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The Pyraloidea (Lepidoptera) fauna of the woody savannah belt in Mali, West Africa

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Abstract

Seventy-nine taxa of Pyraloidea were collected in 2014 with light traps in the woody savannah zone south of Bamako, Mali. Three taxa out of 79 were identified to genus level only. 78 of the 79 species are new records for Mali, 17 are new for West Africa. Most species (54) belong to the subfamily Spilomelinae (family Crambidae). The majority of observed species have wide distribution areas. The only regional endemic is *Hypsopygia bamakoensis* (Leraut, 2006). Concerning the biogeographical categories most of the species (34) are Afrotropical, seven species cosmopolitan, and the remaining species occur in the Palaearctics with a preference to the Palaetropics. The most common species, *Patania balteata* (Fabricius, 1798) comprised 40.0% of all specimens collected. It is known to be a pest of the mango tree, which is common in the light-trapping area.

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Keywords

Afrotropics; biogeography; Crambidae; distribution; faunistics; host plants; pest species; Pyralidae

Introduction

Geography of Mali.

The Republic of Mali is one of the largest countries in West Africa with an area of 1.240.000 km². It occupies four latitudinal ecological zones corresponding to the gradient of precipitation. The northern two thirds are occupied by the Sahara Desert with less than 100 mm of annual precipitation, in the south by the Sahel zone, the savannah zone, and the far south of the country which is occupied by woody savannah with a tropical savannah climate (BSH in Köppen climate classification - the hot steppe climate) and with annual precipitation of 1400 mm. In the broad sense of ecological zones, Mali is considered as a complex ecotone between closed forest and desert (Rian *et al.* 2009).

Study Site.

Our research was carried out during 2014 near Ouronina village, 75 km south-west of Bamako (12° 5'39.78"N; 8°24'3.16"W) (Fig. 1). The village is located amongst rocky hills with small seasonal water streams at the edge of the flood plain of the River Niger. This area is classified as woody savannah, within the forest/savanna transition belt (Torello-Raventos 2013). Mean annual precipitation in the area is <1200 mm. The rainy season lasts from the end of June to mid-October. Mean monthly maximum temperatures vary from 30°C to 33°C in summer and mean minimum temperatures are between 18°C and 21°C in winter. The major water source in this area is the River Niger, which is complemented by several smaller rivers, thus becoming an important place of agricultural production. The favorable conditions of the zone allow a mosaic of wooded savannah and natural forest to exist (Figs. 2–7). Forty to ninety percent of the ground has vegetative cover, with gallery forests in valleys creating a continuous dense band of vegetation. Most of the valleys and the flood plain of the River Niger are used for agriculture while the hills are mainly used for logging and seasonal grazing.

The most common trees in the area are *Vitellaria paradoxa* (C.F.Gaertn) (Fam. Sapotaceae), *Anogreissus leocarpus* ((DC.) Guill. & Perr.) (Fam. Combretaceae), *Daniella oliveri* ((Rolfe) Hutch. & Dalziel) (Fam. Caesalpiniaceae), *Isobertina doka* (Craib & Stapf) (Fam. Fabaceae), *Monotes kerstingii* (Gilg.) (Fam. Dipterocarpaceae), *Khaya senegalensis* ((Desr.) A.Juss.) (Fam. Meliaceae), *Pterocarpus eribaceus* (Poir.) (Fam. Fabaceae) and *Terminalia macroptera* (Guill. & Perr.) (Fam. Combretaceae) (Rian *et al.* 2009).

Superfamily Pyraloidea.

This superfamily includes 2 families: Pyralidae and Crambidae (Beccaloni *et al.* 2018; Nuss *et al.* 2003–2018). The larvae of most species feed on living plants either internally or externally as leaf rollers, leaf webbers, leaf miners, stem borers, root feeders, and seed feeders. Some species of *Niphopryalis* in Spilomelinae live parasitically in ant nests, the

representatives of Phycitinae prey on scale insects, or live in the nests of bees (species in Galleriinae). The larvae of the Acentropinae are adapted to life under water, and certain Phycitinae and Pyralinae are adapted to very dry environments and their larvae feed on stored food products. Others feed on animal detritus such as carrion and feces. Several species are known as serious agricultural pests (Nuss *et al.* 2003–2018). Information about west-African pyraloids is generally poor and limited to information about the biology of some pests (Heinrichs & Barrion 2004; James *et al.* 2010; Ghoneim 2015; Ogbalu 2015).

Material and methods

Within the framework of an NIH grant (see Acknowledgements) on the ecology of Malaria vectors we had the opportunity to collect non-target insects with automatic light traps equipped with cold ultra-violet cathode lamps (12 Volt) of 30 cm length powered by 12 Volt, 15 Ampere motorcycle batteries. A set of 20 traps was shifted every night between different sites around Ouronina village, 75 km south-west of Bamako (12° 5'39.78"N; 8°24'3.16"W). Sample sites included grassland, islands of bushes and trees, riverine forests along seasonally dry riverbeds, agricultural fields of maize, rice, and peanuts, and riverine forests along the Niger River. The light traps were operated every night from the beginning of January 2014 until end of December 2014, except holidays or during severe weather.

To describe the general distribution of species, we followed the biogeographical classification of Olson *et al.* (2001). The following categories were used to describe species: 1) Afrotropical—species known only in Africa south of Sahara; 2) Palaeotropical—species occurring in the Old World tropics (Africa, India, South-East Asia and North Australia); 3) Palaeotropical— species with penetration to Palaearctic; 4) Pantropical— species that occur throughout the tropical zone including South and Central America; 5) Pantropical— with penetration to Palaearctic; 6) Cosmopolitan— species that occur throughout all biogeographical zones.

Information about the identity of moths, general distribution of species, and their host plants was summarized from the following Internet sites: AfroMoths (De Prins & De Prins 2018) and African Moths (Goff 2018). The species names follow the Global Information System on Pyraloidea provided by Nuss *et al.* (2003–2018).

In total, 9643 specimens of Pyraloidea, comprising 79 species were collected, including 3 species identified to the genus level only. The total collected materials of Heterocera (1022 cottons), including Pyraloidea species, are deposited in the Steinhardt Museum of Natural History, Israel National Center for Biodiversity Studies and Department of Zoology, Tel Aviv University, Tel Aviv, Israel (SMNH); curator—V. D. Kravchenko.

ANNOTATED LIST OF SPECIES COLLECTED

Family Crambidae

Subfamily Acentropinae

1. *Eoophyla platyxantha* Agassiz, 2012

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 02.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: Cameroon, DR Congo (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

2. *Parapoynx fluctuosalis* (Zeller, 1852): (Fig. 8)

Synonymy follows Nuss *et al.* (2003–2018):

- = *Hydrocampa circealis* Walker, 1859;
- = *Nymphula luteivittalis* Mabille, 1880;
- = *Oligostigma chrysippusalis* Walker, 1859;
- = *Oligostigma curta* Butler, 1879;
- = *Oligostigma obitalis* Walker, 1859;
- = *Parapoynx linealis* Guenée, 1854;
- = *Parapoynx* [sic] *oryzalis* Wood-Mason, 1885;
- = *Parapoynx* [sic] *rugosalis* Möschler, 1890.

Material: 15 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 23.01.–08.03.2014, leg. Kravchenko *et al.*, 5 ex. same data except the date 15.10.–17.11.2014 (SMNH).

Distribution: Afrotropical: Botswana, Burkina Faso, Comoros, DR Congo, Ethiopia, Guinea, Kenya, Madagascar, Mauritius, Morocco, Mozambique, Namibia, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasian: Australia, Fiji, Guam, Hawaii; Neotropical: the Galapagos Islands, Puerto Rico; Oriental: India, Malaysia, Myanmar, Sri Lanka, Taiwan; Palaearctic: China, Italy (Sardinia), Japan, Morocco, Portugal, Spain, Tunisia, United Kingdom (De Prins & De Prins 2018; Wikipedia 2018).

Host-plants: Hydrilloideae: *Hydrilla verticillata* (L.f.) Royle; Nymphaeaceae: *Nymphaea* sp., Poaceae: *Oryza sativa* L. (Goff 2018). Known as waved China-mark—global pest of rice.

Subfamily Crambinae**3. *Ancylolomia prepiella* Hampson, 1919**

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 26.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: Lesotho, South Africa (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

4. *Ancylolomia simplella* de Joannis, 1913

Material: 7 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 23.01.–30.06.2014, leg. Kravchenko *et al.*; 2 ex. same data except the date 14.09.2014 (SMNH).

Distribution: Afrotropical. Eritrea, Kenya, South Africa, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

5. *Classeya placydioni* Bleszy ski, 1960: Synonymy follows Nuss *et al.* (2003–2018):

= *placydioni* Chen, Song, Yuan & Zhang, 2002.

