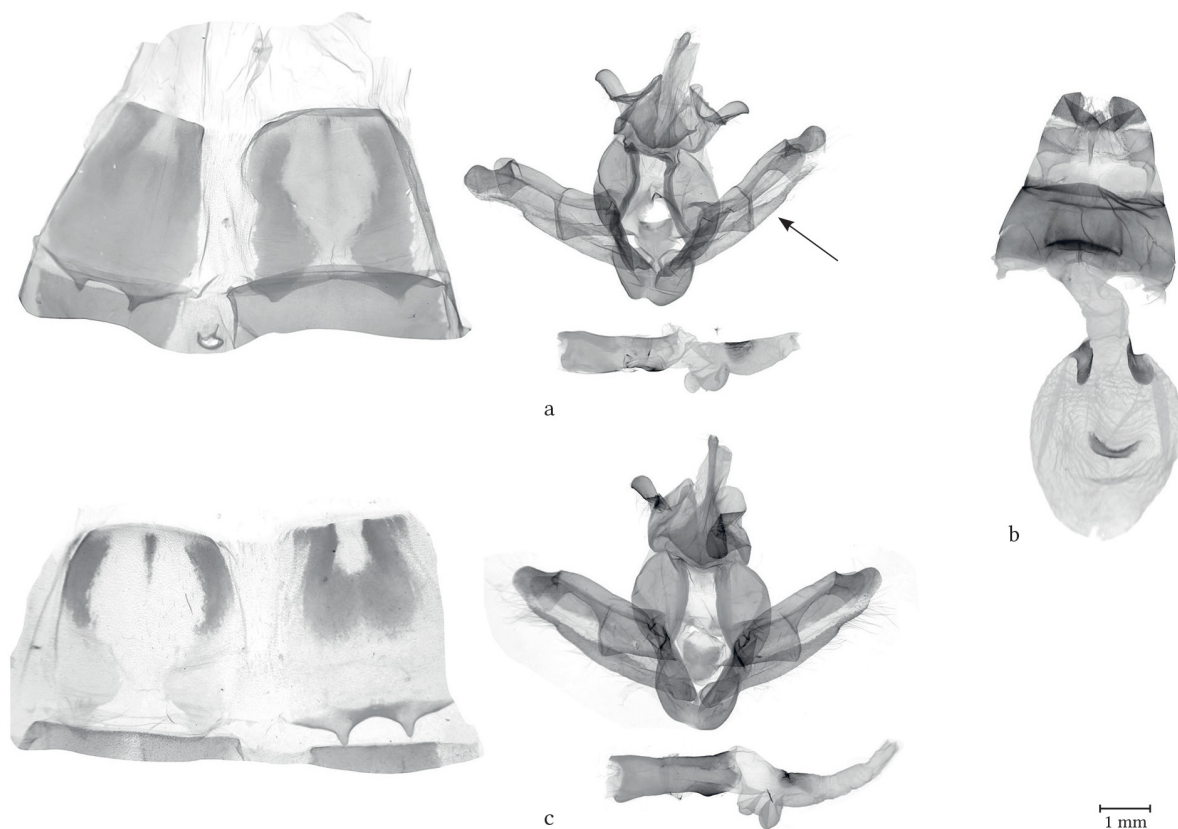
Regarding female genitalia, the sclerotized distal plates of the corpus bursae are the largest in the species group. The signum bursae has a somewhat C-shaped form, is slightly shorter and broader than in *A. atrata*, and is more prominent than in other species of the group.

**Etymology.** This new species is named after the Lunda people, a major ethnic group in northwestern Zambia.



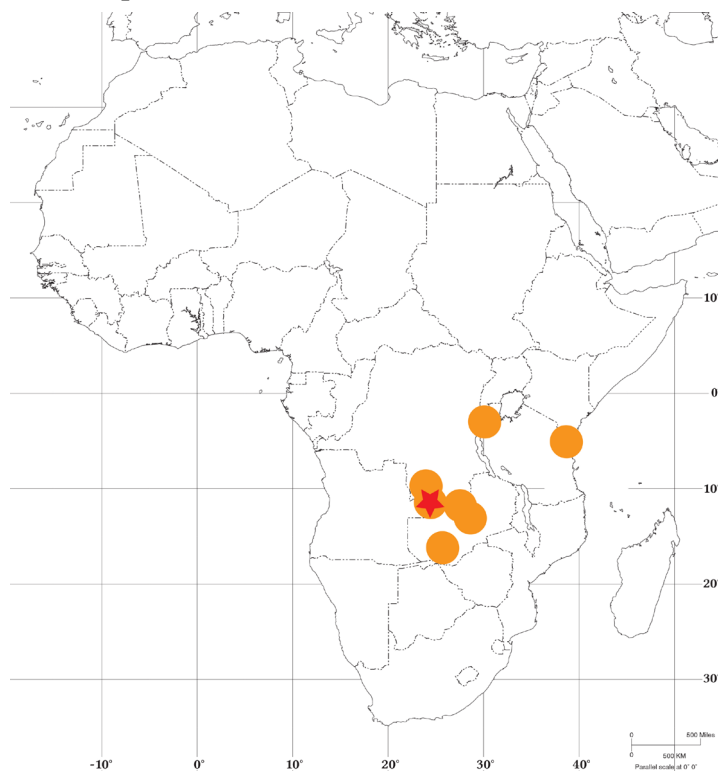
**Figure 72.** *Antheua lunda* **sp. nov.**, adults. **a)** ♂, Zambia, Ikelenge, holotype (GS: LG 5253, ANHRT). **b)** ♂, Zambia, Jiwundu Swamp, paratype (ANHRT). **c)** ♂, Zambia, Jiwundu Swamp, paratype (GS: ANHRT 00251, ANHRT). **d)** ♂, Zambia, Zambezi Rapids, paratype (GS: LG 5136, ANHRT). **e)** ♀, Zambia, Lukwakwa, West Lunga NP (GS: LG 5139, ANHRT). **f)** ♀, DRC, Katanga, Kafakumba, paratype (RMCA).





**Figure 73.** *Antheua lunda* sp. nov., genitalia. a) ♂, Zambia, Ikelenge, Miombo, holotype (GS: LG 5253, ANHRT). b) ♀, Zambia, Lukwakwa, West Lunga NP, paratype (GS: LG 5139, ANHRT). c) ♂, Zambia, Zambezi Rapids, paratype (GS: LG 5136, ANHRT).

**Distribution.** *Antheua lunda* sp. nov. is known to date from Burundi, the DRC, Tanzania, and Zambia.



**Figure 74.** Distribution of *Antheua lunda* sp. nov.

***Antheua kaffa* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:170F94FA-CD3A-4CF6-AFD7-A901F382BD96>

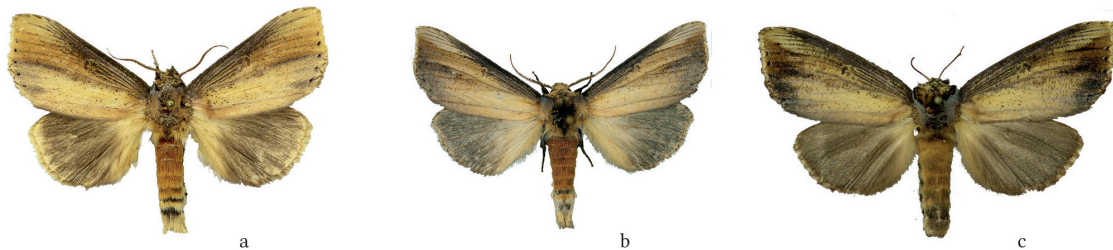
Habitus: Figs 75a–c, Genitalia: Figs. 76a–b, Distribution map: Fig. 77.

**Holotype.** ♂, “Ethiopia kaffa region / Envinons de Jimma [7°41'N 36°50'E] / 1800 m, viii. 2011 / leg. Cyril Di Gennaro / Coll. Danny Nilsson // GS: MWM 35.239 (MWM/ZSM).

**Paratypes** (1 ♂, 1 ♀).

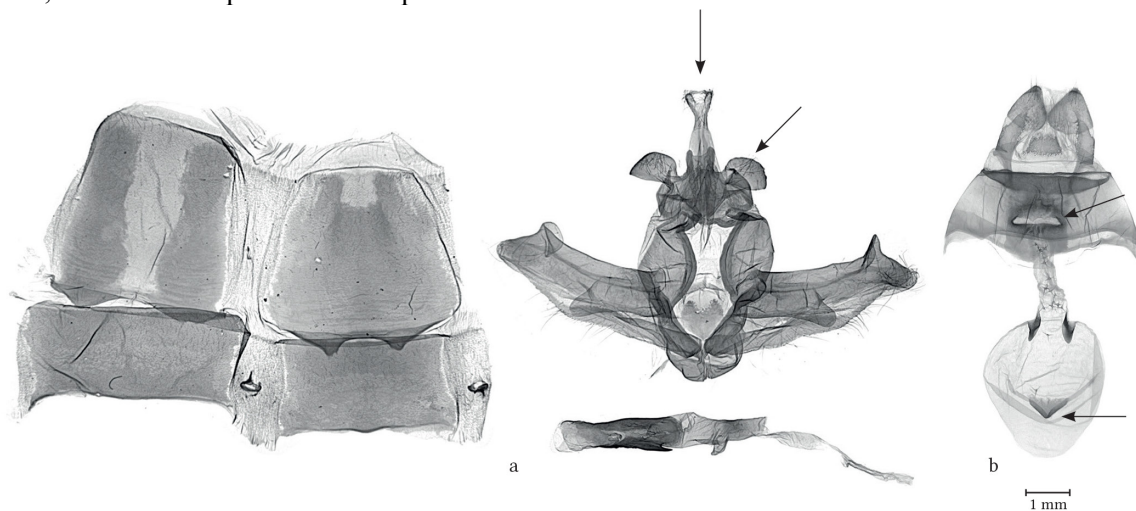
**Ethiopia.** 1 ♀, Kaffa Province, 10 km N Bonga, 1550m, 7°21'N, 36°25'E, 29.iv.2008, leg. Naumann & Schnitzler, GS: GU 97-42 (CAS). 1 ♂, Region of the Southern Nations, Bonga Guesthouse, 7°15'4.33"N, 36°15'15.51"E, 1750m, 12–14.v.2016, leg. R. & S. Fiebig/D. Stadie (CRF).

**Diagnosis.** Forewing length is 22–25 mm in males, 24 mm in female paratype. *Antheua kaffa* sp. nov. bears a resemblance to *A. acholi* in its external appearance; however, it is noticeably darker in colour, especially evident in the dark chocolate-brown hindwings. The blackish dash in the postmedial area of the forewing is indistinct and shadow-like, and the terminal line of the forewing is presented as a series of blackish dots. There is minimal sexual dimorphism observed in this species.



**Figure 75. *Antheua kaffa* sp. nov., adults.** a) ♂, Ethiopia, Kaffa Prov., Jimma, holotype (GS: MWM 35.239, MWM/ZSM). b) ♂, Ethiopia, Kaffa Prov., Bonga, paratype (CRF). c) ♀, Ethiopia, Kaffa Prov., 10 km N Bonga, paratype (GS: GU 97-42, CAS).

The male genitalia exhibit several unique features. These include a robust, apically deeply notched bilobate uncus; fan-shaped socii without projections that are considerably smaller than those of other members of the complex. The apical lobe of the valva is short and rounded, and the ampulla process is also short and broadly rounded. The phallus of *A. kaffa* sp. nov. is relatively short and possesses a small, acute carinal spine. The endophallus contains a small subbasal diverticulum.



**Figure 76. *Antheua kaffa* sp. nov., genitalia.** a) ♂, Ethiopia, Kaffa Prov., Jimma, holotype (GS: MWM 35.239, MWM/ZSM). b) ♀, Ethiopia, Kaffa Prov., 10 km N Bonga, paratype (GS: GU97-42, CAS).

The sclerotization of the eighth abdominal segment of *A. kaffa* **sp. nov.** closely resembles that of *A. atrata* and *A. acholi*, although the anterior margins are less deeply depressed.

In the female genitalia, the ostium bursae is notably featuring an elongate-quadrangular, heavily sclerotized margin; the rectangular antrum is the shortest in the species group; in addition, the distal plates of the corpus bursae are relatively short, and the signum bursae is unmistakable due to its triangular shape.

**Etymology.** The specific epithet refers to the Kaffa region as well as the medieval Kingdom of Kaffa in Ethiopia, the type locality of this new species.

**Distribution.** This species is exclusively known from Ethiopia.



**Figure 77.** Distribution of *Antheua kaffa* **sp. nov.**

***Antheua extenuata* Walker, 1869**

Habitus: Figs 78a–f, Genitalia: Figs 79a–d, Distribution map: Fig. 80.

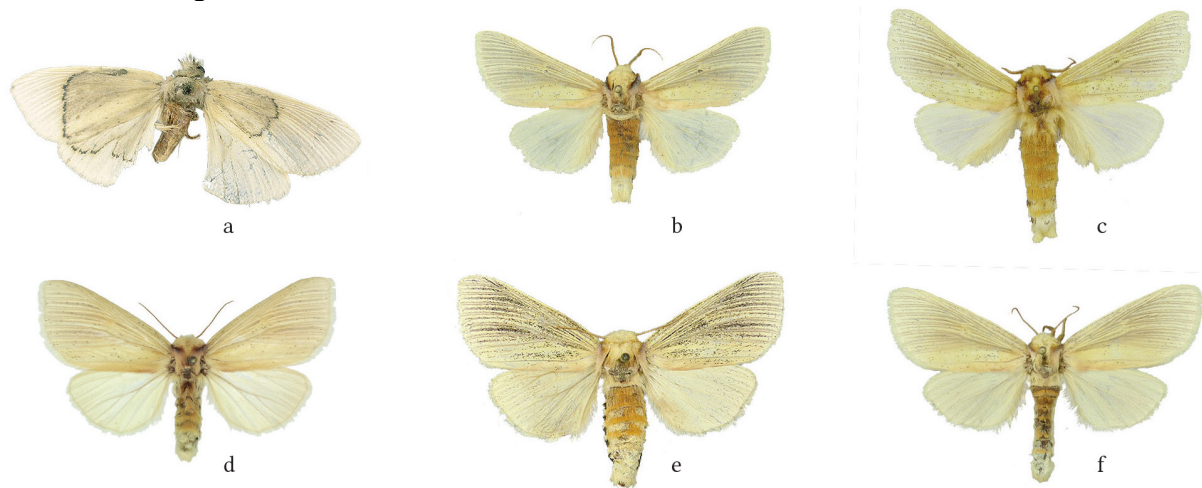
*Antheua extenuata* Walker, 1869, *Characters of undescribed species of Heterocerous Lepidoptera*: 11. Holotype: ♂, type locality not stated (in coll. NHMUK).

**Material examined** (31 ♂♂, 8 ♀♀).

**Burkina Faso.** 3 ♂♂, Boromo, Ft de Sorobouli, 11°46'53.8"N, 02°54'02.5"W, 247m, 4–5.vii.2013 and 24–25.vii.2014, UV light trap, P. Moretto leg., GS: LG 4356, LG 6607 (ANHRT, CAS). **Ivory Coast.** 1 ♂, 2 ♀♀, Denguele Classified Forest (sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 479m, 6–

14.vi.2018, actinic, LepiLED and MV light trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg., GS: LG 5140 ♂, LG 5141 ♀, LG 6609 ♀ (ANHRT). **Mali.** 22 ♂♂, 6 ♀♀, 80 km SW of Bamako, Ourina Forest, 420m, x. 2011, viii. 2015, ix.2022 (CAS, CGM). 3 ♂♂, Monts Mandingu, SW Sandama, 550–650m, mosaic of savannah and mature deciduous forest, iii.–iv.2009; 2 ♂♂, Kangaba District, 25 km NW Kangaba city, 100 km W Bamako, mature deciduous forest savannah mosaic, ix. [year not stated] (ANHRT).

**Diagnosis.** Forewing length ♂♂ 20–22 mm, ♀♀ 21–23 mm. *Antheua extenuata*, *A. melanotornata* **sp. nov.** and *A. nigristriga* are members of a species group distinguished by their hay to ochreous-yellow forewings, which display fine brownish longitudinal stripes between the veins. The hindwings are paler than the forewings.

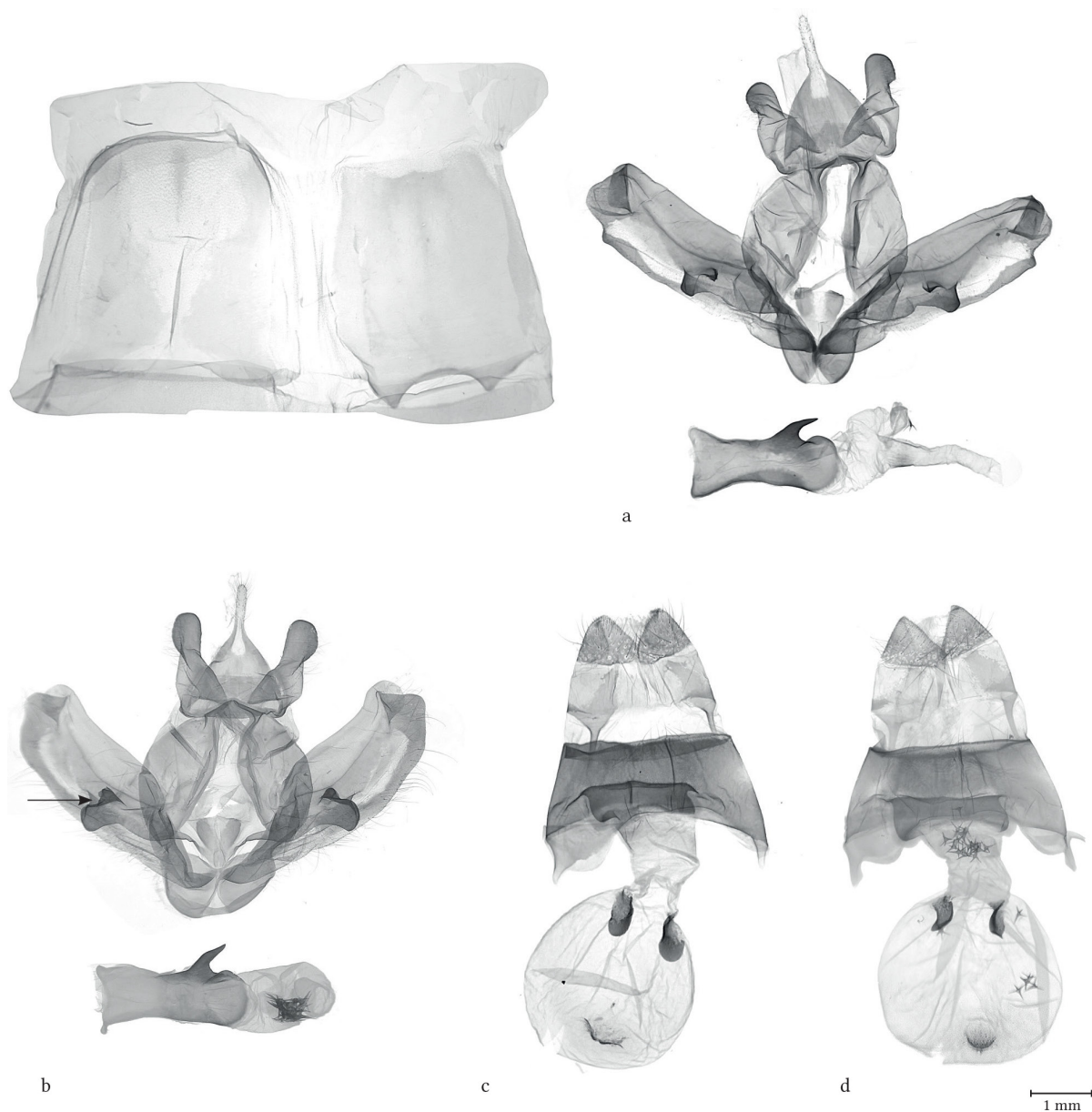


**Figure 78. *Antheua extenuata*, adults. a)** ♂, "Africa", holotype (stained) (NHMUK). **b)** ♂, Burkina Faso, Boromo, Ft. de Sorobouli (GS: MWM 25.982, CAS). **c)** ♂, Mali, 80 km SW Bamako (CAS). **d)** ♀, Ivory Coast, Denguele Classified Forest (GS: LG 6609, ANHRT). **e)** ♀, Mali, 80 km SW Bamako, Ourina Forest (GS: MWM 35.240, CAS). **f)** ♀, Burkina Faso, Boromo (GS: MWM 25.981, CAS).

The male genitalia of *A. extenuata* and *A. melanotornata* **sp. nov.** feature a short digitiform uncus and relatively short and narrow, apically broadly rounded socii; however, the latter are somewhat shorter in the new species. The moderately elongated valva exhibits an extensive, rounded-quadrangular costal plate (editum) and a short, apically rounded ampulla with a short, acute dorsal projection; this latter character is noticeably shorter in the new species than in *A. extenuata*. The apical valval lobe is shorter and more triangular in *A. melanotornata* **sp. nov.** compared to *A. extenuata*, where the valval lobe is broadly rounded. The phallus is short and thick, possessing a prominent, hook-like carina, which is curved distally in the new species and straight in *A. extenuata*; the carina process is markedly smaller and triangular in *A. nigristriga*.

In the female genitalia, the ostium bursae is extremely wide in both *A. extenuata* and *A. melanotornata* **sp. nov.**; the antrum of the former species is considerably shorter and more or less elongate-quadrangular, while it is asymmetrical with rounded lateral margins in the new species. The ductus bursae is short and thick in both species; the sclerotized distal plates of the corpus bursae are markedly more extensive in *A. melanotornata* **sp. nov.** than in *A. extenuata*. Finally, the signum bursae is considerably larger and elliptical in *A. melanotornata* **sp. nov.** compared to the more disc-like signum of *A. extenuata*.





**Figure 79. *Antheua extenuata*, genitalia. a)** ♂, Burkina Faso, Boromo, Ft. de Sorobouli (GS: LG 6607, ANHRT). **b)** ♂, Ivory coast, Denguele Classified Forest (GS: LG 5140, ANHRT). **c)** ♀, Ivory coast, Denguele Classified Forest (GS: LG 6609, ANHRT). **d)** ♀, Ivory Coast, Denguele Classified Forest (GS: LG 5141, ANHRT).

**Distribution.** Confirmed records of *A. extenuata* are known from Burkina Faso, Ivory Coast, and Mali.



**Figure 80.** Distribution of *Antheua extenuata*.

***Antheua melanotornata* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:ED29F03B-C92E-4049-9B10-014AB7B86ED6>

Habitus: Figs 81a–f, Genitalia: Figs 82a–d, Distribution map: Fig. 83.

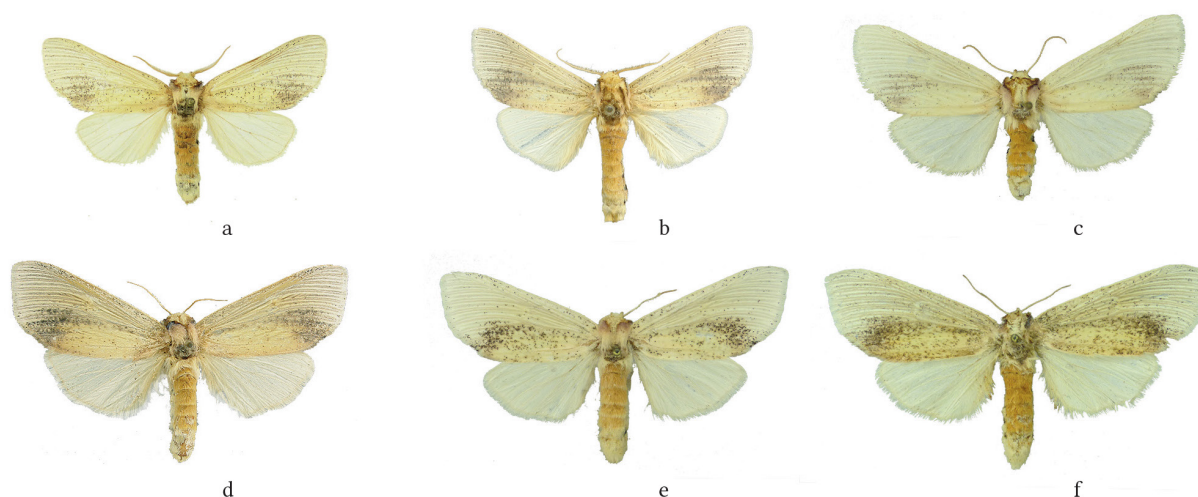
**Holotype.** ♂, “Burkina Faso / Boromo / 11°45'N, 2°56'W / viii.2005, leg. P. Moretto” // GS: GU 90-03 (CAS).

**Paratypes** (3 ♂♂, 10 ♀♀).

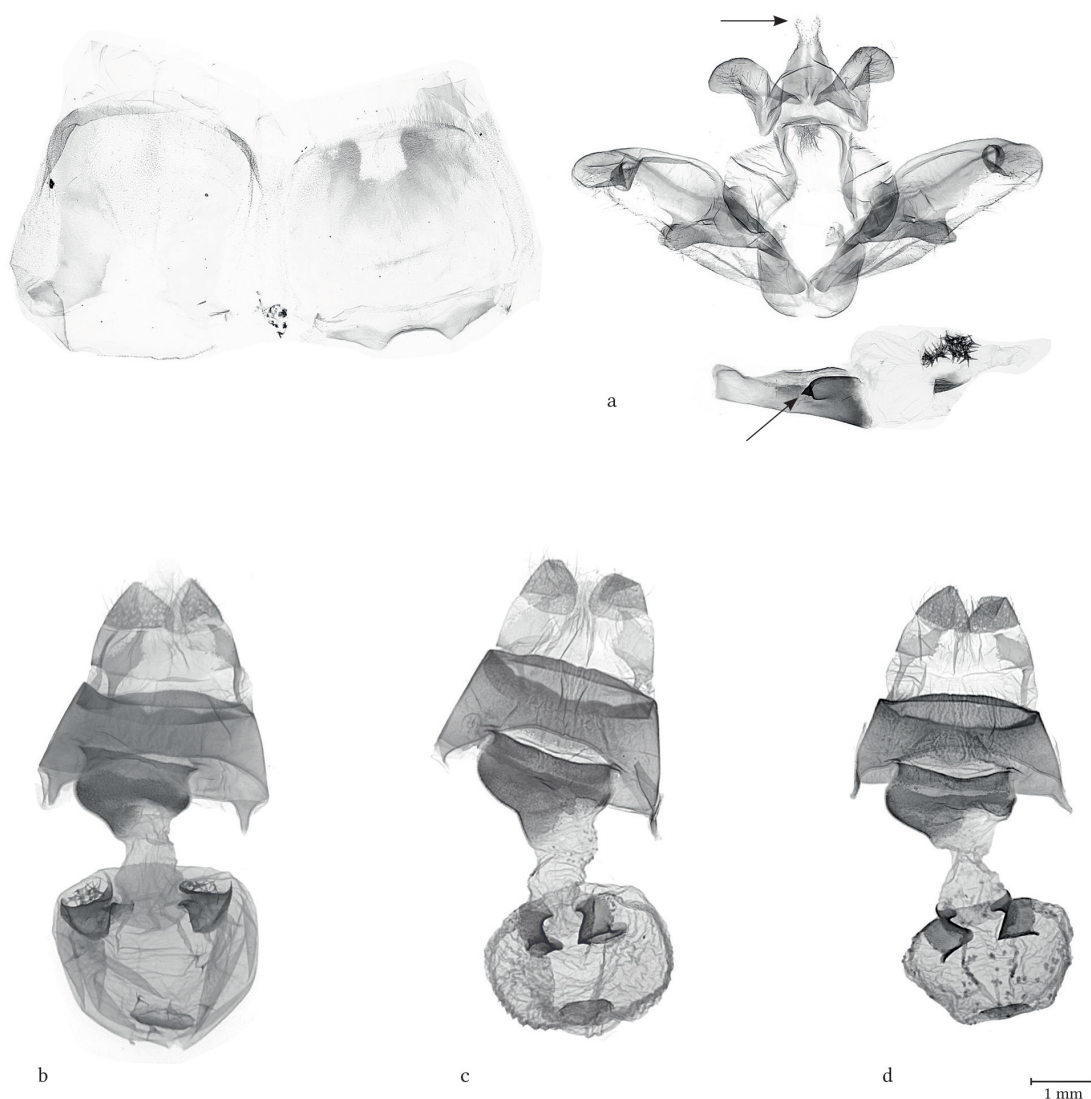
**Burkina Faso.** 1 ♀, Boromo, Ft de Sorobouli, 11°46'53.8"N, 02°54'02.5"W, 247m, 24–25.vii.2014, UV light trap, P. Moretto leg., GS: ANHRT 00256; 1 ♀, Obervolta, Bobo Dioulasso, 20.vii.1975, leg. Dr. Politzar, GS: LG 6608 (ANHRT). 1 ♀, Boromo, Fort de Sorobouli, 247m, 11°46'53"N, 2°54'02"W, 4–5.vii.2013, leg. P. Moretto; 1 ♀, same site and collector, 11°46'53"N, 2°54'02"W, 25–26.vi.2014, GS: LG 4627; 1 ♂, Folonzo am Fluß, Comoa, 25.iv.1985, leg. H. Politzar. 1 ♂, 1 ♀, Bobo, 20.viii.1976, leg. H. Politzar; 1 ♀, Bobo-Dioulasso, 9.viii.1981, GS: MWM 35.241 (MWM/ZSM). **Ghana.** 1 ♀, Kete-Krachi, leg. A.W. Cardinall; 1 ♂, Navaro, 11°N, 1°30'W, vi.1923, leg. A.W. Cardinall (NHMUK). **Nigeria.** 1 ♀, Bara, 15.vi.1974, leg. H. Politzar (ZSM). **Sudan.** 1 ♀, Prov. Kordofan, Kadugli, 21.viii.1962, leg. H. Schmutterer; 1 ♀, Prov. Blue Nile, Tozi, 26.viii.1960, leg. H. Schmutterer, GS: ZSM 01-03 (ZSM).

**Diagnosis.** Forewing length of males is 20–21 mm, that of females is 23–27 mm. *Antheua melanotornata* sp. nov. closely resembles *A. extenuata* but is distinguished by several features. In *A. melanotornata* sp. nov., the ternal area has an infusion of blackish scales, creating a diffuse dark patch. Besides the conspicuous ternal patch of *A. melanotornata* sp. nov., this new species has noticeably more elongated forewings than the sympatric *A. extenuata*, allowing for an easy distinction between the two species. *Antheua nigristriga* exhibits a habitus reminiscent of *A. extenuata* and *A. melanotornata* sp. nov.; however, males of *A. nigristriga* are distinguished by antennae with significantly shorter rami.

The distinctive genitalia traits of *A. melanotornata* sp. nov. and *A. extenuata* are discussed in detail under the diagnosis of the latter species.

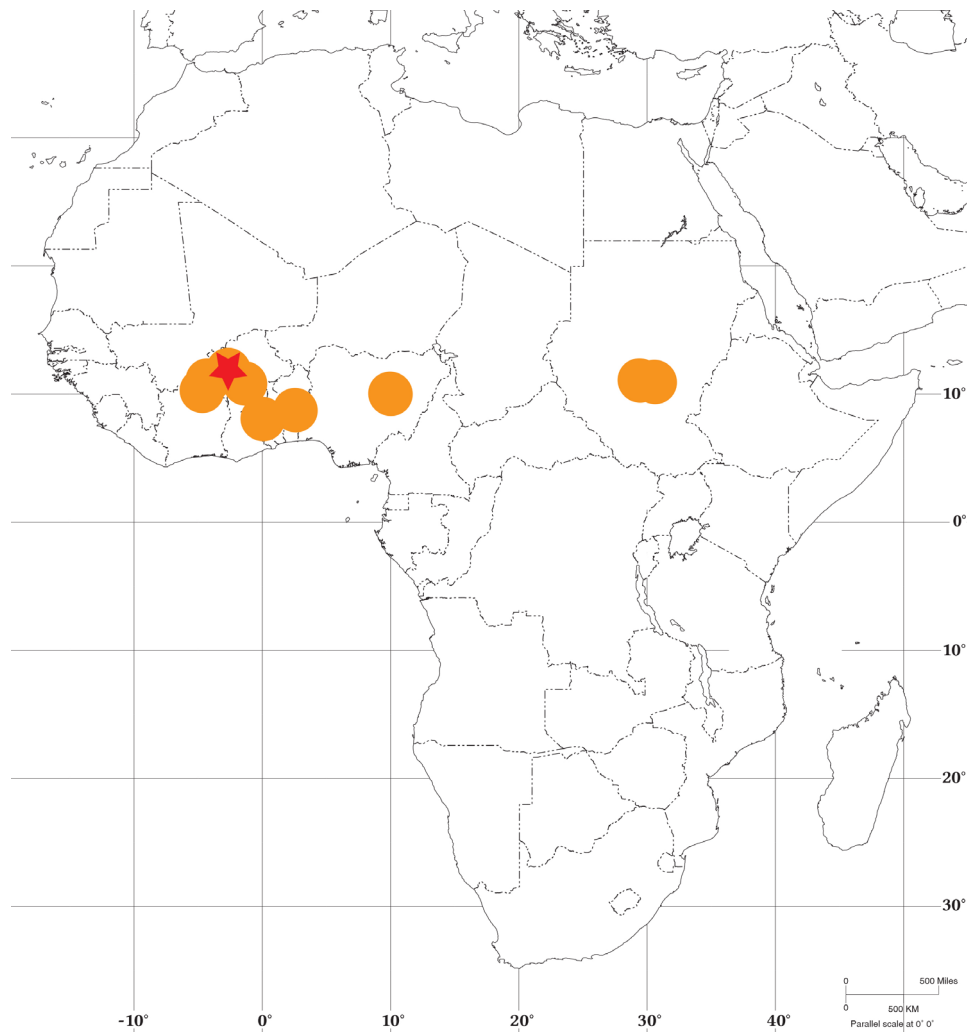


**Figure 81.** *Antheua melanotornata* sp. nov., adults. **a)** ♂, Burkina Faso, Boromo, holotype (GS: GU 90-03, CAS). **b)** ♂, Burkina Faso, Bobo, paratype (ZSM). **c)** ♀, Nigeria, Bara paratype (ZSM). **d)** ♀, Burkina Faso, Bobo, paratype (ZSM). **e)** ♀, Sudan, Tozi, paratype (GS: ZSM 01-03, ZSM).



