

## **New genera and species of Afrotropical Ancyrolomiini Ragonot, 1889 (Lepidoptera: Pyralidae sensu lato: Crambinae)**

Author: Bassi, Graziano

Source: Revue suisse de Zoologie, 128(2) : 477-486

Published By: Muséum d'histoire naturelle, Genève

URL: <https://doi.org/10.35929/RSZ.0058>

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](https://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

## New genera and species of Afrotropical Ancylolemiini Ragonot, 1889 (Lepidoptera: Pyralidae *sensu lato*: Crambinae)

Graziano Bassi

*Via Sant'Agostino, 51, I-10051 Avigliana (Torino), Italy; Muséum d'histoire naturelle de Genève, C.P. 6434, CH-1211 Geneva 6, Switzerland (Corresponding member). E-mail: alphacrambus@gmail.com; ORCID 0000-0002-6028-0740*

**Abstract:** Two new genera of Afrotropical Crambinae are described and illustrated: *Afrocharltona* gen. n. including *A. katanga* sp. n. from the Democratic Republic of the Congo and *A. oblongissima* sp. n. from Botswana, Namibia and Zambia, and *Afroromieuxia* gen. n. including *A. aarviki* sp. n. from Tanzania, *A. bernardlandryi* sp. n. from the Democratic Republic of the Congo, and *A. ustjuzhanini* sp. n. from Zambia.

**Keywords:** Africa - *Afrocharltona* - *Afroromieuxia* - Crambidae - Pyraloidea.

### INTRODUCTION

The tribe Ancylolemiini Ragonot, 1889 experienced important evolutionary success in the Old World and particularly in the Afrotropics. Recent genetic studies (Léger *et al.*, 2019) highlight that the Ancylolemiini should enclose the Prionapterygini Landry, 1995, but for the sake of simplicity the present paper concerns only the genera strictly related to *Ancylolema* Hübner, 1825, as summarized in Bassi (2013). The Afrotropical fauna of the tribe's main genera, i.e. *Ancylolema*, *Prionotalis* Hampson, 1919, *Charltona* Swinhoe, 1886, were never reviewed, except for two small species groups of *Ancylolema* (Bassi, 2013).

Among the very valuable material forwarded to me for study by Leif Aarvik (Natural History Museum, University of Oslo, Norway) and by Bernard Landry (Muséum d'histoire naturelle, Geneva, Switzerland), and in my own collection I found a few species that are superficially similar to known genera such as *Charltona*, *Diploschistis* Meyrick, 1937 and *Prionotalis*, but that have such unique genitalia that the description of new genera is deemed to be warranted.

### MATERIAL AND METHODS

Genitalia preparations were made following Robinson (1976). The terminology of the genitalia follows Błeszyński (1970), Klots (1970) and Kristensen (2003). Genitalia photographs were taken with a Canon S120 digital camera. The habitus photos were made with a

Nikon D300 digital camera. The images were enhanced with Adobe Photoshop Elements. The following abbreviations are used: 'BC' for barcode, 'DRC' for Democratic Republic of the Congo, 'GB' for Graziano Bassi, 'GS' for genitalia slide, 'm' for meter(s), 'RCGB' for Graziano Bassi research Collection, Avigliana, Italy, 'MHNG' for "Muséum d'histoire naturelle de Genève," Geneva, Switzerland, 'NHMO' for Natural History Museum, University of Oslo, Norway, 'RMCA' for Royal Museum for Central Africa, Tervuren, Belgium, 'ZSM' for Zoologische Staatssammlung München, Germany, 'TMSA' for Ditsong National Museum of Natural History (formerly the Transvaal Museum), Pretoria, Republic of South Africa.