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 07.06.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: Gambia, Mali, Senegal (Goff 2018).

Host-plants: Unknown.

6. *Euchromius gnathosellus* Schouten, 1988

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 12.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: the Central African Republic, Congo, Côte d'Ivoire, Ghana, Niger, Nigeria, Senegal, Sierra Leone, Togo, (Schouten 1988) and Mali (**new record**).

Host-plants: Unknown.

Subfamily Odontiinae**7. *Autocharis jacobsalis* Marion & Viette, 1956**

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 24.03.2014, leg. Kravchenko *et al.*, 1 ex. same data except the date 22.05.2014 (SMNH).

Distribution: Afrotropical: Madagascar, South Africa (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

8. *Autocharis fessalis* (Swinhoe, 1886): Synonymy follows Nuss *et al.* (2003–2018):

= *Autocharis amethystine* Swinhoe, 1894.

Material: 138 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 22.01.–06.03.2014, leg. Kravchenko *et al.*, 57 ex. same data except the date 20.09.–17.11.2014 (SMNH).

Distribution: Palaeotropical. In: Africa: DR Congo, Seychelles, South Africa, United Arab Emirates, Yemen (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: Bhutan, India and Pakistan (De Prins & De Prins 2018)

Host-plants: Unknown.

Subfamily Pyraustinae

9. *Achyra coelatalis* (Walker, 1859): Synonymy follows Nuss *et al.* (2003–2018):

= *Sceliodes nodiferalis* Gaede, 1917.

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 02.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Botswana, Cape Verde, DR Congo, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Mozambique, Namibia, Niger, Oman, Rwanda, Réunion, Seychelles, Sierra Leone, South Africa, Tanzania, Yemen, Zambia, Zimbabwe (De Prins & De Prins, 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: India, Sri Lanka, Taiwan; Palaearctic: Afghanistan, Iran (De Prins & De Prins, 2018).

Host-plants: Poaceae: *Oryza sativa* L., *Pennisetum glaucum* (L.) R.Br., *Sorghum* species *Zea mays* L. (Wikipedia 2018).

10. *Cryptosara caritalis* (Walker, 1859): (Fig. 9)

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 24.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Cameroon, Congo, DR Congo, Ghana, Mauritius, Sierra Leone, Togo (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

11. *Euclasta warreni* Distant, 1892: Synonymy follows Nuss *et al.* (2003–2018):

= *Euclasta hiracopsis* Meyrick, 1933.

Material: 3 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 21.01.–10.05.2014, leg. Kravchenko *et al.*, 6 ex. same data except the date 2.09.–18.11.2014 (SMNH).

Distribution: Afrotropical: DR Congo, Ethiopia, South Africa, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plant: Apocynaceae: *Acokanthera oppositifolia* (Lam.) Codd (Popescu-Gorj & Constantinescu 1977).

12. *Isocentris filalis* (Guenée, 1854): Synonymy follows Nuss *et al.* (2003–2018):

= *Agrotera retinalis* Saalmüller, 1880;

= *Hyalobathra argentifilalis* Hampson, 1908;

= *Botys holoxanthalis* Mabille, 1881;

= *Botys amoenalis* Walker, 1866;

= *Endotricha rhodophilalis* Walker, 1866;

= *Hyalobathra metallogramma* Meyrick, 1934;

= *Hyalobathra veroniqueae* Guillermet in Viette & Guillermet, 1996;

= *Samea dives* Butler, 1881.

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 21.01.2014, leg. Kravchenko *et al.*, 3 ex. same data except the date 12.08.–04.11.2014 (SMNH).

Distribution: Palaeotropical. In Africa: Cameroon, Comoros, Congo, DR Congo, Madagascar, Mauritius, Mozambique, Réunion, Seychelles, Togo (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: Indonesia, Malaysia and Taiwan (De Prins & De Prins 2018).

Host-plants: Euphorbiaceae: *Euphorbia virosa* Willd.; Phyllanthaceae: *Flueggea virosa* (Roxb. ex Willd.) Royle (Wikipedia 2018).

13. *Pioneabathra olesialis* (Walker, 1859): Synonymy follows Nuss *et al.* (2003–2018):

Pionea brevialis Walker, 1859;

Botys divisalis Lederer, 1863;

Mnesictena pactolina Meyrick, 1887;

Scopula eximialis Walker, 1866;

Pionea holoxuthalis Hampson, 1908.

Material: 55 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 24.02.–25.07.2014, leg. Kravchenko *et al.*, 172 ex. same data except the date 04.08.–18.11.2014 (SMNH).

Distribution: Palaeotropical. In Africa: Comoros, Congo, DR Congo, Gambia, Mozambique, Oman, Seychelles, South Africa, Yemen, Zambia (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: India, Sri Lanka (De Prins & De Prins 2018).

Host-plants: Phyllanthaceae: *Flueggea virosa* (Roxb. ex Willd.) Royle; Solanaceae: *Solanum* sp. (Goff 2018).

14. *Pyrausta phoenicealis* (Hübner, 1818): (Fig. 10)

Synonymy follows Nuss *et al.* (2003–2018):

Botys coeciliialis Walker, 1859b;

Botys phaenicealis Snellen, 1883;

Botys phaenicialis Snellen, 1875;

Myriostephes heliamma Meyrick, 1885b;

Rhodaria flegialis Walker, 1859b;

Rhodaria nerialis Boisduval, 1833b;

Rhodaria noraxalis Walker, 1859c;

Rhodaria ocellusalis Walker, 1859c;

Rhodaria panopealis Walker, 1859a;

Rhodaria catenalis Walker, 1866;

Rhodaria concatenalis Walker, 1866;

Rhodaria juncturalis Walker, 1866;

Rhodaria probalis Walker, 1859c.

Material: 47 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 23.01.–24.03.2014, leg. Kravchenko *et al.*, 2 ex. same data except the date 10–23.09.2014 (SMNH).

Distribution: Cosmopolitan. In Africa: Comoros, DR Congo, Gambia, Madagascar, Mauritius, Namibia, Réunion, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, United Arab Emirates (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Nearctic: U.S.A.; Neotropical: Brazil, Colombia, Dominican

Republic; Oriental: India, Taiwan; Palaearctic: China, Europe, Japan, Turkey (De Prins & De Prins 2018).

Host-plants: Lamiaceae: *Coleus* sp., *Dicerandra frutescens* Shinnery, *Hyptis pectinate* (L.) Poit., *H. brevipes* Poit., *H. capitata* Jacq., *Rosmarinus officinalis* L. Known as perilla leaf moth—a pest of shiso (*Perilla*), fruit mint (*Dicerandra frutescens*) and knobweed (*Hyptis capitata*) (Heppner 2003; Choi *et al.* 2008).

Subfamily Spilomelinae

15. *Agathodes musivalis* Guenée, 1854: Synonymy follows Nuss *et al.* (2003–2018):

= *Agathodes chrysalis* Hampson, 1908;

= *Myriostephes heliamma* Meyrick, 1885.

Material: 3 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 08–24.02.2014, leg. Kravchenko *et al.*, 1 ex. same data except the date 03.09.2014 (SMNH).

Distribution: Afrotropical. Angola, Cameroon, Comoros, DR Congo, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Réunion, Somalia, South Africa, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Fabaceae: *Erythrina abyssinica* DC., *E. caffra* Thunb., *E. variegata* L. (Goff 2018).

16. *Agrotera citrina* (Hampson, 1899)

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 12.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Ghana, Malawi, Mozambique, Sierra Leone, Tanzania, Uganda, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

17. *Agrotera rufitinctalis* (Hampson, 1917)

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 11.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Malawi, Rwanda, Uganda, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

18. *Analyta calligrammalis* Mabille, 1879

Material: 12 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 23.01.–10.07.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. DR Congo, Gambia, Ghana, Madagascar, Mozambique, Seychelles, Sierra Leone (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Moraceae: *Ficus* sp. (Ghesquière 1942).

19. *Antigastra catalaunalis* (Duponchel, 1833): Synonymy follows Nuss *et al.* (2003–2018):

= *Antigastra catalaunalis* ab. *sionensis* Caradja, 1929;

= *Botys venosalis* Walker, 1866.

Material: 3 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 02–21.02.2014, leg. Kravchenko *et al.*, 5 ex. same data except the date 12–19.11.2014 (SMNH).

Distribution: Cosmopolitan. In Africa: Cameroon, Comoros, DR Congo, Gambia, Kenya, Namibia, Oman, Rwanda, Réunion, Saudi Arabia, Seychelles, Somalia, South Africa, Sudan, Tanzania, Uganda, United Arab Emirates, Yemen, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Nearctic: U.S.A.; Oriental: India, Malaysia, Myanmar, Sri Lanka; Palearctic: Cyprus, Iraq, Iran, Jordan, Malta, Morocco, South Europe, Syria (De Prins & De Prins 2018).