**Figure 82.** *Antheua melanotornata* sp. nov., genitalia. **a)** ♂, Burkina Faso, Boromo, holotype (GS: GU 90-03, CAS). **b)** ♀, Sudan, Tozi, paratype (GS: ZSM 01-03, ZSM). **c)** ♀, Burkina Faso, Bobo-Dioulasso, paratype (GS: MWM 35.241, MWM/ZSM). **d)** ♀, Burkina Faso, Boromo, Ft de Sorobouli, paratype (GS: ANHRT 00256, ANHRT).

**Distribution.** *Antheua melanotornata* **sp. nov.** occurs sympatrically with *A. extenuata* across the dry savannahs of the Sub-Sahel region, with confirmed records from Burkina Faso, Ghana, Nigeria, and Sudan.



**Figure 83.** Distribution of *Antheua melanotornata* **sp. nov.**

***Antheua nigristriga* (de Joannis, 1913), stat. rev., comb. nov.**

Habitus: Figs 84a–e, Genitalia: Figs. 85a–c, Distribution map: Fig. 86.

*Zana nigristriga* de Joannis, 1913, in: Joannis, J. de & R. Verity: *Bulletino della Società Entomologica Italiana* 44: 134; fig. 5. Holotype: ♀, Eritrea, Adi Caiè [= Adi Keyh, 14°51'N, 39°22'E] (in coll. MNHN, not examined).

Synonym:

*Rigema ungulata* Berio, 1938, **syn. nov.**

*Memoire della Società Entomologica Italiana* 17: 61; pl. 2: 7.

Holotype: ♂, Eritrea, Elaberet [15°43'N, 38°38'E] (in coll. MCSN, not examined).

**Material examined** (1 ♂, 5 ♀♀).

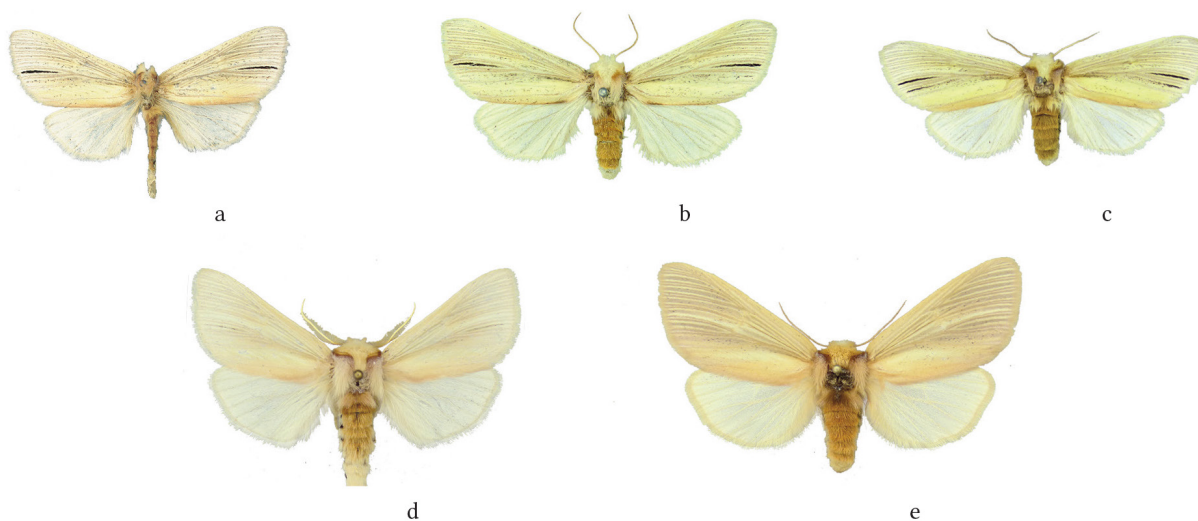
**Eritrea.** 1 ♀, “Colonia Eritrea 1908” (MfN). 1 ♀, Mt. Ari, 18.vii.1908, GS: ZMNU 04-54 (MfN).

**Ethiopia.** 1 ♀, Dangila, 6,700', 40 mls S of L. Tana, 16.vi.1926, leg. R.E. Cheeseman, GS: NHMUK014331228 (NHMUK). 1 ♂, 2 ♀♀, Region of Southern Nations, Bonga Guesthouse, 7°15'N, 36°15'E, 1750m, 12–14.v.2016, leg. R. & S. Fiebig/D.Stadie, GS: GU 97-09 (CAS).

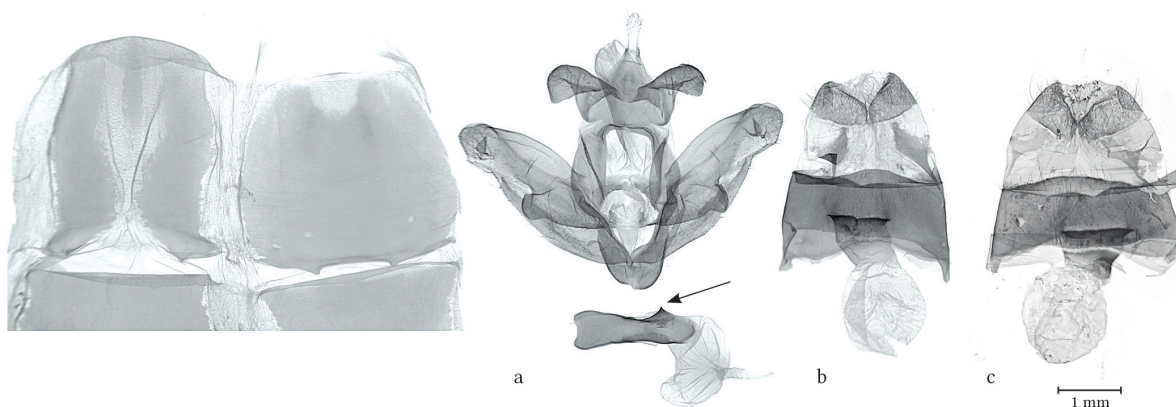


**Diagnosis.** Forewing length is 22 mm in the single known male and 19–24 mm in females. *Antheua nigristriga* and *P. extenuata* share a similar yellowish forewing colouration; however, the former species displays a brownish tinge, whilst the latter is brighter yellow with a hint of rusty sheen. Both holotypes of *Z. nigristriga* and *R. unguolata*, along with several examined specimens, show a prominent black longitudinal streak between the veins M2 and M3; although, some specimens may lack this feature. Sexual dimorphism is limited, primarily indicated by the slightly larger size and filiform antennae of the females.

In the male genitalia, *A. nigristriga* exhibits a broader uncus, broader and curved socii, a shorter ampulla lobe without a dorsal process, and a smaller, tooth-like carina process compared to *A. extenuata*. In the female genitalia, *A. nigristriga* displays a narrower ostium bursae and a shorter antrum and ductus bursae. Its corpus bursae also lacks both distal plates and signum bursae when compared with *A. extenuata*.



**Figure 84. *Antheua nigristriga*, adults.** **a)** ♀, Ethiopia, Dangla, (GS: NHMUK014331228, NHMUK). **b)** ♀, Eritrea (MfN). **c)** ♀, Eritrea, Mt. Ari (GS: ZMHU 04-54, MfN). **d)** ♂, Ethiopia, Kaffa prov., Bonga (GS: GU 97-08, CAS). **e)** ♀, Ethiopia, Kaffa prov., 24 km E of Bonga (GS: GU 97-09, CAS).



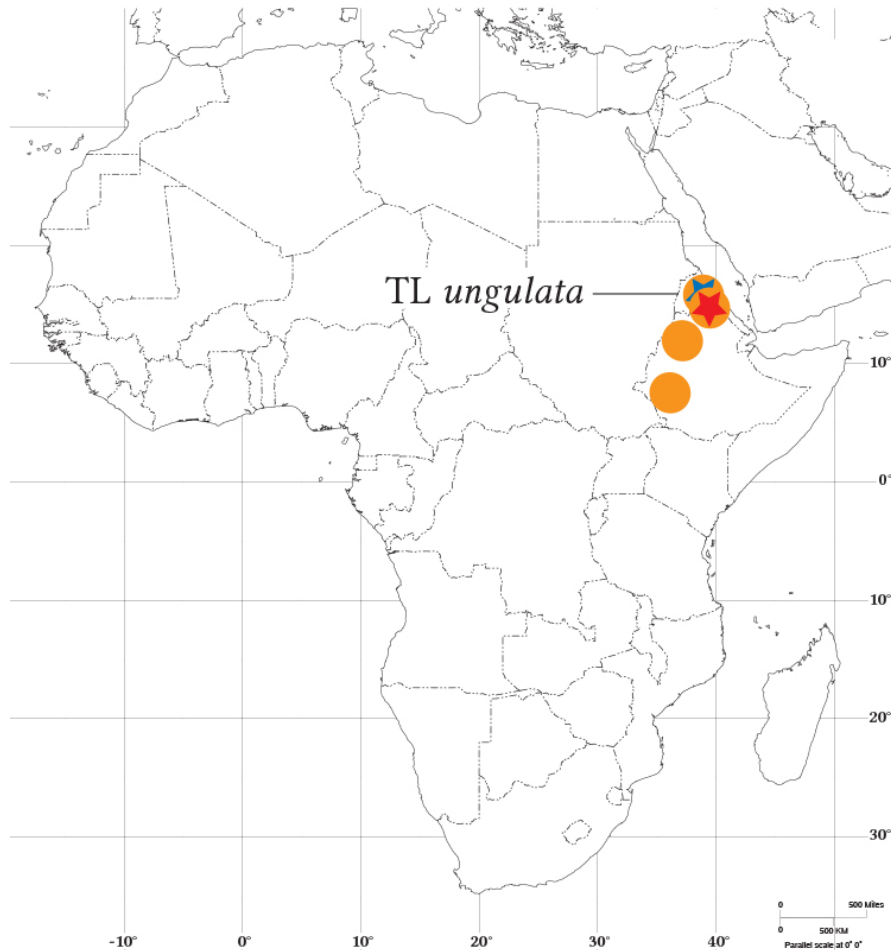
**Figure 85. *Antheua nigristriga*, genitalia.** **a)** ♂, Ethiopia, Kaffa prov., Bonga (GS: GU 97-08, CAS). **b)** ♀, Ethiopia, Kaffa prov., 24 km E of Bonga (GS: GU 97-09, CAS). **c)** ♀, Ethiopia, Dangla, (GS: NHMUK014331228, NHMUK).

**Taxonomic notes.** The authors could not examine the primary types of *Zana nigristriga* and *Rigema unguolata*; however, both types are well-illustrated in their original descriptions, allowing one to compare their facies with examined non-type material. As the type specimens of both species display a conspicuous black streak in the forewing postmedial area, which feature was not observed in *A.*

*extenuata*; furthermore, their type localities in Eritrea are found in close vicinity, we consider the name *ungulata* **syn. nov.** to be a junior synonym of *A. nigristriga*.

Gaede (1934) erroneously synonymised *nigristriga* with *Antheua atrata*. There is no doubt that these taxa are distinct; therefore, we reinstate *Zana nigristriga* **stat. rev.** as a valid species and transfer it to the genus *Antheua* (**comb. nov.**).

**Distribution.** This species is exclusively known from Eritrea and Ethiopia.



**Figure 86.** Distribution of *Antheua nigristriga*.

***Antheua tricolor tricolor* Walker, 1855**

Habitus: Figs 87a–f, Genitalia: Figs 88a–c, Labels of lectotype: Fig. 89, Distribution map: Fig. 90.

*Antheua tricolor* Walker, 1855, *List of specimens of Lepidopterous Insects in the Collection of the British Museum* **3**: 688.

Holotype: ♂, [RSA], Port Natal [= Durban ca. 29°52'S, 31°01'E] (in coll. NHMUK).

Synonym:

*Antheua varia* Walker, 1855

*List of specimens of Lepidopterous Insects in the Collection of the British Museum* **3**: 766.

**Lectotype:** ♂, [RSA], Port Natal [= Durban ca. 29°52'S, 31°01'E] (in coll. NHMUK, by present designation).

**Material examined** (large series of both sexes).

**Angola.** 3 ♂♂, N'Dalla Tando, 2,700 feet, 15.xi.1908, 20.xi.1908, 25.xi.1908, leg. Dr. W.J. Ansorge, gen. slide No.: LG 5239; large series of ♂♂, ♀♀, Prov. Benguela, btw. Catenque and Cubai,

13°00.329'S, 13°48.236'E, 830m, 24.iii.2014, leg. Naumann, Ott & Sulak; 7 ♂♂, Prov. Cuanza Sul, 1 km N Chipita, btw. Uku-Sumbe, 11°16.032'S, 14°09.521'E, 301m, 29.iii.2014, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Benguela, btw. Catenque & Cubal, 13°46.901'S, 14°00.105'E, 965m, 2.iv.2014, leg. Sulak, Naumann & Ott; 3 ♂♂, Prov. Benguela, btw. Cutembo & Caluquembe, 14 km E Cutembo, 13°47.905'S, 14°01.928'E, 1047m, 23.iii.2014, leg. Sulak, Naumann & Ott; 2 ♂♂, Prov. Benguela, 5 km E Sumbe, btw. Sumbe & Benguela, 12°08.078'S, 13°54.448'E, 280m, 30.iii.2014, leg. Sulak, Naumann & Ott; 2 ♂♂, Prov. Cuanza Sul, Chindalala, ca. 10 km SW Conda, Pousada do Engelo, 905m, 11°11'28.7"S, 14°19'10.5"E, 21.xi.2017, leg. Naumann, Ott & Sulak; 1 ♂, Prov. Huila, ca. 3 km N Camawa, 14°49.446'S, 14°13.594'E, 1414m, 30.xi.2013, leg. Naumann, Ott & Sulak (ANHRT). **Kenya.** 1 ♂, E 729, Sosoma, 202 km E of Thika, 20.xi.2007, leg. M. Snižek (ANHRT). **Mozambique.** 1 ♀, Maputo Special Reserve, West Gate, Sand Thicket, 26°30'14.2"S, 32°42'59.6"E, 22m, 9–17.ii.2018, Actinic Light Trap, László, G., Mulvaney, J., Smith, L. leg.; 1 ♂, Maputo Special Reserve, Futi Corridor (Sand Forest Woodland Mosaic) 26°32'10.1"S, 32°43'09.7"E, 17m, 23–24.ii.2018, actinic light trap, László, G., Mulvaney, J., Smith, L. leg.; 1 ♂, Prov. Gaza, 10 km NE Espungabera, 20°25'40"S, 32°48'49"E, 620m, 19.ii.2016, leg. Sulak, Naumann & Ott (ANHRT). **RSA.** Long series of both sexes, KwaZulu-Natal, Pongola, Belvedere Game Ranch, 27°31'S, 31°45'E, 430m, 22–26.ii.2018, Kovtunovich, V., Yakovlev, R. leg.; 5 ♂♂, 2 ♀♀, KwaZulu-Natal, Pietermaritzburg, Cumberland Nature Reserve, 28°30'50"S, 30°30'17"E, 660m, 15–16.ii.2018, R.V. Yakovlev, V. Kovtunovich leg.; 1 ♂, Krüger NP, P. Krüger Gate, Garden of Protea Hotel, 300m, 22–23.iii.2014, leg. M. Hluchy & Gy.M. László, GS: LG 4351; 1 ♂, Krüger NP, Camp Berg-en-Dal, 350m, 29–30.xi.2011, leg. M. Hluchy & Gy.M. László; 1 ♂, Limpopo Province, Ben Lavin, 900m, 23°09'S, 29°57'E, 24–26.xi.2007, leg. Jiří Klir; 1 ♂, 1 ♀, Limpopo, 10 km S Mokopane, Trailer Camp, 24°15'44"S, 28°59'27"E, 1095m, 28.ii.2016, leg. Naumann, Ott & Sulak; 1 ♂, Limpopo Prov., 10 km W Louis Trichard, Madi a Thavha Mountain Lodge, 1040m, 22°00'57"S, 29°49'37"E, 27.ii.2016, leg. H. Sulak, S. Naumann & E. Ott (ANHRT). **Tanzania.** 2 ♂♂, Mkonga Forest Reserve, South Pare Mountains, S04°07'48", E37°45'49", 836m, 1.xii.2011, Light Trap, leg. Smith, R. & Takano, H., GS: LG 4353; 2 ♂♂, Mount Meru, Arusha NP, S03°14'51", E36°50'38", 1679m, 18–24.vii.2012, Light Trap, leg. Smith, R. & Takano, H.; 4 ♂♂, 1 ♀, 30 km W Dar es Salaam, coastal region, vic. Kibaha, Kongowe village, 130m, 06°47'S, 38°59'E, 18.xi.2008, leg. loc. coll. (ANHRT). **Zambia.** 10 ♂♂, Chilambwe Falls, Kafubu River, 09°50'13"S, 30°43'35"E, 1420m, 8–12.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 2 ♂♂, Kalungu, north of Isoka, S9°40'52", E32°42'50", 1280m, 5–8.iii.2017, MV, Oram, D., Miles, W., Smith, L. leg.; 2 ♂♂, same locality, 12–13.xii.2023, László, G., Morgan, L., Volynkin, A. leg.; 8 ♂♂, 1 ♀, Mayukuyuku, Kafue NP, S14°54'55", E26°03'47", 1080m, 21–26.xi.2013, Light Trap, leg. Smith, Takano & Oram; 8 ♂♂, Lukulu River, Lavushi Manda N. P., S12°15'05", E30°53'43", 1285m, 27–29.xi.2012, Light Trap, leg. Smith, R. & Takano, H.; 1 ♂, Ntumbachushi Falls, Ngona River, Luapula Prov., S09°51'12", E28°56'40", 1166m, 3–4.xi.2014, Light Trap, leg. Smith, Takano & Oram; 1 ♂, Ndanda, E. Mongu, S15°04'44", E23°45'59", 1090m, 10–11.xi.2013, Light Trap, leg. Smith, Takano & Oram; 2 ♂♂, Kabwe, Kasanka N.P., S12°32'28", E30°12'42", 1187m, 30.xi.–1.xii.2012, Light Trap, leg. Smith, R. & Takano, H., GS: LG 4350; 1 ♀, Ijobwe, Sioma Ngwezi NP, S16°53'55", E23°35'54", 1020m, 19–20.xi.2013, Light Trap, leg. Smith, Takano, & Oram, GS: ANHRT 00400; 1 ♂, Muchinga Prov., Benyanga village, 10°40'41"S, 33°27'45"E, 1250m, 7–12.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A. leg. (ANHRT). **Zimbabwe.** 1 ♂, Umvuma, 20.xii.1917, A.J.T. Janse (TMSA).

**Diagnosis.** Forewing length of the nominotypical subspecies of *A. tricolor* is 18–22 mm in males and 21–24 mm in females. The corresponding measures in ssp. *anomala* are 20–24 mm in males and 21–25 mm in females. *Antheua tricolor* is a distinctive species characterised by the bright lemon-yellow forewings, which feature sparse black patches. The extent of the black pattern varies in the ssp. *tricolor* and can sometimes be completely absent. The hindwings of the ssp. *tricolor* are dark brownish-grey, while those of the ssp. *anomala* are considerably paler. In the latter subspecies, the dark patches on the forewings are replaced by narrow, short, wavy markings, and less individual variability is observed. Sexual dimorphism is minimal.

The male genitalia are characterised by the basally broad uncus produced into a moderately long, narrow, digitiform distal process and the long, narrow, gradually tapered, medially curved, apically pointed socii. The costal plate of the valva (editum) exhibits a rounded distal protuberation near the base; the ampulla is short and broadly rounded. The dorsal lobe of the editum is noticeably longer, whilst the

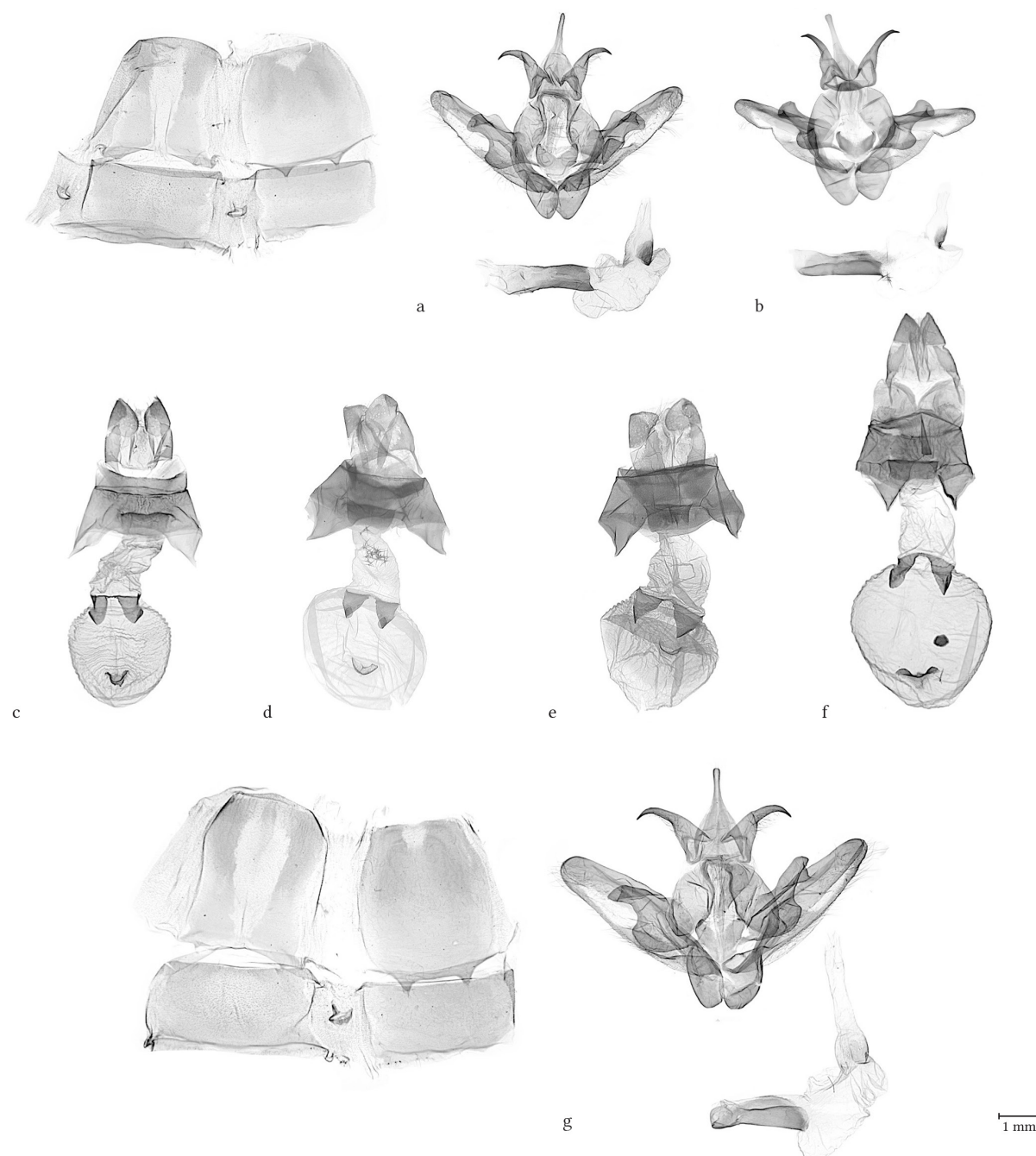
ampulla is broader in ssp. *anomala* compared to the nominotypical taxon. The phallus is short and moderately thick, with a very short triangular distal carinal tooth in ssp. *tricolor*, which feature is absent in ssp. *anomala*; the endophallus is short, broadly inflated basally, with short diverticula basally, subbasally and distally.

The female genitalia exhibit unique characters, including a remarkably robust, triangular anterior apophysis, a very short, quadrangular antrum continued in a thick and rather long ductus bursae, the large triangular distal sclerotized plates of the corpus bursae and the relatively long, sinuous signum bursae reminiscent of a Greek letter omega.



**Figure 87.** *Antheua tricolor tricolor* (a–f), *A. tricolor anomala* (g–l), adults. **a)** ♂, RSA, Durban, holotype (NHMUK). **b)** ♂, RSA, Limpopo, Kimberley, Wolwekop (TMSA). **c)** ♂, Zimbabwe, Mvuma (TMSA). **d)** ♀, RSA, Limpopo, Soutpansberg (MWM/ZSM). **e)** ♂, RSA, Limpopo, Louis Trichardt (GS: MWM 22.737, MWM/ZSM). **f)** ♀, RSA, Limpopo, Soutpansberg (MWM/ZSM). **g)** ♂, Sudan, Prov. Kordofan, Kaduqli (GS: ZSM 01-14, ZSM). **h)** ♀, Sudan, Prov. Blue Nile, Tozi (ZSM). **i)** ♀, Sudan, Prov. Blue Nile, Tozi (GS: ZSM 01-13, ZSM). **j)** ♂, Sierra Leone, Eastern Prov., Potoru (GS: MWM 35.203, MWM/ZSM). **k)** ♀, Sierra Leone, Eastern Prov., Potoru (GS: MWM 35.206, MWM/ZSM). **l)** ♂, Burkina Faso, Bobo-Dioulasso (GS: MWM 22.736, MWM/ZSM).





**Figure 88.** *Antheua tricolor tricolor* (a–c), *A. tricolor anomala* (d–g), genitalia. **a)** ♂, Angola, Huila Prov., 5 km SSW Bonga, Mt. Hole, (GS: MWM 35.207, MWM/ZSM). **b)** ♂, RSA, Limpopo, Louis Trichardt (GS: MWM 22.737, MWM/ZSM). **c)** ♀, Zambia, Ijobwe, Sioma Ngwezi NP (GS: ANHRT 00400, ANHRT). **d)** ♀, Ivory Coast, Mt. Tonkouli Peak (GS: LG 5143, ANHRT). **e)** ♀, Sudan, Blue Nile, Tozi (GS: ZSM 01-13, ZSM). **f)** ♀, Sierra Leone, Eastern Prov., Potoru (GS: MWM 35.206, MWM/ZSM). **g)** ♂, Sierra Leone, Eastern Prov., Potoru (GS: MWM 35.203, MWM/ZSM).

**Taxonomic note.** In his *Insecta Transvaaliensia*, Distant (1903) had already referred to *A. varia* as a synonym of *A. tricolor*. Similarly, Janse (1920) stated that the holotype of *A. tricolor* is a “rather old and bleached” specimen, which is identical with the subsequently described *A. varia*. Our investigations suggest that Walker (1855) described this species twice from the same specimen. He based his descriptions on material provided by Dr. W. Gueinzus (b. 15. iii. 1813, Halle an der Saale – d. 24. i. 1874 in Pietermaritzburg), who was one of the earliest European collectors in Africa, particularly in Natal and Mozambique (Schintlmeister & Witt 2015). It is presumed that Gueinzus sent a pair of this

species to Walker. The male specimen was initially used to describe the species as *A. tricolor*. Subsequently, in the "Addenda" section of the same book (pp. 762–775), Walker introduced the name *A. varia* based on Gueinzus' identical male specimen, which had already been used for the description of *tricolor*. In the description of *A. varia*, Walker additionally referenced a female specimen.

In the holdings of the NHMUK, we found a rather worn, bleached, male type specimen with two name labels: "*tricolor*" and "*varia*." To stabilize the nomenclature, we hereby designate this male syntype specimen, which also serves as the holotype for *tricolor*, as the lectotype of *varia* (Fig. 87a). The labels are illustrated below (Fig. 89).



**Figure 89.** Labels of the lectotype of *Antheua varia*, which is also the holotype of *A. tricolor*.

**Distribution.** See under the following taxon.

***Antheua tricolor anomala* Berio, 1937, stat. nov.**

Habitus: Figs 87g–l, Genitalia: Figs 88d–g, Distribution map: Fig. 90.

*Antheua anomala* Berio, 1937, *Annali del Museo civico di storia naturale Giacomo Doria* **59**: 382.

Holotype: ♀, Uganda, Bussu Busoga [ca. 0°56'N, 33°42'E] (in coll. MSNGD, not examined).

**Material examined** (large series of both sexes).

**Burkina Faso.** 1 ♂, Bobo, 12.viii.1977, leg. H. Politzar, GS: MWM 22.736 (MWM). **Cameroon.** 1 ♂, North Region, Wack (La Falaise), 07°40'16.5"N, 13°33'18.4"E, 900m, 2–21.x.2018, General coll., Sáfián, Sz., Simonics, G. leg. (ANHRT). **DRC.** 1 ♂, 1 ♀, Uele: Paulis, 14.v.1956, 6.vi.1957 leg. Dr. M. Fontaine (RMCA). **Gambia.** 1 ♂, Abuko, 13°23'41"N, 16°38'45"W, 22.vii.2013, leg. R.W. Goff, GS: LG 4352 (ANHRT). **Guinea.** 3 ♂♂, 690m, Guinée Forestière, Bossou Forest and Institut de Recherche Environnementale de Bossou (Lowland Forest-Farmland), 07°38'32"N, 08°30'30"W, 24–30.vi.2019, MV light trap, Dérozier, V., Suah Dore, J., Koivagui, S., Miles, W., Sáfián, S., Warner, R. leg.; 2 ♂♂, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, local collectors leg. (ANHRT). **Ivory Coast.** Long series of both sexes, 479m, Denguele Classified Forest (Sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 6–14.vi.2018, Actinic, LepiLED and MV light trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg., GS: LG 5142 ♂; 5 ♂♂, 1 ♀, Gbando Village, (Sudanian forest with Gallery forest), 9°34'17.1"N, 6°41'1.1"W, 417m, 15–22.vi.2018, MV Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg.; 1 ♀, Mt Tonkoui Peak, 07°27'15.2"N, 07°38'12.5"W, 1171m, 20–27.v.2018, Actinic Light Trap, leg. Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg., GS: LG 5143 (ANHRT). **Mali.** Long series of both sexes, 25 km NW Kangaba, 350m, ix.2022 (CAS, GCM, MWM, ZSM). **Sierra Leone.** 3 ♂♂, Loma Mountains, farmland/forest mosaic, N09°07'47", W11°05'24", 420m, 11–15.vi.2016, Light Trap, leg. Takano, Miles & Goff, GS: ANHRT 00399 (ANHRT). 6 ♂♂, 1 ♀, Eastern Prov., Potoru, 7°58.621'N, 10°46.498'W, 219m, 4.v.2013, leg. Naumann, Malec, GS: MWM 24.257, MWM 35.203, MWM 35.206 (MWM). **South Sudan.** 1 ♂, UNMISS Bentiu, N09°19'43", E29°47'18", 400m, 24.vii.2017, T.C. Nicholson-Roberts (ANHRT). **Sudan.** 1 ♀, Blue Nil, Tozi, 10.ix.1960, leg. H. Schmutterer, GS: ZSM01–13. (ZSM). 1 ♂, Kordofan, Kadugli, 16.ix.1969, leg. H. Schmutterer, GS: ZSM01–14. (ZSM). **Togo.** 1 ♂, Fazao-Malfakassa NP, Point de vue campsite (Sudanian savannah), 8°48'50"N, 0°49'3.2"E, 415m, 16–

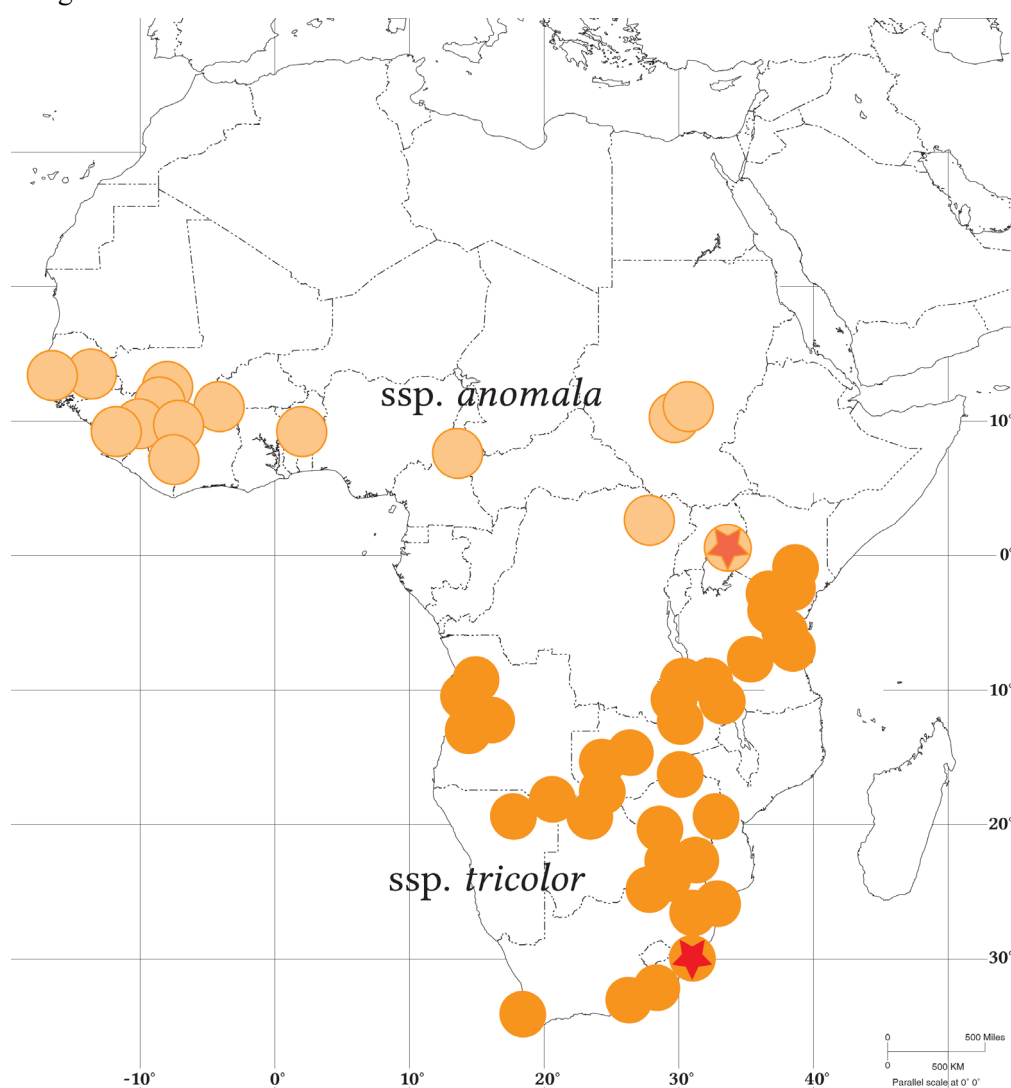
23.viii.2018, MV Light Trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg.; 1 ♂, Region Kara, Bafilo env., 350m, ca. 9°21'N, 1°14'E, vii.2015, leg. T. Gadagbui (ANHRT).