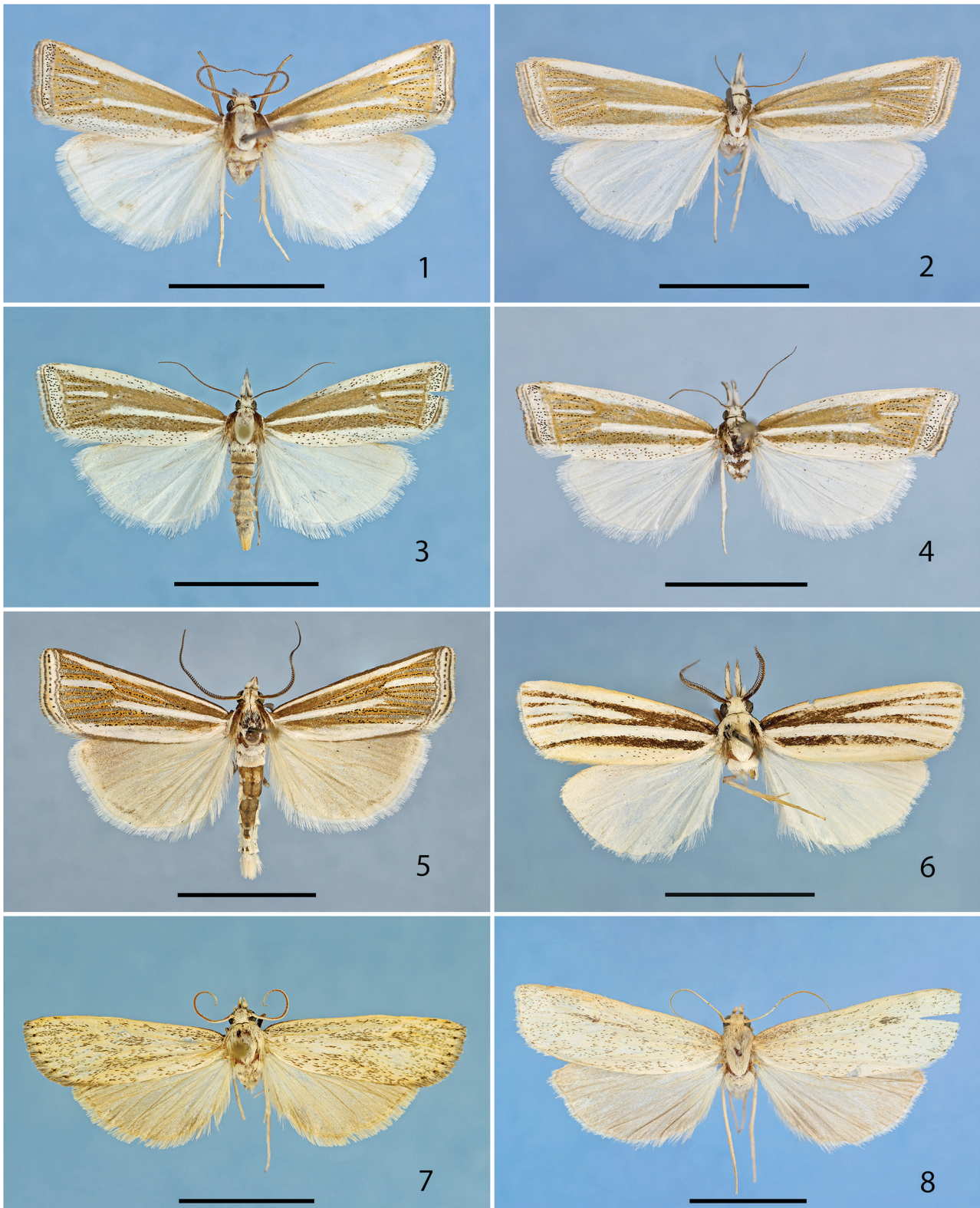
### TAXONOMY

#### *Afrocharltona* gen. n.

Figs 7-11, 13, 17-19

**Type species:** *Afrocharltona oblongissima* sp. n.

**Diagnosis:** In the adult the slender forewing distinguishes *Afrocharltona* from *Charltona*. Some *Prionotalis* [i.e. *P. balia* (Tams, 1932)] also have forewing yellow marbled with brown, but their apex of forewing is more pointed. In the male genitalia the combination of modified uncus and the very long and narrow valva represents a distinctive feature. In the female genitalia the lateral extension of medium length branching off in the middle of the ductus bursae and the ductus seminalis originating close to the lateral



Figs 1-8. Habiti. (1) *Afrormieuxia bernardlandryi*, holotype. (2) *A. bernardlandryi*, female paratype. (3) *A. aarviki*, holotype. (4) *A. ustjuzhanini*, holotype. (5) *Ancylolomia prepiella*, male, Lesotho. (6) *Diploschistis stygiocrena*, male, DRC. (7) *Afrocharltona oblongissima*, holotype. (8) *A. katanga*, holotype. Scale bars = 10 mm.



extension, are unique among related genera except for the *prepiella* species complex in the *inornata* group in *Ancyrolomia* (Bassi & Trematerra, 2014). In this complex, however, the lateral extension is always very thin.

The holotype and the female paratype from Zambia of *A. oblongissima* are barcoded, showing intraspecific distance of 1.27% and distance of 9.36% from *Charltona tritonella* (Hampson, 1898) and 7.74% from *Charltona plurivittalis* Hampson, 1910. However, the paucity of available barcoded specimens of *Ancyrolomia* and allied genera does not allow a comprehensive DNA comparison, and in the future more molecular markers should be analysed to be conclusive on the relationships to other genera of Ancyrolomiini.

**Etymology:** The generic name is a combination of *afro* (from Africa) and *Charltona*, the probably closest genus. The gender of the new genus is feminine.

**Description:** Medium to large species, with labial palpi rather short (2.5 - 3 x eye diameter in side view), ocelli and chaetosemata poorly developed, narrow forewing with rounded apex and arched termen.

Male genitalia. Uncus slightly longer than gnathos (1.1 x), heavily bulged dorsally and with blunt and wrinkled apex. Gnathos subtriangular, slightly upcurved apically. Tegumen with slender arms, tegumen roof 0.3 of tegumen arm length. Vinculum v-shaped, moderately produced dorsally. Juxta suboval, more or less folded medially. Pseudosaccus a small plate fused with juxta. Valva strongly elongated, tapering towards apex; costal process always developed over cucullus. Phallus stout, 0.6 x valva length, with phallobase downcurved.

Female genitalia. Papillae anales subtriangular, rounded ventrally. Apophyses well developed, roughly the length of papillae anales. Ostium concave, with sclerotized edge. Ductus bursae elongated, sclerotized and bearing a narrow lateral extension. Ductus seminalis originating at the middle of ductus bursae. Corpus bursae oval, wrinkled.

**Biology:** Unknown.

**Distribution:** Central Africa and Northern part of Southern Africa.

### *Afrocharltona oblongissima* sp. n.

Figs 7, 9-11, 17-19

#### Material examined

**Holotype:** Male; Botswana, Maun, 957 m, 1-2.xii.2010, 19°55'58S 23°30'61E, lux, G. Bassi legit, BC 92320 ZSM, GS 6245 GB, 41400 RCGB.

**Paratypes:** Male; same data as holotype, Collezione Bassi, GS 5365 GB, RCGB. – Female; Zambia, Livingstone, Maramba River Lodge camp, 17°53'S 25°51'E, 900 m, 28.xi.2010, lux, G. Bassi legit, BC 92321 ZSM, GS

6230 GB, RCGB. – Female; Namibia, Ghaub Vall[ey], 7.i.[19]72, D. M. Kroon [legit], GS 5444 GB, TMSA. – Female; Namibia, Otavi, 5.i.[19]72, D.M. Kroon [legit], TMSA.

**Diagnosis:** The yellow ground colour distinguishes *A. oblongissima* from *A. katanga* described below. The male genitalia are similar to *A. katanga* but the valva and apical thorn of the costal arm are longer and the phallus is without cornuti in the vesica. The female genitalia with lateral extension of medium length and thickness, with ductus seminalis originating nearby from ductus bursae are unlike every other species of the *Ancyrolomia* complex.