Host-plants: Pedaliaceae: *Sesamum angolense* Welw, *S. calycinum* subsp. *angustifolium* (Oliv.) Ihlenf. & Seidenst., *S. indicum* L.; Plantaginaceae: *Anarrhinum fruticosum* subsp. *brevifolium* (Coss. & Kralik) D.A.Sutton, *Linaria fruticosa* Desf.; Poaceae: *Panicum maximum* Jacq.; Solanaceae: *Solanum* sp.; Verbenaceae: *Duranta erecta* L. (Goff 2018).

20. *Bocchoris inspersalis* (Zeller, 1852): Synonymy follows Nuss *et al.* (2003–2018):

Aediodes bootanalis Walker, 1866;

Desmia afflictalis Guenée, 1854;

Desmia stellaris Butler, 1879.

Material: 11 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 08.02.–15.05.2014, leg. Kravchenko *et al.*, 26 ex. same data except the date 11.07.–23.09.2014 (SMNH).

Distribution: Palaetropical. In Africa: Cameroon, DR Congo, Equatorial Guinea, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia, Nigeria, Réunion, Saudi Arabia, Seychelles, Sierra Leone, Somalia, South Africa, Tanzania, Yemen, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: South China, India, Indonesia (Java), South Japan, Malaysia, Myanmar, Sri Lanka (De Prins & De Prins 2018).

Host-plants: Fabaceae: *Arachis hypogaea* L., *Desmodium triflorum* (L.) DC., Amaranthaceae: *Telanthera versicolor* Regel (Goff 2018), Malvaceae: *Triplochiton scleroxylon* K.Schum. (De Prins & De Prins 2018).

21. *Botyodes asialis* Guenée, 1854: Synonymy follows Nuss *et al.* (2003–2018):

= *Botyodes asialis f. liliputalis* Strand, 1913;

= *Botys chrysotalis* Mabille, 1880 (Nuss *et al.* 2003–2018).

Material: 53 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 21.01.–05.06.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Cameroon, DR Congo, Equatorial Guinea, La Réunion, Madagascar, Rwanda, Réunion, Sierra Leone, South Africa, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasian: Australia, Fiji; Oriental: India, Indonesia, Philippines, Sri Lanka (De Prins & De Prins 2018).

Host-plants: Apocynaceae: *Tabernaemontana* sp.; Boraginaceae: *Ehretia* sp., Ebenaceae: *Diospyros* sp.; Lamiaceae: *Premna* sp.; Magnoliaceae: *Michelia* sp.; Malvaceae: *Urena* sp.; Menispermaceae: *Tinospora* sp.; Moraceae: *Ficus* sp.; Rutaceae: *Glycosmis* sp.; Salicaceae: *Casearia* sp. (Goff 2018).

22. *Botyodes diniasalis* (Walker, 1859): Synonymy follows Nuss *et al.* (2003–2018):

= *Pyrausta diniasalis capnosalis* Caradja, 1925;

= *Sylepta* [sic] *kosemponis* Strand, 1918.

Material: 123 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 21.01.–30.06.2014, leg. Kravchenko *et al.*, 13 ex. same data except the date 01.07.–13.09.2014 (SMNH).

Distribution: Palaeotropical, penetrates to Palaearctic. In Africa: DR Congo, Kenya, Malawi, Nigeria, South Africa, Tanzania, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: China, Taiwan; Palaearctic: N.W. Himalayas (De Prins & De Prins 2018).

Host-plants: Malvaceae: *Grewia asiatica* L., Salicaceae: *Populus ciliata* Wall. ex Royle, *Salix pentandra* L. (Goff 2018).

23. *Cadarena pudoraria* (Hübner, 1825): Synonymy follows Nuss *et al.* (2003–2018):

= *Botys marginalis* Guenée, 1854;

= *Phalaena marginata* Stoll in Cramer & Stoll, 1782;

= *Phalaena sinuata* Fabricius, 1781.

Material: 7 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 22.07.–08.08.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Angola, Cameroon, Comoros, DR Congo, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Kenya, Madagascar, Malawi, Nigeria, Rwanda,

Réunion, Seychelles, Sierra Leone, South Africa, Tanzania, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in India, Malaysia, Sri Lanka.

Host-plants: Malvaceae: *Gossypium* sp., *Sida rhombifolia* L.; Passifloraceae: *Adenia* sp. (Goff 2018).

24. *Cirrhochrsta grabczewskyi* (E. Hering, 1903)

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 19.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: Cameroon, Ghana, Nigeria, South Africa, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

25. *Diaphania indica* (Saunders, 1851): (Fig. 11)

Synonymy follows Nuss *et al.* (2003–2018):

- = *Botys hyalinalis* Boisduval, 1833a;
- = *Eudiotis capensis* Zeller, 1852;
- = *Glyphodes intermedius* Dognin, 1904;
- = *Glyphodes indicus* Moore, 1867;
- = *Phakellura cucurbitalis* Guenée, 1862;
- = *Phakellura gazoralis* Guenée, 1854;
- = *Phakellura garoralis* Snellen, 1882;
- = *Phakellura zygaenalis* Guenée, 1854.

Material: 8 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 23.01.–07.06.2014, leg. Kravchenko *et al.*, 28 ex. same data except the date 03.07.–28.10.2014 (SMNH).

Distribution: Pantropical, penetrates to Palaearctic. In Africa: British Indian Ocean Territory, Cameroon, Cape Verde, Comoros, DR Congo, Ethiopia, Gambia, Kenya, Madagascar, Malawi, Maldives, Mauritius, Mozambique, Namibia, Oman, Rwanda, Réunion, Saint Helena, Saudi Arabia, Seychelles, Sierra Leone, South Africa, Sudan, Tanzania, Uganda, United Arab Emirates, Yemen, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasian: Australia, Fiji, Marquesas, Tahiti; Nearctic: U.S.A. (Florida); Oriental: India, Indonesia (Borneo, Java), New Guinea, Sri Lanka; Palaearctic: Canary Islands, China, Japan, Korea (De Prins & De Prins 2018).

Host-plants: Amaranthaceae: *Achyranthes aspera* L.; Cucurbitaceae: *Ceratosanthes palmata* (L.) Urb., *Cucurbita* sp., *Cucurbita pepo* L., *Cucumis sativus* L., *Luffa acutangula* (L.)

Roxb., *L. cylindrica* (L.) M.Roem., *Trichosanthes cucumerina* L.; Fabaceae: *Erythrina corallodendron* L.; Malvaceae: *Gossypium herbaceum* L. (De Prins & De Prins 2018; Goff 2018). Known as a cucumber moth—occasional pest of cucurbits.

26. *Dysallacta negatalis* (Walker, 1859): Synonymy follows Nuss *et al.* (2003–2018):

= *Botys monesusalis* Walker, 1859b;

= *Botys phanasalis* Walker, 1859.

Material: 91 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 13.01.–15.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical, penetrates to Palearctic. In Africa: DR Congo, Gambia, Lesoto, Malawi, Mozambique, Namibia, Nigeria, South Africa, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: India, Sri Lanka, Taiwan (De Prins & De Prins 2018).

Host-plants: Dilleniaceae: *Dillenia indica* L.; Moraceae: *Ficus microcarpa* L.f., *F. religiosa* (Goff 2018).

27. *Eurrhyarodes tricoloralis* (Zeller, 1852): Synonymy follows Nuss *et al.* (2003–2018):

= *Isopteryx abnegatalis* Walker, 1859a;

= *Botys ebnegatalis* Lederer, 1863;

= *Eurrhyarodes confusalis* Warren, 1896.

Material: 6 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 25.01.–10.06.2014, leg. Kravchenko & Muller *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Cameroon, Comoros, DR Congo, Gambia, Madagascar, Maldives, Mauritius, Réunion, Seychelles, Sierra Leone, South Africa, United Arab Emirates, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia, Fiji, Solomon Islands; Oriental: India, Indonesia (Java), New Guinea, Philippines, Sri Lanka, Taiwan, Thailand (De Prins & De Prins 2018).

Host-plants: Unknown.

28. *Ghesquierellana hirtusalis* (Walker, 1859): (Fig. 21)

Synonymy follows Nuss *et al.* (2003–2018):

= *Ghesquierellana hirsutalis* Pinhey, 1975;

= *Phostria pallas* Meyrick, 1936;

= *Polygrammodes hirtusalis borbonica* Viette, 1976.

Material: 9 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 25.01.–29.05.2014, leg. Kravchenko *et al.*, 4 ex. same data except the date 15.08.–07.11.2014 (SMNH).

