



THE PYRALOID PLANET

Volume 11 – December 1, 2017
A Newsletter for Pyraloidea Fans

Inside:

GlobIZ News
Borneo Publishing Project
New Students...
News From...
New Papers, Web Sites, etc....

Editorial

Has it really been a whole year? Thanks to everyone who sent in items for the newsletter. We had at least two students join the Pyraloid Planet newsletter and I have highlighted them below.

It is easy to see that pyraloid enthusiasts (as well as the moths) are everywhere. Pyraloids are being observed, enjoyed, and studied in all parts of the world, from primary forests to gardens. This year I discovered an aquatic pyraloid enthusiast in Kansas, U.S.A. Don Huggins with the Kansas Biological Survey for many years was rearing these animals in the 80's. It was inspiring to listen to him tell me about his discoveries regarding acentropine biology, specifically what they are doing in water!

M. Alma Solis

GlobIZ News 2017

The Global Information System on Pyraloidea (GlobIZ) is still slowly growing in terms of the quantity of taxa. Since the last newsletter, the number of valid species included in the database increased by 109 (+ 30 synonyms). Altogether, there are 25,267 pyraloid names for 2,092 genera (+ 1,399 synonyms) and 15,543 species (+ 6,233 synonyms). The following table provides an overview per subfamily, but we are convinced that some described species are still missing.

A few taxa were moved from Pyraustinae to Spilomelinae suggesting that the species number of the former has been overestimated in the past. These corrections are being done by Richard Mally in preparation for submission of a comprehensive phylogenetic study of the two groups.

Seeing the relatively low number of names added to the database, much time is spent on improving the quality of data and we even found one name duplicated which has since been deleted.

Behind the scenes, the database has been set on a new system and is currently in the testing phase. As soon as the test is com-

pleted, we will move all the data and close the old editing platform which has been running for 15 years now.

I very much like to thank all who contributed editing data in GlobIZ.

Matthias Nuss

	Genera		Species	
	valid	synonyms	valid	synonyms
Chrysauginae	131	60	398	130
Epipaschiinae	93	69	705	170
Galleriinae	63	61	258	119
Phycitinae	656	386	3131	1474
Pyalinae	134	109	957	347
Acentropinae	75	39	761	208
Crambinae	176	123	2047	1090
Cybalomiinae	19	15	107	12
Glaphyriinae	52	36	345	165
Heliothelinae	5	6	49	15
Lathrotelinae	4	7	37	8
Linostinae	1	0	4	2
Midilinae	13	8	95	16
Musotiminae	23	8	193	24
Odontiinae	87	38	384	139
Pyraustinae	173	103	1175	590
Schoenobiinae	29	17	235	98
Scopariinae	24	19	577	208
Spilomelinae	334	295	4085	1418
	2092	1399	15543	6233

Progress Report on the Pyraloids of Borneo Hybrid Publishing Project

Volume II of the Preliminary Guide to Pyraloid Moths of Borneo will be the second print volume in a series of three. It will consist of images, species names, and a QR code for each image. This links to an address on the website 'The Pyraloid and Thyridoid Moths of Borneo' for each species and/or morphotype. We include species that occur in Borneo, as well as those that are likely to occur in Borneo.

This Volume is nearing completion, but it is a slow process and our target date for publication (October this year) was not met. There is good reason to believe it will appear in the first half of 2018. It is a more ambitious project than Volume I and this makes it more time consuming to prepare. Because we are using each QR code to link to a species address on the website, the book cannot go to press until all the species entries for that volume are uploaded to the website. However, uploading and checking of the final 100 species is still under way. Also, we are still trying to locate missing images for 5% of the 700 species and morphotypes intended for this volume.

To make identification easier for those new to pyraloid study, we are including 120 images (at a decent size – 12 per A4 plate) of species to exhibit typical resting postures in the different subfamilies and genera. For the supply of these live images we are getting help from an enthusiastic band of photographers in south east Asia who are increasingly turning their attention to the pyraloids and thyridoids, and are drawn to their beauty. Some of the images are quite stunning. **We encourage anyone with an outstanding photo of a living species, especially where the posture makes it difficult to relate to the image of the set specimen, to send it in for inclusion.** Same goes for a photo which makes you say "Wow!" We have set up a new email to receive these images: stephensutton <po-bliveimages@gmail.com>. You can use this email address for sending images (min 1MB, max 4MB) and/or feedback about the website and print volumes.

A gratifying development is the growing number of DNA profiles available. We load them into our dedicated bar code tab as we

find them. You can use the new e-mail above to send us details to make sure we don't miss them.

All the subfamilies of the Crambidae are included, except for the Spilomelinae, which will be included only down to the genus *Hartalodes*, the rest will be included in Volume III. Once Volume III is published, we will re-do Volume I so that the Pyralidae have QR codes and entries are brought up to date. The Thyridoidea will be segregated to a new volume.