COI barcode sequence of the holotype BIN: BOLD:ADF2943 (658 bp):

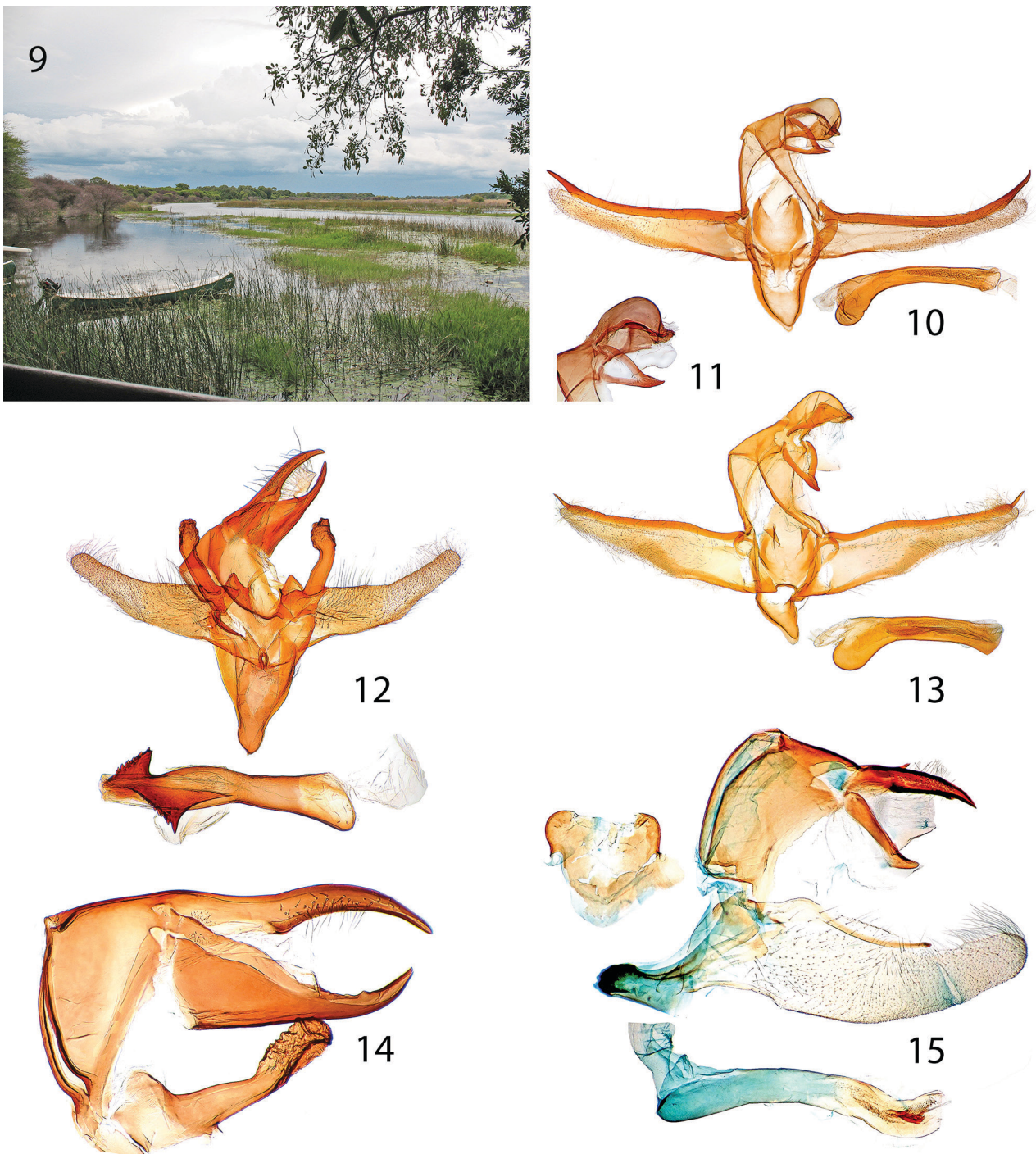
```
AACTTTATATTTTATTTTGGAAATTTGAGCAGGAATATT-
AGGAACATCTTTAAGACTTTTAATTCGAGCTGAATTAG-
GAAATCCTGGATCTTTAATTGGAGATGATCAAATTATAATAC-
TATTGTAACAGCTCATGCATTTATTATAATTTTTTTATAGT-
TATACCAATTATAATTGGTGGATTTGGTAATTGATTAGTC-
CCTTTAATATTAGGAGCACCTGATATAGCTTTCCCCCG-
TATAAATAATATAAGATTTTGATTACTACCTCCCTCTCTA-
ACTCTTTTAATTTCCAGAAGAATTGTTGAAAATGGAG-
CAGGTAAGTGAACAGTGTACCCCCACTTTTCATC-
CAATATTGCTCATGGTGGAAAGTTCTGTAGACCTAGC-
TATTTTTTCTTTACACTTAGCTGGAATTTCTTCTATTTT-
GTGCTATTAACTTTATTACAACAATTATAATATACGAATTA-
ATGGGTTATCTTTTGATCAAATACCTTTATTTGTTGATCTG-
TAGGAATTACTGCTTTATTACTTTTATTATCATTACCTGTATT-
AGCAGGAGCTATTACTATACTACTGACCGAAATTTA-
AATACATCTTTCTTTGATCCAGCAGGAGGAGGAGATCCAAT-
TCTTTATCAACACTTATT
```

**Etymology:** The name is derived from the Latin *oblongus-a* = very elongated, and refers to the shape of the valva in the male genitalia.