Distribution: Afrotropical. Comoros, DR Congo, Ethiopia, Gambia, Madagascar, Malawi, Mozambique, Namibia, Réunion, Sierra Leone, South Africa, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Moraceae: *Ficus carica* L., *F. mauritiana* Lam., *F. mucoso* Welw. ex Ficalho, *F. sur* Forssk., *F. trichopoda* Backer, *F. vallis-choudae* Delile; Malvaceae: *Gossypium* sp. (Goff 2018).

29. *Glyphodes argyraspides* (Tams, 1941)

Material: 16 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 18.06.–23.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: Gambia, Sierra Leone, Uganda (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Moraceae: *Ficus sycomorus* L., *Ficus* sp. (Goff 2018).

30. *Glyphodes bicolor* (Swainson, 1821): (Fig. 12)

Synonymy follows Nuss *et al.* (2003–2018):

= *diurnalis* Guenée, 1854;

= *parvalis* Walker, 1866;

= *perspicillalis* Zeller, 1852.

Material: 4 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 25.01.–27.08.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaetropical. In Africa: Angola, DR Congo, Gambia, Mozambique, South Africa, Tanzania, Uganda, Zimbabwe (De Prins & De Prins, 2018) and Mali (**new record**). Also in Oriental: India, Malaysia (De Prins & De Prins 2018).

Host-plants: Apocynaceae: *Alstonia scholaris* (L.) R. Br., *Carissa carandas* L., *Nerium oleander* L.; Moraceae: *Artocarpus integer* (Thunb.) Merr., *Ficus benghalensis* L., Fabaceae: *Desmodium oojeinense* (Roxb.) H. Ohashi; Lamiaceae: *Tectona grandis* L.f. (Goff 2018).

31. *Glyphodes bitriangulalis* Gaede, 1917

Material: 40 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 08.05.–21.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: South Africa, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

32. *Glyphodes stolalis* Guenée, 1854: (Fig. 14)

Synonymy follows Nuss *et al.* (2003–2018):

= *substolalis* Snellen, 1899.

Material: 191 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 11.06.–20.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical, penetrates Palaearctic. In Africa: Cameroon, Comoros, DR Congo, Gambia, Kenya, Madagascar, Réunion, Seychelles, South Africa, Uganda, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: China, India, Indonesia (Sulawesi), Sri Lanka (De Prins & De Prins 2018).

Host-plants: Combretaceae: *Terminalia ivorensis* A.Chev.; Moraceae: *Ficus benghalensis* L., *F. carica* L., *F. microcarpa* L.f., *F. natalensis* Hochst., *F. racemosa* L.; (Goff 2018).

33. *Glyphodes onychinalis* (Guenée, 1854): (Fig. 13)

Synonymy follows Nuss *et al.* (2003–2018):

= *Lepyrodes astomalis* C. Felder, R. Felder & Rogenhofer in C. Felder, R. Felder & Rogenhofer, 1875;

= *Zebronia braurealis* Walker, 1859c.

Material: 7 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 14.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: DR Congo, Côte d'Ivoire, Ethiopia, Madagascar, Oman, Saudi Arabia, Sierra Leone, South Africa, Yemen (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia, New Zealand; Oriental: Hong Kong, India, Indonesia (Borneo), Malaysia, Myanmar, Sri Lanka,

Thailand; Palaearctic: Japan; Nearctic: U.S.A.: has been recorded in California since 2000 (Wikipedia 2018).

Host-plants: Apocynaceae: *Gomphocarpus fruticosus* (L.) W.T.Aiton, *Nerium oleander* L. Oleaceae: *Jasminum* sp. (Wikipedia 2018).

34. *Haritalodes derogata* (Fabricius, 1775): (Fig. 15)

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 04.02.2017, leg. Kravchenko *et al.*, 57 ex. same data except the date 25.08.–12.11.2014 (SMNH).

Distribution: Palaeotropical, penetrates to Palaearctic. In Africa: Comoros, DR Congo, Gambia, Ghana, Madagascar, Malawi, Maldives, Nigeria, Réunion, Seychelles, Sierra Leone, South Africa, Tanzania, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia, Fiji, Papua New Guinea, Samoa, Solomon Islands; Oriental: Andaman Islands, Bali, Hong Kong, India, Malaysia, Myanmar, Singapore, Sri Lanka, Vietnam; Palaearctic: China, Japan, E. Siberia (De Prins & De Prins 2018).

Host-plants: Anacardiaceae: *Anacardium occidentale* L., Fabaceae: *Glycine max* (L.) Merr., Malvaceae: *Abelmoschus esculentus* (L.) Moench, *Alcea rosea* L., *Gossypium* sp., *Hibiscus columnaris* Cav., *Ochroma pyramidale* (Cav. ex Lam.) Urb., *Pavonia* sp., *Sida* sp., *Thespesia danis* Oliv., *Urena lobata* L.; Rhamnaceae: *Ziziphus jujuba* Mill. (De Prins & De Prins 2018; Wikipedia 2018). Known as cotton leaf roller—pest of cotton.

35. *Herpetogramma licarsisalis* (Walker, 1859): Synonymy follows Nuss *et al.* (2003–2018):

= *Botys abstrusalis* Walker, 1859b;

= *Botys immundalis* Walker, 1866;

= *Botys pharaxalis* Walker, 1859b;

= *Botys serotinalis* Joannis in Joannis & Ragonot, 1889;

= *Entephria fumidalis* Walker, 1866.

Material: 6 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 04.08.–23.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical, penetrates to Palaearctic. In Africa: British Indian Ocean Territory, Cameroon, Cape Verde, DR Congo, Egypt, Ethiopia, Madagascar, Réunion, Saint Helena, Saudi Arabia, Seychelles, Sierra Leone, South Africa, Sudan, United Arab Emirates, Yemen, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Hawaii, New Zealand, Solomon Islands; Oriental: Andaman Islands, Hong Kong, India, Indonesia (Borneo), Malaysia (Sarawak), New Guinea, Philippines, Sri Lanka; Palaearctic: China, Cyprus, Japan, Lebanon, North Africa, South Europe, Syria (De Prins & De Prins 2018).

Host-plants: Poaceae: *Cynodon dactylon* (L.) Pers., *Eleusine indica* (L.) Gaertn., *Hyparrhenia* sp., *Lolium perenne* L., *Paspalum dilatatum* Poir., *Pennisetum clandestinum* Hochst. ex Chiov., *Oryza sativa* L., *Stenotaphrum dimidiatum* (L.) Brongn., *Zea mays* L.. (De Prins & De Prins 2018;). Known as tropical grass webworm—its larvae feed on various grasses of the Poaceae family and it is a pest of turf and pastures (Wikipedia 2018).

36. *Herpetogramma basalis* (Walker, 1866): Synonymy follows Nuss *et al.* (2003–2018):

= *Botys apertalis* Walker, 1866;

= *Botys inanitalis* Lederer, 1863;

= *Pyrausta dorsipunctalis* Rebel, 1892;

= *Pyrausta dorcalis* Alpheraki, 1889.

Material: 69 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 03.09.–17.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Kenya, Réunion, Seychelles, South Africa (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: Sri Lanka (De Prins & De Prins 2018).

Host-plants: Amaranthaceae: *Amaranthus* sp., *Beta vulgaris* L.; Verbenaceae: *Lantana camara* L.; Cucurbitaceae and Brassicaceae (Wikipedia 2018).

37. *Hodebertia testalis* (Fabricius, 1794): Synonymy follows Nuss *et al.* (2003–2018):

= *Botys albidalis* (Walker, 1866);

= *Botys incoloralis* (Guenée, 1854);

= *Botys melonalis* (Walker, 1859b);

= *Botys perpendicularis* (Duponchel, 1833);

= *Botys ruficostalis* (Lederer, 1855);

= *Margaronia putrescens* (Meyrick, 1934);

= *Pyrausta phyllidalis* Schaus, 1940;

= *Spilodes nitetisalis* (Walker, 1859b).

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 04–25.05.2014, leg. Kravchenko 1 ex. same data except the date 03.07.2014 and 1 ex. same data except the date 13.10.2014 (SMNH).

Distribution: Palaeotropical. In Africa: Botswana, Comoros, DR Congo, Ethiopia, Gambia, Kenya, Madagascar, Malawi, Mozambique, Réunion, Saint Helena, Saudi Arabia, Seychelles, Somalia, South Africa, Tanzania, Zambia, Yemen, Zambia (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasian: Australia; Neotropical: Cuba; Oriental: India, Malaysia, Myanmar; Palaearctic: N. Africa, S. Europe, Syria (De Prins & De Prins 2018).