**Diagnosis.** The diagnostic features of *A. tricolor anomala* are discussed under the nominotypical taxon.

**Taxonomic note.** Berio (1937) described *Antheua anomala* from Uganda, Busoga Kingdom and compared it to *A. tricolor*. The taxon was not illustrated in the original description, and the authors were unable to examine the holotype of *A. anomala*. However, from the detailed original description it is obvious that the holotype matches in external appearance well with the illustrated specimens from Sudan and West Africa. The fine black arches on the forewings of *A. anomala* clearly differ from the diffuse patches observed in the populations from southern and southern-central Africa and the range of individual variation is limited ( $n > 20$  specimens examined). As the genital morphology of *A. tricolor* is fairly uniform throughout its distribution, the taxon *anomala* is treated here as a subspecies of *tricolor* (**stat. nov.**).

**Distribution.** The nominate subspecies of *A. tricolor* is distributed in southern, southern-central and eastern Africa, with confirmed occurrences from Angola, Botswana, Eswatini, Kenya, Mozambique, Namibia, the RSA, Tanzania, Zambia, and Zimbabwe.

Subspecies *anomala* exhibits a wide equatorial distribution reported from Burkina Faso, Cameroon, the DRC, Gambia, Guinea, Ivory Coast, Mali, Senegal, Sierra Leone, South Sudan, Sudan, Togo, and Uganda.



**Figure 90.** Distribution of *Antheua tricolor*.

***Antheua consanguinea* Distant, 1903**

Habitus: Figs 91a–d, Genitalia: Figs 92a–b, Distribution map: Fig. 93.

*Antheua consanguinea* Distant, 1903, *Insecta Transvaaliensia: a Contribution to a knowledge of the Entomology of South Africa*. Part 4: 92; pl. 8: 12.

Holotype: ♀, [RSA], Transvaal / Lydenburg Distr. / 1896, P.A. Krantz (in coll. NHMUK).

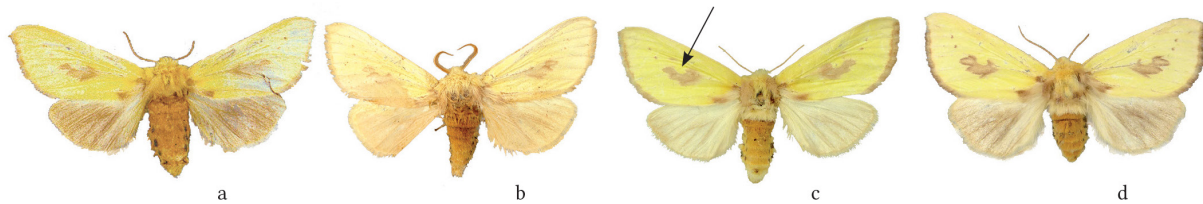
**Material examined** (2 ♂♂, 3 ♀♀).

**Malawi.** 1 ♀, Nyasaland, Cholo [= Thyolu], 2700ft., R.C. Wood (CMNH). **RSA.** 1 ♂, Lydenburg distr., 1896, P.A. Krantz 1 ♀, Moordrift, 1925, leg. G. v. Dam. 1 ♀, Moordrift ii.1914, C. J. Swiestra, GS: TMSA 16.879. 1 ♂, Limpopo, Hoedspruit Dist., Hongonyi Lodge, 20.xii.2010, leg. Joannou., GS: TMSA 16.878. (TMSA).

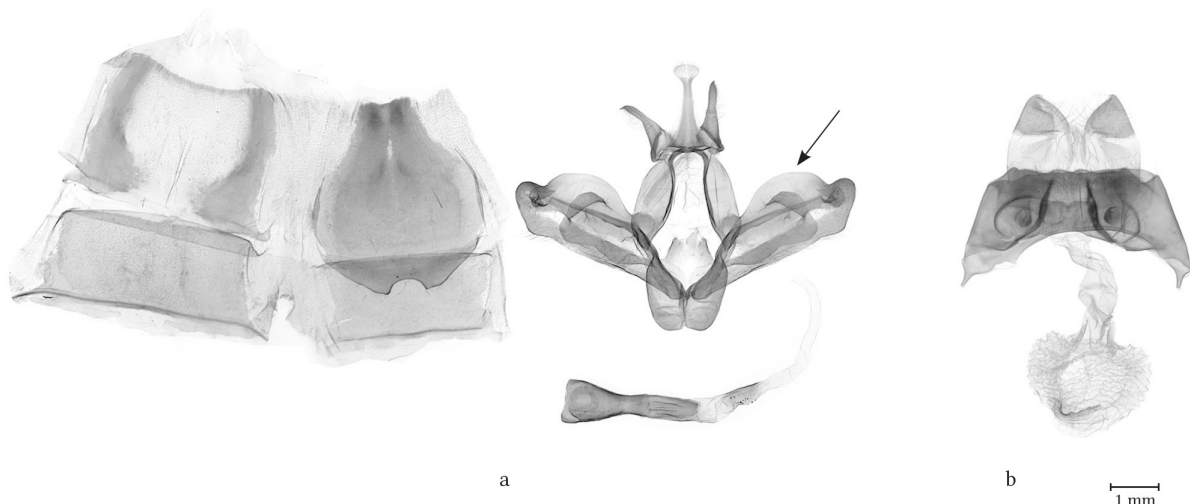
**Diagnosis.** Forewing length is 19–20 mm in males and 20–22 mm in females. *Antheua consanguinea* is a distinctive and apparently rare species characterised by a bright yellow ground colour, a contrasting brown marginal area and fringe, and a prominent medial blotch of the forewing. The posterior margin of the brownish discal blotch is concave in this species, distinguishing it from the following new species *A. pyrasa* **sp. nov.**, where the medial blotch has a convex posterior margin. Sexual dimorphism is negligible.

The male genitalia of *A. consanguinea* closely resemble those of *A. tricolor* but readily distinguished by the broader and apically dilated uncus, the less curved and shorter socii, the considerably larger costal lobe of the valva (editum), the more extensive ampulla that has both a broadly rounded ventral and dorsal lobe and the presence of a short, rounded subapical valval lobe.

The female genitalia are characterised by a conspicuously wide eighth segment, the absence of a sclerotised antrum and distal plates of the corpus bursae; the signum bursae is large U-shaped, ribbon-like.



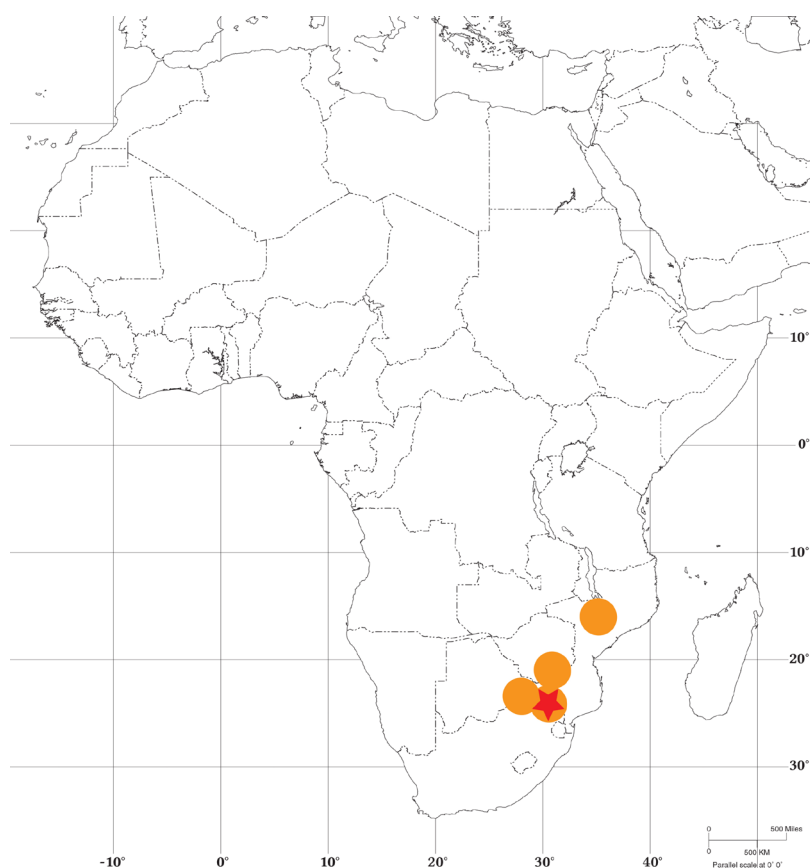
**Figure 91. *Antheua consanguinea*, adults.** **a)** ♂, RSA, Lydenburg district, holotype (NHMUK). **b)** ♂, RSA, Lydenburg district, (TMSA). **c)** ♀, Malawi, Thyolu (NHMUK). **d)** ♀, RSA, Limpopo, Moordrift (GS: TM 16879, TMSA).



**Figure 92. *Antheua consanguinea*, genitalia.** **a)** ♂, RSA, Limpopo, Hoedspruit (GS: TM 16878, TMSA). **b)** ♀, RSA, Limpopo, Moordrift (GS: TM 16879, TMSA).



**Distribution.** This species has been recorded from Malawi, the RSA and Zimbabwe (Schintlmeister & Witt 2015).



**Figure 93.** Distribution of *Antheua consanguinea*.

***Antheua pyrasa* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:BCCA5B78-CDF2-4BF8-BC7D-89B3DE651B01>

Habitus: Figs 94a–d, Genitalia: Figs 95a–c, Distribution map: Fig. 96.

**Holotype.** ♂, “Kenya / Eastern Provinz / Zw. Moyale & Marsabit / 7km N Sololo, 4°42.248'S, 38°10.251'E / 21. iv. 2010 – 1590m – Lux / leg. H. Sulak” // GS: MWM 23.386 (CAS).

**Paratypes** (2 ♂♂, 7 ♀♀).

**Ethiopia.** 1 ♀, Oromia, River Valley, 15 km SW of Dolamena, 1210m, 6°20.126'N, 39°50.092'E, 4.v.2016, leg. R. & S. Fiebig/D. Stadie (CRF). **Kenya.** 1 ♀, Mtito Andei, 2°41'12"S, 38°10'27"E, GS: MWM 22.735 (MWM); 1 ♀, Mtito Andei, iv.1951, leg. Mac Arthur (USNM); 1 ♂, 3 ♀♀, Kibwezi, 700m, 15–8.xii.1991, 31.xii.2000 and 1–15.v.2001, leg. Dr. Politzar, GS: MWM 22.734 ♂ (MWM/ZSM, CGM); 1 ♂, Kibwezi, xii. 1928, leg. W. Feather, GS: NHMUK010315321 (prepared by G. László) (NHMUK). 1 ♀, Taita-Taveta, Tsavo East NP, Men Eaters Camp, S2°59'19.9", E38°28'08.8", 15–16.iv.2025, 450m, leg. Dirk & Philipp Stadie (CDS).

**Diagnosis.** Forewing length of males is 16–18 mm; that of females is 20–22 mm. *Antheua pyrasa* sp. nov. is reminiscent of *A. consanguinea*, but it features a smaller, less elongate and posteriorly convex brownish medial blotch of the forewing. Sexual dimorphism is negligible.

The ground plan of the male genitalia of *A. pyrasa* sp. nov. resembles those of *A. consanguinea* with several diagnostic characters. The new species has a somewhat narrower uncus with a more elongate knob-shaped tip, elliptical valva with evenly arcuate margins (the ventral valval margin is subapically angled in *A. consanguinea*) and a considerably smaller costal lobe of the valva (editum) compared to those of *A. consanguinea*. Distinctive features of the ampulla in the new species include a

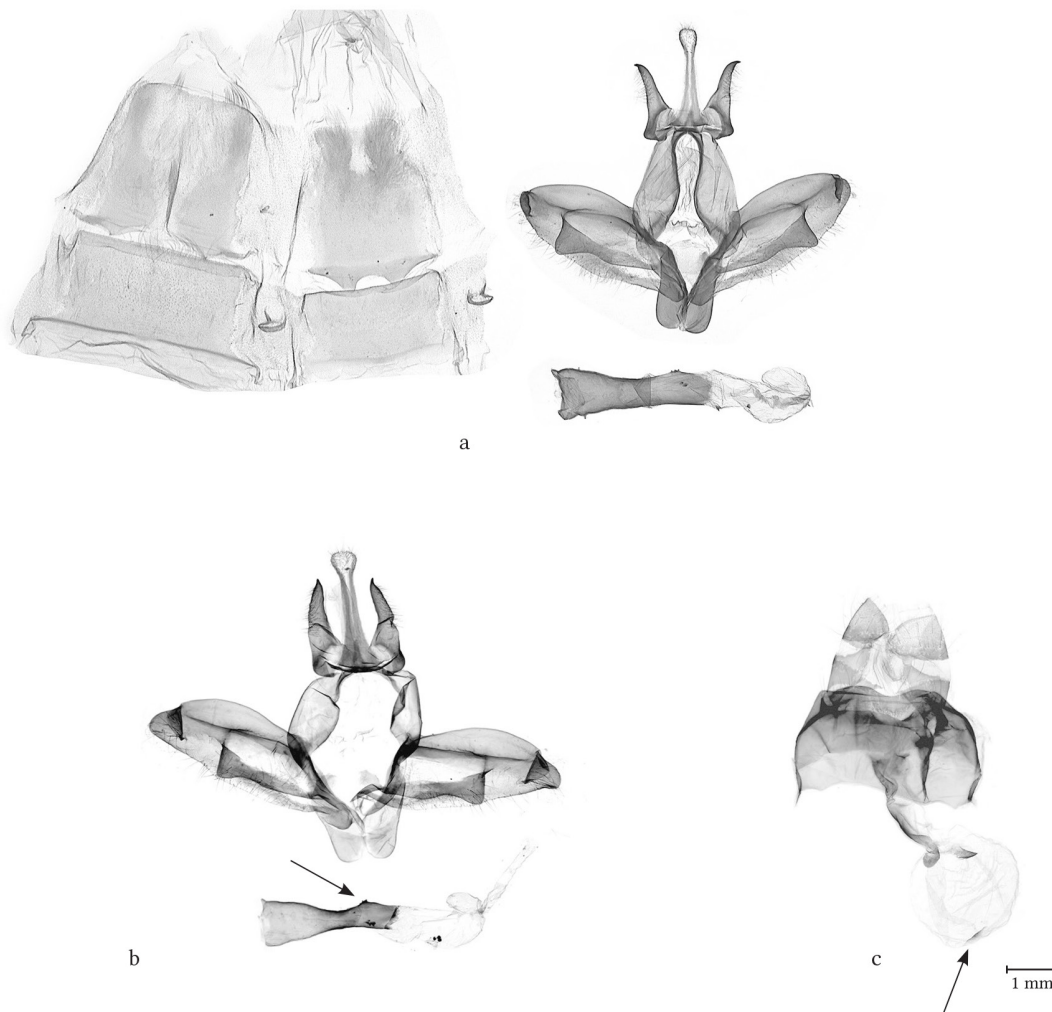
triangular ventrodistal lobe and the lack of a dorsal lobe typical for *A. consanguinea*. Additionally, the phallus of *A. pyrasa* **sp. nov.** is less dilated distally than that of *A. consanguinea* and has two small subbasal spines, which are absent in the latter species. The endophallus of the new species contains a medial diverticulum, in contrast to the simple tubular endophallus of *A. consanguinea*.

The female genitalia of *A. pyrasa* **sp. nov.** feature a considerably narrower eighth segment and a more slender, partially sclerotized ductus bursae compared to *A. consanguinea*. Furthermore, the new species has a pair of small distal plates in the corpus bursae, which are absent in the related species. Additionally, the signum bursae is notably shorter than that of *A. consanguinea*.

**Etymology.** The specific epithet is derived from the ancient Greek noun “pyr”, meaning “fire”, alluding to the distinctive fiery patterning observed in this species.

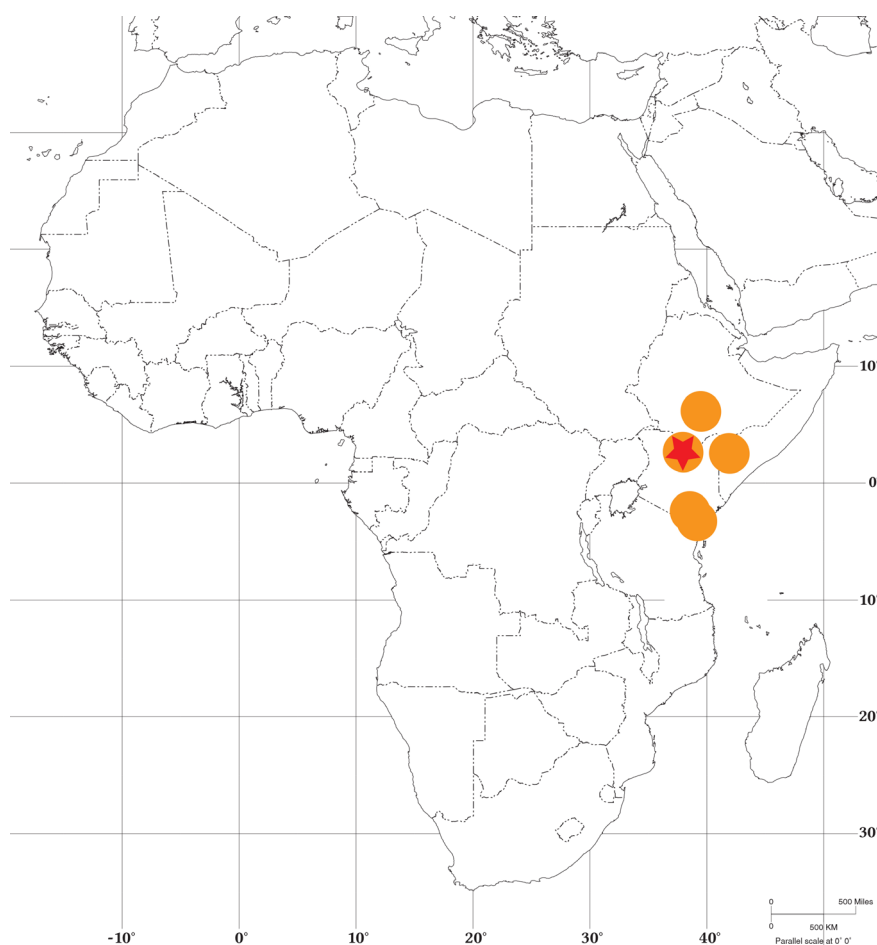


**Figure 94.** *Antheua pyrasa* **sp. nov.**, adults. **a)** ♂, Kenya, Eastern Provinz, Sololo, holotype (GS: MWM 23.386, MWM/ZSM). **b)** ♀, Kenya, Mtito Andei, paratype (USNM). **c)** ♀, Kenya, Mtito Andei, paratype (GS: MWM 22.735, MWM/ZSM). **d)** ♀, Ethiopia, Oromia, Dolamena, paratype (CRF).



**Figure 95.** *Antheua pyrasa* **sp. nov.**, genitalia. **a)** ♂, Kenya, Eastern Provinz, Sololo, holotype (GS: 23.386, MWM/ZSM). **b)** ♂, Kenya, Kibwezi, paratype (GS: MWM 22.734, MWM/ZSM). **c)** ♀, Kenya, Mtito Andei, paratype (GS: MWM 22.735, MWM/ZSM).

**Distribution.** *Antheua pyrasa* **sp. nov.** has been collected so far in Kenya and Ethiopia.



**Figure 96.** Distribution of *Antheua pyrasa* **sp. nov.**

***Antheua eximia* Kiriakoff, 1965**

Habitus: Fig. 97, Distribution map: Fig. 98.

*Antheua eximia* Kiriakoff, 1965, *Bulletin et Annales de la Société Royale d'Entomologie de Belgique* **101** (17): 322; fig. 15.

Holotype: ♂, [Tanzania], P. Burdon / Mufindi / Tanganyika / 1955 (in coll. NHMUK).

**Diagnosis.** *Antheua eximia* is known solely from its male holotype, the forewing length of which is 18 mm. This species is rather distinct due to the large, contrasting brown medial spot on its pale yellow forewing. The authors were unable to locate the genitalia slide or preparation of the holotype that was prepared by Kiriakoff; however, the genitalia are illustrated in Kiriakoff (1965) in figure 15.

The female is unknown.



**Figure 97.** *Antheua eximia*, adult. ♂, Tanzania, Mufundi, holotype (NHMUK).

**Distribution.** The single known specimen of this species was collected in proximity to Mufindi town within the Iringa Region of Tanzania.



**Figure 98.** Distribution of *Antheua eximia*.

***Antheua editae* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:099B8DF6-6CB3-4805-BD3F-16606D3D8E9D>

Habitus: Figs 99a–f, Genitalia: Figs 100a–c, Distribution map: Fig. 101.

**Holotype.** ♂, “Mali / [Koulikoro Region, near] Ouronina [12.103085N, 8.411406W, 395 m] / Aug. 2022” (CAS).

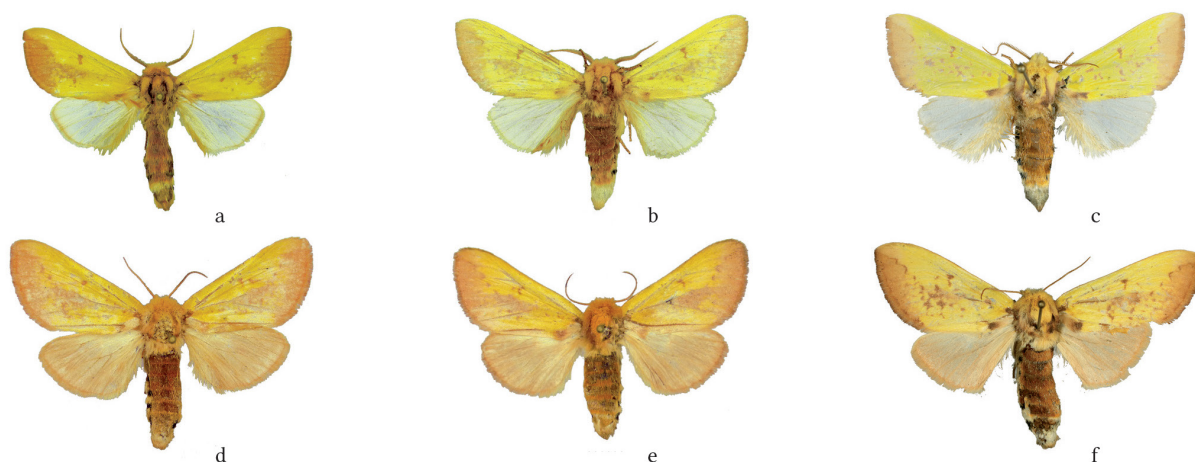
**Paratypes** (143 ♂♂, 18 ♀♀).

**Mali.** 123 ♂♂, 14 ♀♀, same locality as the holotype, ix–x.2012, viii–x.2022, leg. USTTB team, GS: Prozorov 0524, Prozorov 0525, Prozorov 0526, Prozorov 0527; 9 ♂♂, 4 ♀♀ 25 km NW Kangaba, 350m, 12°09'24"N, 8°31'22"E, ix.2022, leg. USTTB team, GS: GU 98-40; GU 98-41, GU 98-42; 6 ♂♂, Kangaba District, 25 km NW Kangaba city, mature deciduous forest/savannah mosaic, ix.2009, local coll. leg.; 2 ♂♂, Monts Mandingu, SW Sandama, 550–650m, mosaic of savannah and mature deciduous forest, iii.2009 (ANHRT, CAS, CGM). **Senegal.** 3 ♂♂, 5 miles W Diouguel, natural riverine forest / grass and bushland, early to mid July 1985, leg. H. Friend (CAS).

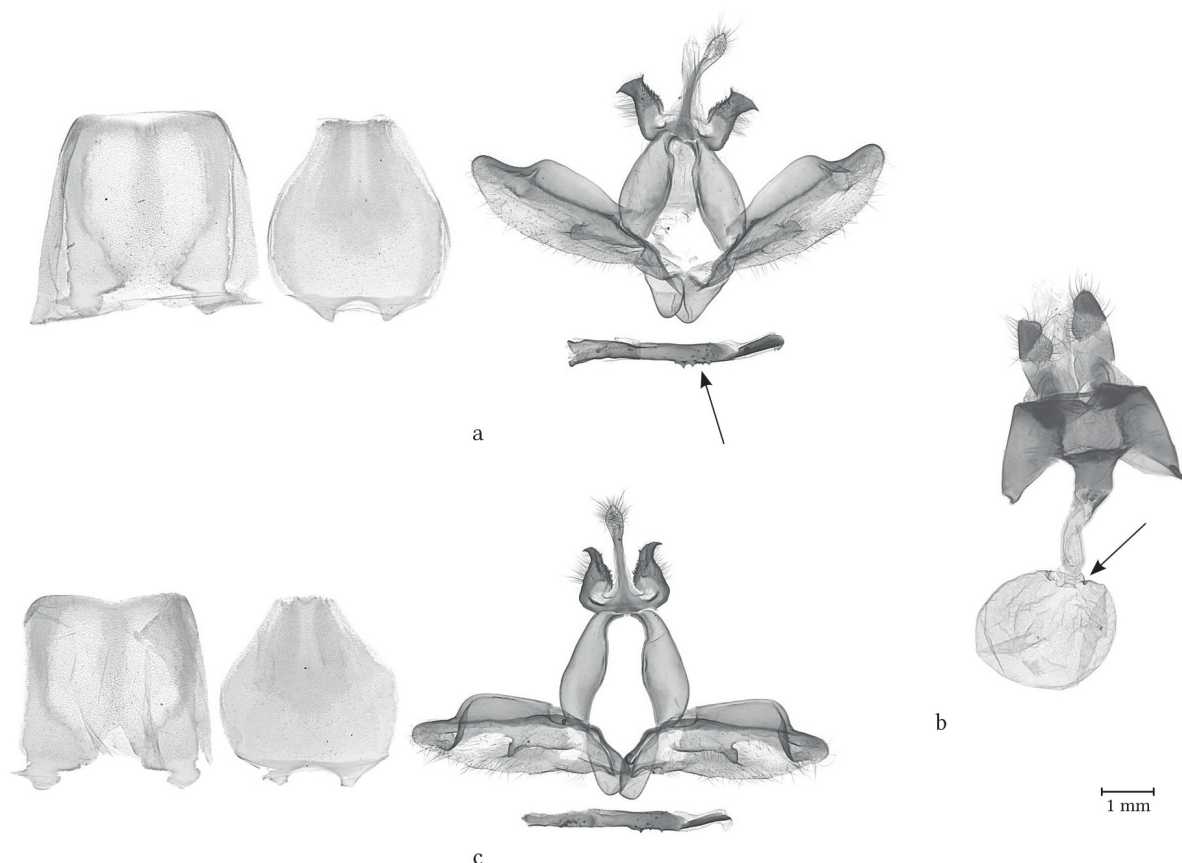
**Diagnosis.** Forewing length is 19–20 mm in males, and ♀♀, 20–21 mm in females. *Antheua editae* sp. nov. is a distinctive species with bright yellow forewings featuring variable red-brown patterning. The



forewings have a relatively large brown discal spot, and a postmedial line marked by a row of brown dots that extends from the apex to the medial section of the anal margin.



**Figure 99.** *Antheua editae* sp. nov., adults. **a)** ♂, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, holotype (CAS). **b)** ♂, Mali, 25 km NW Kangaba, 80 km SW Bamako, paratype (CAS). **c)** ♂, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, paratype (GS: Prozorov 0525, CGM). **d)** ♀, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, paratype (CAS). **e)** ♀, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, paratype (CAS). **f)** ♀, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, paratype (GS: Prozorov 0526, CGM).



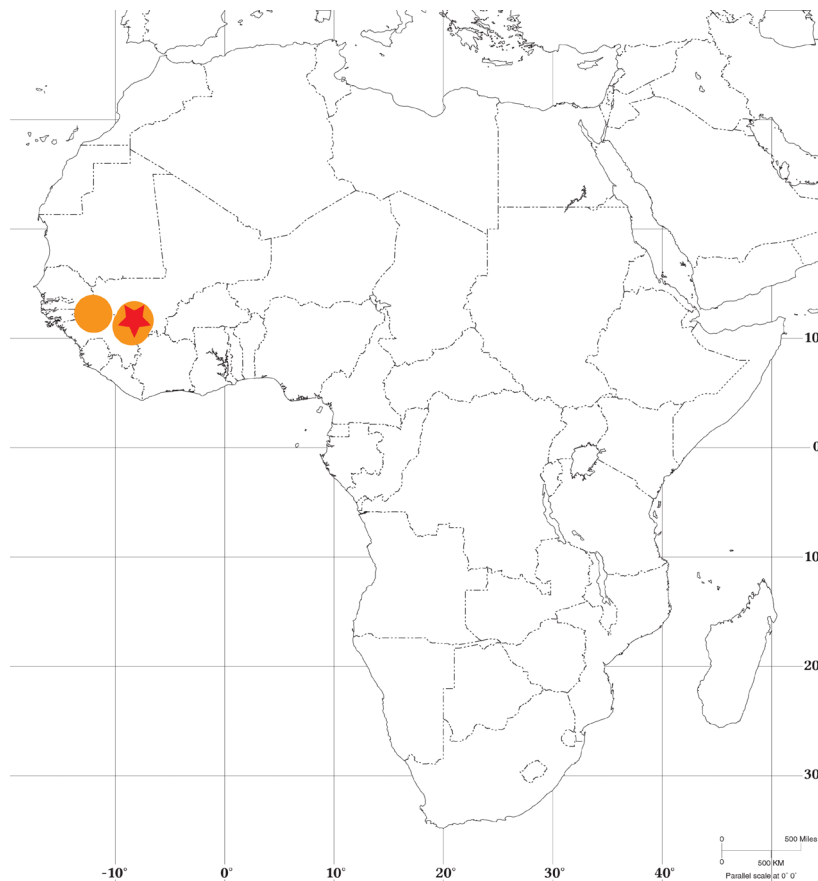
**Figure 100.** *Antheua editae* sp. nov., genitalia. **a)** ♂, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, paratype (GS: Prozorov 0524, CAS). **b)** ♀, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, paratype (GS: Prozorov 0527, CAS). **c)** ♂, Mali, Koulikoro Region Ouronina, 80 km SW Bamako, paratype (GS: Prozorov 0525, CAS).

The subterminal area of the forewing is reddish brown, often faded. In males, the hindwings are whitish with a yellowish-tinged anal area and a yellow fringe. In contrast, females tend to be darker, displaying an orange hue on their forewings, while their hindwings are reddish brown.

The male genitalia feature a relatively long, slim uncus with an ovoid apical dilation. The socii are moderately long and broad with nearly parallel lateral margins and a dilated, distally truncated apex with two fine posterolateral teeth. The valva costa is expanded into an elongated editum in the anterior two-thirds, while the ampulla is short, rounded, and considerably smaller than in *A. consanguinea* or *A. pyrasa* **sp. nov.** The phallus is relatively long and narrow, straight, with a conspicuous posterolateral dentation. The endophallus contains a large elongate-quadrangular cornutus with a rounded apex. The female genitalia are characterised by a large, distally infundibular, and proximally squarish antrum and a pair of tiny distal evaginations at the base of the ductus bursae. These evaginations are notably smaller than the distal plates of the corpus bursae in *A. consanguinea* and *A. pyrasa* **sp. nov.** The signum bursae is absent in this species.

**Etymology.** This new species is dedicated to Edita Müller, spouse of Günter C. Müller, organiser of the extensive insect sampling project in Mali.

**Distribution.** *Antheua editae* **sp. nov.** is known exclusively from dry savannahs of Mali and Senegal.



**Figure 101.** Distribution of *Antheua editae* **sp. nov.**

***Antheua croceipuncta* Hampson, 1910**

Habitus: Figs 102a–l, Genitalia: Figs 103a–f, Distribution map: Fig. 104.

*Antheua croceipuncta* Hampson, 1910, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (8th series) **5**: 474.

Holotype: ♂, [Zimbabwe], Mt. Chirinda [= Mt. Selinda, ca. 20°27'S, 32°43'E] / Gazaland. / Nov. 1901 / C.A.K. Marshall (in coll. NHMUK).

## Synonyms:

*Antheua basipuncta* Hampson, 1910

*The Annals and Magazine of Natural History including Zoology, Botany, and Geology (8th series)* **5**: 474.

Holotype: ♀, [Zimbabwe], Mashonaland, 1903, H.B. Dobbie (in coll. NHMUK).

*Antheua rodeosemena* Bethune-Baker, 1911

*The Annals and Magazine of Natural History including Zoology, Botany, and Geology (8th series)* **7**: 554.

Holotype: ♂, N. Angola, N'Dalla Tando [= N'dalatando, ca. 9°18'S, 14°55'E], 2700 ft., 30.xi.1908, Dr. W.J. Ansorge (in coll. NHMUK).

*Antheua birbirana* Viette, 1954, **syn. nov.**

*Anales du Musée du Congo Belge Tervuren (Belgique) in 4°. Série Sciences Zoologiques* **1**: 556; fig. 10.

Holotype: ♀, [Ethiopia], Abyssinie, course moyen du Birbir Youbdo [ca. 8°23'N, 35°48'E], 8.vi.1926 (in coll. MNHN).