**Description** (Fig. 7): Wingspan of holotype 29 mm; male paratype 34 mm, female paratypes 33 to 36 mm. Labial palpus 3 x as long as greatest diameter of eye, ochre brown tipped with white on outer side, creamy white on inner side. Maxillary palpus ochre brown tipped with white. Frons rounded, slightly produced, white to pale yellow. Antennae thin, serrate in male, simple in female, pale brown with silvery white costa. Vertex white. Patagia white to pale yellow. Tegulae and thorax pale yellow sprinkled with brown. Forewing slender, with rounded apex and termen oblique; ground colour pale grey yellow sprinkled with brown and black; veins marked with yellow; seven terminal dots; fringes white and silvery grey; underside grey yellow strongly suffused with dark brown. Hindwing pale golden yellow suffused greyish brown; terminal line brown; fringes paler than ground colour; underside pale golden yellow suffused with brown. Legs golden yellow; tibial spurs small. Abdomen golden yellow suffused with grey, paler in males; sternites pale yellow.

Male genitalia. (Figs 10, 11). Uncus as long as gnathos, strongly bulged dorsally, with apex blunt and notched. Gnathos with pointed and slightly upcurved apex. Tegumen almost twice as long as uncus, narrow. Vinculum





Figs 9-15. Habitat and male genitalia. (9) Habitat of *Afrocharltona oblongissima* (photo G. Bassi, Dec., 2010). (10) *A. oblongissima*, holotype. (11) *A. oblongissima*, paratype, Botswana, Maun, uncus and gnathos in lateral view. (12) *Afroromieuxia bernardlandryi*, holotype. (13) *Afrocharltona katanga*, holotype. (14) *Afroromieuxia bernardlandryi*, paratype, uncus, gnathos and costal process in lateral view. (15) *Diploschistis stygiocrena*, DRC.

stout, subtriangular. Pseudosaccus subtrapezoidal, fused with juxta. Juxta broadly v-shaped. Valva extremely elongated, with rounded cucullus; costal arm slightly longer than valva, strongly sclerotized, with apical long and pointed thorn. Phallus with bent phallobase: vesica with minute scobinations.

Female genitalia (Figs 17-19). Papillae anales subtriangular. Apophyses posteriores with lightly sclerotized basis and arms weakly arched. Abdominal segment VIII ventrally membranous and lightly sclerotized dorsally. Apophyses anteriores sub-triangular, shorter than apophyses posteriores. Ostium bursae large, semi-circular, lightly sclerotized. Ductus bursae twice as long as corpus bursae, sub-conical, strongly sclerotized except at its beginning; extension at 0.5, just below origin of ductus seminalis, cylindrical, slightly shorter than corpus bursae, more or less sclerotized and wrinkled. Corpus bursae sub-oval, weakly wrinkled.

**Biology:** Unknown. The adults from Botswana and Zambia were attracted to actinic artificial light in the riparian vegetation (Fig. 9).

**Distribution:** Northern part of Southern Africa: Botswana, Namibia, South Zambia.

#### *Afrocharltona katanga* sp. n.

Figs 8, 13

#### Material examined

*Holotype:* Male; [DRC], H[au]t Katanga, Tshinkolobwe, 5.x.[19]30, J. Romieux [legit], GS 5970 GB, MHNG.

**Etymology:** The species is named after the Province of the Democratic Republic of the Congo where the holotype was collected and is treated as a noun in apposition.

**Diagnosis:** The forewing with pale yellow ground colour flushed with pink grey and the brown hindwing with yellow, pink and grey suffusion distinguish *A. katanga* from *A. oblongissima*. The male genitalia are similar to those of *A. oblongissima* but the valva and apex of the costal arm are shorter and the phallus has two cornuti in the vesica.

**Description** (Fig. 8): Wingspan 36 mm. Labial palpus 2.5 x eye diameter, chestnut brown, apically paler. Maxillary palpus basally chestnut brown, apically paler. Antenna thickened, brown with costa paler. Frons rounded, slightly produced, off-white. Vertex and patagia pale yellow. Tegulae and thorax pale yellow, sprinkled with brown. Forewing and hindwing as in Fig. 8. Forewing sprinkled with brown, more intensely basally; suboval brown dot after cell; fringes bright ivory yellow. Underside pale yellow, suffused with brown dorsally in hindwing. Abdomen pale yellow. Legs yellow; tibial spurs asymmetrical, first pair longer than apical pair.

Male genitalia. (Fig. 13). Uncus as long as gnathos, strongly bulged dorsally and with apex blunt and notched. Gnathos with pointed and slightly upcurved apex. Tegumen almost twice as long as uncus, narrow. Vinculum stout, subtriangular. Pseudosaccus narrow, concave. Juxta suboval, with subtriangular protrusions medioventrally. Valva extremely elongated, narrowing apically, with rounded cucullus; costal arm slightly longer than valva, strongly sclerotized, with apical pointed thorn. Phallus with bent phallobase: vesica with two light sclerotized cornuti and minute scobinations. Female unknown.