Host-plants: Malvaceae: *Hibiscus* sp.; Apocynaceae: *Gomphocarpus* sp.; *Asclepias curassavica* L.; *Stapelia* sp., *Pergularia daemia* (Forssk.) Chiov. (Nuss *et al.* 2003–2018; De Prins & De Prins 2018).

38. *Hydriris ornatalis* (Duponchel, 1832): Synonymy follows Nuss *et al.* (2003–2018):

- = *Botys invenustalis* Walker, 1866;
- = *Cataclysta fraterna* Butler, 1875;
- = *Ercta ornatalis orientalis* Yamanaka, 1972;
- = *Nymphula bifascialis* Heeger, 1838;
- = *Nymphula saturnalis* Treitschke, 1835;
- = *Spanista saturalis* Swinhoe, 1889;
- = *Pyrallis deciusalis* Walker, 1859c;
- = *Stenia pulchellalis* Mabille, 1879.

Material: 3 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 23.01.–04.02.2014, leg. Kravchenko *et al.*, 5 ex. 05.09.–08.11.2014 (SMNH).

Distribution: Palaetropical, penetrates to Palaearctic. In Africa: British Indian Ocean Territory, Cameroon, Cape Verde, Comoros, DR Congo, Egypt, Gambia, Kenya, Madagascar, Malawi, Maldives, Mauritania, Mauritius, Mozambique, Réunion, Saint Helena, Seychelles, South Africa, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in: Australasia: Australia; Oriental: India, Sri Lanka; Nearctics: North America and Palaearctics: Southern Europe (Wikipedia 2018).

Host-plants: Convolvulaceae: *Convolvulus arvensis* L.; *Ipomoea aquatic* Forssk., *I. batatas* (L.) Lam., *I. calophylla* Fenzl; Fabaceae: *Acacia monticola* J.M.Black; Polygonaceae: *Emex spinosa* (L.) Campd.; Rosaceae: *Malus pumila* Mill. (Goff 2018).

39. *Marasmia* (= *Cnaphalocrocis*) *trapezalis* (Guenée, 1854): Synonymy follows Nuss *et al.* (2003–2018):

- = *Botys convectalis* Walker, 1866;
- = *Botys creonalis* Walker, 1859b;
- = *Botys neoclesalis* Walker, 1859b;
- = *Botys suspicalis* Walker, 1859b;
- = *Bradina andresi* Rebel, 1912;
- = *Cnaphalocrocis bifurcalis* Snellen, 1880;
- = *Dolichosticha perinephes* Meyrick, 1886.

Material: 6 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 15.05.–05.06.2014, leg. Kravchenko *et al.*, 41 ex. same data except the date 15.07.–21.10.2014 (SMNH).

Distribution: Pantropical, penetrates to Palaearctic. In Africa: Cameroon, DR Congo, Egypt, Gambia, Kenya, , Madagascar, Mauritius, Nigeria, Oman, Réunion, Saint Helena, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia, Fiji, Palau, Polynesia; Neotropical: Dominican Republic, Mexico, Peru; Oriental: S. China, India, Indonesia (Sulawesi), Papua New Guinea, Sri Lanka (De Prins & De Prins 2018).

Host-plants: Polyphagous. Poaceae: *Brachiaria* sp., *Imperata cylindrical* (L.) Raeusch., *Oryza sativa* L., *Panicum maximum* Jacq., *P. trichocladum* K. Schum., *Paspalum notatum* Flügge, *Pennisetum clandestinum* Hochst. ex Chiov., *Saccharum officinarum* L., *Sorghum bicolor* (L.) Moench, *Triticum aestivum* L., *Zea mays* L., (Goff 2018). Known as rice leaf folder—this species damages rice in Cameroon, Nigeria, Senegal and Togo (Heinrichs & Barrion 2004). It is also a pest of maize, sorghum and sugarcane.

40. *Marasmia* (= *Cnaphalocrocis*) *poeyalis* (Boisduval, 1833b): Synonymy follows Nuss *et al.* (2003–2018):

= *Asopia venilialis* (Walker, 1859a);

= *Botys marisalis* (Walker, 1859b);

= *Botys ruralis* (Walker, 1859b);

= *Botys minutalis* (Mabille, 1880);

= *Lasiacme mimica* (Warren, 1896);

= *Marasmia cicatricosa* (Lederer, 1863);

= *Marasmia hampsoni* (Rothschild, 1921);

= *Marasmia rectistrigosa* (Snellen, 1872).

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 06.08.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaetropical. In Africa: British Indian Ocean Territory, Burundi, Cameroon, Cape Verde, Comoros, DR Congo, Côte d'Ivoire, Equatorial Guinea, Kenya, Madagascar, Mauritius, Mozambique, Namibia, Nigeria, Réunion, Saint Helena, Seychelles, Sierra Leone, United Arab Emirates, Yemen (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasian: Australia, Cook Islands, Fiji, Solomon Islands; Oriental: India, Indonesia (Java), Papua New Guinea, Singapore, Sri Lanka; Palaearctic: Japan (De Prins & De Prins 2018).

Host-plants: Poaceae: *Oryza sativa* L., *Zea mays* L. (Goff 2018).

41. *Maruca vitrata* (Fabricius, 1787): Synonymy follows Nuss *et al.* (2003–2018):

- = *Botys bifeneustalis* Mabille, 1880;
- = *Crochiphora testulalis* Geyer in Hübner, 1832;
- = *Hydrocampe aquitilis* Guérin-Ménéville, 1832.

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 21.01.2017, leg. Kravchenko *et al.*, 582 ex. same data except the date 04.08.–17.11.2014 (SMNH).

Distribution: Pantropical. In Africa: Angola, Benin, Burkina Faso, Cameroon, Cape Verde, DR Congo, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia, Niger, Nigeria, Oman, Réunion, Seychellens, Sierra Leone, Somalia, South Africa, Tanzania, Uganda, United Arab Emirates, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Neotropics, Oriental and Australian regions (Wikipedia 2018).

Host-plants: Fabaceae: *Cajanus cajan* (L.) Millsp., *Phaseolus vulgaris* L., *Pisum sativum* L., *Vigna radiata* (L.) R. Wilczek, *Vigna unguiculata* (L.) Walp.; Malvaceae: *Hibiscus rosa-sinensis* L.; Poaceae: *Oryza sativa* L., Solanaceae: *Nicotiana tabacum* L. (Goff 2018). Known as cowpea pod borer—pest of leguminous crops such as pigeon pea, cowpea, mung bean and soybean. Larvae feed on flower buds, flowers and young pods.

- 42. *Nausinoe geometralis* (Guenée, 1854):** Synonymy follows Nuss *et al.* (2003–2018):
- = *Lepyrodes geometricalis* Lederer, 1863.

Material: 4 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 03.04.–10.05.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: DR Congo, Gambia, Ghana, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Réunion, Sierra Leone, South Africa, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: India, Indonesia (Sulawesi, Sumatra), Philippines, Sri Lanka, Taiwan (De Prins & De Prins 2018).

Host-plants: Oleaceae: *Jasminum* sp.; Rubiaceae: *Gardenia* sp. (Goff 2018).

43. *Nausinoe quadrinalis* (Guenée, 1854)

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 11.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: Rwanda, Seychelles, South Africa, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

44. *Nevrina* sp.: (Fig. 17)

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 21.01.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Mali (**new record**).

Host-plants: Unknown.

45. *Notarcha quaternalis* (Zeller, 1852)

Material: 3 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 09.02.2014, leg. Kravchenko *et al.*, 3 ex. same data except the date 24.09.–28.10.2014 (SMNH).

Distribution: Afrotropical: Botswana, Cape Verde, Comoros, DR Congo, Ethiopia, Gambia, Ghana, Madagascar, Mauritius, Mozambique, Réunion, Seychelles, Sierra Leone, South Africa, Tanzania, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: India, Palaearctic: Iran (De Prins & De Prins 2018).

Host-plants: Malvaceae: *Helicteres isora* L., *Grewia* sp., *Sida rhombifolia* L.; Rubiaceae: *Porterandia scortechinii* (King & Gamble) Ridl.; Theaceae: *Schima noronhae* Reinw (Goff 2018).

46. *Omiodes indicata* (Fabricius, 1775)

Material: 18 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 15.09.–28.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: In Africa: British Indian Ocean Territory, Cameroon, Cape Verde, Comoros, Congo, DR Congo, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Mauritius, Namibia, Nigeria, Réunion, Saudi Arabia, Seychelles, Sierra Leone, South Africa, Tanzania, Uganda, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Nearctic: North America; Neotropical: Antilles, Brazil, Dominican Republic, French Guiana, Guyana, Puerto Rico, Surinam; Oriental: Andamans, W. China, India, Indonesia (Java), Malaysia (Sarawak), Myanmar, Singapore, Sri Lanka (De Prins & De Prins 2018).