**Material examined** (large series of both sexes).

**Angola.** 2 ♂♂, N'Dalla Tando, 2,700 feet, 30.xi.1908, leg. Dr. W.J. Ansorge, GS: LG 5237 (ANHRT). 3 ♂♂, Huila Prov., 5km N Camawa, 14°47.865'S, 14°13.633'E, 29.xi.2013, 1434m, leg. Naumann, Ott & Sulak, GS: MWM 35.212 (ANHRT, CAS). 4 ♂♂, prov. Cuanza Sul, 26 km E Cassongue, 11°52.257'S, 15°09.320'E, 1650m, 28.iii.2014, GS: MWM 35.210 (ANHRT, CAS). 1 ♂, Prov. Huambo, 2 km S Calanque, 12°52.214'S, 15°28.126'E, 1970m, 27.iii.2014, leg. Sulak, Naumann & Ott (ANHRT). 1 ♀, Gamba, Bihé, i.1935, R. Braun (NHMUK). **DRC.** 1 ♂, Lumbumbashi, 3.ii.1924, Ch. Seidel (RMCA). 1 ♂, Luena, 22.xi.1984, leg. Th. Bouyer (RMCA). **Kenya.** 6 ♂♂, 2 ♀♀, Kibwezi, 700 m, 15–31.xii.2000, leg. H. Politzar, GS: MWM 35.214 ♀, MWM 35.215 ♀ (ANHRT, ZSM); 1 ♂, South Coast, Marenche Forest, 0m, 1–20.ix.2001, leg. Dr. Politzar; 1 ♂, Narok Region, Lemek, 60 km W Narok, 20–25.iii.2002, leg. Dr. Politzar (ANHRT). **Malawi.** 1 ♂, Chitipa District, Jembya Reserve, 18 km SSE Chisenga, 10°08'S, 33°27'E, 1870m, 1–10.i.1989, leg. J. Rawlins & S. Thompson (CMNH). **Sudan.** 1 ♀, Prov. Kordofan, Kadugli, 1.vii.1962, leg. H. Schmutterer (ZSM). **Tanzania.** 1 ♂, 1 ♀, Iringa Region, Kipengere Mts., Lugenge Moorland, 2060m, 9°24.864'S, 34°34.822'E, 16.xii.2005, (Ph. Darge); 1 ♂, Ruvuma Region, Kitai savanna, 1020m, 10°42.40'S, 35°12.339'E, 24.iii., Ph. Darge, GS: MWM 23.036; 3 ♂♂, Ruvuma Region, W of Mbinga, 1506m, 11°03.325'S, 034°56.684'E, 25.iii.2006, Ph. Darge; 1 ♂, Ruvuma Region, SE of Magingo, savannah, 1030m, 10°02.258'S, 034°38.945'E, 26.iii.2006, Ph. Darge; 1 ♂, Iringa Region, Njombe District, Itago Forest, Utengule village, iii.2008, local coll.; 5 ♂♂, Iringa Region, Kidungala savannah, 1754m, 09°08.523'S, 034°37.531'E, 3.i.2011, Ph. Darge (ANHRT, MWM/ZSM). **Zambia.** Long series of ♂♂, Jiwundu Swamp, (Miombo/Riverine forest mosaic), 11°51'54"S, 25°33'20"E, 1340m, 21–24.xi.2014, 25–30.x.2017, 29.x.–4.xi.2018, MV Light Trap, Aristophanous, M., Carter, M., Dérozier, V., László, G., Lloyd, A., Miles, W., Oram, D., Smith, R., Takano, H. leg., GS: LG 4361, ANHRT 00404; 4 ♂♂, Kambishi School, S11°54'42", E25°28'50", 1346m, 10–13.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 1 ♂, Hillwood, Ikelenge, S11°16'02", E24°18'59", 1400m, 17–24.iii.2013, Light Trap, leg. Smith, R., Takano, H.; 1 ♂, same locality, 23–30.xi.2019, Bashford, M., Miles, W., Mulvaney, L., Smith, R. leg.; 1 ♂, Camp near Kanyama, (Miombo/Riverine/Dambo mosaic), 11°25'36"S, 24°40'00"E, 1375m, 4–7.xii.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 2 ♂♂, Lumangwe Falls, Kalungwishi River, S09°32'33", E29°23'17", 1187m, 4–7.ii.2019, MV Light Trap, Dérozier, V., Mulvaney, L., Smith, R., Takano, H. leg.; 1 ♂, Chitunta Plain (Miombo/Dambo mosaic), 11°29'12"S, 24°24'18"E, 1396m, 10–16.xii.2020, MV Light Trap, Chizuwa, D., Choongo, W. leg.; 1 ♀, same locality, 29.xi.–4.xii.2019, Bashford, M., Miles, W., Mulvaney, L. leg.; 2 ♂♂, Mutinondo Wilderness Area, Mpika, Northern Prov., S12°27'06", E31°17'30", 1460m, 14–17.ii.2019, MV light trap, Dérozier, V., Mulvaney, L., Takano, H. leg.; 6 ♂♂, 1 ♀, same site, 15–17.xii.2023, László, G., Morgan, L., Volynkin, A. leg.; 5 ♂♂, Kapishya Hot Springs, Shiwa N'gandu Estate, S11°10'13", E31°36'00", 1437m, xii.2014, i.2015, i–iii. 2016, i–iii. 2017, Harvey, M.T., Miles, W., Oram, D., Smith, L., Smith, R., Takano, H. leg.; 1 ♂, North-western Province, Mutande Region, Georgie's Bar & Grill, 12°24'02.5"S, 26°15'28.7"E, 1250m, 1–9.i.2019, Murzin, S. leg.; 2 ♂♂, Muchinga Province, 30 km N of Mpika,

Danger Hill, 11°37'38"S, 31°33'56"E, 1684m, 13–15.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A. leg. (ANHRT). 1 ♀, Solwezi, xi.1917, H.C. Dollman (NHMUK). **Zimbabwe.** 1 ♂, Harare, 24.xii.1966, leg. A.J. Duke. 1 ♀, Harare, 31.xii.1917, leg. A.J.T. Janse. 1 ♂, Broken Hill, 24.ii.1950, N. Mitton (TMSA).



**Figure 102. *Antheua croceipuncta*, adults.** a) ♂, Zimbabwe, Mt. Selinda, holotype (NHMUK). b) ♀, Zimbabwe, Mashonaland, holotype of *Antheua basipuncta* (NHMUK). c) ♂, Zimbabwe, Mashonaland, paratype of *Antheua basipuncta* (NHMUK). d) ♀, Ethiopia, Birbir river, Youbdo, holotype of *Antheua birbirana* (MNHN). e) ♀, Zimbabwe, Harare (TMSA). f) ♂, Zimbabwe, Harare (TMSA). g) ♂, Angola, N'dalatando, holotype of *Antheua rodeosemena* (NHMUK). h) ♀, Kenya, Kibwezi (GS: MWM 35.214, CAS). i) ♂, Malawi, Chitipa District, Jembya Reserve (CMNH). j) ♂, Angola, Huila prov. Camawa (CAS). k) ♀, Sudan, Kordofan, Kadugli (ZSM). l) ♂, DRC, Luena (RMCA).

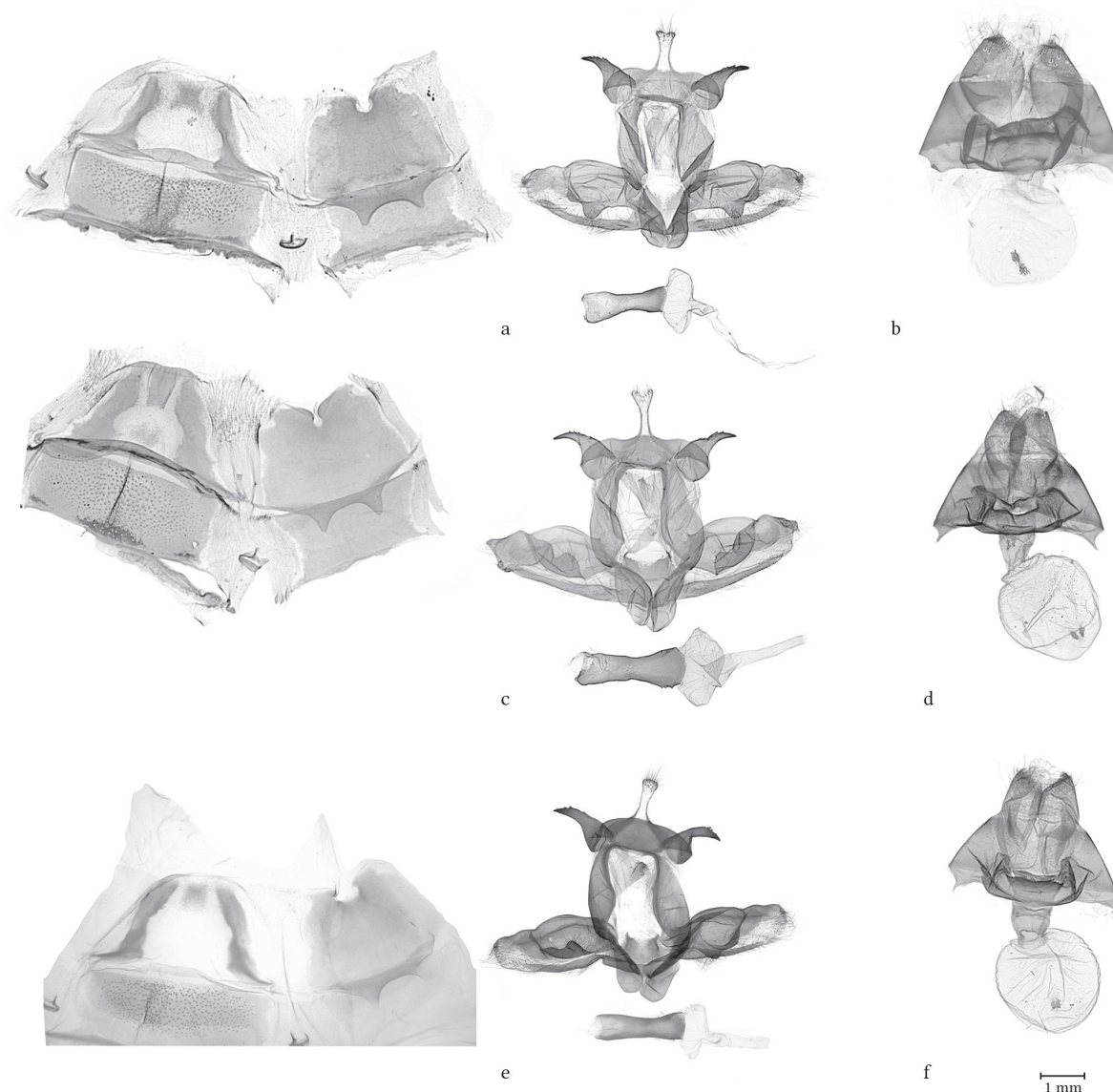
**Diagnosis.** Forewing length is 19–25 mm in males, and 22–27 mm in females. *Antheua croceipuncta* is characterised by the forewing antemedial lines represented by contrasting red dots. Similar dots can often be found on the mesothorax. This species exhibits considerable variability in forewing colour, ranging from a deep lemon yellow to a pale yellowish white; in some cases, the forewing spots may be pale orange. The hindwings of males are white to yellowish-white. Additional two species, *A. magnipuncta* **sp. nov.** and *A. albida*, share similar facies with *A. croceipuncta*; however, the latter species has a noticeably more pointed forewing, *A. albida* displays darker, rather pale ochreous or greyish hindwings and *A. magnipuncta* **sp. nov.** exhibits considerably larger and more contrasting forewing markings. The females have darker hindwings than the males, featuring a contrasting yellow fringe.

The male genitalia have a relatively short and slim uncus with a bilobed tip. The socii are broad basally, then gradually tapered, slightly arched, elongate triangular with serrate posterior margin. The



valvae are short (shorter than in *A. magnipuncta* **sp. nov.** or *A. albida*) and have a broadly dilated, somewhat bulbous costal lobe (editum); the ampulla has two short, rounded projections. The phallus is relatively short and thin, without a modified carina; the endophallus is very short and inflated proximally with two basal diverticula. The posterior margin of the eighth sternite displays a circular notch of variable size.

The female genitalia have an expansive eighth segment, a broad, proximally slightly tapered antrum replacing entirely the ductus bursae. The corpus bursae lacks distal sclerotization but possesses a small amorphous signum.



**Figure 103. *Antheua croceipuncta*, genitalia.** **a)** ♂, Angola, prov. Cuanza Sul, 26 km E Cassongue (GS: MWM 35.210, CAS). **b)** ♀, Tanzania, Iringa Region, Kipengere Mts., Lugenge Moorland (GS: MWM 22.803, CAS). **c)** ♂, Zambia, Jiwundu Swamp (GS: ANHRT 00404, ANHRT). **d)** ♀, Kenya, Kibwezi (GS: MWM 35.214, CAS). **e)** ♂, Angola, N'dalatando (GS: LG 5237, ANHRT). **f)** ♀, Kenya, Kibwezi (GS: MWM 35.215, CAS).

**Taxonomic notes.** The holotype of *Antheua birbirana* exhibits characteristics that fall within the variation range of *A. croceipuncta* and does not present any distinct diagnostic features. The authors were unable to examine the genitalia of the female holotype of *A. birbirana* or access topotypical specimens for comparative analysis. However, since the type locality of this taxon lies within the distribution range of *A. croceipuncta*, we propose that *A. birbirana* **syn. nov.** is conspecific with *A. croceipuncta*.

**Distribution.** This species is distributed across southern-central and eastern Africa, with confirmed records in Angola, the DRC, Ethiopia, Kenya, Malawi, Sudan, Tanzania, Zambia, and Zimbabwe.

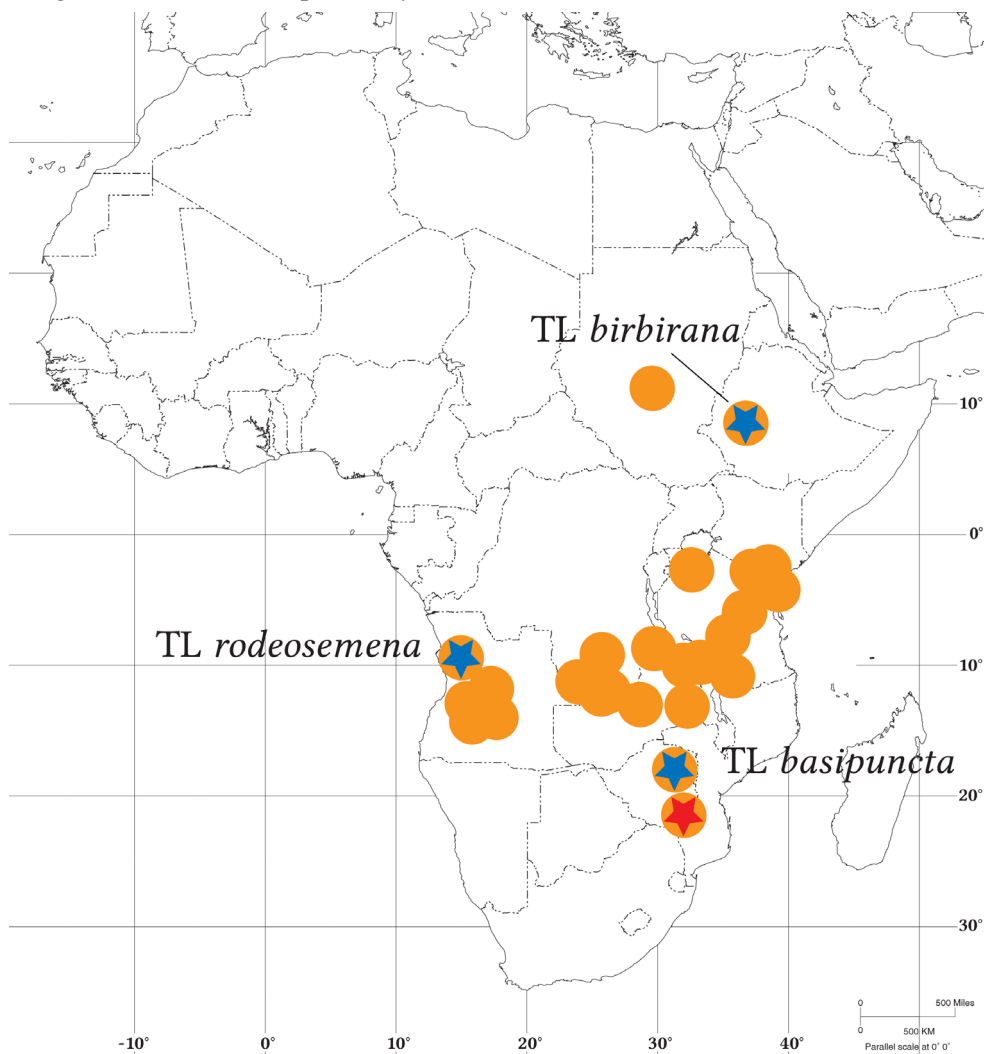


Figure 104. Distribution of *Anthea croceipuncta*.

***Anthea magnipuncta* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:10865EF0-6568-448B-B081-7CD5C0CEAD59>

Habitus: Figs 105a–f, Genitalia: Figs 106a–e, Distribution map: Fig. 107.

**Holotype.** ♂, “SIERRA LEONE 420 m / Loma Mountains / farmland/forest mosaic / N09°07'47", W11°05'24" / 11–15.vi.2016 Light Trap / leg. Takano, Miles & Goff / ANHRT: 2017.18” // “ANHRTUK / 00034203” // GS: ANHRT 00407 (ANHRT).

**Paratypes** (93 ♂♂, 14 ♀♀).

**Burkina Faso.** 19 ♂♂, 4 ♀♀, Folonzo am Fluß, Comoe, 13.iv.1985, 10.viii.1983, 20.iv.1984, 19.x.1984, 13.iv.1985, 17.ix.1985, 12.x.1985, 9.xi.1985, 9.ix.1985, 7.ix.1985, leg. Dr. Politzar, GS: MWM 35.217; 1 ♂, Bobo Dioulesso, 10.ix.1984, leg. Dr. Politzar (ANHRT, MWM/ZSM). **Guinea.** 1 ♂, Conakri, Macenta Prefecture, Ziama Forest, 550m, x.2017, leg. G. Petrányi & GC Müller, & VD Kravchenko (CAS); 1 ♂, 619km ESE of Conakry, Nzerekore Region, Prefecture de Lola, Ziela env., 540–600m, x.2017, 7°42'N, 8°21'W, local collectors leg. (ANHRT). **Ivory Coast.** 1 ♀, Comoe N.P., Kakpin, 8°39'N, 3°46'E, ix.2001, leg. P. Moretto (CAS); 3 ♂♂, Ferkessédougou, 12.x.1982, leg. Dr. Politzar, GS: MWM 35.216; 2 ♂♂, Ferke, 12.x.1982, leg. Dr. Politzar (MWM/ZSM); 3 ♂♂, 1 ♀, Gbando Village (Sudanian forest with Gallery forest) 417m, 9°34'17.1"N, 6°41'1.1"W, 15–22.vi.2018,

actinic and MV light trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg. (ANHRT); 1 ♀, Denguele Classified Forest (sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 479m, 6–14.vi.2018, LepiLED Light Trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg. (ANHRT). **Mali.** 1 ♂, 80 km SW of Bamako, near Ourga Forest, 420m, ix.2015, leg. Müller & Kravchenko, GS: MWM 35.211 (MWM/ZSM); 8 ♂♂, Ouronina, 80 km SW of Bamako, near Keniroba/Niger, 360m, ix.2013 (CAS); 13 ♂♂, Kangaba Distr., 10 km East Kangaba city, 80 km SW Bamako, x.2011, leg. USTTB team (CAS). 1 ♂, Kangaba District, 2.5 km NW of Kangaba, mature deciduous forest/savannah mosaic, ca. 450m, vii.2007, local coll. leg.; 2 ♂♂, 80 km SW of Bamako, near Ouronina, 12°6'N, 8°24'W, ca. 350m, v.2014, local coll. leg.; 1 ♂, same site and collector, vii.2014; 1 ♂, same site and collector, viii.2014; 1 ♂, Monts Mandingu, SW Sandama, 550–650m, mosaic of savannah and mature deciduous forest, iv.2009 (ANHRT). **Nigeria.** 2 ♂♂, Mokwa, 25.x.1970, 27.ix.1971, leg. Dr. Politzar, GS: MWM 35.213; 1 ♀, Kaduna, 18.vi.1979 (MWM/ZSM). **Senegal.** 1 ♂, 5 miles W Diouguel, natural riverine forest / grass and bushland, early to mid July 1985, leg. H. Friend (CAS). **Togo.** 21 ♂♂, 6 ♀♀, Fazao-Malfakassa NP, Mare aux crocodiles campsite (Sudanian savannah/dry forest), 8°44'58.8"N, 0°48'51.8"E, 505m, 26.viii.–7.ix.2018, actinic, MV Light Trap and general coll., Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., GS: ANHRT 00405 ♂, ANHRT 00406 ♀; 11 ♂♂, Fazao-Malfakassa NP, Point de vue campsite (Sudanian savannah), 8°48'50"N, 0°49'3.2"E, 415m, 16–23.viii.2018, actinic, LepiLED and MV light trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg. (ANHRT).

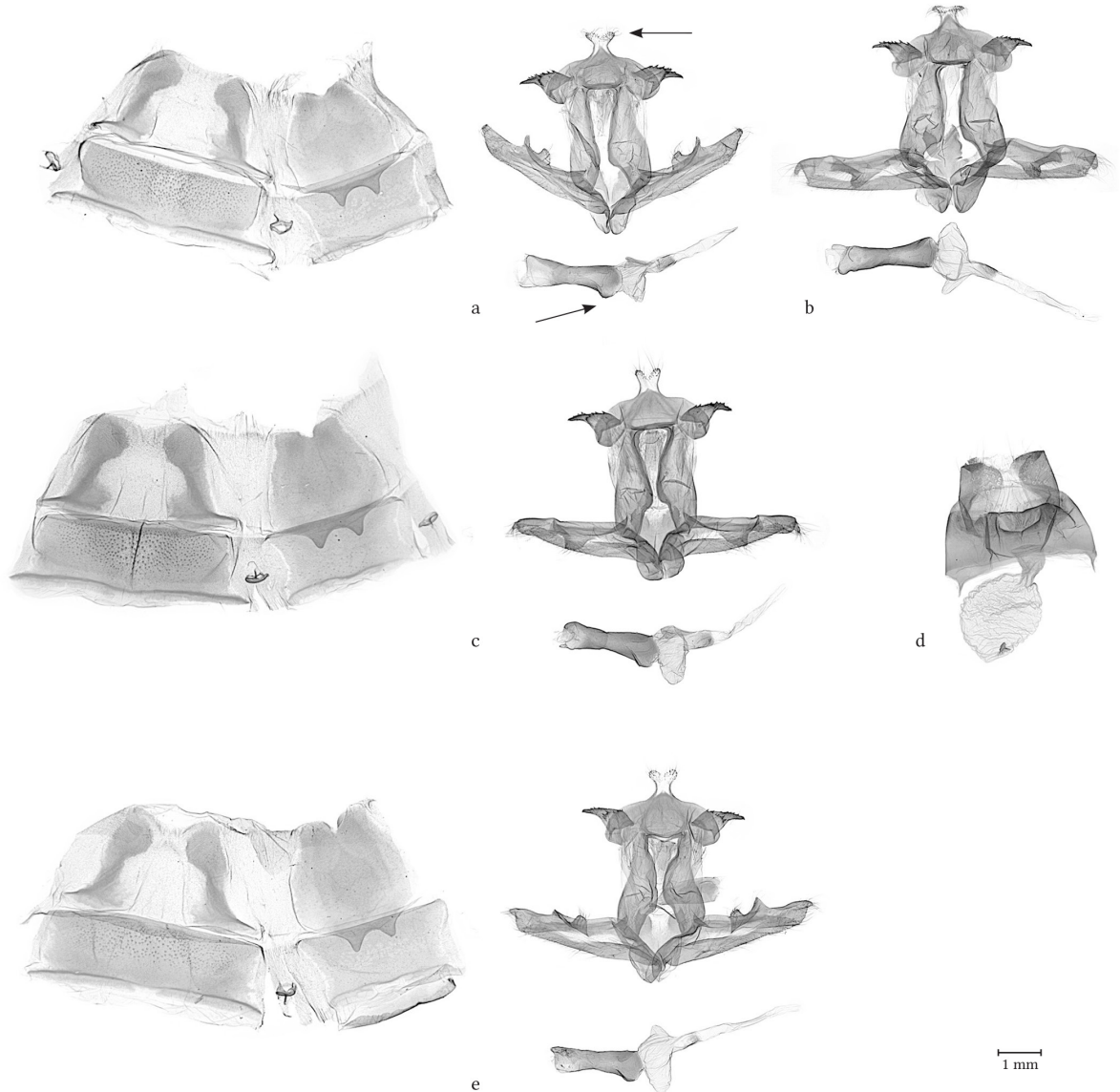
**Diagnosis.** Forewing length is 17–20 mm in males, and 20–25 mm in females. This new species is similar to *A. croceipuncta* but is somewhat larger, and the ante- and postmedial transverse lines consist of larger, more quadrangular patches that can sometimes appear dash-like. Unlike *A. croceipuncta*, the red basal spots on the forewings were not observed in the *A. magnipuncta* **sp. nov.** type series. Additionally, the variation within this new species is more limited compared to *A. croceipuncta*. The forewings are bright yellow, and the hindwings are whitish in males. In contrast, females have darker, orange-brown forewings and brownish-grey hindwings.



**Figure 105. *Antheua magnipuncta* sp. nov., adults.** a) ♂, Sierra Leone, Louma Mountains, holotype (GS: ANHRT 00407, ANHRT). b) ♀, Ivory Coast, Comoé National Park, Kakpin, paratype (CAS). c) ♀, Togo, Fazao-Malfakassa NP, paratype (GS: ANHRT 00406, ANHRT). d) ♂, Burkina Faso, Folonzo am Fluß, Comoa, paratype (GS: MWM 35.217, MWM/ZSM). e) ♂, Ivory Coast, Ferke, paratype (GS: MWM 35.216, MWM/ZSM). f) ♂, Nigeria, Mokwa, paratype (GS: MWM 35.213, MWM/ZSM).

In the male genitalia, *A. magnipuncta* **sp. nov.** has a bifid uncus that is considerably shorter and broader than that of *A. croceipuncta*, with a more pronounced dilation at the apex. The socii of this new species are notably shorter, and their posterior margin is more roughly serrated compared to its congener. The valva of *A. magnipuncta* **sp. nov.** is distinctly narrower and lacks the bulbous dilation of the costa found in *A. croceipuncta*. Additionally, the ampulla processes are also narrower, while the apical lobe of the valva is similarly short in both species. The phallus of *A. magnipuncta* **sp. nov.** is slightly longer

than that of *A. croceipuncta* and features a hump-like carinal lobe. The endophallus contains two basal diverticula of different sizes in the new species, whereas in *A. croceipuncta*, the diverticula are almost equal in size and significantly larger overall. The eighth sternite has a short, V-shaped, somewhat variable posteromedial notch, while this feature is disc-shaped in the related species. Furthermore, the eighth tergite lacks the posteromedial sclerotized field that is present in *A. croceipuncta*.



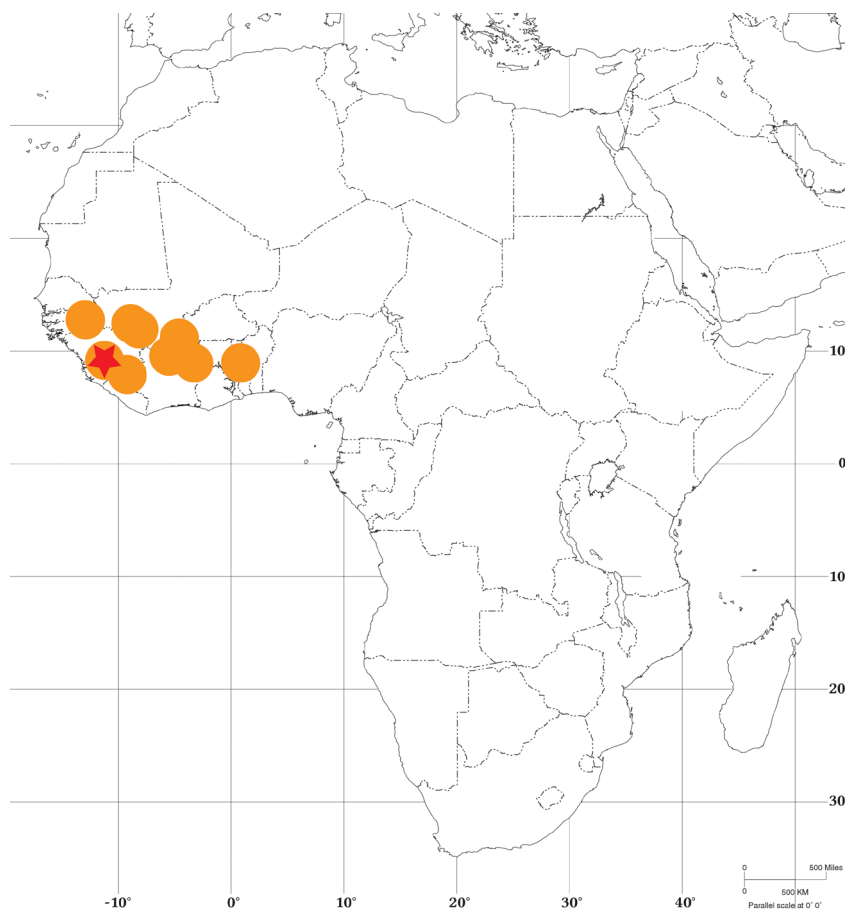
**Figure 106. *Antheua magnipuncta* sp. nov., genitalia.** **a)** ♂, Sierra Leone, Louma Mountains, holotype (GS: ANHRT 00407, ANHRT). **b)** ♂, Mali, 80 km SW of Bamako, Ouronina (GS: MWM 35.211, MWM/ZSM). **c)** ♀, Togo, Fazao-Malfakassa NP, paratype (GS: ANHRT 00406, ANHRT). **d)** ♂, Ivory Coast, Ferke, paratype (GS: MWM 35.216, MWM/ZSM). **e)** ♂, Nigeria, Mokwa, paratype (GS: MWM 35.213, MWM/ZSM).

In terms of female genitalia, *A. magnipuncta* sp. nov. resembles *A. croceipuncta*; however, the ostium bursae is rectangularly notched, in contrast to being nearly straight in the related species. The antrum is less heavily sclerotized, and the ductus bursae is narrower in *A. magnipuncta* sp. nov. compared to its relative. In the new species, the distal sclerotization of the corpus bursae is absent, and the signum bursae is small and irregularly shaped, similar to that in *A. croceipuncta*.

**Etymology.** The specific epithet is a compound word derived from the Latin adjective “magnus” meaning “large” and Latin noun “punctum” meaning “dot”, referring to the large, contrasting dots of the ante- and postmedial lines of the forewing observed in this new species.



**Distribution.** *Antheua magnipuncta* **sp. nov.** is a West African vicariant of *A. croceipuncta*, with confirmed records from Burkina Faso, Guinea, Ivory Coast, Mali, Nigeria, Senegal, Sierra Leone, and Togo.



**Figure 107.** Distribution of *Antheua magnipuncta* **sp. nov.**

***Antheua albida* Hampson, 1910**

Habitus: Figs 108a–i, Genitalia: Figs 109a–f, Distribution map: Fig. 110.

*Antheua albida* Hampson, 1910, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (8th series) **5**: 475.

Holotype: ♀, [Zimbabwe], Mashonaland / Salisbury. [= Harare, 18°00'S, 31°27'E] / G.A.K. Marshall (in coll. NHMUK).