**Biology:** Unknown.

**Distribution:** Presently known only from the Haut-Katanga province in the DRC.

#### *Afroromieuxia* gen. n.

Figs 1-4, 12, 14, 16, 20, 22, 23

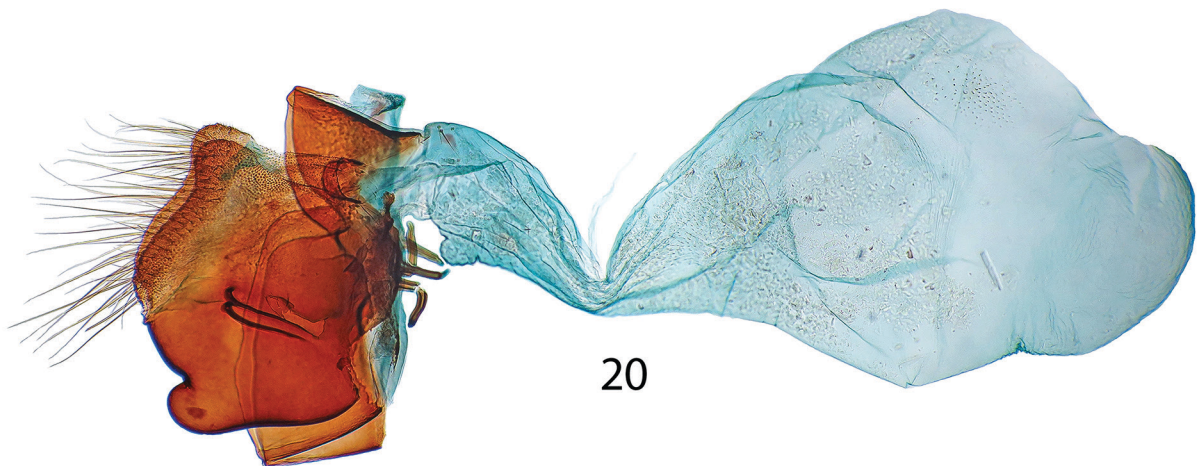
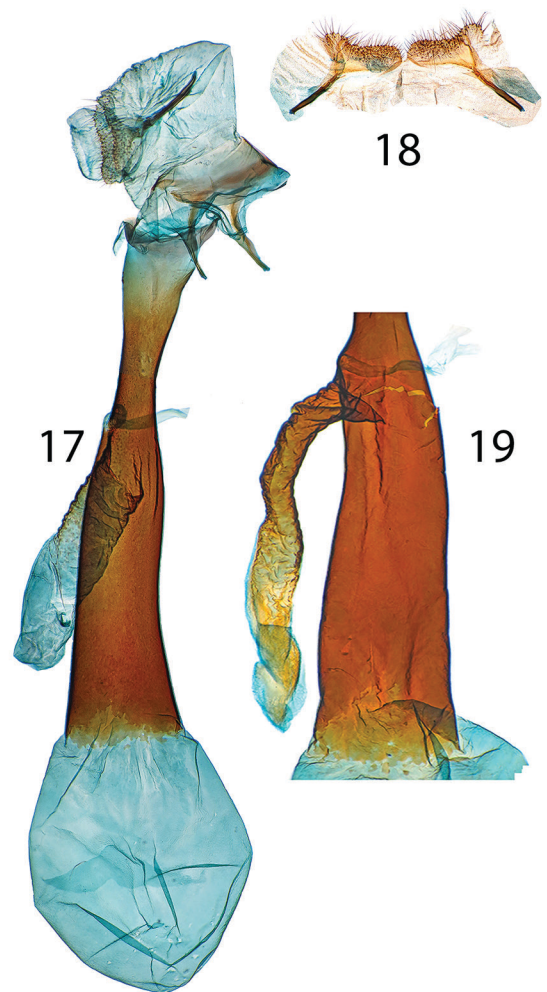
**Type species:** *Afroromieuxia bernardlandryi* sp. n.

**Diagnosis:** Adult features closely similar to some *Ancyrolomia* [i.e. *A. prepiella* Hampson, 1919 (Fig. 5)], but in the latter the subterminal area is always sinuate with large black or dark brown dots. In the male genitalia the combination of strongly developed uncus and gnathos with the short and triangular tegumen and the strong pars basalis of the valva differ from related genera. In the female genitalia the heavily sclerotized ninth abdominal segment with the apophyses posteriores fused inside it, and the eighth abdominal segment – except for their apex –, are unique among Afrotropical Crambinae. *Diploschistis* with its sole species *D. stygiocrena* Meyrick, 1937, seems related to *Afroromieuxia* in the female genitalia (Fig. 21) with the ninth abdominal segment partially sclerotized, but its apophyses posteriores are not fused in the eighth abdominal segment and both adult (Fig. 6) and male genitalia (Fig. 15) are far from *Afroromieuxia* species. DNA analysis of the holotype of *A. ustjuzhanini*, the more recent specimen studied, failed to provide any product usable for sequencing. Only future analysis could fully clarify the relationship with other genera of Ancyrolomiini.

**Etymology:** The generic name is a combination of *afro* (from Africa) and Romieux, in honour of Jean Romieux (1893-1951) of Geneva, a pioneer of Lepidoptera research in the Democratic Republic of the Congo whose material was essential for the present study. The gender of the new genus is feminine.

**Description:** Medium to large species, with labial palpi long (3.5-4 x eye diameter in side view). Ocelli and chaetosemata well developed, subrectangular forewing, straight termen and well developed and straight subterminal fascia.





Figs 16-20. Habitat and female genitalia. (16) Habitat of *Afroromieuxia ustjuzhanini* (photo V. Anikin, Jan., 2011). (17) *Afrocharltona oblongissima*, paratype, Namibia. (18) *A. oblongissima*, paratype, Zambia. (19), ductus bursae with lateral extension. (20) *Afroromieuxia ustjuzhanini*, holotype.



Male genitalia. Uncus and gnathos fully developed. Tegumen subtriangular, with short arms; tegumen roof 0.5 x tegumen arm length. Vinculum stout, with arms subrectangular and strong dorsal projection. Juxta broad, v-shaped. Valva elongated, tapering towards apex; costal process strongly developed, 0.4 x valva length. Phallus stout, 1.3 x valva length, with two subapical lateral teeth. Female genitalia. Papillae anales well developed, concave. Apophyses posteriores fused inside eighth abdominal segment, with apex short. Sterigma rounded, slightly produced anteriorly. Ostium membranous. Ductus bursae 0.5 to 0.7 the length of corpus bursae, funnel-shaped. Ductus seminalis originating from posterior half of ductus bursae. Corpus bursae oval, without signa, but often with rows of spines.

**Biology:** Unknown.

**Distribution:** Central Africa, south to Northern Zambia.

*Afroromieuxia aarviki* sp. n.

Figs 3, 23

**Material examined**

*Holotype:* Female; Tanzania, Mufindi Distr[ict], Mufindi, 1960 m, 16.i.1993, leg[it] Leif Aarvik, GS 6660 GB, NHMO.

**Etymology:** The species is named after the collector of the type Leif Aarvik (MNHO), well known Tortricidae specialist, in acknowledgment of his friendship.