Host-plants: Amaranthaceae: *Beta vulgaris* L.; Compositae: *Chrysanthemum indicum* L.; Colchicaceae: *Gloriosa* sp.; Fabaceae: *Arachis hypogaea* L., *Calopogonium* sp., *Glycine max* (L.) Merr., *Phaseolus vulgaris* L., *Vigna unguiculata* (L.) Walp., *V. vexillata* (L.) A.Rich.; Lamiaceae: *Coleus* sp.; Solanaceae: *Nicotiana tabacum* L.; Verbenaceae: *Lantana camara* L. Known as bean-leaf webworm moth - pest of soybean (Wikipedia, 2018).

47. *Orphanostigma abruptalis* (Walker, 1859): (Fig. 19)

Synonymy follows Nuss *et al.* (2003–2018):

= *Asopia dotatalis* (Walker, 1866);

= *Asopia suffectalis* (Walker, 1866);

= *Syngamia aeruginosa* Ghesquière, 1942.

Material: 8 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 01.09.–19.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Cape Verde, DR Congo, Equatorial Guinea, Ghana, Kenya, Mauritius, Nigeria, Rwanda, Réunion, Senegal, Seychelles, Sierra Leone, Somalia, Yemen, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia, Fiji; Oriental: Andamans, India, Myanmar, Sri Lanka (De Prins & De Prins 2018).

Host-plants: Asteraceae: *Elephantopus* sp. Lamiaceae: *Coleus* sp., *Hyptis* sp., *Plectranthus rotundifolius* (Poir.) Spreng, *Plectranthus* sp., *Ocimum basilicum* L., *Ocimum* sp., *Mentha* sp., *Perilla* sp., Malvaceae: *Gossypium hirsutum* L., *Gossypium* sp. Theaceae: *Camellia japonica* L. (De Prins & De Prins 2018). Known as leaf webber—major pest of coleus (Wikipedia 2018).

48. *Palpita metallata* (Fabricius, 1781): Synonymy follows Nuss *et al.* (2003–2018):

= *Glyphodes ocellata* Hampson, 1899;

= *Glyphodes picticaudalis* Hampson, 1908.

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 03.07.–03.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical: Angola, Cameroon, Comoros, DR Congo, Gambia, Ghana, Kenya, Liberia, Nigeria, Sierra Leone, South Africa, Tanzania, Uganda (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Apocynaceae: *Funtumia elastica* (Preuss) Stapf, *Funtumia* sp. (Lamborn 1914; Goff 2018).

49. *Palpita vitrealis* (Rossi, 1794): Synonymy follows Nuss *et al.* (2003–2018):

= *Pyalis unionalis* Hübner, 1796.

Material: 13 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 21–28.01.2014, leg. Kravchenko *et al.*, 421 ex. same data except the date 14.05.–28.10.2014 (SMNH).

Distribution: Cosmopolitan. In Africa: Cape Verde, Central African Republic, Comoros, DR Congo, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Liberia, Madagascar, Mauritius, Réunion, Seychelles, South Africa, Tanzania, Uganda, Yemen, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: South Asia; Palearctic: Canary Islands, Japan, Madeira, South Europe (De Prins & De Prins 2018).

Host-plants: Oleaceae: *Fraxinus* sp., *Jasminum auriculatum* Vahl, *J. dichotomum* Vahl, *J. fluminense* Vell., *J. officinale* L., *J. sambac* (L.) Aiton, *Ligustrum* sp., *Olea europaea* L., *Phillyrea* sp. (De Prins & De Prins 2018). Known as olive leaf moth—this pest is highly

mobile having dispersed as far as northern Europe, such as Sweden and Poland. This species has also been recorded on wild olives in Southern Africa and jasmine in Kenya (Ghoneim 2015).

50. *Pardomima callixantha* (Martin, 1955)

Material: 30 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 22.01.–23.03.2014, leg. Kravchenko *et al.*, 103 ex. same data except the date 07.06.–30.10.2014 (SMNH).

Distribution: Afrotropical. In Africa: Angola, DR Congo, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Kenya, Malawi, South Africa, Sudan, Zambia, Zimbabwe (De Prins & De Prins, 2018) and Mali (**new record**).

Host-plants: Unknown.

51. *Pardomima amyntusalis* (Walker, 1859)

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 03.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. Australia. In Africa: DR Congo, Côte d'Ivoire, Kenya, Madagascar, Mozambique, Sierra Leone, Uganda, Zambia (De Prins & De Prins 2018) and Mali (**new record**). Also in: Oriental: India, Myanmar, Sri Lanka, Indonesia; Australasian: Australia (References).

Host-plants: Unknown.

52. *Parotis impia* (Meyrick, 1934)

Material: 334 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 03.01.–05.04.2014, leg. Kravchenko *et al.* 745 ex. same data except the date 05.05.–30.09.2014 (SMNH).

Distribution: Afrotropical. DR Congo, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

53. *Patania* (=Pleuroptya) *balteata* (Fabricius, 1798): Synonymy follows Nuss *et al.* (2003–2018):

= *Botys aurea* Butler, 1879;

= *Botys crocealis* Duponchel, 1834;

= *Botys aurantiacalis* Fischer von Röslerstamm, 1840;

= *Botys mysolalis* Walker, 1866;

= *Patania balteata africalis* P. Leraut, 2005;

= *Sylepta* [sic] *evergestialis* Strand, 1918;

= *Sylepta* [sic] *irregularis* Rothschild, 1915.

Material: 3689 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 01.05.–31.07.2014, leg. Kravchenko *et al.*, 171 ex. same data except the date 01.08.–19.11.2014 (SMNH).

Distribution: Palaeotropical, penetrates to Palaearctic. In Africa: Benin, Cameroon, Comoros, Congo, DR Congo, Côte d'Ivoire, Gambia, Ghana, Madagascar, Mozambique, Niger, Nigeria, Réunion, Senegal, Sierra Leone, South Africa, Sudan, Zambia (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: India, Taiwan; Palaearctic: China, Japan, South Europe (De Prins & De Prins 2018).

Host-plants: Anacardiaceae: *Anacardium occidentale* L., *Cotinus coggygia* Scop., *Pistacia terebinthus* L., *Pseudospondias microcarpa* (A.Rich.) Engl., *Toxicodendron vernicifluum* (Stokes) F.A. Barkley, (De Prins & De Prins 2018); Fabaceae: *Quercus serrata* Murray, *Castanea* spp. (Wikipedia 2018); Urticaceae: *Boehmeria stipularis* Wedd. (De Prins & De Prins 2018).

54. *Phostria hesusalis* (Walker, 1859)

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 27.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Cameroon, Congo, DR Congo, Equatorial Guinea, Ghana, Nigeria, Sierra Leone, Togo (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

55. *Poliobotys ablactalis* (Walker, 1859)

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 29–30.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Angola, Cameroon, DR Congo, Côte d'Ivoire, Gambia, Kenya, Lesotho, Madagascar, Mozambique, Réunion, Seychelles, Uganda, Zambia, Zimbabwe (De Prins & De Prins, 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: Indonesia (Borneo, Java, Sulawesi), Sri Lanka (De Prins & De Prins 2018).

Host-plants: Unknown.

56. *Pyncarmon cribrata* (Fabricius, 1794): Synonymy follows Nuss *et al.* (2003–2018):

= *Aripa* *frenulalis* Strand, 1918;

= *Conchylodes corycicalis* Snellen, 1880;

= *Conchylodes privalis* Snellen, 1901;

= *Spilomela caberalis* Guenée, 1854;

= *Zebronia cabiralis* Walker, 1859a;

= *Zebronia abdicalis* Walker, 1859a.

Material: 7 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 14.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaetropical. In Africa: DR Congo, Kenya, Madagascar, Malawi, Mozambique, Sierra Leone, South Africa, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: China, India, Indonesia (Java, Sulawesi), Sri Lanka, Taiwan (De Prins & De Prins 2018).

Host-plants: Primulaceae: *Embelia tsjeriam-cottam* (Roem. & Schult.) A.DC.; Lamiaceae: *Ocimum tenuiflorum* L.; *Plectranthus parviflorus* Willd., *P. scutellarioides* (L.) R.Br., *Salvia coccinea* Buc'hoz ex Etl. and *Vitex* sp. (Wikipedia 2018).

57. *Pycnarmon sexpunctalis* (Hampson, 1912)

Material: 8 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 01.09.–30.10.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. DR Congo, Nigeria, Sierra Leone (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Apocynaceae: *Funtumia elastica* (Preuss) Stapf, *Strophanthus* sp. (De Prins & De Prins 2018; Wikipedia 2018).