**Material examined** (large series of both sexes).

**Angola.** 1 ♂, N'Dalla Tando, 2,700 feet, 23.xi.1908, Dr. W. J. Ansorge, GS: LG 5238 (ANHRT). **DRC.** 1 ♀, Katanga: Buttama, 18.iv.1923, leg. Ch. Seydel (RMCA). 1 ♀, Kafakumba, ix.1933 (RMCA). **Tanzania.** 5 ♂♂, 1 ♀, Njombe, Masaulwa, 2700m, 09°07'S, 34°35'E, iii.–iv.2013, local collectors leg., GS: ANHRT 02460 ♂, ANHRT 02461 ♂, ANHRT 02462 ♀ (ANHRT). **Zambia.** 3 ♂♂, 1 ♀, Chilambwe Falls, Kafubu River, S09°50'13", E30°43'35", 1420m, 8–9.xi.2014, Light Trap, leg. Smith, Takano & Oram, GS: ANHRT 00403 ♀; 1 ♂, Lumangwe Falls, Kalungwishi River, S09°32'33", E29°23'17", 1187m, 5–7.xi.2014, Light Trap leg. Smith, Takano & Oram; 1 ♂, same locality, 20–22.xi.2012, leg. Smith, R., Takano, H.; 6 ♂♂, Kankonde Camp, Mutinondo Stream, S12°23'29", E31°19'24", 1400m, 12–15.xi.2014, Light Trap, leg. Smith, R. & Takano, H.; 5 ♂♂, Kambishi School, S11°54'42", E25°28'50", 1346m, 10–13.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 2 ♂♂, Mumbuluma Falls, Luamfumu River, S10°55'45", E28°44'11", 1180m, 1–2.xi.2014, Light Trap, leg. Smith, Takano & Oram; 1 ♂, Nyangombe Falls, (Miombo/Riverine forest

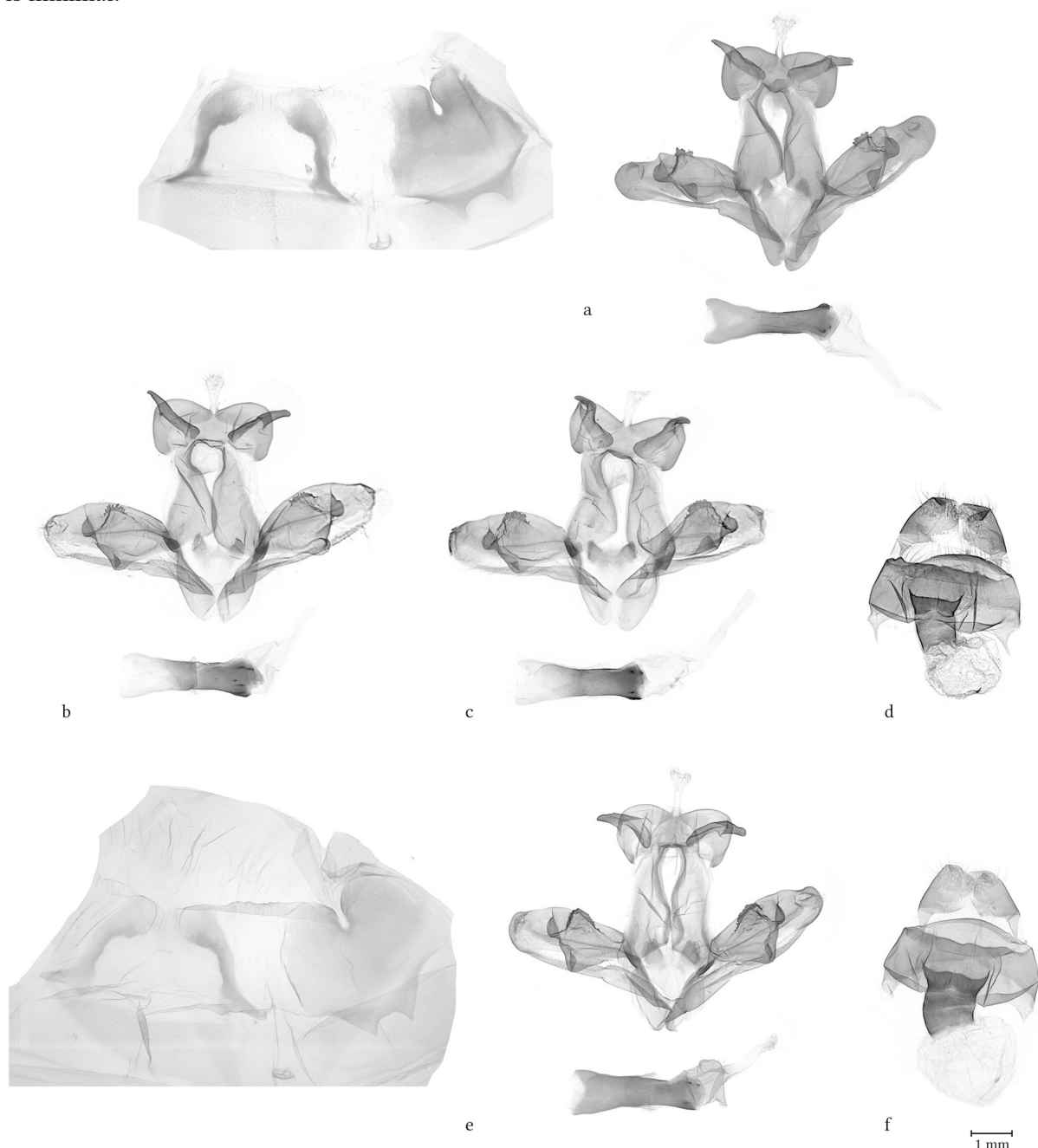
mosaic), 11°48'25"S, 24°32'12"E, 1300m, 17–23.xi.2019, LepiLED Light Trap, Bashford, M., Miles, W., Mulvaney, R., Smith, R. leg.; 2 ♂♂, Chitunta Plain (Miombo/Dambo mosaic), 11°29'12"S, 24°24'18"E, 1396m, 29.xi.–4.xii.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L. leg.; 1 ♂, Hillwood, Ikelenge (Miombo/Riverine forest mosaic), S11°16'02", E24°18'59", 1400m, 23–30.xi.2019, MV Light Trap, Bashford, M., Miles, W., Mulvaney, L., Smith, R. leg.; 1 ♂, Nkwaji, Mwinilunga S11°36'22", E24°33'17" 1316m, 29.x.–3.xi.2013, Light Trap, leg. Smith, R., Takano, H., Chmurova, L., Smith, L.; 1 ♀, Ndole Bay, on the shores of the lake Tanganyika, S08°28'42", E30°26'59", 777m, 23–25.xi.2012, Light Trap, leg. Smith, R. & Takano, H., GS: LG 4362; long series of both sexes, Jiwundu Swamp, S11°51'54", E25°33'20", 1340m, 20–22.x.2014, 21–24.xi.2014, 25–30.x.2017, 29.x.–4.xi.2018, actinic, LepiLED and MV light trap, leg. Aristophanous, M., Carter, M., Dérozier, V., László, Lloyd, A., G., Miles, W., Oram, D., Smith, R., Takano, H., GS: LG 4360 ♂, LG 4354 ♂; 7 ♂♂, 1 ♀, Muchinga Prov., Benyanga village, 10°40'41"S, 33°27'45"E, 1250m, 7–12.xii.2023, actinic and MV light trap, László, G., Morgan, L., Volynkin, A. leg.; Muchinga Prov., Muyombe, Mama Muwowo's Lodge, 10°32'40"S, 33°26'05"E, 1230m, 6–7.xii.2023, MV light trap, László, G., Morgan, L., Volynkin, A. leg. (ANHRT). 1 ♀, Ndola, Fatima School, 9.i.1973, leg. E. Hausmann (ZSM). 1 ♀, 50km E of Mwinilunga, 28.x.2008. leg. Snizhek (MWM/ZSM). **Zimbabwe.** 1 ♂, Mashonaland, H.B. Dobbie, paratype (NHMUK). 1 ♂, 1 ♀, Harare, from larva f/p. *Eriosema*, xi.1963, A.J. Duke (TMSA).



**Figure 108. *Antheua albida* adults.** **a)** ♀, Zimbabwe, Harare, holotype (NHMUK). **b)** ♂, Zimbabwe, Mashonaland, paratype (NHMUK). **c)** ♀, Zimbabwe, Harare, ex larva (TMSA). **d)** ♂, Zambia, Jiwundu Swamp (GS: LG 4354, ANHRT). **e)** ♀, Zambia, Chilambwe Falls, Kafubu River (GS: ANHRT 00403, ANHRT). **f)** ♂, Angola, N'dalatando (ANHRT). **g)** ♀, Zambia, 50 km E of Mwinilunga (GS: MWM 01-06, CAS). **h)** ♂, Zambia, Jiwundu Swamp (GS: LG 4360, ANHRT). **i)** ♀, Zambia, Tanganyika Lake, Ndole Bay (GS: LG 4362, ANHRT).

**Diagnosis.** The forewing length ranges from 20 to 23 mm in males and from 23 to 27 mm in females. *Antheua albida* resembles *A. croceipuncta* and *A. magnipuncta* **sp. nov.** but can be distinguished by its broader forewings, paler ground color, and less contrasting markings, which are often fully reduced. A series of reared adults from Harare, Zimbabwe, display whitish-tinged forewing veins, similar to the holotype. There is a significant range of individual variability in wing colouration, which can vary from

yellowish-white to lemon. The hindwings may be white, yellowish, or even blackish. Sexual dimorphism is minimal.



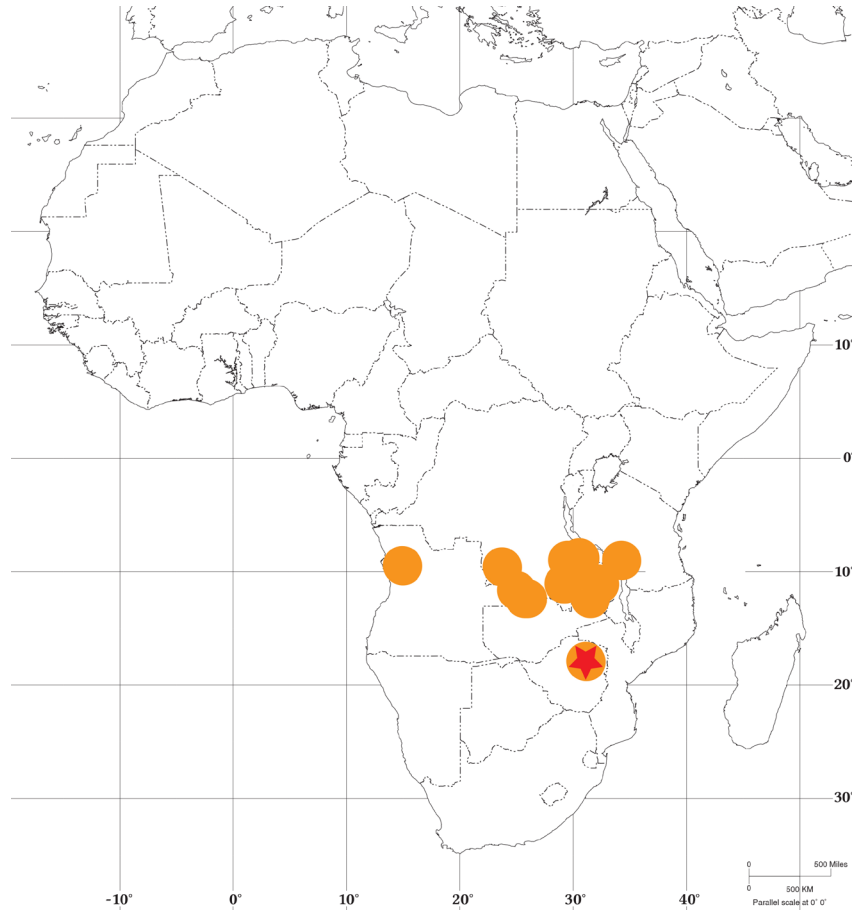
**Figure 109. *Antheua albida*, genitalia.** **a)** ♂, Angola, N'dalatando (GS: LG 5238, ANHRT). **b)** ♂, Zambia, Jiwundu Swamp (GS: LG 4360, ANHRT). **c)** ♂, Zambia, Jiwundu Swamp (GS: LG 4354, ANHRT). **d)** ♀, Zambia, Tanganyika Lake, Ndole Bay (GS: LG 4362, ANHRT). **e)** ♂, Zambia, 50 km E of Mwinilunga (GS: MWM 01-06, MWM/ZSM). **f)** ♀, Zambia, Chilambwe Falls, Kafubu River (GS: ANHRT 00403, ANHRT).

In the male genitalia, *A. albida* has a short, slim, apically dilated bifid uncus and highly characteristic socii with an enlarged, rounded base and narrow, digitiform distal process. The moderately enlarged costal lobe (editum) includes three ampulla lobes: one short, crest-like dorsal projection, and two rounded ventral-ventrolateral projections. The phallus is more robust and longer compared to that of *A. croceipuncta*, characterised by a largely dilated coecum and a small rounded hump-like carina.

The overall size of the female genitalia is remarkably small, displaying a short, nearly quadrangular eighth segment, a moderately wide ostium bursae, a short, distally infundibular, proximally quadrangular antrum replacing the ductus bursae in its entire length; additionally, the corpus

bursae is considerably smaller than that of *A. croceipuncta*. Like *A. croceipuncta* and *A. magnipuncta* **sp. nov.**, this species lacks distal sclerotizations of the corpus bursae and features a small, inconspicuous signum bursae.

**Distribution.** This species shows a southern-central and eastern African distribution with confirmed occurrences in Angola, DRC, Tanzania, Zambia, and Zimbabwe.



**Figure 110.** Distribution of *Antheua albida*.

***Antheua aurifodinae* (Distant, 1902)**

Habitus: Figs 111a–h, Genitalia: Figs 112a–d, Distribution map: Fig. 113.

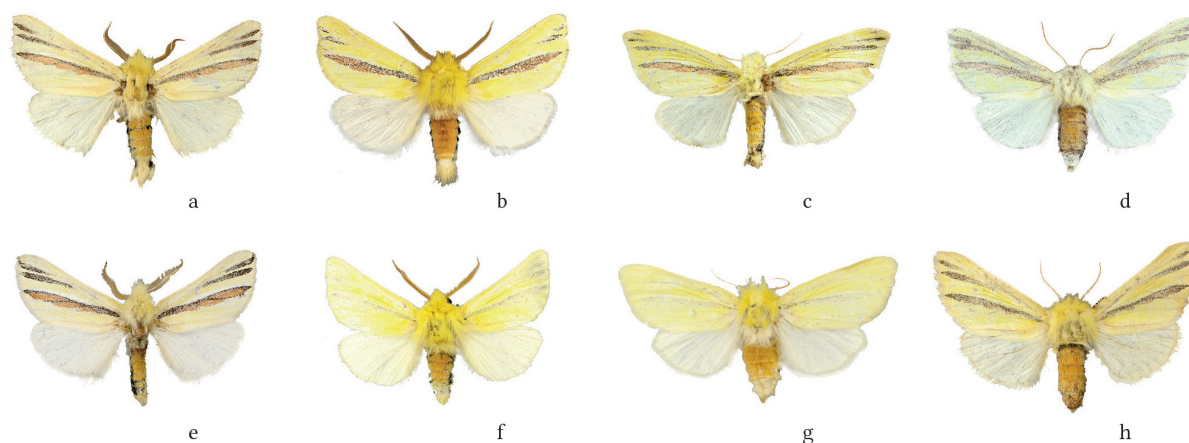
*Rigema aurifodinae* Distant, 1902, *The Entomologist* **35**: 213.

Lectotype: ♂, [RSA], Transvaal [Pretoria, ca. 25°45'S, 28°12'E] (in coll. TMSA).

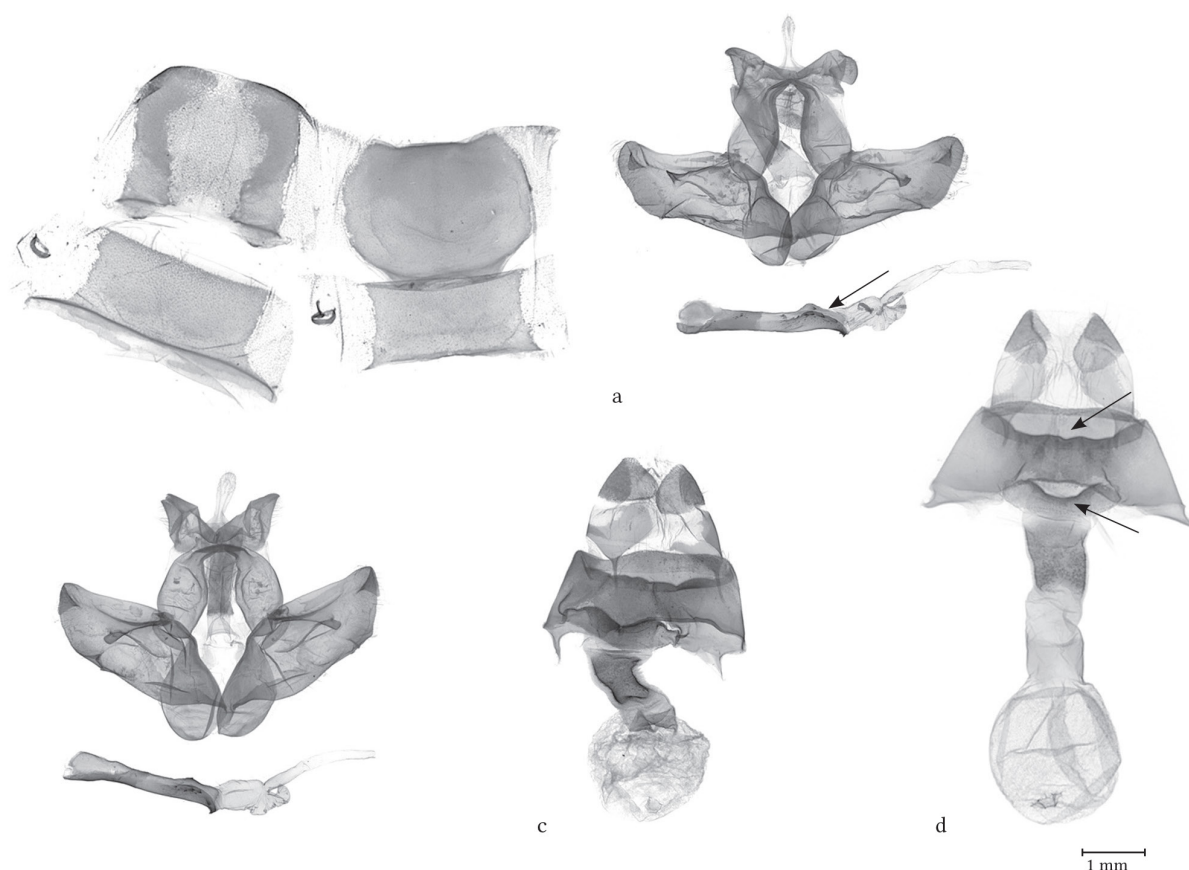
**Material examined** (6 ♂♂, 5 ♀♀).

**Botswana.** 1 ♂, Betschuana Land, 1892 Chr. (MfN). **Eswatini.** 1 ♂, Maldotja, 20.ii.1994, N.J. Duke, GS: TM 17.043 (TMSA). **RSA.** 2 ♂♂, Pretoria, 18.ii.1898, i.1890, leg. C. Swierstra, paralectotypes; 2 ♀♀, Pretoria, xii. 1900, Dr. Breyer, paralectotypes; 2 ♂♂, Natal, Balgowan, 11.x.1950, K.M. Pennington, GS: TMSA 16.873; 1 ♀, Blyde River Nature Reserve, 24.xi.–1.xii.1975, leg. Potgieter & Scoble, GS: TM 16.874 (TMSA). 1 ♀, 3km NEE Lydenburg, 1600m, 12.i.2009, leg. de Freina (MWM/ZSM). **Zimbabwe.** 1 ♀, Darwendale, 17–19.i.1955, leg. D.W. Rorke, GS: TMSA 16.875 (TMSA).





**Figure 111. *Anthea aurifodinae*, adults.** **a)** ♂, RSA, Pretoria, lectotype (TMSA). **b)** ♂, Eswatini, Malolotja (TMSA). **c)** ♀, Botswana (MfN). **d)** ♀, RSA, Limpopo, Lydenburg (MWM/ZSM). **e)** ♂, RSA, Gauteng, Modderfontein (TMSA). **f)** ♂, Eswatini, Malolotja (GS: TM 17.013, TMSA). **g)** ♀, ♀, Zimbabwe, Darwendale, (GS: TM 16.875, TMSA). **h)** ♀, RSA, Pretoria, paralectotype (TMSA).



**Figure 112. *Anthea aurifodinae*, genitalia.** **a)** ♂, RSA, KwaZuluNatal, Balgovan (GS: TM 16.873, TMSA). **b)** ♂, Eswatini, Malolotja (GS: TM 17.013, TMSA). **c)** ♀, RSA, Limpopo, Blyde River Nature Reserve (GS: TM 16.874, TMSA). **d)** ♀, Zimbabwe, Darwendale, (GS: TM 16.875, TMSA).

**Diagnosis.** Forewing length is 16–19 mm in males and 18–20 mm in females. *Anthea aurifodinae* is characterised by a broad, dark longitudinal streak that runs through the middle of the forewing, along with two shorter subapical streaks. The forewing ground colour ranges from lemon-yellow to cream, while the colour of the streaks varies from black to pale violet-brown. The sexual dimorphism is negligible, with the most notable difference being the filiform antennae of females.

The male genitalia of *A. aurifodinae* feature a short, distally slightly dilated, apically rounded digitiform uncus, short triangular socii, conspicuously broad, somewhat rhomboidal valvae (those are noticeably narrower in *A. triloris* **sp. nov.**), a narrow costal plate (editum) of the valva possessing a single, short, rounded ampulla process. The phallus is relatively long, narrow, and straight, with a serrated longitudinal crest of the carina, falcated at the phallus tip, forming a small spine.

The female genitalia display a broad ostium bursae with a shallow V-shaped distal margin, a short sub-quadrangular antrum, a relatively long, broad, sclerotized ductus bursae, and a small, spherical corpus bursae possessing a relatively sizeable U-shaped signum. The distal margin of the 8<sup>th</sup> abdominal segment is wavy.

**Distribution.** This species is distributed in southern Africa, with confirmed records from Botswana, Eswatini, the RSA, and Zimbabwe.



**Figure 113.** Distribution of *Antheua aurifodinae*.

***Antheua triloris* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:C3952996-8336-453C-BEB5-2B667419F2DF>

Habitus: Figs 114a–l, Genitalia: Figs 115a–g, Distribution map: Fig. 116.

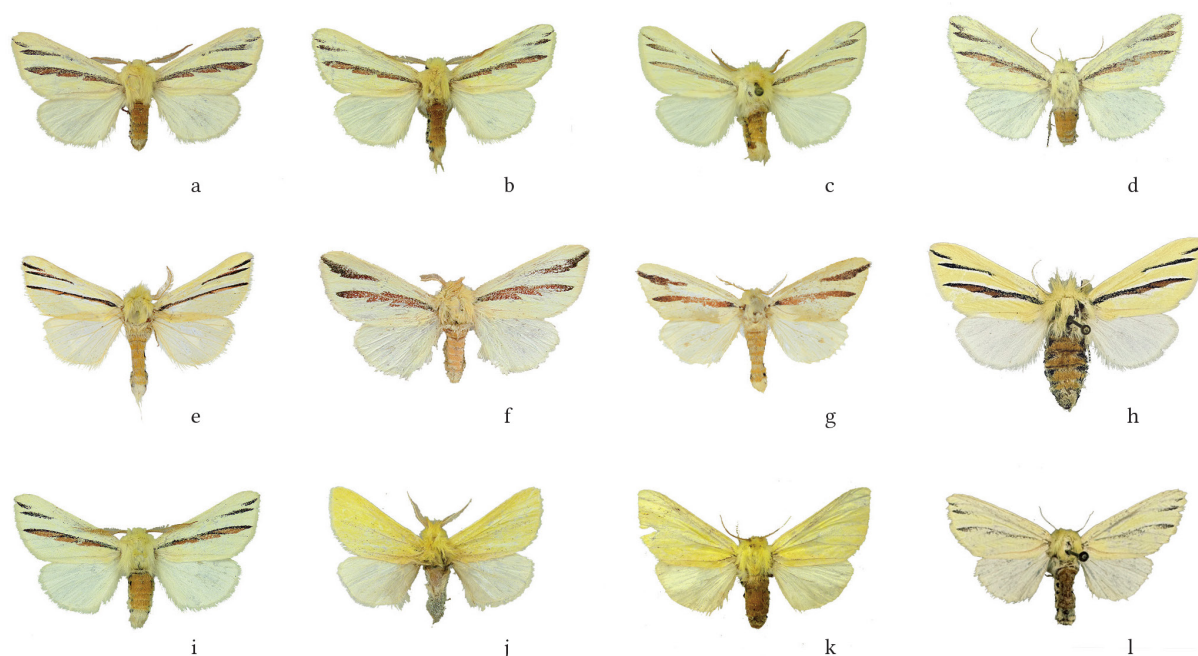
**Holotype:** ♂, “Angola / Huila Prov. / 2 km SSW Negola, 1606m / 14°08'56.1"S, 14°28'20.5"E / 16. xi. 2017 / leg. S. Naumann, E. Ott & H. Sulak” (CAS).

**Paratypes** (15 ♂♂, 4 ♀♀).

**Angola.** 1 ♀, Prov. Benguela, between Cutebo and Caluquembe, 14 km E Cutembo, 965m, 13°46.901'S, 14°00.105'E, 2.iv.2014, leg. Sulak, Naumann & Ott, GS: MWM 35.224; 10 ♂♂, Huila Prov., 2km SSW Negola, 1606m, 14°08'56.1"S, 14°28'20.5"E, 16.xi.2017, leg. S. Naumann, E. Ott & H. Sulak, GS: CSW

01-15, CSW 01-21; 1 ♂, Prov. Huambo, 2km S Calenque, 12°52.214'S, 15°28.126'E, 1970m, 27.iii.2014, leg. Sulak, Naumann & Ott, GS: MWM 35.220 (CAS). **DRC.** 1 ♂, Katanga, Kolwezi, x.1951, leg. V. Allard (RMCA). **Namibia.** 2 ♀♀, Kavango prov., Shamwura Rest camp, 130km W Rundu, 18.0262°S, 20.785096°E, 1090m, 13–31.xii.2013, leg. S. Murzin, GS: MWM 35.220 (CGM). **Tanzania.** 1 ♀, Chunya District, Chunya, 2,650 ft., 20.i.1947, leg. G. Swynnerton, GS: NHMUK014331242 (prepared by G. László) (NHMUK). **Zambia.** 1 ♂, Ndanda, E Mongu, 1090 m, 15°04'44"S, 23°45'59"E, 10–11.xi.2013, light trap, leg. Smith, Takano & Oram, GS: LG 4358; 1 ♂, Lyangu, Liuwa Plain NP, 1035m, 14°46'51"S, 22°34'44"E, 12–15.xi.2013, light trap, leg. Smith, Takano & Oram, GS: LG 4548; 1 ♂, Ikelenge, Hillwood, S11°16'02", E24°18'59", 1400m, 30.x.–3.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg., GS: LG 6598 (ANHRT).

**Diagnosis.** Forewing length is 15–17 mm in males and 18–20 mm in females. *Antheua triloris* **sp. nov.** closely resembles *A. aurifodinae*, featuring a broad longitudinal medial stripe that runs from the base to the termen of the forewing, accompanied by two additional short stripes in the apical area. However, this new species can be distinguished by its lighter yellowish ground colour of the forewings and its noticeably narrower medial stripe, which is often dentate on the ventral margin. The colour of the stripes ranges from black to reddish-brown, their width can vary and the markings can even be entirely absent (Figs 114j, 114k). The hindwings are light yellowish-white, and there is negligible sexual dimorphism in this species.



**Figure 114. *Antheua triloris* sp. nov., adults.** **a)** ♂, Angola, Huila prov., Negola, holotype (CAS). **b)** ♂, Angola, Huila prov., Negola, paratype (CAS). **c)** ♂, Angola, Huila prov., Negola, paratype (GS: CSW 01-15, CAS). **d)** ♀, Angola, prov. Benguela, betw. Cutebo and Caluquembe, paratype (GS: MWM 35.224, CAS). **e)** ♂, Zambia, Lyangu, Liuwa Plain NP, paratype (GS: LG 4548, ANHRT). **f)** ♂, DRC, Katanga, Kolwezi, paratype (RMCA). **g)** ♂, Zambia, Ndanda, E Mongu, paratype (GS: LG 4358, ANHRT). **h)** ♀, Zambia, 50 km E Mwinilunga, paratype (CGM). **i)** ♂, Angola, Huila prov., Negola, paratype (CAS). **j)** ♂, Angola, Huambo prov., Calanque (GS: MWM 35.218, CAS). **k)** ♀, Namibia, Kavango Prov., Shamwura Rest camp, paratype (GS: MWM 35.220, GCM). **l)** ♀, Namibia, Kavango Prov., Shamwura Rest camp, paratype (CGM).

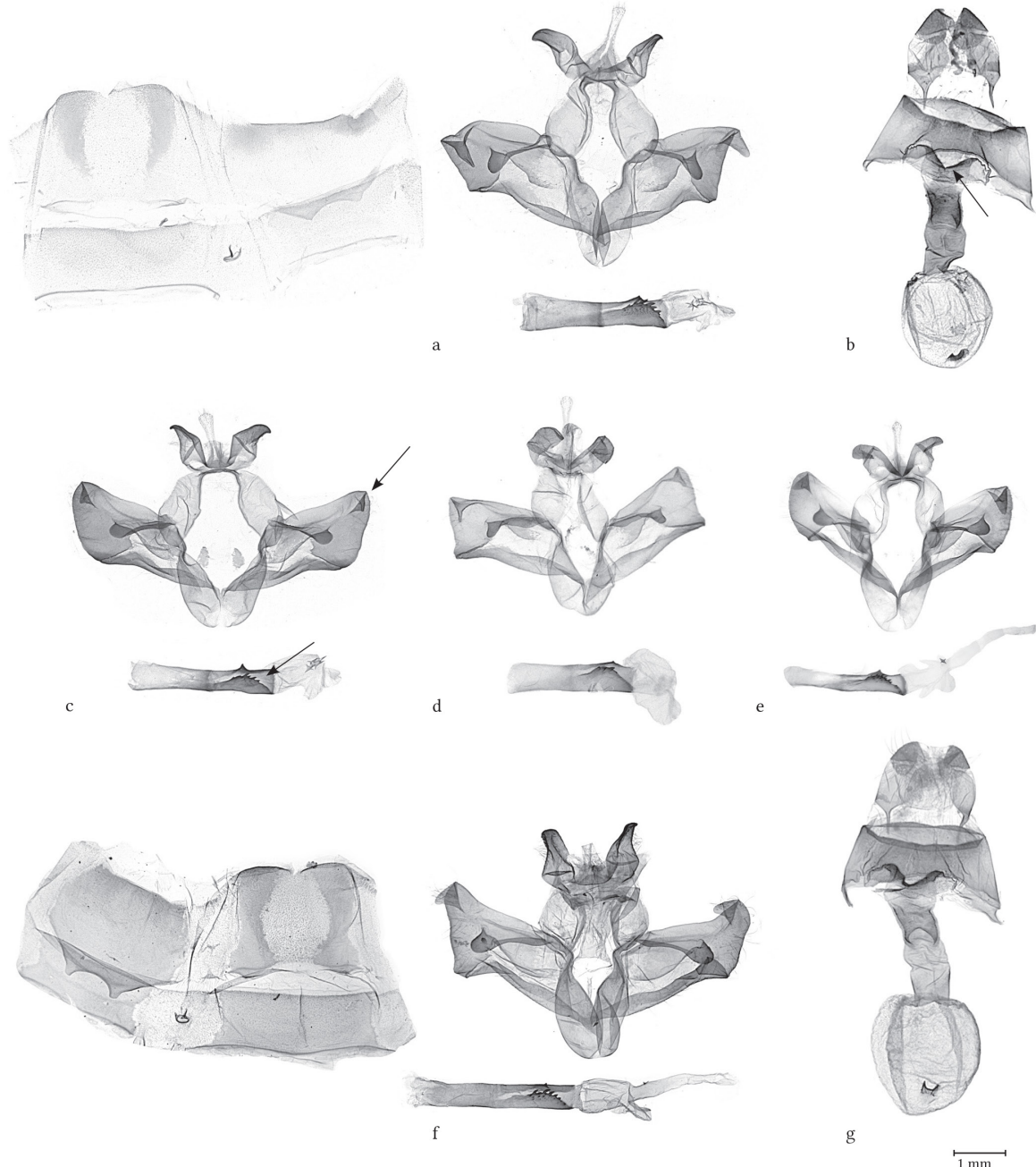
The male genitalia of this new species resemble those of *A. aurifodinae*; however, it has a somewhat longer and narrower uncus, slimmer, more elongate and curved socii, considerably broader, more squarish valvae with a notable ventrodistal dilation and a longer apical lobe, and markedly longer ampulla processes. The phallus of *A. triloris* **sp. nov.** is shorter than that of *A. aurifodinae*, and the



serrated crest of the carina does not have a falcate tip. In terms of endophallus structure, both species are similar, though *A. triloris* **sp. nov.** exhibits a slightly shorter diverticulum.

In the female genitalia, the new species features a narrower ostium bursae with a more deeply notched distal margin, and shorter apophyses anteriores compared to *A. aurifodinae*. The distal margin of the eighth abdominal segment is smooth in *A. triloris* **sp. nov.**, whereas it is wavy in *A. aurifodinae*. Both species possess a small, spherical corpus bursae; however, the signum in *A. triloris* **sp. nov.** is reniform, while in *A. aurifodinae*, it is U-shaped.

**Etymology.** The specific epithet refers to the three longitudinal stripes on the forewing of this new species. The Latin prefix “tri” means “three,” while the Latin noun “lorum” translates to “strap.”

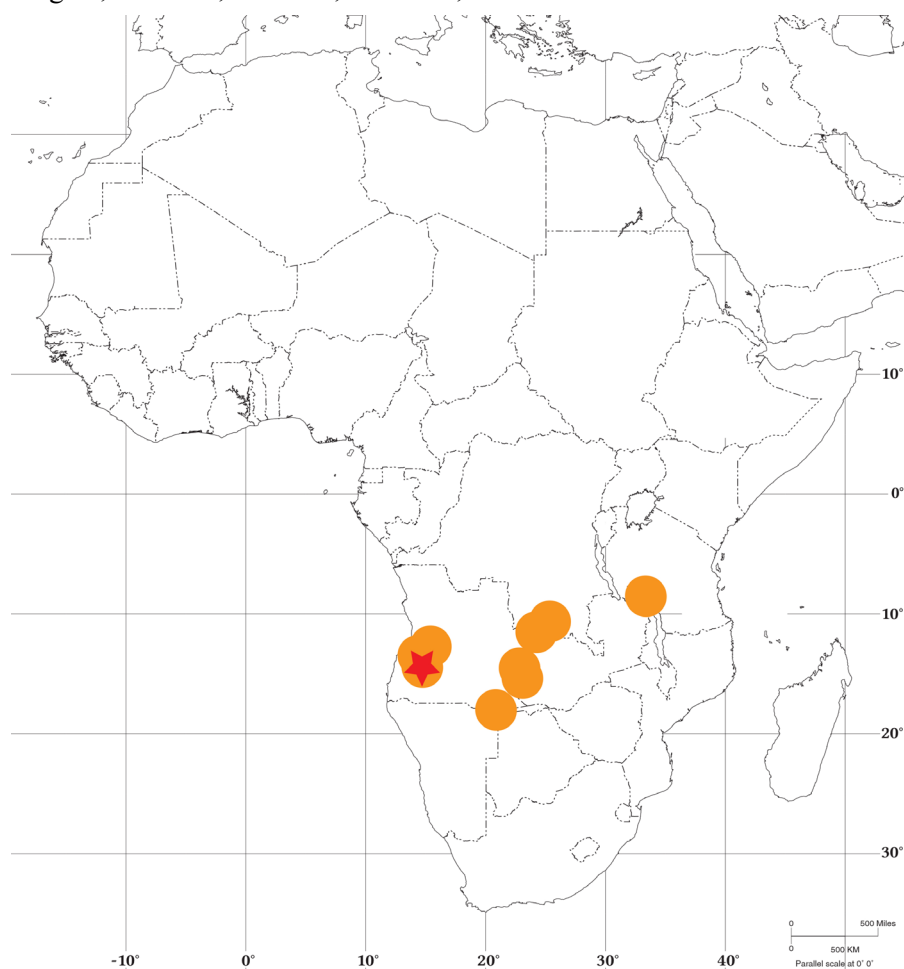


**Figure 115. *Antheua triloris* sp. nov., genitalia.** **a)** ♂, Angola, Huila prov., Negola, paratype (GS: CSW 01-15, CAS). **b)** ♀, Angola, prov. Benguela, betw. Cutebo and Caluquembe, paratype (GS: MWM 35.224, CAS). **c)** ♂, Angola, Huila prov., Negola, paratype (GS: CSW 01-21, CAS). **d)** ♂, Zambia, Ndanda, E Mongu, paratype (GS: LG 4358, ANHRT). **e)** ♂, Zambia, Lyangu Liuwa Plain NP, paratype (GS: LG 4548, ANHRT). **f)** ♂, Angola, Huambo prov., Calanque (GS: MWM 35.218, CAS). **g)** ♀, Namibia, Kavango Prov., Shamwura Rest camp, GS: MWM 35.220 (CGM).



**emark.** A male specimen from Angola (Fig. 114j) and a female from Namibia (Fig. 114k) exhibits conspicuous differences from the usual habitus of *A. triloris* **sp. nov.** by its more intense yellow forewing colouration and the absence of the black longitudinal stripes. Only a few black scales indicate the trace of the longitudinal medial stripe. In terms of genitalia configuration in both sexes (Figs 115f, 115g), these unusual specimens do not exhibit any distinct characteristics compared to other individuals of *A. triloris* **sp. nov.**; therefore, we consider it to be an individual variation of *A. triloris* **sp. nov.** A similar unmarked form is also known in the sister species *A. aurifodinae*.