**Diagnosis:** The three species described here are closely similar in wing pattern, but the forewing apex is more pointed, with termen oblique in *A. ustjuzhanini*, rounded with termen slightly oblique in *A. aarviki* and rounded with termen almost straight in *A. bernardlandryi*; the costa is almost straight in *A. bernardlandryi*, gently arched in *A. aarviki* and more definitely arched in *A. ustjuzhanini*; the white streak on the costa is shorter and intermediate in width in *A. aarviki*, narrower and almost reaching the base in *A. bernardlandryi* and wider and almost reaching the base in *A. ustjuzhanini*; the subterminal area is narrow with inner margin almost straight in *A. bernardlandryi*, slightly wider and with inner margin slightly concave in *A. aarviki*, and wider still with inner margin straight but oblique in *A. ustjuzhanini*. The hindwing is pale ivory yellow in *A. aarviki*, off-white with scattered brown suffusion and with terminal line brown in *A. bernardlandryi*, and pure white in *ustjuzhanini*.

The female genitalia are similar in the three species, but *A. aarviki* has the ninth abdominal segment moderately bulged dorsally, the ostium bursae large and the ductus bursae half sclerotized, as opposed to the papillae anales dorsally produced, the ninth abdominal segment moderately sclerotized dorsally, ostium bursae small and ductus bursae sclerotized only

basally in *A. bernardlandryi*. *A. ustjuzhanini* has the ninth abdominal segment strongly bulged dorsally, the ostium bursae small and the ductus bursae sclerotized only basally.

**Description** (Fig. 3): Wingspan 28 mm. Labial palpus 3.5 x eye diameter, brown with upper and inner side white. Maxillary palpus basally brown, then white. Antenna brown, basally simple, distally lightly dentate. Frons rounded, produced, pale brown. Vertex white with brown line medially. Patagia white, dark brown laterally. Tegulae dark brown with thin outer border white. Thorax white. Forewing subrectangular, with rounded apex and termen almost straight; ground colour bronze brown sprinkled with black; costa shape basally bronze brown, then white sprinkled with black; dorsum white sprinkled with black; medial stripe white ending under cell; postmedial interveins silvery white; subterminal area reaching apex, white intensely sprinkled with black; terminal line brown; fringes bronze brown with medial line white; underside brown, off-white distally and with costa and dorsum white; terminal line brown; fringes white tipped bronze brown. Hindwing pale ivory yellow; fringes white; underside white with costa and veins suffused with brown. Legs bronze brown with inner side white; tibial spurs long and thin, the outer one shorter. Abdomen with first tergite bright white, second to fourth bronze brown suffused with white, then white suffused with bronze brown; sternites white suffused with reddish brown; anal tuft yellow.

Female genitalia (Fig. 23). Papillae anales slightly concave, densely covered with setae; lower edge hardly traceable, fused with ninth abdominal segment. Ninth abdominal segment strongly sclerotized, bulged dorsally. Apophyses posteriores basally only recognizable by a comma-like sclerotization, ending shortly pointed close to apophyses anteriores. Abdominal segment VIII sclerotized. Apophyses anteriores as long as apophyses posteriores. Ostium bursae large, rounded, slightly produced. Ductus bursae 1.2 the length of corpus bursae, funnel-shaped for 2/3, then cylindrical. Ductus seminalis branching off at 2/3 of ductus bursae. Corpus bursae suboval, wrinkled.

Male unknown.

**Biology:** Unknown.

**Distribution:** Presently known from the Iringa Region in Southern Tanzania only.

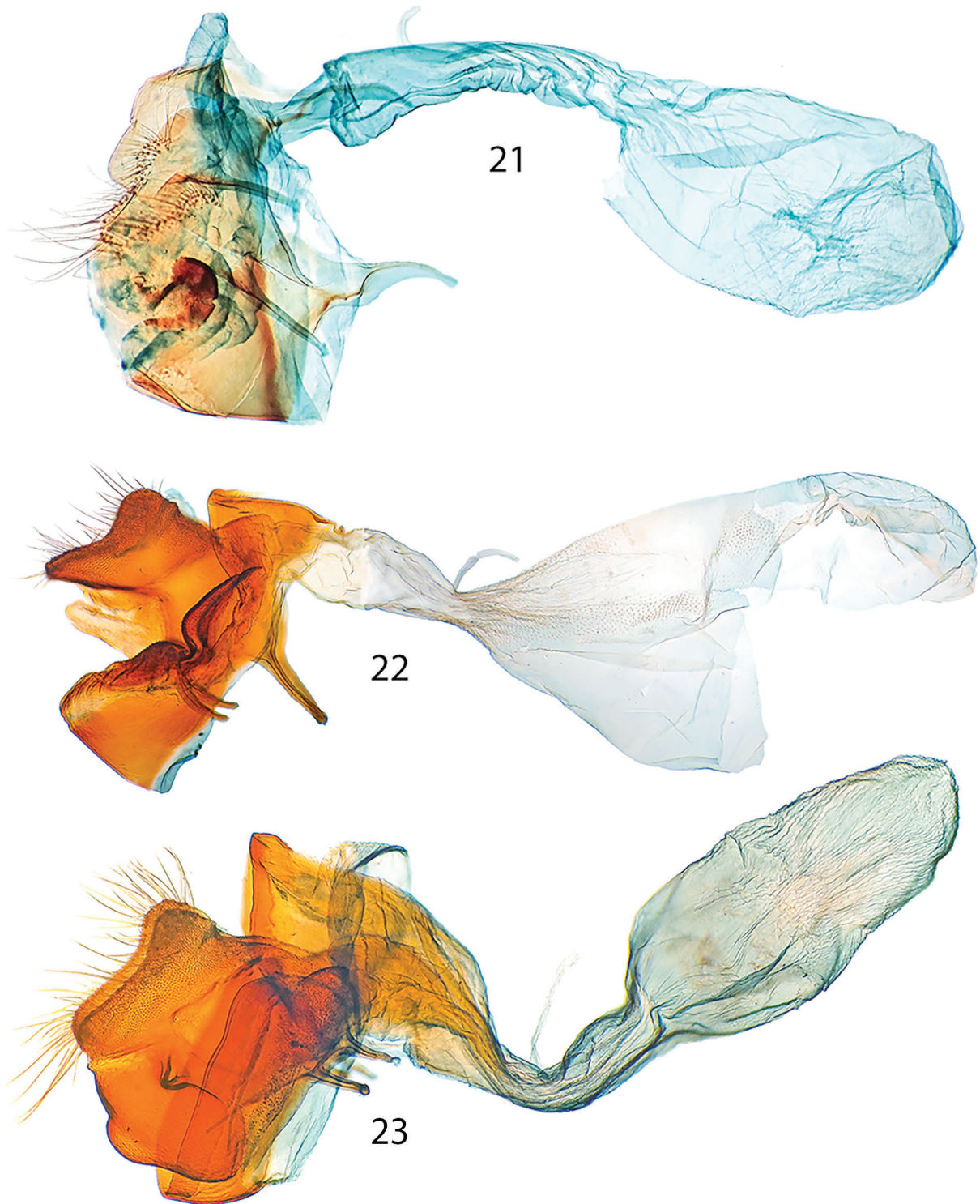
*Afroromieuxia bernardlandryi* sp. n.