58. *Sameodes cancellalis* (Zeller, 1852): Synonymy follows Nuss *et al.* (2003–2018):

= *Hymenia meridionalis* Walker, 1866;

= *Lepyrodes lepidalis* Walker, 1859a;

= *Samea sidealis* Walker, 1859c;

= *Samea vespertinalis* Saalmüller, 1880;

= *Sameodes trithyralis* Snellen, 1880;

= *Stenia pipleisalis* Walker, 1859a.

Material: 479 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 20.01.–11.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaetropical, penetrates to Palaearctic. In Africa: British Indian Ocean Territory, Cameroon, Comoros, DR Congo, Gambia, Ghana, Madagascar, Malawi, Réunion, Seychelles, Sierra Leone, South Africa, Yemen, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia; Oriental: India, Indonesia (Java, Sulawesi), Sri Lanka (De Prins & De Prins 2018).

Host-plants: Fabaceae: *Stylosanthes erecta* P.Beauv.; Lamiaceae: *Tectona grandis* L.f.; Poaceae: *Oryza sativa* L. (Goff 2018).

59. *Spoladea recurvalis* (Fabricius, 1775): Synonymy follows Nuss *et al.* (2003–2018):

= *Hymenia exodias* Meyrick, 1904;

= *Nacoleia ancylosema* Dognin, 1909;

= *Phalaena angustalis* Fabricius, 1787;

= *Spoladea animalis* Guenée, 1854.

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 24.02.2014, leg. Kravchenko *et al.*, 359 ex. same data except the date 02.04.–12.11.2014 (SMNH).

Distribution: Pantropical, penetrates to Palaearctic. In Africa: British Indian Ocean Territory, Cameroon, Cape Verde, Comoros, DR Congo, Equatorial Guinea, Ethiopia, Gambia, Kenya, Lesotho, Madagascar, Maldives, Mauritius, Mozambique, Namibia, Niger, Nigeria, Oman, Rwanda, Réunion, Saint Helena, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Uganda, United Arab Emirates, Yemen, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in: Australasian: Australia, Hawaii (Molokai), New Zealand, Rapa Island; Neotropical: Brazil, French Guiana; Oriental: Andamans, India, Indonesia (Java), Malaysia, Myanmar, Singapore, Sri Lanka, Taiwan; Palaearctic: Canary Islands, Europe, China, Japan (De Prins & De Prins 2018).

Host-plants: Polyphagous. Often on weeds. Amaranthaceae: *Altermanthera* sp., *Amaranthus* sp., *Chenopodium* sp. *Achyranthes aspera* L., *Bassia indica* (Wight) A.J.Scott; *Beta vulgaris* L., *Telanthera versicolor* Regel; Aizoaceae: *Trianthema portulacastrum* L.; Brassicaceae: *Brassica* sp.; Fabaceae: *Glycine max* (L.) Merr., *Vigna unguiculata* (L.) Walp. Known as beet webworm—damages spinach, beet, cotton, maize and soybean beet in tropical and sub-tropical countries (James *et al.* 2010; Ogbalu 2015; De Prins & De Prins 2018).

60. *Stemorrhages sericea* (Drury, 1773): Synonymy follows Nuss *et al.* (2003–2018):

= *Botys thalassinalis* Boisduval, 1833b;

= *Geometra laterata* Fabricius, 1794;

= *Margarodes beryllalis* Guenée, 1854;

= *Margarodes sericeolalis* Guenée, 1862;

= *Margaronia congradalis* Hübner, 1825;

= *Phalaena polita* Cramer, 1777.

Material: 40 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 06.07.–15.08.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Angola, Cameroon, Comoros, DR Congo, Gambia, Ghana, Madagascar, Malawi, Mauritius, Mozambique, Réunion, Seychelles, Sierra Leone, South Africa, Sudan, São Tomé & Príncipe, Tanzania, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Rubiaceae: *Gardenia jasminoides* J.Ellis, Apocynaceae: *Nerium oleander* L., *Tabernaemontana iboga* Baill., *Tabernaemontana persicariifolia* Jacq., *T. divaricata* (L.) R.Br. ex Roem. & Schult.; Arecaceae: *Raphia* sp., Podocarpaceae: *Afrocarpus usambarensis* (Pilg.) C.N.Page (De Prins & De Prins 2018; Goff 2018).

61. *Syllepte butlerii* (Dewitz, 1881): Synonymy follows Nuss *et al.* (2003–2018):

= *Sylepta* [sic] *clementsi* Hampson, 1899.

Material: 4 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 25.07.–05.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Angola, Cameroon, DR Congo, Equatorial Guinea, Sierra Leone, Zambia (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

62. *Syllepte ovalis* (Walker, 1859): Synonymy follows Nuss *et al.* (2003–2018):

= *Antigastra cinnamomalis* Saalmüller, 1880;

= *Botys aburalis* Plötz, 1880;

= *Syllepte ovalis serei* Guillermet, 2008.

Material: 208 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 07.07.–19.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Cameroon, DR Congo, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Mozambique, Réunion, South Africa, São Tomé & Príncipe, Tanzania, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Fabaceae: *Cassia fistula* L.; Vitaceae: *Vitis vinifera* L. (Goff 2018).

63. *Syllepte sarronalis* (Walker, 1859)

Material: 5 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 04.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Gambia, Sierra Leone, (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

64. *Syllepte rogationis* (Hampson, 1918): (Fig. 16)

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 30.08.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Mozambique (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

65. *Synclera traducalis* (Zeller, 1852): (Fig. 20)

Synonymy follows Nuss *et al.* (2003–2018):

= *Salbia achatinalis* Guenée, 1862;

= *Spilomela retinalis* Lederer, 1857.

Material: 10 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 26.01.–19.06.2014, leg. Kravchenko *et al.*, 178 ex. same data except the date 25.07.–19.11.2014 (SMNH).

Distribution: Palaetropical, penetrates to Palaearctic. In Africa: Cameroon, DR Congo, Côte d'Ivoire, Egypt, Equatorial Guinea, Ethiopia, Gambia, Madagascar, Mozambique, Namibia, Réunion, Saudi Arabia, Seychelles, Senegal, South Africa, Tanzania, United Arab Emirates, Yemen, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: India, Malaysia, New Guinea, Sri Lanka; Palaearctic: Canary Islands, Cyprus, Israel, Lebanon, Palestine, Syria (De Prins & De Prins 2018).

Host-plants: Rhamnaceae: *Gouania polygama* (Jacq.) Urb., *Ziziphus jujube* Mill. (Goff 2018). Known as variegated pearl—pest of jujube.

66. *Terastia africana* Sourakov, 2015

Material: 175 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 03.01.–24.04.2014, leg. Kravchenko *et al.*, 9 ex. same data except the date 06.06.–13.11.2014 (SMNH).

Distribution: Afrotropical. Cameroon, DR Congo, Gambia, Kenya, Malawi, Rwanda, Seychelles, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Fabaceae: *Erythrina abyssinica* DC., *E. mitis* Jacq., *E. variegata* L., (Ghesquière 1942).

67. *Ulopeza flavicepsalis* Hampson, 1912

Material: 91 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 22.07.–19.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Cameroon, DR Congo, Sierra Leone (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

68. *Ulopeza conigeralis* Zeller, 1852: (Fig. 22)

Synonymy follows Nuss *et al.* (2003–2018):

= *Botys latiferalis* Walker, 1966;

= *Ulopeza phaeothoracica* Hampson, 1912;

= *Xacca trigonalis* Walker, 1869.

Material: 9 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 15.09.–18.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. Cameroon, Congo, DR Congo, Côte d'Ivoire, Equatorial Guinea, Ethiopia, Ghana, Malawi, Mozambique, Nigeria, Sierra Leone, South Africa, Tanzania, Uganda, Zambia, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Moringaceae: *Moringa oleifera* Lam. (Wikipedia 2018).

Family Pyralidae

Subfamily Phycitinae

69. *Epicrocis laticostella* (Ragonot, 1888)

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 26.02.–07.05.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. South Africa, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

70. *Maliarpha concinnella* (Ragonot, 1888): Synonymy follows Nuss *et al.* (2003–2018):

= *Biafra concinnella* Ragonot, 1888;

= *Biafra rhodinella* Ragonot, 1888;

= *Biafra taxiarcha* Meyrick, 1935;

= *Ethiotropa pyromerella* Hampson, 1918;

= *Singhalia haemocharis* Meyrick, 1937.

Material: 43 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 14.09.–04.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. DR Congo, Gambia, Ghana, Malawi, Mozambique, Nigeria, Rwanda, South Africa, Uganda, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

71. *Maliarpha separatella* (Ragonot, 1888): Synonymy follows Nuss *et al.* (2003–2018):

= *Anerastia pallidicosta* Hampson, 1896;

= *Enosima vectiferella* Ragonot & Hampson, 1901.