**Distribution.** *Antheua triloris* **sp. nov.** is distributed across southern-central Africa with confirmed records from Angola, the DRC, Namibia, Tanzania, and Zambia.



**Figure 116.** Distribution of *Antheua triloris* **sp. nov.**

***Antheua ruficosta* (Hampson, 1910)**

Habitus: Figs 117a–f, Genitalia: Figs 118a–b, Distribution map: Fig. 119.

*Zana ruficosta* Hampson, 1910, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (8th series) **5**: 477.

Holotype: ♀, [Ghana], Gold Coast, Ashanti [6°45'N, 1°31'E] (in coll. NHMUK).

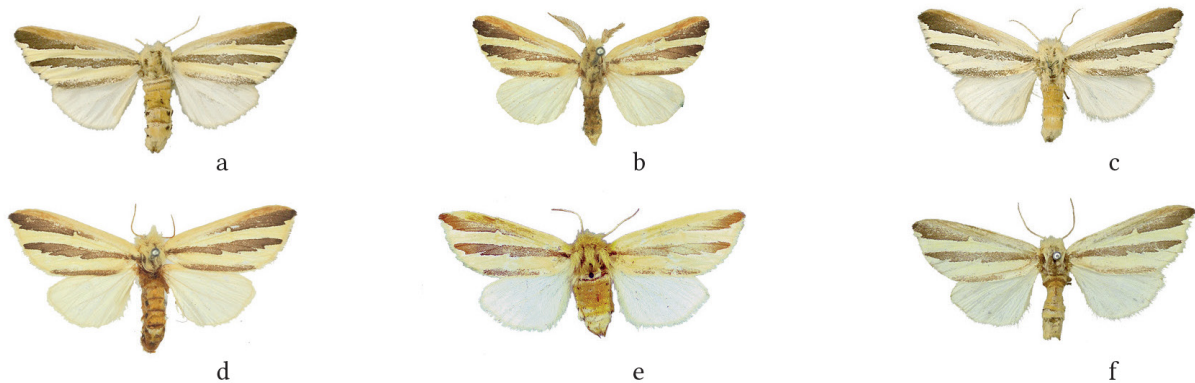
**Material examined** (2 ♂♂, 2 ♀♀).

**Ghana.** 1 ♀, Gold Coast, N. Territories, Kete-Krachi, leg. A.W. Cardinall, gen. slide No.: NHMUK014331225 (prepared by G. László) (NHMUK). **Guinea.** 1 ♀, Kindia, Pastoria, 25.vi.1983, leg. S. V. Murzin, GS: GU 60-60 (CAS). **Ivory Coast.** 1 ♂, Dimbrok, leg. I. Dyot. 1914, GS: NHMUK014331224 (prepared by G. László) (NHMUK). 1 ♂, Ilorin, Scot Macfee (NHMUK).

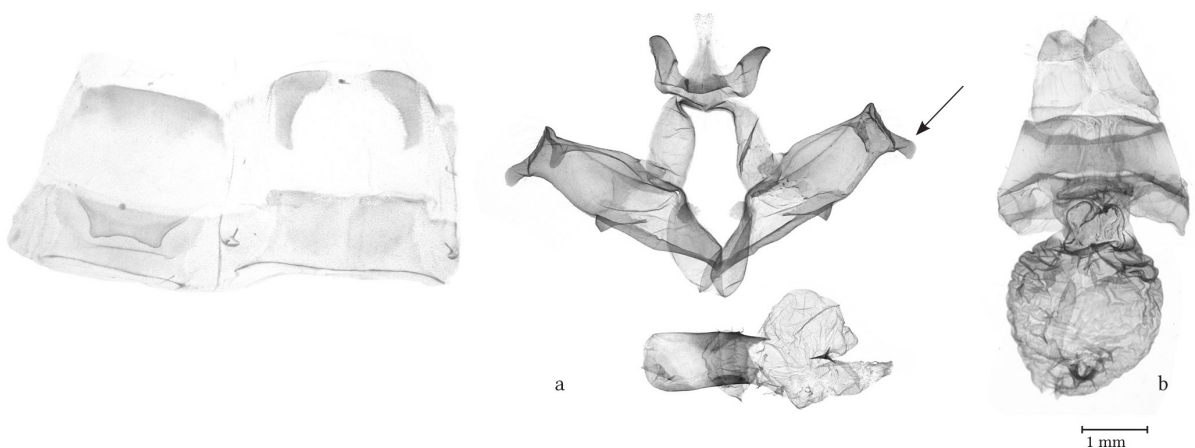
**Diagnosis.** Forewing length of the single known male is 13 mm, that of females is 15–16 mm. *Antheua ruficosta* can be easily distinguished from the similar species *A. aurifodinae*, *A. triloris* **sp. nov.**, and *A. liparidioides* by the pale brown colour of the costal and anal margins of its forewings, which remain unmarked in the related species. Additionally, *A. ruficosta* features a much broader dark brown longitudinal streak along the M vein. The sexual dimorphism is minimal in this species.

In the male genitalia, *A. ruficosta* closely resembles *A. triloris* **sp. nov.**; however, it has a broader uncus, somewhat shorter, distally less elongated socii, and more elongated valvae possessing a well-developed thumb-shaped ventrodiscal lobe in contrast to the short triangular ventrodiscal dilation of the valva in the allied species. Additionally, *A. ruficosta* lacks an ampulla, which is present in its relatives, and it has a short, triangular saccular process, a feature absent in the allied species. The phallus is conspicuously short and thick, without a modified carina. The endophallus is considerably inflated proximally, exhibiting an extensive spherical basal diverticulum.

In terms of the female genitalia, *A. ruficosta* is characterised by a broad ostium bursae with a nearly straight distal margin, a short antrum and a very broad, short, rugose ductus bursae. Additionally, it features a relatively large, spherical corpus bursae displaying a small U-shaped signum.

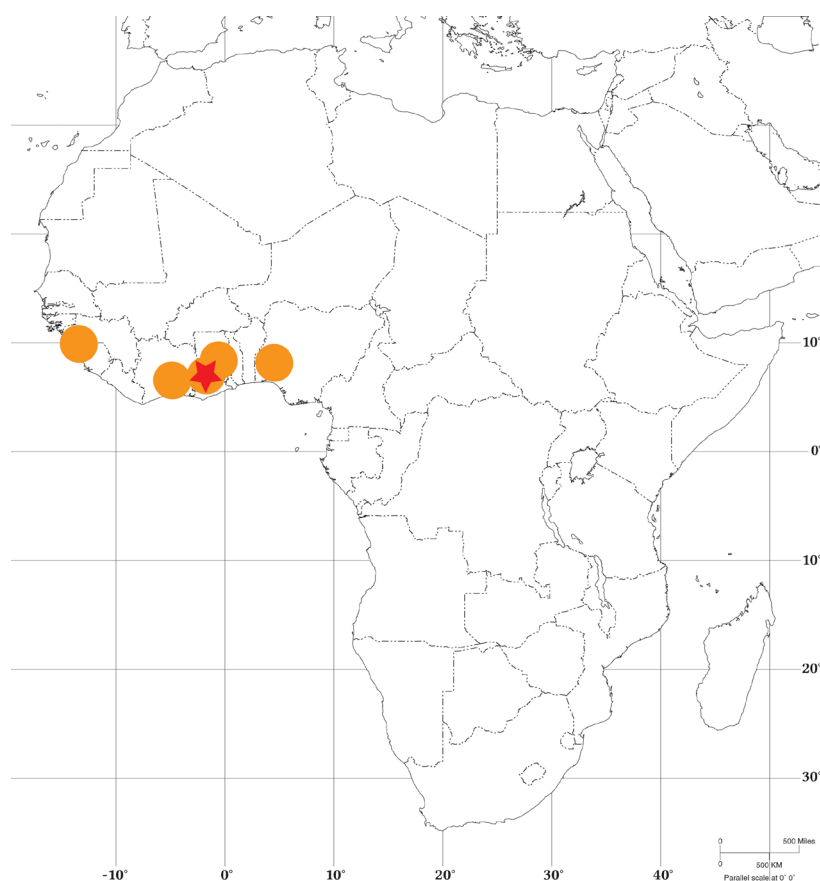


**Figure 117. *Antheua ruficosta*, adults.** **a)** ♀, Ghana, Ashanti, holotype (NHMUK). **b)** ♂, Ivory Coast, District des Lagunes, Dimbokro (GS: NHMUK014331224, NHMUK). **c)** ♀, Nigeria, Ilorin (NHMUK). **d)** ♀, Ghana, Kete-Crachi (GS: NHMUK014331225, NHMUK). **e)** ♀, Ghana, Kindia (GS: GU 68-60, CAS). **f)** ♀, Ghana, Kete-Crachi (NHMUK).



**Figure 118. *Antheua ruficosta*, genitalia.** **a)** ♂, Ivory Coast, District des Lagunes, Dimbokro (GS: NHMUK014331224, NHMUK). **b)** ♀, Ghana, Kete-Crachi (GS: NHMUK014331225, NHMUK).

**Distribution.** The species occurs in West Africa, with documented records from Guinea, Ghana, Nigeria, and Ivory Coast.



**Figure 119.** Distribution of *Antheua ruficosta*.

***Antheua liparidioides* (Rothschild, 1910)**

Habitus: Figs 120a–h, Genitalia: Figs 121a–g, Distribution map: Fig. 122.

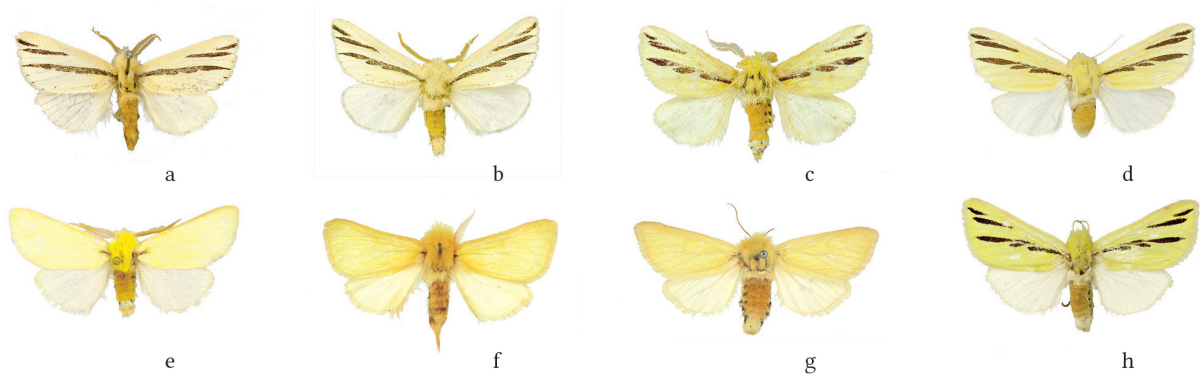
*Estigmene liparidioides* Rothschild, 1910, *Novitates Zoologicae* **17**: 163.

Holotype: ♂, [Kenya], Nairobi to Mt. Kenia [ca. 1°04'S, 37°02'E] (in coll. NHMUK).

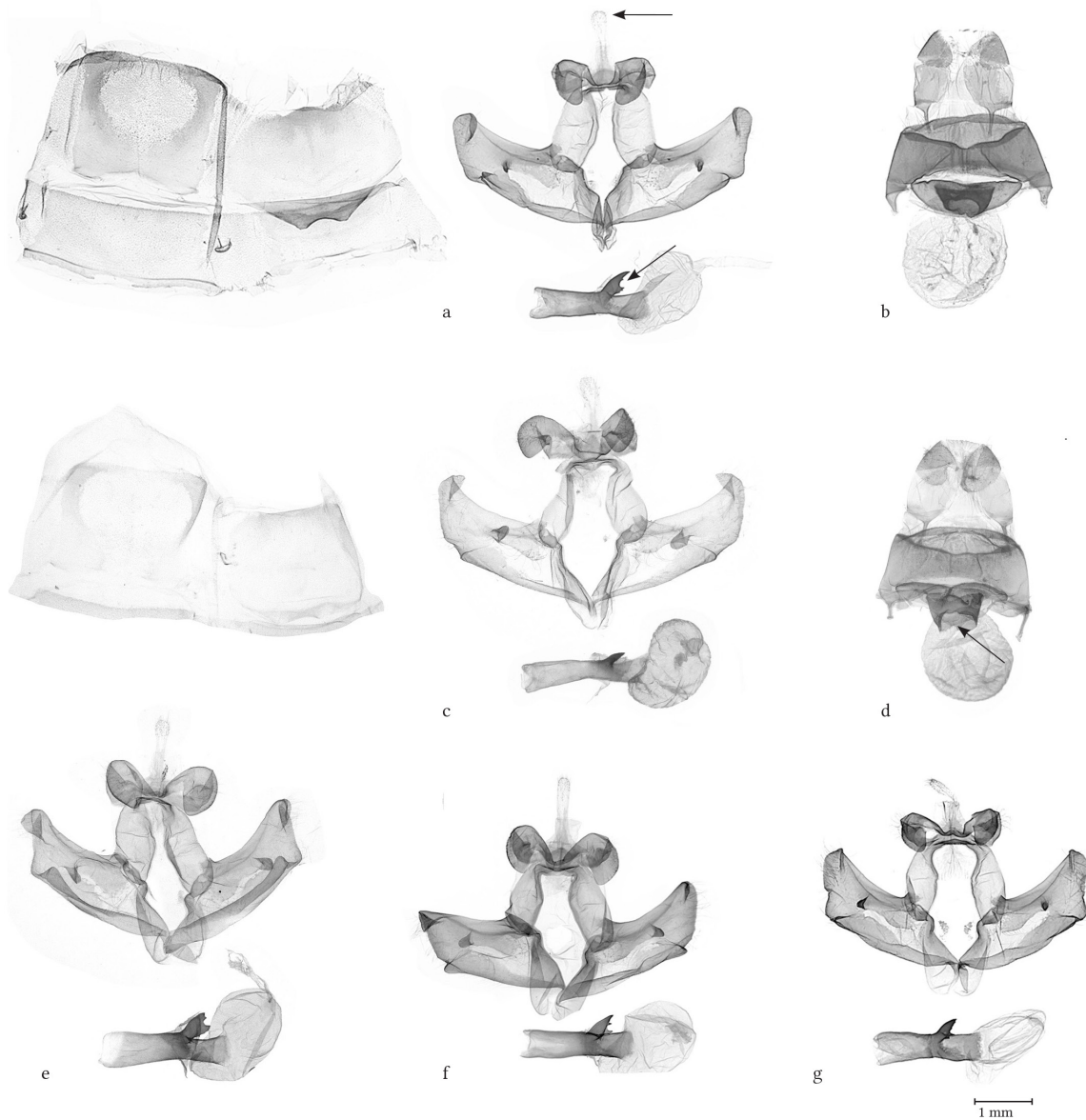
**Material examined** (10 ♂♂, 5 ♀♀).

**Burundi.** 2 ♂♂, Gitega, 9–10.xii.1963, leg. Dr. M. Fontaine, GS: LG 6597; 1 ♂, Gitega, 11.iv.1962, leg. Dr. M. Fontaine (RMCA). **Kenya.** 2 ♂♂, Kitale, vi.–vii.1934, leg. G.W. Jeffery, GS: NHMUK010315319, NHMUK014331240; 1 ♀, same locality and collector, GS: NHMUK014331241; 1 ♂, 1 ♀, Mombasa, vi.1916, leg. van Someren, GS: NHMUK014331241; 1 ♂, Njoro, leg. A.J. Cholmley, GS: NHMUK014331243 (all slides prepared by G. László) (NHMUK). 1 ♀, Suna, S. Kavirondo, xi.1931, leg. W. Feather; 2 ♂♂, Kitale, iv.1933 and vi.1933, leg. C.R. Howard, GS: USNM 02-23, USNM 02-24; 1 ♀, Makindu, GS: USNM 02-25 (USNM). **Tanzania.** 1 ♀, Serengeti N.P., Seronera Wildlife Lodge, 10–13.ii.2002, leg. E. Burmeister (CGM). 1 ♂, Kagera Distr., 2.540101°S, 30.837697°E, 25.x.2012, leg. Elk Ott & H. Sulak, GS: CSW 01-23 (CAS).

**Diagnosis.** Forewing length is 15–17 mm in males and 15–18 mm in females. *Antheua liparidioides* is a highly polymorphic species with the forewing colour ranging from cream to warm yellow and lemon. The species displays two primary forms: the more widespread form features three prominent black or dark reddish-brown streaks, resembling those of *A. aurifodinae* and *A. triloris* **sp. nov.**, but with the medial streak split into three sections. The less common form has uniform yellowish forewings without any pattern. This latter form may be confused with a similar variant of *A. insignata*, which has a somewhat paler yellow forewing colouration; however, most specimens exhibit traces of the medial streak. The hindwings are either white or yellowish-white. Sexual dimorphism is negligible, as females exhibit the same range of individual variation as males.



**Figure 120. *Antheua liparidioides*, adults.** **a)** ♂, Kenya, Nairobi to Mt. Kenya, holotype (NHMUK). **b)** ♂, Kenya, Mombasa (GS: NHMUK014331105, NHMUK). **c)** ♂, Kenya, Kitale, (GS: USNM 02-23, USNM). **d)** ♀, Kenya, S Winam gulf, Suna (NHMUK). **e)** ♂, Tanzania, Kagera District (GS: CSW 01-23, CAS). **f)** ♂, Kenya, Kitale (GS: NHMUK014331240, NHMUK). **g)** ♀, Kenya, Kitale (GS: NHMUK014331241, NHMUK). **h)** ♀, Kenya, Makindu (GS: USNM 02-25, USNM).



**Figure 121. *Antheua liparidioides*, genitalia.** **a)** ♂, Kenya, Kitale (GS: USNM 02-24, USNM). **b)** ♀, Kenya, Makindu (GS: USNM 02-25, USNM). **c)** ♂, Kenya, Mombasa (GS: NHMUK014331105, NHMUK). **d)** ♀, Kenya,

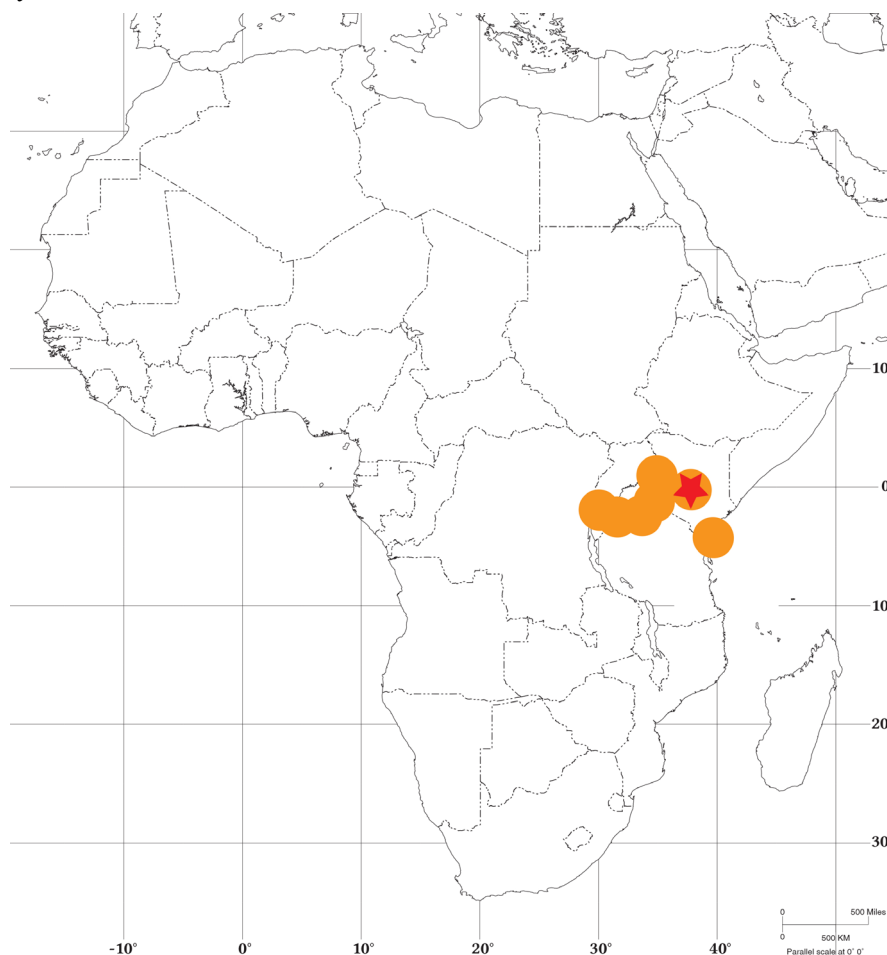


Kitale (GS: NHMUK014331241, NHMUK). **e)** ♂, Kenya, Kitale (GS: NHMUK014331240, NHMUK). **f)** ♂, Tanzania, Kagera District (GS: CSW 01-23, CAS). **g)** ♂, Kenya, Kitale, (GS: USNM 02-23, USNM).

In the male genitalia, *A. liparidioides* can be easily distinguished from its externally similar relatives by the longer uncus displaying a club-shaped tip, the more robust, strongly curved, bulbous socii, the very short crest-shaped apical lobe of the valva, the tiny, knob-shaped ampulla projections and the broadly rounded ventrodistal margin of the valva lacking a well-defined lobe. The phallus has an extensive, subapical dentate carina process with an acute tip, a character that is absent in the aforementioned relatives. Based on the configuration of the male genitalia, *A. liparidioides* is closely related to *A. insignata*, but they can be differentiated by several diagnostic features. *Antheua insignata* has a shorter, more slender uncus, narrower socii, shorter valvae, more prominent ampulla processes, and a well-developed triangular ventrodistal lobe of the valva. Moreover, the carina process of *A. insignata* does not have additional spines, unlike that of *A. liparidioides*.

In the female genitalia, *A. liparidioides* closely resembles *A. insignata*; however, it has a broader ostium bursae and a more heavily sclerotized antrum. Notably, the signum bursae is absent in both species.

**Distribution.** This species exhibits a limited East African distribution and has been recorded in Burundi, the DRC, Kenya, and Tanzania.



**Figure 122.** Distribution of *Antheua liparidioides*.

### *Antheua insignata* Gaede, 1928

Habitus: Figs 123a–l, Genitalia: Figs 124a–e, Distribution map: Fig. 125.

*Antheua insignata* Gaede, 1928, In Seitz, A. (1925-1930), ed.: *Die Großschmetterlinge der Erde. Die Afrikanischen Spinner und Schwärmer*. Band 14: 433; pl. 71: h.

Lectotype: ♂, [RSA], Transvaal–Pretoria [ca. 25°45'S, 28°11'E] / Wichgraf S. / Dr. R. Lück & Gehlen V. (in coll. MfN).

Synonyms:

*Antheua benguelana* Viette, 1954, **syn. nov.**

*Annales du Musée du Congo Belge Tervuren (Belgique) in 4<sup>e</sup>. Série Sciences Zoologiques* **1**: 556; fig. 7.

Holotype: ♀, Angola, Sendjie [Catholic Mission of Sendje, 1475 m, ca. 14°38'S, 16°53'E] (in coll. MNHN).

*Antheua trimacula* Kiriakoff, 1954, **syn. nov.**

*Revue de Zoologie et de Botanique Africaines* **49** (3-4): 322; pl. 1: 16; pl. 2: 18.

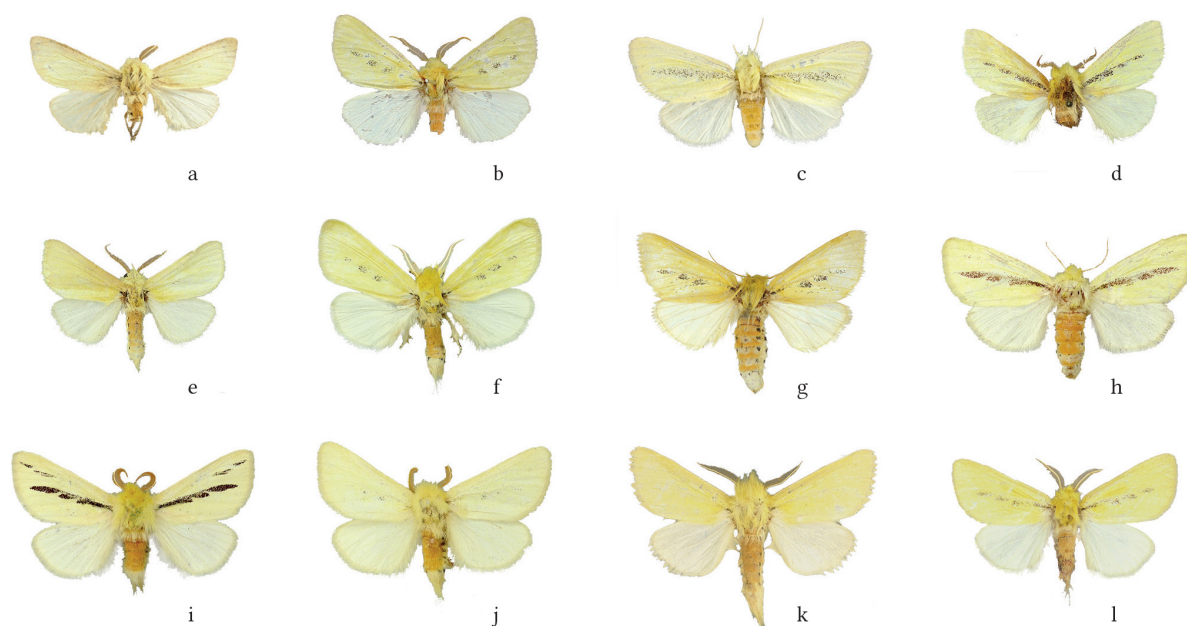
Holotype: ♂, [DRC], Katanga, Elisabethville [= Lubumbashi, ca. 11°41'S, 27°30'E] (in coll. RMCA).

#### Material examined (large series of both sexes).

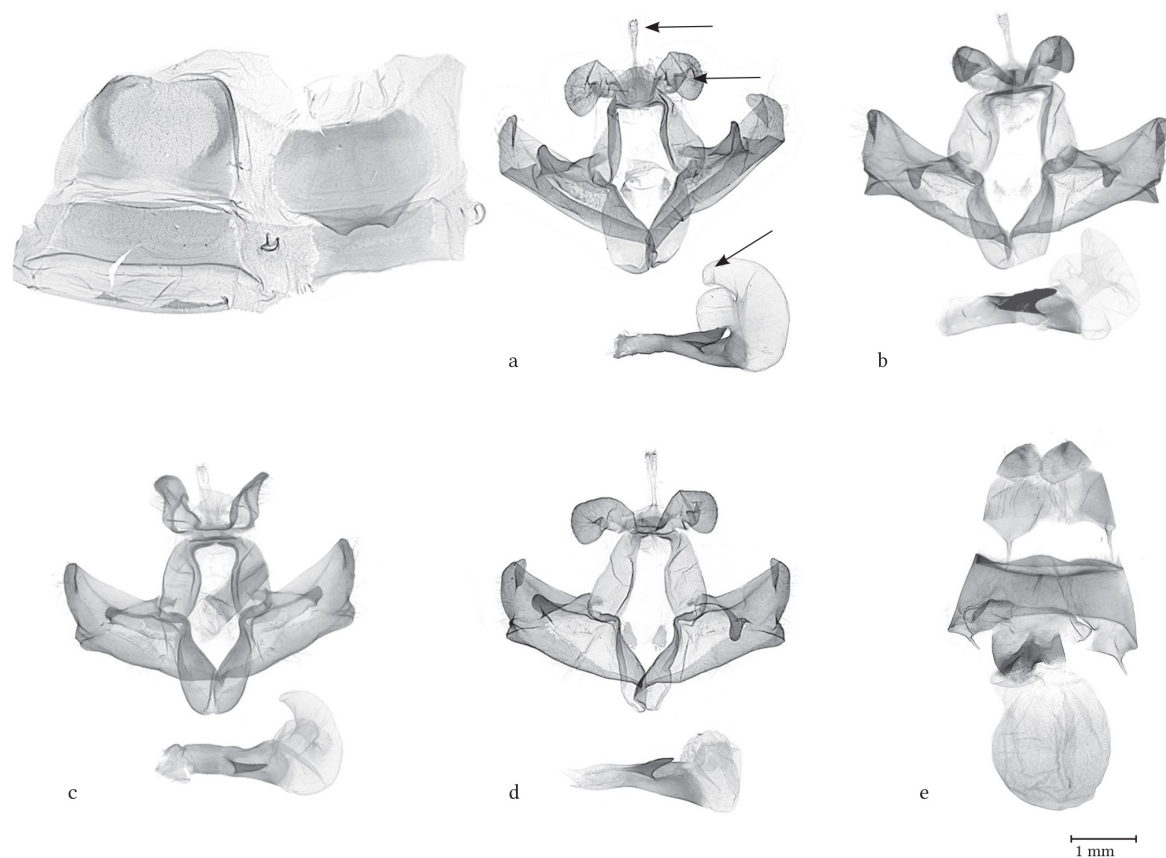
**Angola.** 1 ♂, prov. Cuanza de Sul, 26 km E Cassongue, 11°52.257'S, 15°09.320'E, 1650m, 28.iii.2014, leg. Sulak, Ott & Naumann, GS: MWM 35.223 (CAS). **DRC.** 1 ♀, Rutchuru, Kivu, iv.1924, T.A. Barns, paralectotype (NHMUK). 1 ♂, Elisabethville, 20.xi.1933, leg. Ch. Seydel (RMCA). 1 ♂, Ht. Katanga, Tshinkolobwe, 25.ii.1931, leg. J. Romieux (MHNG). 1 ♂, Kankundu, Lupiala, 1300 m, 13–27.xi.1947, G.F. de Witte (RMCA). **Malawi.** 2 ♂♂, 2 ♀♀, Chitipa District, Jembya Reserve, 1870m, 5–10.xii.1988, leg. J. Rawlins & S. Thimpson; 2 ♂♂, Blantyre, ii.1926, leg. R.C. Wood (CMNH). **Tanzania.** 1 ♀, Chunya District, Chunya, 2.650 ft., 20.i.1947, G. Swynnerton, GS: NHMUK014331242 (prepared by G. László) (NHMUK). **Zambia.** Long series of both sexes, Kapishya Hot Springs, Shiwa N'gandu Estate, S11°10'13", E31°36'00", 1437m, xii.2014, i.2015, iii.2015, i–iii.2016, i–iii.2017, light trap, leg. Harvey, M.T., Miles, W., Oram, D., Smith, L., Smith, R., Takano, H., GS: LG 4611 ♂, LG 4610 ♀, ANHRT 01571 ♂; 2 ♂♂, Lukulu River, Lavushi Manda N. P., S12°15'05", E30°53'43", 1285m, 27–29.xi.2012, light trap, leg. Smith, R., Takano, H.; 1 ♂, Ntumbachushi Falls, Ngona River, Luapula Prov., S09°51'12", E28°56'40", 1166m, 3–4.xi.2014, light trap, leg. Smith, Takano & Oram; 3 ♂♂, Hillwood, Ikelenge, S11°16'02", E24°18'59", 1400m, 21–28.x.2013, light trap, leg. Smith, R., Takano, H., Chmurova, L., Smith, L., GS: LG 4355; 1 ♂, same locality, 30.x.–3.xi.2017, MV light trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg.; 9 ♂♂, Muchinga Prov., Benyanga village, 10°40'41"S, 33°27'45"E, 1250m, 7–12.xii.2023, actinic and MV light trap, László, G., Morgan, L., Volynkin, A. leg.; 1 ♀, same locality, 28.xi.2023, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A. leg.; 5 ♂♂, Muchinga Prov., Muyombe, Mama Muwowo's Lodge, 10°32'40"S, 33°26'05"E, 1230m, 6–7.xii.2023, actinic and MV light trap, László, G., Morgan, L., Volynkin, A. leg.; 1 ♀, Muchinga Province, Jombo village, 10°27'01"S, 33°14'30"E, 1400m, 30.xi.–5.xii.2023, actinic light trap, Bashford, M., Collins, A., László, G., Morgan, L., Volynkin, A. leg., GS: LG 6599; 4 ♂♂, Muchinga Province, 30 km N of Mpika, Danger Hill, 11°37'38"S, 31°33'56"E, 1684m, 13–15.xii.2023, MV Light Trap, László, G., Morgan, L., Volynkin, A. leg. (ANHRT). 1 ♂, Abercorn, ii.–iii.1954, D. VeseyFitz-gerald (USNM). **Zimbabwe.** 1 ♂, Vumba Mts, Umtali, S. Rhodesia, xi.1956, GS: NHMUK010315320 (prepared by G. László) (NHMUK). 2 ♂♂, Vumba Mts, leg. Stevenson, GS: TM 16.876 (TMSA). 1 ♂, Vumba Mts, 19.i.1975, N.J. Duke, GS: TM 17.009 (TMSA). 1 ♂, 1 ♀, Vumba Mts, 22.ii.1964, 18.x.1965, B.D. Barnes, GS: GU 68-19 (CAS). 1 ♂, Salisbury, 9.ii.1968, A.J. Duke (TMSA).

**Diagnosis.** Forewing length is 14–17 mm in males and 16–17 mm in females. *Antheua insignata* is characterised by the lemon-yellow forewing featuring a relatively broad black longitudinal streak running between the base to the subterminal area along vein M2. The medial streak is often reduced to several spots (f. *trimacula*) or may be completely absent; however, a black basal spot is always present, similar to that found in *A. liparidioides*. Occasionally, a second black band may run along vein R5 to the margin, but a third dash, as seen in *A. liparidioides*, is never present. *Some specimens with reduced numbers of black scales may closely resemble to uniform yellow forms of A. aurifodinae or A. triloris sp. nov.* They differ from the latter in shape of the forewings, in particularly the more rounded apex. The hindwings are whitish, sometimes with a pale yellow tinge. The sexual dimorphism is limited and the variability in forewing patterning is similar for both sexes.

The male and female genitalia are similar to those of *A. liparidioides*; the diagnostic characters are discussed under the latter species.