Figs 1, 2, 12, 14, 22

**Material examined**

*Holotype:* Male; [DRC], H[au]t Katanga, Tshinkolobwe, 10.xii.[19]30, J[ean] Romieux, GS 6903 GB, MHNG.

*Paratypes:* Male, same locality and collector as



Figs 21-23. Female genitalia. (21) *Diploschistis stygiocrena*, DRC. (22) *Afroromieuxia bernardlandryi*, paratype. (23) *A. aarviki*, holotype.

holotype, 18.xii.[19]30, RCGB. – Female, some locality and collector as holotype, 15.xii.[19]30, GS 6720 GB, MHNG. – Male; some locality and collector as holotype, 17.xii.[19]30, GS 2206 GB, MHNG. – Male; Elisabethville [DRC, Haut Katanga, now Lubumbashi], 8.XII.1937, Ch. Seydel [legit], GS 3223 GB, RMCA. – Female; Elisabethville, 28.x.1932, Ch. Seydel [legit], GS 6911 GB, RCGB.

**Diagnosis:** For differences from *A. aarviki* and *A. ustjuzhanini* externally and in the female genitalia, see the diagnosis under *A. aarviki*. In the male genitalia the feature of the uncus and gnathos associated with the strongly developed pars basalis of the valva, the dorsally produced vinculum and the two large subapical teeth in the phallus are unlike all known Afrotropical species of Ancyrolomiini.

**Etymology:** The species is dedicated to Bernard Landry (MHNG), well known Crambinae specialist, a colleague, but above all a great friend over the last few decades.

**Description** (Figs 1, 2): Wingspan: holotype 26 mm; males 25 and 26 mm; females 28 and 29 mm. Labial palpus 4 x eye diameter, bronze brown bordered white; inner side white. Maxillary palpus basally bronze brown, apically white. Antenna biserrate in male, filiform in female, with scape white, then brown with bronze brown costa. Frons rounded, slightly produced, white. Vertex white. Patagia white with lateral edge dark brown. Tegulae dark brown with external border white. Thorax white. Forewing and hindwing as in Figs 1, 2 and under diagnosis of *A. aarviki*. Forewing fringes bright golden brown with double medial band white. Underside of forewing bright brown medially, suffused with white elsewhere and with terminal line brown; underside of hindwing brown along costa, then white and with terminal line light brown. Abdomen off-white with first three tergites suffused with brown; sternites more intensely suffused with brown. Legs bronze brown with inner side white; tibial spurs small, strongly asymmetrical, first pair longer than apical pair.

Male genitalia (Figs 12, 14). Uncus twice as long as tegumen, narrow, basally with round patch of spinulae, arched distally and pointed apically. Gnathos slightly shorter than uncus, subtriangular basally, then thin, upcurved and pointed. Tegumen short, triangular. Vinculum strongly produced dorsally, with lateral arms subrectangular. Juxta v-shaped with apical tips triangular. Pseudosaccus minute. Valva subrectangular, twice as long as uncus; basal costal process 0.8 as long as uncus, distally upcurved and wrinkled. Phallus subcylindrical, with two triangular, serrated apical teeth; vesica without cornuti.

Female genitalia (Fig. 22). Papillae anales strongly produced dorsally, fused with ninth abdominal segment. Ninth abdominal segment more sclerotized ventrally.

Apophyses posteriores basally a hardly traceable line, then arched and with rounded tip. Abdominal segment VIII bulged dorsally and sclerotized medially. Apophyses anteriores 0.7 as long as apophyses posteriores, straight, with rounded tip. Ostium bursae rounded, sclerotized, slightly produced. Ductus bursae half the length of corpus bursae, wrinkled. Ductus seminalis branching off at 0.75 of ductus bursae. Corpus bursae broad, suboval, with two vertical stripes of spinulae.

**Biology:** Unknown.

**Distribution:** Presently known from the DRC, Haut-Katanga Province only.

*Afroromieuxia ustjuzhanini* sp. n.

Figs 4, 16, 20

**Material examined**

*Holotype:* Female; East Africa, Zambia, Northern Zambia Prov[ince], Mutinondo Wilderness, 12°27'S 31°17'E, 01.i.2011, Kovtunovich & Ustjuzhanin [legunt], GS 5330 GB, 58550 Collezione Bassi, RCGB.

**Etymology:** The species is named after one of its collectors, Petr Ustjuzhanin (Altai State University, Barnaul, Russia), well-known Pterophoridae and Alucitidae specialist, with many thanks for his friendship.

**Diagnosis:** For differences from *A. aarviki* and *A. bernardlandryi* externally and in the female genitalia, see the diagnosis under *A. aarviki*.