Material: 131 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 13.09.–17.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Cameroon, Comoros, DR Congo, Ghana, Kenya, Madagascar, Malawi, Mauritius, Nigeria, Réunion, Senegal, Sierra Leone, South Africa, Sudan, Swaziland, Uganda (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: China, India, Myanmar (De Prins & De Prins 2018).

Host-plants: Larvae feed on various grasses, including Poaceae: *Andropogon tectorum* Schumach. & Thonn., *Oryza* sp., *Saccharum* sp., *Sorghum* sp. *Zea mays* L. Known as African white stemborer—this species is a pest of many crops, especially—sugar cane (Wikipedia 2018).

72. *Hypargyria metalliferella* (Ragonot, 1888)

Material: 6 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 14–30.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaeotropical. In Africa: Ethiopia, Gambia, Ghana, Namibia, Saint Helena, South Africa (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: India (De Prins & De Prins 2018).

Host-plants: Celastraceae: *Catha edulis* (Vahl) Endl. (De Prins & De Prins 2018), *Siphonodon australis* Benth. (Wikipedia 2018); Oleaceae: *Olea* sp. (De Prins & De Prins 2018).

Subfamily Pyralinae

73. *Endotricha erythralis* (Mabille, 1900): Synonymy follows Nuss *et al.* (2003–2018):

= *Endotricha rosellita* Ghesquière, 1942.

Material: 7 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 18.10.–17.11.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Afrotropical. DR Congo, Madagascar, Seychelles, South Africa, Yemen, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Unknown.

74. *Hypsotropa* sp.

Material: 1 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 07.07.2014, leg. Kravchenko *et al.* (SMNH).

Host-plants: Unknown.

75. *Hypsopygia bamakoensis* (Leraut, 2006)

Material: 87 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 3.01.–27.06.2014, leg. Kravchenko *et al.*, 14 ex. same data except the date 15.08.–17.11.2014 (SMNH).

Distribution: Afrotropical. Central African Republic, Mali, Senegal (Leraut 2006).

Host-plants: Unknown.

76. *Hypsopygia mauritialis* (Boisduval, 1833b): Synonymy follows Nuss *et al.* (2003–2018):

= *Hypsopygia laticilialis* Ragonot, 1891;

= *Hypsopygia pfeifferi* Amsel, 1954;

= *Pyrallis ducalis* Walker, 1866;

= *Pyrallis lucillalis* Walker, 1859a.

Material: 168 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 25.07.–30.09.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Palaetropical with penetration to Palaearctic. In Africa: DR Congo, Madagascar, Mauritius, Réunion, Seychelles, Sudan (De Prins & De Prins 2018) and Mali (**new record**). Also in Australasia: Australia, Hawaii; Oriental: Asia; Palaearctic: China, Iran (De Prins & De Prins 2018).

Host-plants: Larvae develop in wasp (Hymenoptera: Vespinae) nests (Goff 2018)

77. *Pyrallis farinalis* (Linnaeus, 1758): Synonymy follows Nuss *et al.* (2003–2018):

= *Asopia domesticalis* Zeller, 1847.

Material: 2 ex. Mali, Bamako, Ouronina 12°5'39.78"N 8°24'3.16"W, 29–30.01.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Cosmopolitan. In Africa: Saint Helena, Seychelles South Africa, Yemen, Zimbabwe (De Prins & De Prins 2018) and Mali (**new record**).

Host-plants: Pest of stored food plants, especially milled plant products (Wikipedia 2018).

78. *Pyrallis pictalis* (Curtis, 1834): Synonymy follows Nuss *et al.* (2003–2018):

= *Pyrallis pronoealis* Walker, 1859c;

= *Pyrallis proximalis* Walker, 1862.

Material: 10 ex. Mali, Bamako, Oronina 12°5'39.78"N 8°24'3.16"W, 24.03.–05.04.2014, leg. Kravchenko *et al.* (SMNH).

Distribution: Cosmopolitan. In Africa: DR Congo, Madagascar, Réunion, United Arab Emirates, Yemen (De Prins & De Prins 2018) and Mali (**new record**). Also in Oriental: India, Malaysia [Sarawak], Sri Lanka; Palaearctic: Netherlands, United Kingdom [introduced] (De Prins & De Prins 2018).

Host-plants: Decaying vegetable matter. Pest of stored food plants (Wikipedia 2018).

79. *Pyrallis* sp.

Material: 12 ex. Mali, Bamako, Oronina 12°5'39.78"N 8°24'3.16"W, 25.02.–14.08.2014, leg. Kravchenko *et al.* (SMNH).

Host-plants: Unknown.

Discussion

Due to the absence of any published records of the Pyraloidea from Mali, all of our records are new for this country. Seventeen species are also new for West Africa: *Eoophyla platyoxantha*, *Ancylolomia simplella*, *A. prepiella*, *Autocharis jacobsalis*, *Euclasta warreni*, *Hodebertia testalis*, *Herpetogramma basalis*, *Glyphodes bitriangulalis*, *Terastia africana*, *Syllepte rogationis*, *Orphanostigma abruptalis*, *Agrotera rufitinctalis*, *Nausinoe quadrinalis*, *Hypsopygia mauritalis*, *Pyrallis farinalis*, *P. pictalis* and *Nevrina* sp.

The most common subfamily is Spilomelinae (family Crambidae), which includes 54 species (table 1). The majority of collected species have a wide distribution pattern; 5 species are even cosmopolitan. The only regional endemic species is *Hypsopygia bamakoensis*. The most common biogeographical categories are Afrotropical (34 species), Palaetropical (17 species) and Palaetropical with penetration to Palaearctic (12 species); 83.5% of collected species fall into these biogeographical categories.

Conclusion

Most of the species in our collection were represented by only a few specimens. Seventeen species accounted for more than 90% of all specimens collected (Fig. 23). The most common species, *Patania balteata*, comprises 40.0% of all specimens collected. It is known as a pest of mango trees, which are common in the light-trapping area. Other common pests are *Maruca vitrata*, accounts for 6% of specimens which damages leguminous crops; *P. vitrealis* (4.5%) develops on jasmine and wild olives; and *Spoladea recurvalis* (3.7%) damages beets, maize and soybean, which are typical crops in the area. Another 13 pest species are rare in the collecting area: *Maliarpha separatella*, *Omiodes indicata*, *Synclera*

traducalis, *Haritalodes derogata*, *Ghesquierellana hirtusalis*, *Parapoynx fluctuosalis*, *Pyalis pictalis*, *Pyrausta phoenicealis*, *Herpetogramma licarsisalis*, *Marasmia trapezalis*, *Diaphania indica*, *Orphanostigma abruptalis*, *Pyalis farinalis*.

Altogether 164 host plants of caterpillars are mentioned in the list of pyralids above. The host plants for 30 Pyraloidea species are not known.

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FIGURE 1.
Map of Mali. Ouronina village is marked.

FIGURES 2–7.

Habitats sampled during the study. 2. Scattered bushes on slopes of Sibi Hills. 3. Savannah with forest patches. 4. Colonna light trap near riverine forest. 5. Artificial pool near Voronina with ruderal plants on adjacent land. 6. Bushes on sand dunes near Niger River. 7. Riverine forest in the flooded area of Niger River.

FIGURES 8–22.

Some images of Pyraloidea species from Mali. 8. *Parapoynx fluctuosalis*. 9. *Cryptosana caritalis*. 10. *Pyrausta phoenicealis*. 11. *Diaphania indica*. 12. *Glyphodes bicolor*. 13. *Glyphodes onychinalis*. 14. *Glyphodes stolalis*. 15. *Haritalodes derogata*. 16. *Syllepte rogationis*. 17. *Nevrina* sp. 18. *Nevrina procopia* (Stoll in Cramer & Stoll, 1781) from Liberia. 19. *Orphanostigma abruptalis*. 20. *Synclera traducalis*. 21. *Ghesquierellana hirtusalis*. 22. *Ulopeza conigeralis*.

FIGURE 23.

Occurrence in percentages of the 17 most common species with number of specimens collected. White bars = known pest species.

TABLE 1.

Distribution of Pyraloidea species according to subfamilies and biogeographical categories.

Distribution pattern	Subfamilies							Total
	Spilomelinae	Pyalinae	Pyraustinae	Odontiinae	Acentropinae	Crambinae	Phycitinae	
Afrotropical	22	2	2	1	1	4	2	34
Palaeotropical + Palaearctic	10	1	1					12
Palaeotropical	12		2	1			2	17
Pantropical + Palaearctic	5							5
Cosmopolitan	3	2	1		1			7
Pantropical	1							1
Species not identified	1	2						3
Total	54	7	6	2	2	4	4	79