**Figure 123. *Antheua insignata*, adults.** **a)** ♂, RSA, Pretoria, lectotype (MfN). **b)** ♂, DRC, Lubumbashi, holotype of *Antheua trimacula* (GS: NT 113, RMCA). **c)** ♀, Angola, Moxico Prov., Sendye, holotype of *Antheua benguelana* (MNHN). **d)** ♂, Angola, Cuanza Sul, 26 km E Cassongue (GS: MWM 35.223, MWM/ZSM). **e)** ♂, Malawi, Blantyre (CMNH). **f)** ♂, DRC, Tshinkolobwe (MHNG). **g)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu (GS: LG 4610, ANHRT). **h)** ♀, Zimbabwe, Vumba Mts. (TMSA). **i)** ♂, Zimbabwe, Vumba Mts. (GS: GU 68-19, CAS). **j)** ♂, Zimbabwe, Abercorn (USNM). **k)** ♂, Zimbabwe, Vumba Mts. (TMSA). **l)** ♂, Tanzania, Iringa Region, Iyayi Savanna (GS: MWM 22.749, MWM/ZSM).



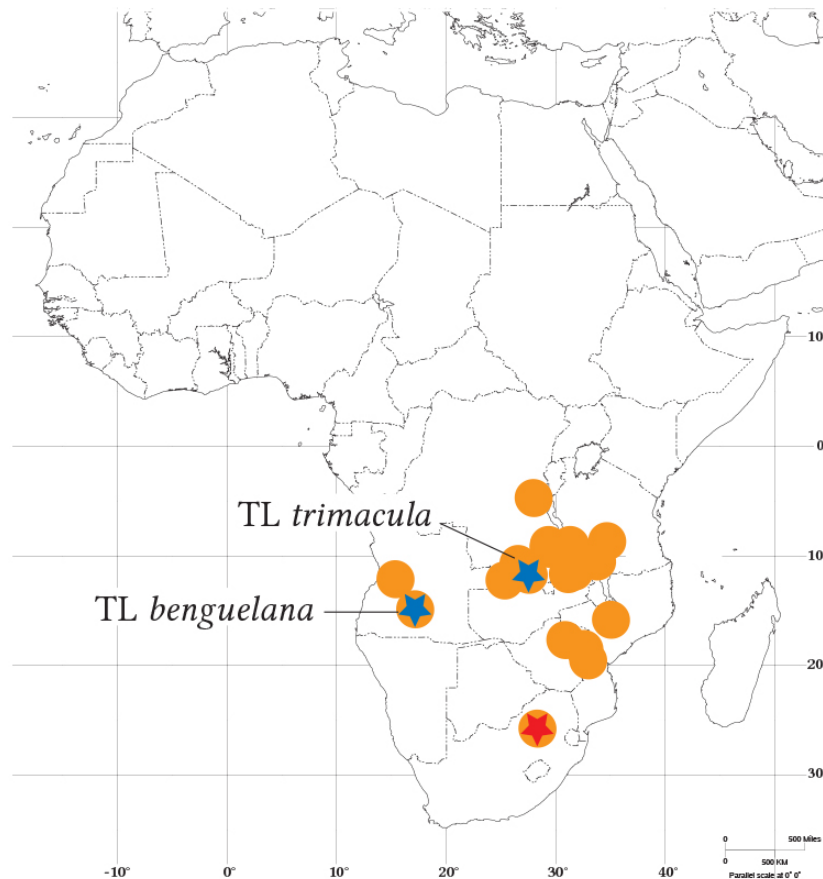
**Figure 124. *Antheua insignata*, genitalia.** **a)** ♂, Angola, Cuanza Sul, 26 km E Cassongue (GS: MWM 35.223, MWM/ZSM). **b)** ♂, Tanzania, Iringa Region, Iyayi Savanna (GS: MWM 22.749, MWM/ZSM). **c)** ♂, Zimbabwe, Vumba Mts. (GS: TM 17.039, TMSA). **d)** ♂, Zimbabwe, Vumba Mts. (GS: GU 68-19, CAS). **e)** ♀, Zambia, Kapishya Hot Springs, Shiwa N'gandu (GS: LG 4610, ANHRT).

**Taxonomic notes.** The lectotype of *A. insignata* lacks its abdomen, so its genitalia could not be examined. The species was described from a male and a female syntype. The type locality of the male lectotype, was given as “Transvaal”. It is important to note that the label information, “Transvaal-Pretoria” is probably incorrect, as *A. insignata* was never found in South Africa. The paralectotype of the species, a female from DRC (Kivu), belongs to *A. liparidioides*.

The holotype of *A. trimacula* and its genitalia (GS: NT 113) were examined during this study and found to be conspecific with several dissected males from Zimbabwe; therefore, *A. trimacula* **syn. nov.** is considered here a junior synonym of *A. insignata*.

*Antheua benguelana* from Angola is based on a female holotype, the genitalia of which were not dissected. A dissected male from Angola (fig. 123d), collected close to the type locality of *A. benguelana*, found to belong to *A. insignata*. The appearance of *A. benguelana* falls within the variation range of *A. insignata*; therefore, *A. benguelana* **syn. nov.** is treated here as a junior synonym of *A. insignata*.

**Distribution.** This species has been recorded in Angola, the DRC, Malawi, Namibia, the RSA, Tanzania, Zambia, and Zimbabwe. The validity of the South African record of the lectotype is questionable, as it is based on a single known specimen (the lectotype) reported from the country.



**Figure 125.** Distribution of *Antheua insignata*.

***Antheua interstincta* Schintlmeister & László, sp. nov.**

<https://zoobank.org/urn:lsid:zoobank.org:act:4F14C4E8-EABE-4F60-A12B-6DBAC1B8C587>

Habitus: Figs 126a–h, Genitalia: Figs 127a–d, Distribution map: Fig. 128.

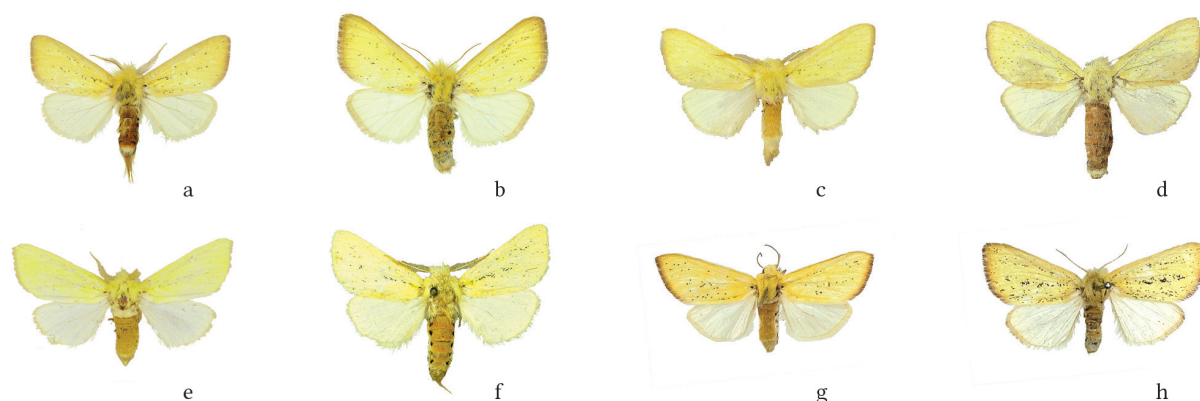
**Holotype:** ♂, “TOGO 415m / Fazao-Malfakassa NP., / Point de vue campsite / (Sudanian savannah) / 8°48'50"N, 0°49'3.2"E / 16–23.viii.2018 Actinic Light Trap / Aristophanous, M., Geiser, M., / Moretto, P., Sanbena, B. leg. / ANHRT: 2018.31” // “ANHRTUK / 00047615” // GS: ANHRT 00401 (ANHRT).



**Paratypes** (18 ♂♂, 13 ♀♀).

**Ghana.** 4 ♂♂, 4 ♀♀, N. Territories, Kete Krachi, leg. A. W. Cardinall (NHMUK). **Guinea.** 1 ♂, Kindia, 23.vi.1983, leg. S. Murzin (CAS). **Ivory Coast.** 4 ♂♂, 1 ♀, Denguele Classified Forest (sudanian forest), 09°30'0.6"N, 07°40'51.1"W, 479 m, 6–14.vi.2018, actinic and MV light trap, Aristophanous, M., Miles, W., Moretto, P., Outtara, Y. leg., GS: LG 5156 (ANHRT). **Mali.** 2 ♂♂, 80 km SW of Bamako, Koulikoro Region, Ouronina Forest, 420 m, viii. and ix.2015, leg. G. Müller & K. Kravchenko, GS: MWM 35.219, MWM 35.222; 1 ♀, 80 km SW of Bamako, near Kenierobam river Niger, 360m, x.2015, leg. G. Müller, K. Kravchenko & M. Traore, GS: MWM 35.221 (MWM/ZSM). **Nigeria.** 1 ♀, N. Nigeria, Ropp, 9.vi.1920, leg. Dr. J. A. Brabury; 1 ♀, Minna, 30.viii.1910, leg. Scott Macfie; 1 ♀, E. O. Haig, 31.v.1934 (NHMUK). **Togo.** 7 ♂♂, 4 ♀♀, same data as the holotype, collected at actinic, LepiLED and MV light trap, GS: ANHRT 00402 ♀ (ANHRT).

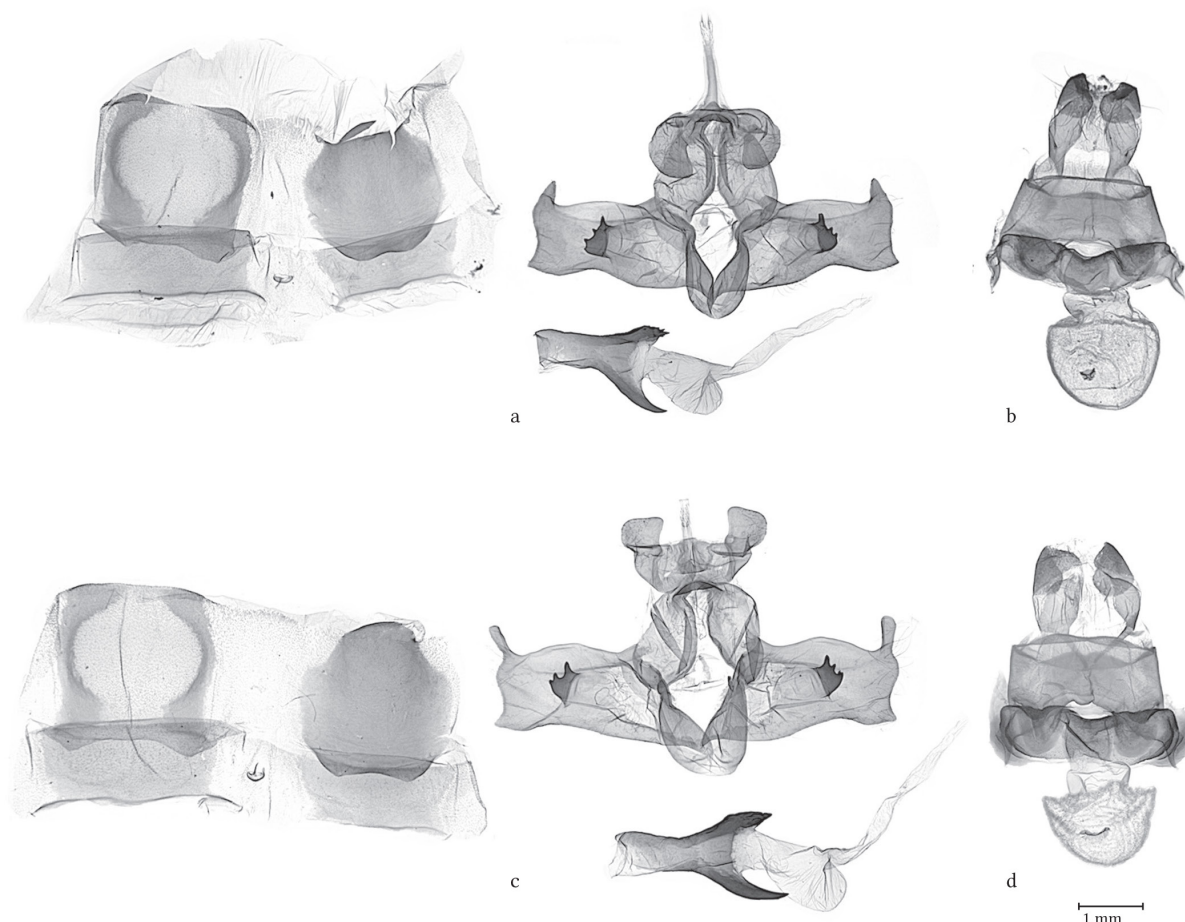
**Diagnosis.** *Antheua interstincta* **sp. nov.** is a relatively small-sized species, with forewing lengths ranging from 13 to 16 mm in males and 14 to 16 mm in females. Males feature light brown bipectinated antennae with long rami. This new species resembles those in the *A. insignata* complex due to its lemon-yellow forewings, but it can be distinguished by the sparse blackish scales scattered across the forewings. The forewings also have a conspicuous red-brown marginal area and fringes, along with a small black basal spot. The hindwing is whitish, with a lighter yellowish shade compared to that of *A. insignata*. Sexual dimorphism is limited to the somewhat broader forewings of females, which possess filiform antennae.



**Figure 126.** *Antheua interstincta* **sp. nov.**, adults. **a)** ♂, Togo, Fazao-Malfakassa National Park, holotype (GS: ANHRT 00401, ANHRT). **b)** ♀, Togo, Fazao-Malfakassa National Park, paratype (GS: ANHRT 00402, ANHRT). **c)** ♂, Mali, 80 km SW of Bamako, near Kenierobam, paratype (MWM 35.222, MWM/ZSM). **d)** ♀, Mali, 80 km SW of Bamako, near Kenierobam, paratype (MWM 35.221, MWM/ZSM). **e)** ♂, Guinea, Kindia (CAS). **f)** ♂, Mali, 80 km SW of Bamako, Koulikoro Region, Ouronina, paratype (MWM 35.219, MWM/ZSM). **g)** ♀, Ghana, Kete Krachi, paratype (NHMUK). **h)** ♀, N Nigeria, Ropp (NHMUK).

The male genitalia of *A. interstincta* **sp. nov.** exhibit a notably longer and slenderer uncus (in Fig. 122c, it was folded during preparation), larger and more quadrangular socii, and more elongated valvae compared to *A. insignata*. Additionally, the valva of the new species features a distinctly longer apical lobe that points caudad (in contrast, this feature is directed ventrad in the related species) and a more extensive, triangular ventrodistal dilation compared to *A. insignata*. A unique diagnostic characteristic of this new species is the strongly sclerotized, short, and broad ampulla process that projects distally. The phallus is remarkably short and possesses two robust, claw-like lateral carina processes of different lengths, with the shorter process featuring a serrated outer margin. The eighth tergite displays a weakly sclerotized, characteristically disc-shaped field.

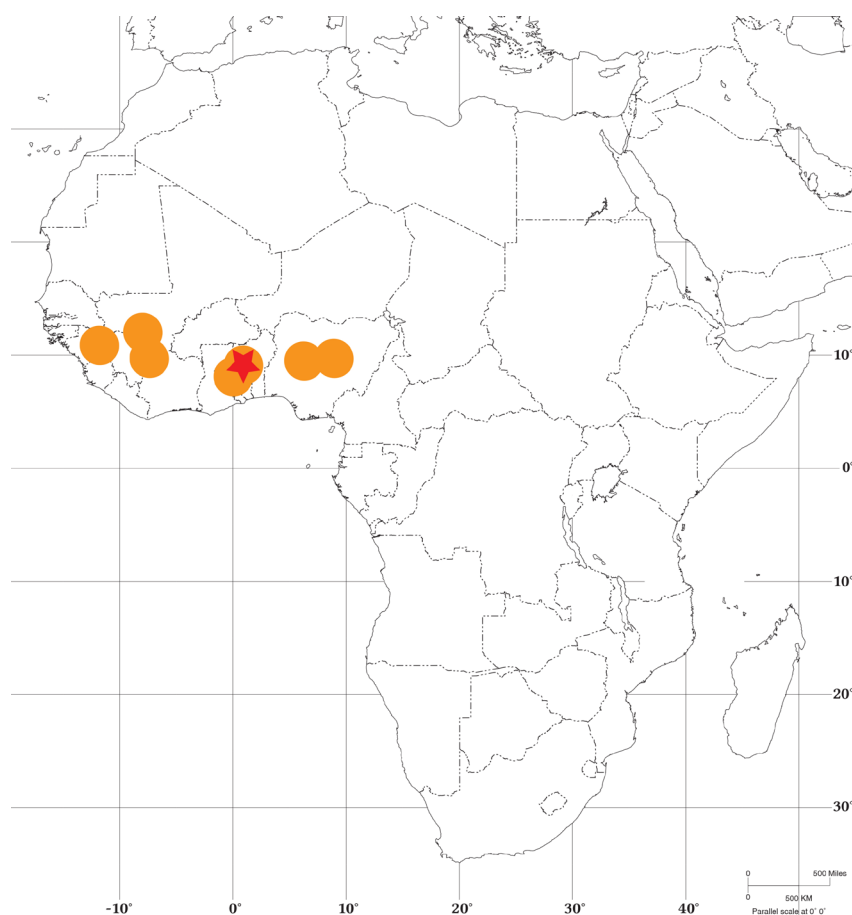
The female genitalia of *A. interstincta* **sp. nov.** are characterised by relatively long apophyses posteriores, short yet broad apophyses anteriores, and a sub-quadrangular eighth abdominal segment. The ostium bursae is noticeably narrower than that of *A. insignata*, with a gently concave distal margin; the antrum is weakly sclerotized. The ductus bursae is short and broad, and the corpus bursae lacks distal sclerotized plates. A small sickle-shaped signum is present in the central part of the corpus bursae.



**Figure 127. *Antheua interstincta* sp. nov., genitalia.** **a)** ♂, Togo, Fazao-Malfakassa National Park, holotype (GS: ANHRT 00401, ANHRT). **b)** ♀, Togo, Fazao-Malfakassa National Park, paratype (GS: ANHRT 00402, ANHRT). **c)** ♂, Mali, 80 km SW of Bamako, Ourina Forest, paratype (MWM 35.222, MWM/ZSM). **d)** ♀, Mali, 80 km SW of Bamako, near Kenierobam, paratype (MWM 35.221, MWM/ZSM).

**Etymology.** The specific epithet “*interstincta*” is a Latin adjective in the feminine form, meaning “speckled”, referring to the new species’ forewing speckled with blackish scales.

**Distribution.** *Antheua interstincta* sp. nov. shows a West African distribution with confirmed records from Ghana, Guinea, Ivory Coast, Mali, Nigeria, and Togo.



**Figure 128.** Distribution of *Antheua interstincta* sp. nov.

***Antheua elongata* Gaede, 1928**

Habitus: Figs 129a–h, Genitalia: Figs 130a–d, Distribution map: Fig. 131.

*Antheua elongata* Gaede, 1928, In Seitz, A. (1925-1930), ed.: *Die Großschmetterlinge der Erde. Die Afrikanischen Spinner und Schwärmer*. Band 14: 433; pl. 71: h.

Holotype: ♀, [Ghana], Goldküste, [Navaro, ca. 11°00'N; 1°30'W] (in coll. NHMUK).

**Material examined** (4 ♂♂, 6 ♀♀).

**Burkina Faso.** 3 ♀♀, Bobo, 9.viii.1975, leg. Dr. Politzar, GS: ZSM01-17 (ZSM, CGM). 1 ♂, 1 ♀, Folonzo am Fluß, Camoe 22.vii.1985, 28.vii.1985, leg. Dr. Politzar (CAS). **CAR.** 1 ♀, Shari-Tchad Protectorate, Dar Runga and Dar Kouti, Ironstone plateau, 2000 ft, c. 22 E, 10 N, leg. Karl W. Kumm., GS: NHMUK014331227 (NHMUK). **Nigeria.** 1 ♂, Samaru, 26–31.v.1970, leg. P.H. Ward, GS: NHMUK014331226 (prepared by G. László) (NHMUK).

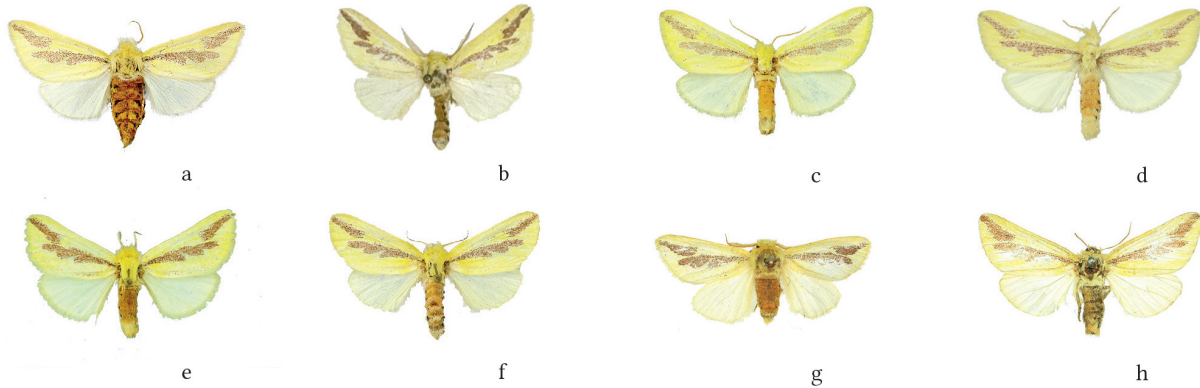
**Senegal.** 1 ♂, 5 miles W Diouguel, natural riverine forest / grass and bushland, early to mid July 1985, leg. H. Friend (CGM). **Sudan.** 1 ♂, Diouguel; 1 ♀, Prov. Kordofan, Kadugli, GS: ZSM 01-16 (ZSM).

**Diagnosis.** Forewing length is 14–15 mm in males and 14–16 mm in females. This species is easily recognisable by its broad, brownish forewings, which feature a dentate and somewhat blurred medial streak that does not extend to the wing's edge, as well as a long, oblique apical dash. Sexual dimorphism is limited: the examined male has pale yellow hindwings, while the females' hindwings are off-white.

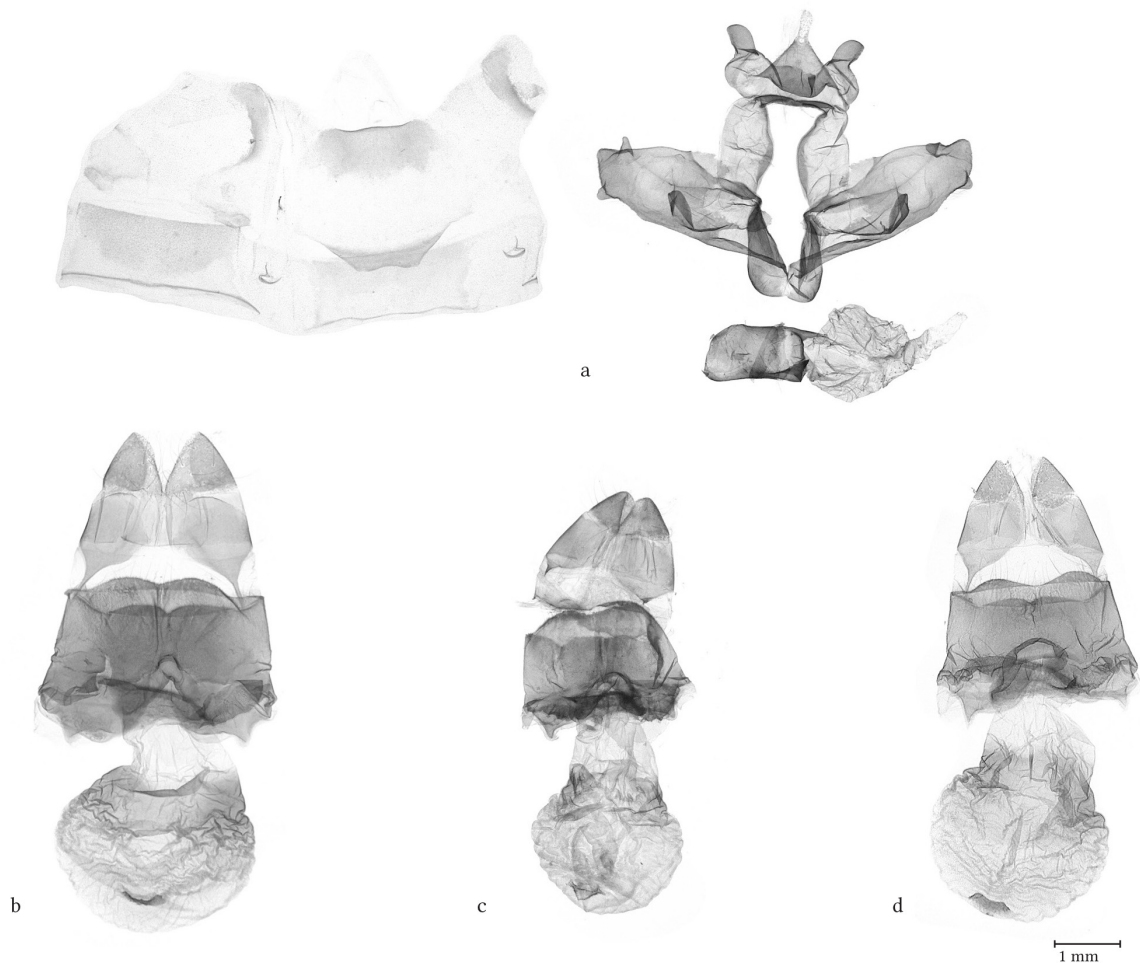
In the male genitalia, the uncus is characterised by a very short, digitiform shape, while the socii are bulbous at the base and have short, thumb-shaped distal lobes. The valva is relatively broad at the base, gently tapered towards the truncated tip, exhibiting a tiny triangular subapical lobe on the costa and an even smaller rounded ventral lobe. The costal plate (editum) is broad and evenly rounded,

featuring a short, rounded ampulla lobe near the ventral margin. The phallus is notably short and thick, cylindrical in shape, and has two acute triangular lateral carinal processes.

In the female genitalia, the eighth abdominal segment is relatively elongate, narrow, and robust, with very short apophyses. The ductus bursae is short, broad, and dilated anteriorly without a sclerotized antrum. The corpus bursae has a heavier sclerotization in place of the paired distal plates and possesses a small, elongate signum that varies in shape.



**Figure 129. *Antheua elongata*, adults.** **a)** ♀, Ghana, Navrongo, holotype (NHMUK). **b)** ♂, Senegal, Diouguel (CGM). **c)** ♀, Sudan, Prov. Kordofan, Kadugli (GS: ZSM 01-16, ZSM). **d)** ♀, Sudan, Prov. Kordofan, Kadugli (ZSM). **e)** ♀, Burkina Faso, Folonzo am Fluß, Camoe (FLMNH). **f)** ♀, Burkina Faso, Folonzo am Fluß, Camoe (FLMNH). **g)** ♂, Nigeria, Samaru (GS: NHMUK014331226, NHMUK). **h)** ♀, CAR, Dar Runga, Ironstone plateau (GS: NHMUK014331227, NHMUK).

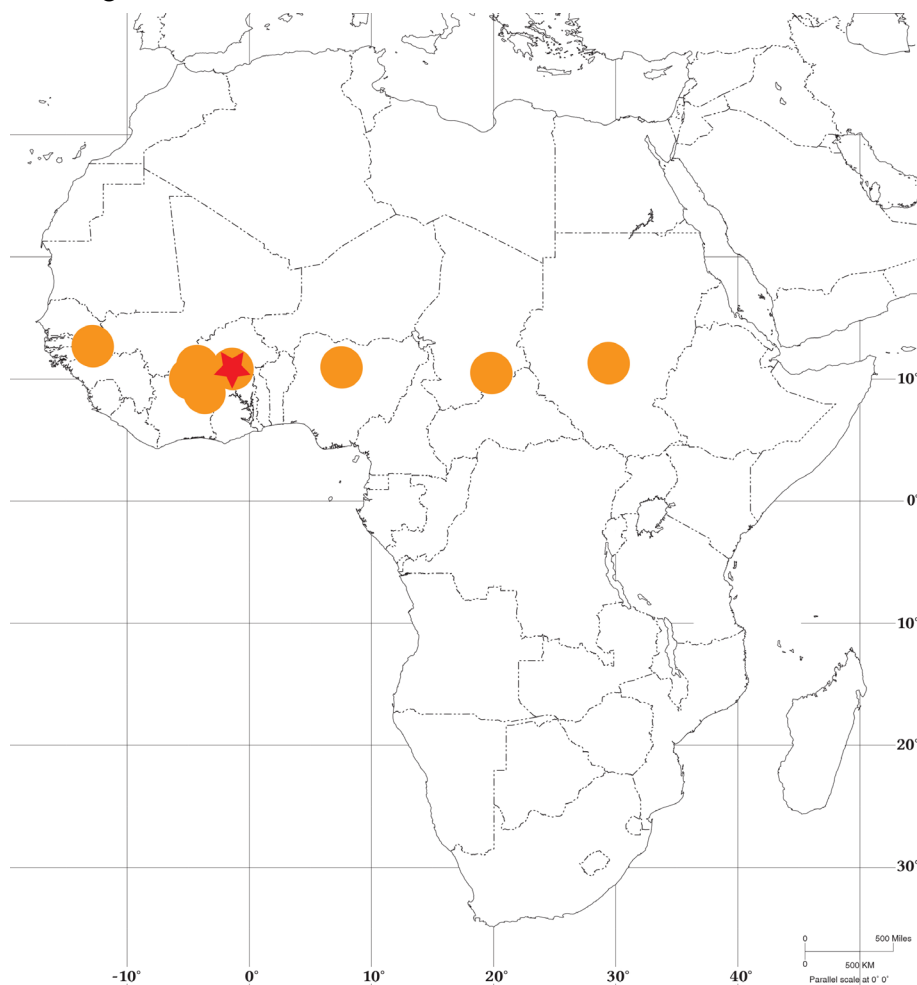


**Figure 130. *Antheua elongata*, genitalia.** **a)** ♂, Nigeria, Samaru (GS: NHMUK014331226, NHMUK). **b)** ♀, Burkina Faso, Bobo (GS: ZSM 01-17, ZSM). **c)** ♀, CAR, Dar Runga, Ironstone plateau ((GS: NHMUK014331227, NHMUK). **d)** ♀, Sudan, Prov. Kordofan, Kadugli (GS: ZSM 01-16, ZSM).



**Taxonomic note.** In the original description, the primary type specimen was mistakenly identified as male; however, the holotype is actually female.

**Distribution.** This species exhibits a Sahelian distribution with confirmed records from Burkina Faso, the CAR, Ghana, Nigeria, and Sudan.



**Figure 131.** Distribution of *Antheua elongata*.

***Antheua delicata* Bethune-Baker, 1911**

Habitus: Figs 132a–e, Genitalia: Figs 133a–c, Distribution map: Fig. 134.

*Antheua delicata* Bethune-Baker, 1911, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (8th series) 7: 554.

Holotype: ♀, 100 miles N of / Lokoja, / N Nigeria. / D. Cator. (in coll. NHMUK).

**Material examined** (5 ♂♂, 7 ♀♀).

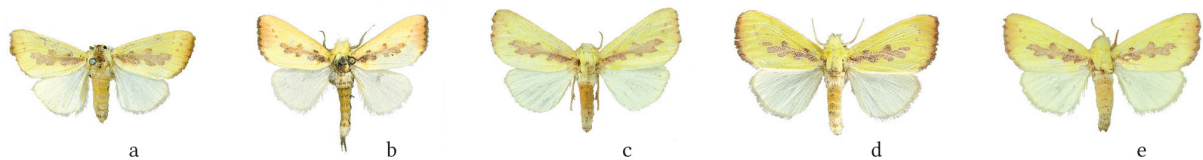
**Burkina Faso.** 2 ♀♀, Bobo Dioulasso, 10.vii.1975, 6.viii.1975, leg. Dr. Politzar (FLMNH, CGM). 3 ♀♀, Bobo, 9.viii.1975, 27.viii.1975, leg. H. Politzar, GS: ZSM 01-15 (ZSM). 1 ♀, Folenzo am Fluß, Comoe, 7.ix.1985, leg. Dr. Politzar (CGM). **Cameroon.** 1 ♂, North Region, Wack (La Falaise), 07°40'16.5"N, 13°33'18.4"E, 900m, 2–21.x.2018, general collecting, Sáfián, Sz., Simonics, G. leg. (ANHRT). 1 ♂, Adamaua, Poli, 500m, b. Garua, 2.vii.1937, leg. A Weidholz (NHMW). **Ghana.** 1 ♀, Gold Coast, Northern Territory, Navaro, leg. A.W. Cardinall, GS: NHMUK014331233 (prepared by G. László) (NHMUK). **Nigeria.** 1 ♂, N.W. State, Mokwa, I.A.R., Mile 1, 8–17.viii.1970, leg. P.H. Ward, GS: NHMUK014331232 (prepared by G. László) (NHMUK). **Senegal.** 1 ♂, 5 miles W Diouguel, natural riverine forest / grass and bushland, early to mid July 1985, leg. H. Friend (CGM). **Togo.** 1 ♂,

Fazao-Malfakassa NP, Point de vue campsite (Sudanian savannah), 8°48'50"N, 0°49'3.2"E, 415m, 16–23.viii.2018, Actinic Light Trap, Aristophanous, M., Geiser, M., Moretto, P., Sanbena, B. leg., GS: ANHRT 01570 (ANHRT).