**Description** (Fig. 4): Wingspan 29 mm. Labial palpus 4 x eye diameter, bronze brown bordered white; inner side white. Maxillary palpus basally bronze brown, apically white. Antenna filiform, with scape white, then bronze brown. Frons rounded, slightly produced, off-white with edge bronze brown. Vertex white suffused with pale yellow laterally and with brown line medially. Patagia white with lateral edge dark brown. Tegulae dark brown with external border white. Thorax brown, off-white distally. Forewing and hindwing as in Fig. 4 and under diagnosis of *A. aarviki*. Forewing fringes bright silvery grey with medial band white. Underside of forewing brown medially, suffused with white elsewhere; underside of hindwing brown along costa, then white. Abdomen: first segment and anal tuft white, other segments off-white densely suffused with grey brown. Legs bronze brown with inner side white; tibial spurs small, asymmetrical, both pairs of same length.

Female genitalia (Fig. 20). Papillae anales produced ventrally, densely covered with setae; lower edge not traceable, fused with ninth abdominal segment. Ninth abdominal segment sclerotized, strongly bulged dorsally. Apophyses posteriores basally only recognizable by a comma-like sclerotization, ending shortly pointed close to bases of apophyses anteriores. Abdominal segment



VIII well developed, sclerotized. Apophyses anteriores short, as long as apophyses posteriores. Ostium bursae moderately enlarged, sclerotized, slightly produced. Ductus bursae half the length of corpus bursae, funnel-shaped for 2/3, then cylindrical. Ductus seminalis branching off at 2/3 of ductus bursae. Corpus bursae suboval, medially bulged, with a patch of spinulae medio-ventrally.

Male unknown.

**Biology:** Unknown. The holotype was attracted to artificial light in open mixed forest (Fig. 16).

**Distribution:** Presently known from Northern Zambia only.

#### ACKNOWLEDGMENTS

I thank L. Aarvik (NHMO), Dr P. Ustjuzhanin (Barnaul, Russia) and Dr V. Kovtunovich (Moscow, Russia) for providing the very valuable material of their African expeditions, Dr B. Landry (MHNG) for the loan of material, for reviewing the English text and for his valuable suggestions, Dr A. Hausmann (ZSM) for his help for DNA barcoding and the staff of RMCA and TMSA for the loan of material.

#### REFERENCES

- Bassi G. 2013. Revisione delle specie afrotropicali del genere *Ancylolomia* Hübner, [1825]. I: i gruppi *indica* e *chrysargyria* (Lepidoptera: Pyralidae, Crambinae). *Shilap. Revista de Lepidopterologia, Madrid* 41(164): 517-529.
- Bassi G., Trematerra P. 2014. The Crambinae from Ethiopia and Mozambique collected by the University of Molise expeditions in 2008 and 2009 (Lepidoptera: Pyraloidea: Crambidae, Crambinae). *Entomologia* 2: 35-45.
- Błeszyński S. 1970. A revision of the oriental species of the genus *Ancylolomia* Hübner (Studies on the Crambinae, Lepidoptera, Pyralidae, Part 49). *Tijdschrift voor Entomologie* 113: 27-43.
- Hampson G.F. 1898. On a collection of Heterocera made in the Transvaal. *Annals and Magazine of Natural History, including Zoology, Botany and Geology, London* (ser.7) 1: 158-164.
- Hampson G.F. 1910. Zoological collections from Northern Rhodesia and adjacent territories: Lepidoptera Phalaenae. *Proceedings of the General Meetings for Scientific Business of the Zoological Society of London* 1910 (2): 388-10, pls 36-41.
- Hampson G.F. 1919. Descriptions of new Pyralidae of the subfamilies Crambinae and Siginae. *Annals and Magazine of Natural History, including Zoology, Botany and Geology, London* (ser. 9) 4: 53-68, 137-154, 305-326.
- Hübner J. 1796-1836 [imprint "1796"]. Sammlung europäischer Schmetterlinge. 8. Horde. Die Schaben; nach der Natur geordnet, beschrieben und vorgestellt. *Augsburg*. [1]-[12]-13-70-[71]-[78], pls 1-71.
- Klots A.B. 1970. Lepidoptera. In: Tuxen SL (Ed.), *Taxonomist's glossary of genitalia in insects*. (Second revised and enlarged edition). *Munksgaard, Copenhagen*, pp. 115-130.
- Kristensen N. P. 2003. Skeleton and muscles: adults. In: Kristensen N. P. (Ed.), *Lepidoptera, moths and butterflies*. Vol. 2. Morphology, physiology, and development. *Handbook of Zoology IV* (36): 39-131. *Walter de Gruyter, Berlin, New York*.
- Landry B. 1995. A phylogenetic analysis of the major lineages of the Crambinae and of the genera of Crambini of North America (Lepidoptera: Pyralidae). *Memoirs on Entomology International, Gainesville* 1: 1-242.
- Léger T., Landry B., Nuss M. 2019. Phylogeny, character evolution and tribal classification in Crambinae and Scopariinae (Lepidoptera, Crambidae). *Systematic Entomology* 44: 757-776.
- Meyrick E. 1937. *Exotic Microlepidoptera*. *Taylor and Francis, London*, pp. 1-160.
- Ragonot E.L. 1889. In: de Joannis J., Ragonot E.L. 1889. Descriptions de genres nouveaux et espèces nouvelles de Lépidoptères. *Annales de la Société Entomologique de France, Paris* (ser. 6) 8[3 (1888)]: 271-284, pl. 6.
- Robinson G.S. 1976. The preparation of slides of Lepidoptera genitalia with special reference to the Microlepidoptera. *Entomologist's Gazette* 27: 127-132.
- Swinhoe C. 1886. On the Lepidoptera of Bombay and the Deccan. Part IV. Heterocera (continued). *Proceedings of the General Meetings for Scientific Business of the Zoological Society of London* 1885 (4): 852-886.
- Tams W.H.T. 1932. New species of African Heterocera. *The Entomologist, London* 65 (829): 124-129, pl. 4.