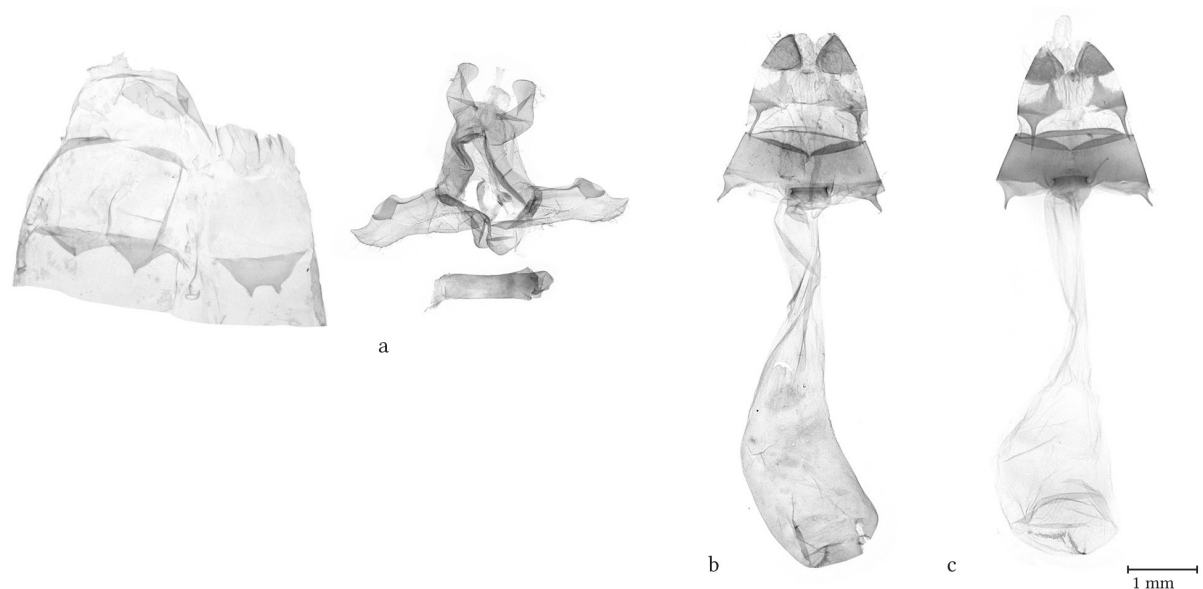
**Diagnosis.** *Antheua delicata* is the smallest species within the genus, with a forewing length ranging from 11–15 mm in males and 13–15 mm in females. It is easily distinguished from all other *Antheua* species by a unique red-brown longitudinal stripe on the forewing, which features irregular margins made up of short, rounded blotches. Additionally, the second apical dash, present in several related species, is absent in *A. delicata*. The terminal-subterminal area displays a variably short, rounded red-brown field that gradually fades into the bright yellow ground colour of the forewing, while the fringe is contrasting brown. Sexual dimorphism is limited in this species, primarily shown by the darker brown terminal area in females.

The male genitalia are notably small and feature a moderately long and thin, apically bilobate uncus. The socii are relatively large, elongated, and rounded at the tip. The valvae are rather narrow, slightly tapered distally with a short, pointed tip, and they possess a prominent, rounded costal projection (editum) situated postmedially. The ampulla is absent in this species. The phallus is tubular, relatively short, and moderately thick, with a small carinal spine.

The female genitalia are highly distinctive, characterised by a relatively short and narrow eighth segment, a narrow ostium bursae, and a very short rectangular antrum. The ductus bursae is remarkably long, while the corpus bursae is elongate and ellipsoid, featuring a narrow dentate streak of signum located at the anterior end of the bursa copulatrix.

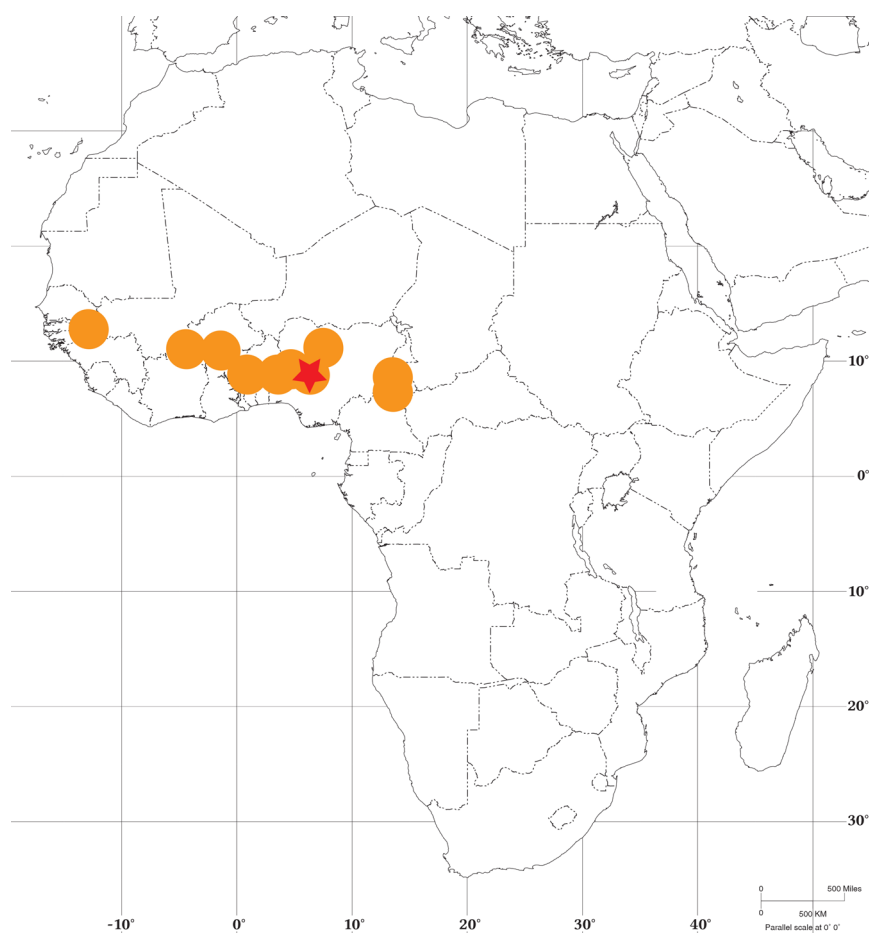


**Figure 132. *Antheua delicata*, adults.** **a)** ♀, Nigeria, Lokoja district, 100 miles to the north, holotype (NHMUK). **b)** ♂, Senegal, Diouguel (CGM). **c)** ♀, Burkina Faso, Bobo Dioulasso (FLMNH). **d)** ♀, Burkina Faso, Bobo (ZSM). **e)** ♀, Burkina Faso, Bobo (GS: ZSM 01-15, ZSM).



**Figure 133. *Antheua delicata*, genitalia.** **a)** ♂, Nigeria, Mokwa (GS: NHMUK014331232, NHMUK). **b)** ♀, Ghana, Navaro (GS: NHMUK014331233, NHMUK). **c)** ♀, Burkina Faso, Bobo (GS: ZSM 01-15, ZSM).

**Distribution.** This species is found in the dry savannah regions of the western Sahel. Its presence has been confirmed in Burkina Faso, Cameroon, Ghana, Nigeria, Senegal, and Togo.



**Figure 134.** Distribution of *Antheua delicata*.

***Antheua eriostepta* Tams, 1932**

Habitus: Fig. 135, Distribution map: Fig. 136.

*Antheua eriostepta* Tams, 1932, *The Entomologist* 65: 124.

Holotype: ♀, Uganda / Madi / - v -1927 / G.D.H. Carpenter (in coll. NHMUK).

**Diagnosis.** Forewing length of the female holotype is 22 mm. This species is known solely from its holotype specimen featuring a unique appearance characterised by the dense dark brown suffusion in the proximal three-quarters of the bright yellow forewing exhibiting a relatively large, dash-like discal spot. The dark suffused area is surrounded by a pure yellow costal and subterminal area where a sparse row of tiny brown spots on veins marks the subterminal line. The terminal line also comprises a series of red-brown dots; the fringe is yellowish-white, and the hindwing is off-white. The colouration of the head and thorax matches that of the forewing, whereas the abdomen is orange-brown. The genitalia of the holotype could not be examined.



**Figure 135.** *Antheua eriostepta*, adult. ♀, Uganda, Madi, holotype (NHMUK).

**Distribution.** The holotype of this species was collected in northern Uganda.



**Figure 136.** Distribution of *Antheua eriostepta*.

***Parazana* Bethune-Baker, 1911, stat. rev.**

*The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (8th series) 7: 555.

Type species: *Parazana radiata* Bethune-Baker, 1911 [= *Antheua albifasciata* Hampson, 1910].

**Characterisation of the genus**

Gaede (1934) treated *Parazana* as a synonym of *Antheua*, a concept that Kiriakoff (1964) also accepted. However, our research indicates that *Parazana* species exhibit several unique features that warrant their classification as a separate genus. *Parazana* species are unmistakable due to their distinctive external appearance, characterised by rusty brown forewings with contrasting white-tinged veins. Sexual dimorphism in this genus is limited and primarily evident in the filiform antennae and the broader forewings of females.

In terms of male genitalia, they feature elongated, slender, slightly curved socii with a unique, window-like weakened basal sclerotization, a trait that is also observed in the genus *Zana* Walker, 1856. The phallus is short, with a greatly broadened coecum, a constricted medial section, and a moderately dilated distal end that extends into two lateral projections without a carinal spine. The endophallus is very short and proximally inflated, displaying a spherical shape; a small group of deciduous caltrop cornuti is present at the base of the vesica ejaculatorius, which often detaches from the endophallus during the everting process.

The female genitalia are characterised by a relatively narrow and short eighth segment, a moderately broad ostium bursae, a weakly sclerotized antrum, and a short, relatively thick ductus bursae.



The sclerotized distal plates of the spherical corpus bursae, found at the junction of the ductus bursae, are notably extensive and heavily sclerotized. Additionally, the signum bursae is small, dash-like, and located anteriorly. The genus consists of only two species and shows a closer morphological resemblance to *Zana* Walker, 1856, than to *Antheua*.

***Parazana albifasciata* (Hampson, 1910), comb. nov.**

Habitus: Figs 137a–e, Genitalia: Figs 138a–c, Distribution map: Fig. 139.

*Ichthyura albifasciata* Hampson, 1910, *The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (8th series) **5**: 495.

Holotype: ♀, Sierra Leone (in coll. NHMUK).

**Synonym:**

*Parazana radiata* Bethune-Baker, 1911, **syn. nov.**

*The Annals and Magazine of Natural History including Zoology, Botany, and Geology* (8th series) **7**: 555.

Holotype: ♂, [Nigeria], Lokoja District, 100 miles to the north (in coll. NHMUK).

**Material examined** (7 ♂♂, 2 ♀♀).

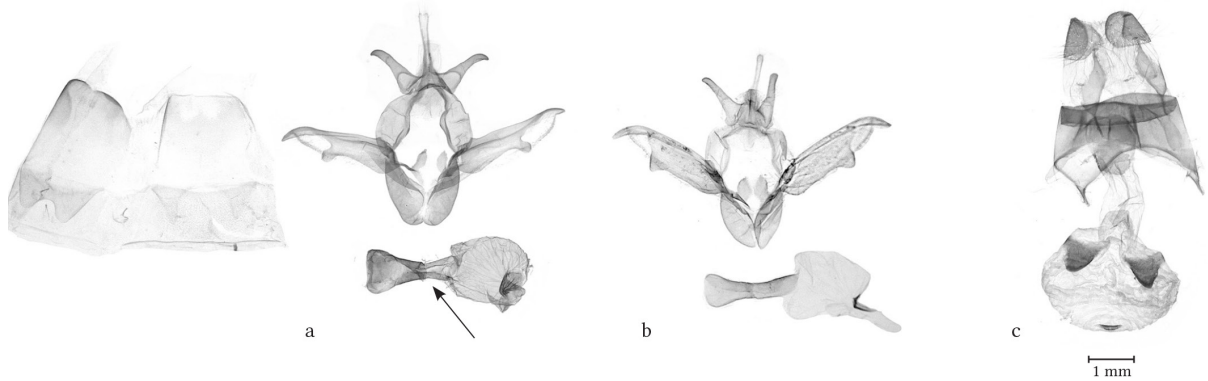
**Burkina Faso.** 1 ♂, Folonzo am Fluß, Comoe, 7.ix.1985, leg. Dr. Politzar (FLNHM). 1 ♂, Bobo Dioulasso, 10.ix.1982, 28.ii.1982, leg. Dr. Politzar (FLNHM, CGM). **Gambia.** 1 ♂, Lamin, 13°23'30"N, 16°38'30"W, 3.viii.2009, leg. R.W. Goff; 1 ♂, Tanji, 13°22'N, 16°46'W, 22.ix.2009, leg. R.W. Goff, GS: LG 4357 (ANHRT). **Ghana.** 3 ♂♂, 2 ♀♀, Gold Coast, N. Territories, Kete-Krachi, leg. A.W. Cardinall, GS: NHMUK014331229 ♂, NHMUK014331230 ♀ (prepared by G. László) (NHMUK).

**Diagnosis.** Forewing length is 14–15 mm in males and 14–16 mm in females. This species closely resembles *P. rufovittata*; however, the greyish-white longitudinal medial field between the base and termen of the forewing is much paler and narrower. The hindwings of *P. albifasciata* have a slight yellowish tint, while those of *P. rufovittata* are pure white.

The male genitalia of *P. albifasciata* differ from those of *P. rufovittata* by the slightly shorter socii, the straight costal margin of the valva (whereas it is dilated medially in *P. rufovittata*) and the considerably broader and shorter ampulla process. The phallus of *P. albifasciata* is similarly short but somewhat narrower and more constricted than that of its congener. The inflated basal part of the endophallus is somewhat cuboid, while it is rather spherical in *P. rufovittata*. The configuration of the female genitalia is nearly identical in both species; however, *P. albifasciata* has slightly shorter apophyses anteriores, a more slender and longer ductus bursae, smaller distal plates of the corpus bursae, and a smaller signum.



**Figure 137. *Parazana albifasciata*, adults. a)** ♀, Sierra Leone, holotype (NHMUK). **b)** ♀, Nigeria, 100 miles N of Lokoja, holotype of *Parazana radiata* (NHMUK). **c)** ♂, Gambia, Tanji (GS: LG 4357, ANHRT). **d)** ♂, Ghana, Kete-Krachi (GS: NHMUK014331229, NHMUK). **e)** ♀, Ghana, Kete-Krachi (GS: NHMUK014331230, NHMUK).

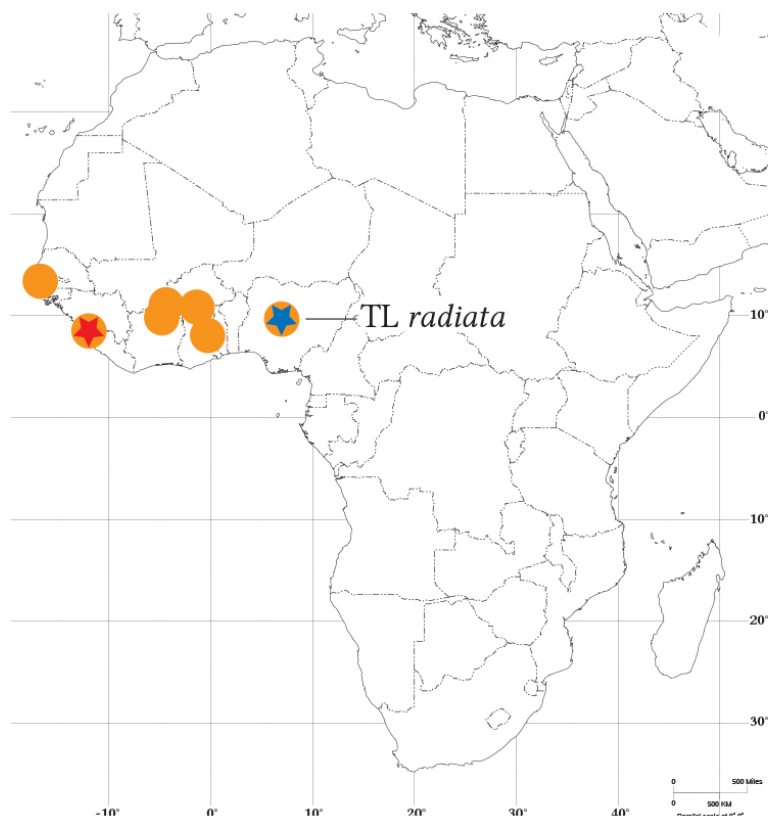


**Figure 138.** *Parazana albifasciata*, genitalia. **a)** ♂, Ghana, Kete-Krachi (GS: NHMUK014331229, NHMUK). **b)** ♂, The Gambia, Tanji (GS: LG 4357, ANHRT). **c)** ♂, Ghana, Kete-Krachi (GS: NHMUK014331230, NHMUK).

**Taxonomic notes.** At first glance, the rather worn holotype of *P. albifasciata* vaguely resembles members of the genus *Clostera*, which may explain why Hampson (1910) placed it in Pygaerinae. Kiriakoff (1968) followed this concept and moved *P. albifasciata* to the genus *Clostera* Samouelle, 1819. However, through the examination of the holotype and recent specimens, it has been determined that the species shares no commonalities with Pygaerinae and is thus transferred to the genus *Parazana* (**comb. nov.**).

Gaede (1928) considered *P. radiata* Bethune-Baker, 1911 to be a synonym of *P. rufovittata*; however, the holotype of *radiata* is actually conspecific with *P. albifasciata*. Since the latter name was published one year earlier, *albifasciata* takes priority over *radiata* (**syn. nov.**).

**Distribution.** This species is distributed in West Africa, with confirmed records from Burkina Faso, Gambia, Ghana, Ivory Coast, Nigeria, and Sierra Leone.



**Figure 139.** Distribution of *Parazana albifasciata*.

***Parazana rufovittata* (Aurivillius, 1901)**

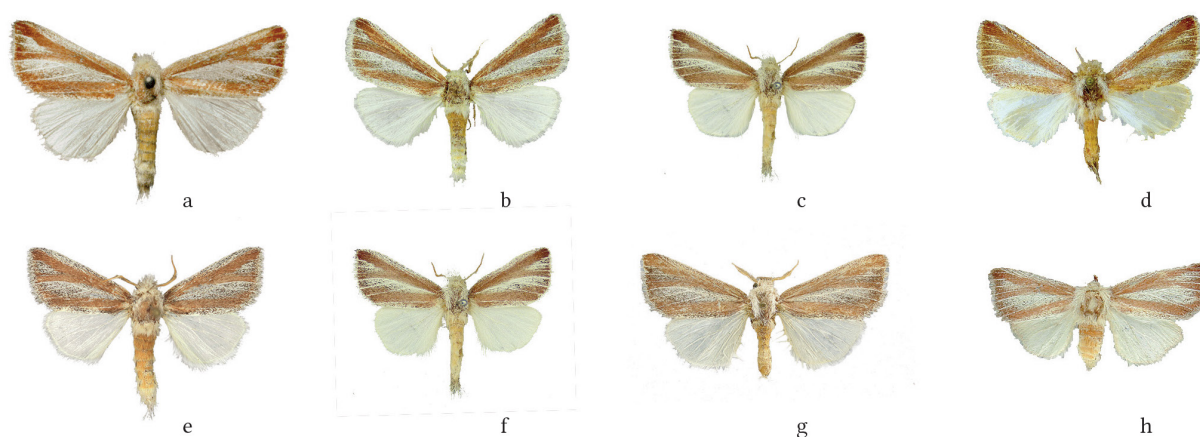
Habitus: Figs 140a–h, Genitalia: Figs 141a–c, Distribution map: Fig. 142.

*Anticyra rufovittata* Aurivillius, 1901, *Entomologisk Tidskrift* **22**: 122.

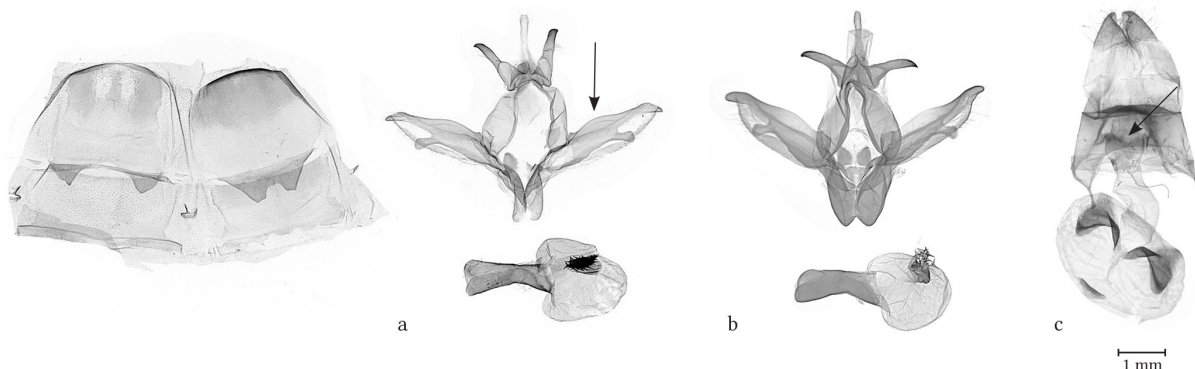
Holotype: ♂, Congo / Dannfelt. (in coll. NRMS).

**Material examined** (7 ♂♂, 2 ♀♀).

**Angola.** 1 ♂, Lunda-Distrikt, Cucumbi, 1250m, ii.1960, leg. E. Mercier (ZSM). **Country unknown.** 1 ♀, East Africa, leg. Capt. Moysey, GS: NHMUK014331231 (prepared by G. László) (NHMUK). **DRC.** 1 ♂, Sankuru, Dimbelenge, 2.xii.1950, leg. Dr. M. Fontaine; 1 ♀, Kil. 345 de Kindu, nuit, leg. Dr. Russo (RMCA). 1 ♂, Ht. Katanga, Tshinkolobwe, 11.xii.1930, leg. J. Romieux, GS: MHNG 01-18 (MHNG). 1 ♂, Neu-Kamerun, Bagiri, 22.v.1913, leg. Houy, S.G. (MfN). **Zambia.** 1 ♂, Ikelenge, Hillwood, S11°16'02", E24°18'59", 1400m, 30.x–3.xi.2017, MV Light Trap, Carter, M., Lloyd, A., Miles, W., Oram, D., Smith, R. leg. (ANHRT). 1 ♂, Hillwood Farm, S11°16.01', E24°18.99' 1320m, 17.ix.2009 leg. J. Lenz (CRF). 1 ♂, Zambezi Rapids, Mwinilunga, 19.i.1965, GS: GU68-20 (CAS).



**Figure 140. *Parazana rufovittata*, adults.** **a)** ♂, Congo, holotype (NRMS). **b)** ♂, DRC, Haut Katanga, Shinkolobwe (GS: MHNG 01-18, MHNG). **c)** ♂, [Congo], Neu-Kamerun, Bagiri (MfN). **d)** ♂, Zambia, Mwinilunga, Zambezi Rapids (GS: GU 68-20, CAS). **e)** ♂, Zambia, Hillwood Farm (CRF). **f)** ♂, DRC, Sankuru, Dimbelenge (RMCA). **g)** ♂, Angola, Lunda District, Cucumbi (ZSM). **h)** ♀, DRC, Kindu (RMCA).



**Figure 141. *Parazana rufovittata*, genitalia.** **a)** ♂, Zambia, Mwinilunga, Zambezi Rapids (GS: GU 68-20, CAS). **b)** ♂, DRC, Haut Katanga, Shinkolobwe (GS: MHNG 01-18, MHNG). **c)** ♀, East Africa (GS: NHMUK014331231, NHMUK).

**Diagnosis.** Forewing length is 14–17 mm in males and 14–15 mm in females. The forewing of this species is rusty-brown, marked by a long, relatively broad greyish longitudinal field in the middle and a triangular patch near the apex. The anal margin is highlighted in pale grey, and the distal sections of the veins are tinged with white. The pale greyish-white longitudinal field stretching from the base to the termen along vein M2 is significantly broader than in *P. albifasciata*. In terms of male genitalia, this

species features a relatively long and narrow uncus, along with a pair of slender, long, slightly tapered and apically pointed socii; these characters are somewhat shorter in *P. albifasciata*. The costal margin of the valva is slightly dilated medially, unlike *P. albifasciata*, which has a straight costal margin. The costal plate (editum) of *P. rufovittata* is noticeably shorter, while the ampulla process is longer and narrower compared to its congener. The phallus is greatly constricted, short, and thick, with a spherical endophallus. In the female genitalia, there is a V-shaped notch on the posterior margin of the antrum, while it is straight in the related species. In *P. rufovittata*, the ductus bursae is broader and shorter, and the strongly sclerotized distal plates of the corpus bursae are larger than those in *P. albifasciata*; additionally, the signum bursae is more extensive than that of *P. albifasciata*.

**Distribution.** *Parazana rufovittata* is known from Angola, Congo, the DRC, and Zambia.



**Figure 142.** Distribution of *Parazana rufovittata*.

## Discussion

### Taxonomic aspects

The most recent taxonomic updates regarding the genus *Antheua* were published by Schintlmeister & Witt (2015), focusing primarily on South African fauna. Before this work, Kiriakoff (1962, 1964, 1970, 1979) had made several nomenclatural changes to the genus in the 1960s, which addressed the entire Afrotropic region. As a result of these efforts, 27 valid species within the genus were recognized.

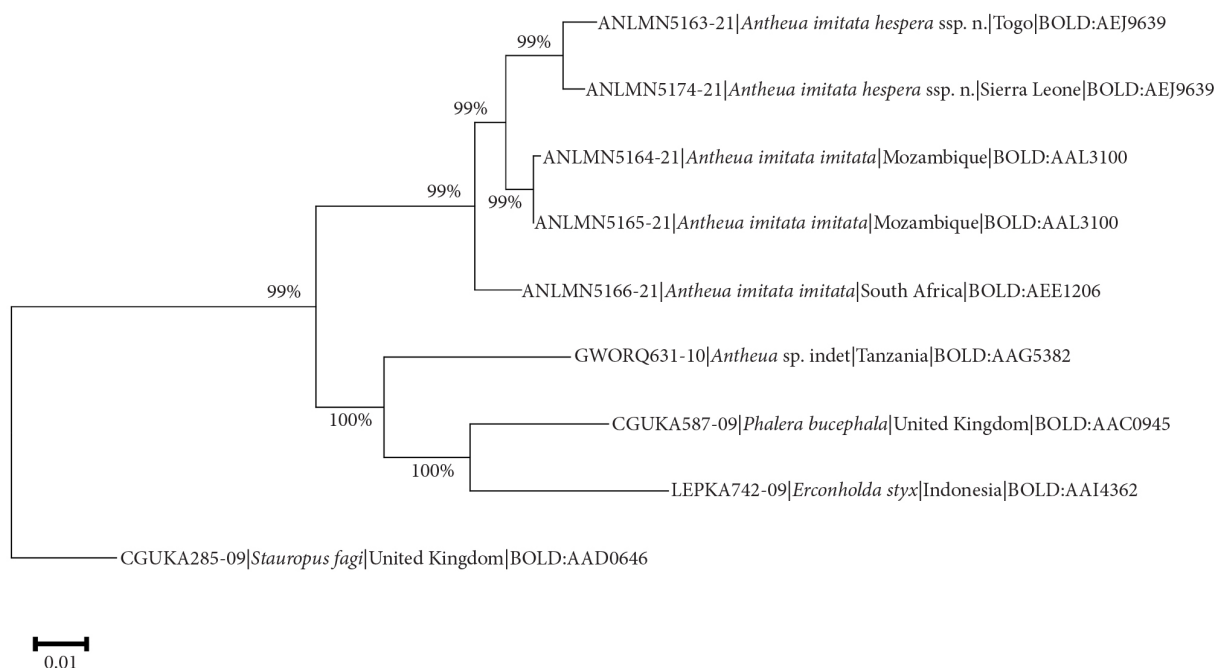
Our research, based on recent material collected over the past two decades and accessions of historical collections (e.g. NHMUK and RMCA), has revealed a significant number of previously undescribed species and clarified several nomenclatural issues. Consequently, the number of recognised *Antheua* species-group taxa has risen to 46, including 19 newly described species, and one new subspecies, while six names have been synonymised.



A notable change in the taxonomy of the genus is the inclusion of several brownish-grey taxa (i.e., the *A. atrata* species group and *A. imitata* species group), which were previously placed in the genus *Phalera*. This expansion is justified by shared diagnostic features in genital morphology, such as the thin, weakly sclerotized uncus, the complex configuration of the socius, the presence of a flap-like apical lobe on the valva, a large editum with a short, rounded ampulla process, and a short, tubular aedeagus with an acute carinal projection – traits commonly observed in *Antheua*.

It is important to note that molecular studies, using multiple genetic markers (St Laurent *et al.* 2025), have also suggested the inclusion of the *atrata* complex within *Antheua*. This study used a comprehensive phylogenomic dataset of 854 anchored hybrid enrichment loci from 150 species, including *Phalera bucephala* Linnaeus, *Antheua servula*, and *Phalera atrata*, and supported our morphological hypothesis. As a result, the entire *atrata* complex is now treated under *Antheua*. *Phalera imitata* Druce, 1896, although externally highly similar to the Palearctic *Phalera bucephala* (Linnaeus, 1758), differs markedly in male genitalia, particularly in the long, slender, and weakly sclerotized uncus characteristic of *Antheua*, in contrast to the broad triangular, heavily sclerotized uncus observed in the type species of *Phalera*.

Although comprehensive genetic analyses were beyond the scope of our study, five *P. imitata* specimens from the ANHRT collection were DNA barcoded. Maximum Likelihood analysis of these COI 5P' sequences, together with DNA barcodes from *P. bucephala*, *Erconholda styx* Holloway, 1983, and an unidentified member of the *A. simplex* species group obtained from the BOLD (boldsystems.org) database, indicated a distinct phylogenetic position for *P. imitata* (Fig. 143). Pairwise distance calculations revealed an 8.10–8.97% divergence between *P. imitata* and *P. bucephala*, and a 7.75–8.26% divergence between *P. imitata* and *A. cf. simplex*. The pairwise distance between the latter *Antheua* sample and *P. bucephala* was 7.50%. These comparable and relatively high pairwise distance values suggest that the three taxa examined may represent three distinct genera. However, establishing a new genus for the Afrotropical *imitata* is not warranted without a comprehensive, integrative taxonomic analysis of Eurasian *Phalera* and related genera. Consequently, based on similarities in genital morphology and bionomy, we provisionally transfer the Afrotropical taxa exhibiting typical *Phalera* habitus to *Antheua*: *A. imitata* **comb. nov.** and *A. lydenburgi* **comb. nov.**



**Figure 143.** ML dendrogram of selected Phalerinae species based on COI barcodes, rooted with *Stauropus fagi* as outgroup taxon.

Our limited genetic study based on a single marker (COI 5P') confirmed that *A. imitata* is not congeneric with *P. bucephala*. However, this analysis did not establish a direct association between *A.*

*imitata* and *Antheua*, and demonstrated that the current concept of *Antheua* is paraphyletic. (Fig. 143). St Laurent *et al.* (2025) thoroughly discussed the open questions in the phylogeny of Phalerinae, which are primarily due to the lack of sequences for the type species of seemingly closely related genera such as *Phalera*, *Antheua*, *Rigema*, *Zana*, *Eutimia*, and *Roppa*. In their analysis, *Rigema* and *Eutimia* nested within the greater *Antheua* clade, suggesting potential congenericity among the three genera. It is plausible, based on both the aforementioned paper and our present study, that *Phalera* is absent in the Afrotropics; however, the validity and the phylogenetic relationships of the other genera remain uncertain. Comprehensive phylogenetic studies are required to resolve these issues and elucidate the phylogeny of Old World Phalerinae.

Our paper introduces an additional taxonomic update: based on diagnostic morphological characteristics, the genus *Parazana* is reinstated from synonymy with *Antheua*.

The complexity of male genital structures facilitates the development of distinct morphological differences, a phenomenon commonly observed in isolated *Antheua* populations, leading potentially to allopatric speciation. At the same time, the genus includes several sympatric taxa whose nearly identical external appearances are combined with significantly different genital morphologies. In both instances, comparative studies of genital structures are essential for accurate identification and a clearer understanding of the distribution of *Antheua* taxa.

### Biogeographical overview

Representatives of the genus *Antheua* are found throughout Sub-Saharan Africa, primarily favoring drier habitats over moist forests. The highest diversity of *Antheua* species is observed in East Africa, particularly in the highlands along the Rift Valley and the isolated volcanic systems of Kenya and Tanzania, which provide ideal conditions for allopatric speciation. Several species recorded from this region have relatively restricted distributions and appear to be endemic to specific areas. These include *A. trivitta*, *A. hirutae* **sp. nov.**, *A. kaffa* **sp. nov.**, and *A. nigristriga*, which are known from the Ethiopian Highlands; *A. lemona* **sp. nov.** from the Chyulu Hills near Kibwezi in southern Kenya; *A. nicholsonrobertsi* **sp. nov.** from South Sudan; *A. eriostepta* from northern Uganda; and *A. eximia* from the Southern Highlands of Tanzania.

Some East African species have broader distributions expanding to southern-central Africa. For example, *A. obtusipuncta* **sp. nov.** replaces the mainly southern African species *A. simplex* in northern regions, from Angola across the Zambian Plateau to Somalia. *Antheua reducta* **sp. nov.**, which seems to be widespread in Tanzania and southern Kenya, and *A. lungu* **sp. nov.**, known from the broader vicinity of the Albertine Rift. *Antheua pyrasa* **sp. nov.** has been recorded in both Kenya and Ethiopia, while *A. liparidioides* is identified from Kenya and Burundi. However, it is important to note that due to the limited material collected in East African countries, the exact distribution ranges of these seemingly local species cannot yet be established with complete certainty.

Moving southward, a relatively extensive area of southern-central Africa stretching from the Albertine Rift through the Zambian and Katanga Plateau to the highlands of northern Angola, represents another important area for speciation. The following species have their ranges restricted to this area: *A. smithi* **sp. nov.**, *A. galbina* **sp. nov.**, *A. lungu* **sp. nov.**, *A. lunda* **sp. nov.**, *A. tricolor tricolor*, *A. croceipuncta*, *A. albida*, *A. triloris* **sp. nov.**, *A. insignata* and *A. conspicuana* **sp. nov.**

Species diversity decreases as one moves towards southern Africa, with only a few endemic taxa such as *A. mixta*, *A. consanguinea*, and *A. aurifodinae*. *Antheua simplex* is predominantly a southern African species with sporadic records from southern central Africa and the vicinity of the Rift Valley. In the tropical rainforests of the Congo Basin and central Africa, *Antheua* taxa are present in limited numbers; however, two endemic species inhabit the isolated drier savannah or grassland habitats: *A. lobo* **sp. nov.** and *A. angolana*. *Parazana rufovittata* can also be classified as a central African species, with its range expanding to northwest Zambia.

West Africa is home to numerous relatively widespread species, such as *A. cinerea*, *A. atrata*, *A. magnipuncta* **sp. nov.**, *A. ruficosta*, *A. interstincta* **sp. nov.**, *A. delicata*, *A. extenuata* and *P. albifasciata*. Several taxa, including *A. melanotornata* **sp. nov.**, *A. tricolor anomala*, and *A. elongata*, have wide distributions between Senegal and Sudan throughout the Sahel zone. However, *A. editae* **sp. nov.** has considerably more restricted range in southwestern Mali and central Senegal.

Notably, *A. spurcata* and *A. tricolor* are the only, extremely widespread species within the genus, having been recorded throughout Sub-Saharan Africa, including lower numbers in the rainforests of the Congo Basin.

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The authors declare that to the best of their knowledge they conform to the national regulations and meet with the conditions and requirements of International Conventions concerning collecting/export and handling of the specimens presented in this Article.

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