Volume II will be a big improvement on the 1st edition of Volume I, ie. more thoroughly researched. We continue our policy of not formally describing any taxa, but Terry Whitaker is now producing much more detail for each species and its literature. We hope that experienced Pyraloid Planet members will take the opportunity to get going on naming species – some 35% of entries are unnamed (but note that many of these may simply be varieties of named species).



Photo by Ron Eldie who is a local school teacher doing good macro-photo work.

Although Borneo is an island, it is a very large one in the centre of Sundaland and a great many mainland species occur. Therefore, we are setting up a southeast Asia Pyraloid Reference Collection in Borneensis, the mu-

seum of the Universiti of Malaysia Sabah's Institute of Terrestrial Biology and Conservation. By mid 2018 we should have identifications for all the species in the collection with published names.

We are very pleased to announce that Richard Mally has agreed to join the Pyraloids of Borneo team. We congratulate him on submitting his PhD thesis and wish him all the best.

Stephen Sutton
Terry Whitaker
Henry Barlow

New Students in Pyraloidea....

Stacey J Anderson - Australia

I have just applied to a PhD program at the University of Queensland, potentially to undertake a taxonomic revision of *Chilo* and *Scirpophaga* species from the Australasian region.

I am also completing a collaborative project entitled "You can't manage what you can't identify – Managing threats from exotic moth borers through accurate identification." This is a two year collaborative project between Sugar Research Australia, the Department of Agriculture & Water Resources, and the Australian Museum (Andrew Mitchell). Specific research objectives include Next-Generation DNA sequencing and developing phylogenetic trees relating to the taxonomically revised specimens of risk to Australia sourced from Australia's neighbouring countries. The project outcomes will assist the update of Australia's incursion management plans and emerging threats to Australia's sugar industry.

I will forward my PhD title when it is finalized for the next edition of the newsletter.



Nagaraj Kammar - India

Hi everyone, I am Nagaraj Kammar (see image above) at present working as a Ph.D. student on faunistic studies of the Pyraloidea (Lepidoptera) associated with cereals in south India at the University of Agricultural Sciences, Raichur, India under the guidance of Dr. A. Prabhuraj and Dr. M. Shankara Murthy.

The main goal of the investigation is to describe species reared from hosts and their accurate identification and authentication. Previous surveys and taxonomic studies in India have relied largely on light trap collecting. I will also prepare an illustrated key, distribution maps, and CO1 barcode the collected and reared species.

Further, I want to continue research on major subfamilies of Indian Pyraloidea in the future with your constant support and valuable suggestions. Thank you all. NaGaRaJ

NEWS FROM.....

Bernard Landry- Nicaragua

The highlight for me regarding pyraloids in the past year certainly was a return trip to Nicaragua in June. I had planned to be there during the rainy season to optimize my chances of obtaining interesting pyraloids that might differ from those that I had collecting in December 2015, at the end of the rainy season. I visited the same three localities, i.e. Selva Negra Ec lodge at 1300 m in the mountains close to Matagalpa, the Refugio Bartola on the side of the San Juan River, on the western margin of the large Reserva Biologica Indio Maiz, and Lost Canyon Nature Reserve, a private property situated in the dry deciduous forest, at some 150 m in elevation. Again, Jean-Michel Maes, founder of the “Museo Entomológico de León”, obtained the necessary collecting permit for me.



Female of *Cliniodes underwoodi* Druce (Odontiinae) from Selva Negra. The wingspan is 39 mm. Det. by J. Hayden. Photo by B. Landry.



Pair of *Oligostigmoides cryptalis* (Druce) (Acentropiinae) from Selva Negra. The female, on the left, is 32 mm in wingspan. Det. by A. Solis. Photo by B. Landry.

The collecting was better than in 2015 at Selva Negra and Bartola, but less so at Lost Canyon, which was a bit of a disappointment that I explain by the emergence of most moth species in May when the rains started, and the stronger moth seasonality in this habitat. The specimens so far have not all been identified, but a rough count shows a total of 326 species, which is 38 more than in 2015. Fifteen Pyraloidea subfamilies were collected, with the most diverse being the Spilomelinae by far with some 131 species, the Chrysauginae (51 species), Phycitinae (29), Epipaschiinae (25), Crambinae (23), Acentropinae and Glaphyriinae (19), Pyraustinae (12), Scopariinae (5), Galleriinae and Schoenobiinae (3), Odontiinae (2), Lathrotelinae and Midilinae (1). This material is of course available for study to anyone interested.

I thank James Hayden and Alma Solis for their determinations of the two species figured here.

Willy De Prins-Cydalima - Belgium

The first Belgian specimen of *Cydalima perspectalis*, the box tree moth, was in 2010 in the north of the country, vicinity of Antwerpen. Since then, the species has slowly spread through all the Flemish provinces (Antwerpen, Limburg, Oost-Vlaanderen, Vlaams-Brabant and West-Vlaanderen) and this year it has been extremely common in many areas, sometimes in large numbers.

In my own garden at Leefdaal (prov. Vlaams-Brabant) I counted up to 200 specimens each night in a small light trap with an 8W actinic blue lamp, though I do not grow *Buxus* in my garden. My two neighbors do (did!) and, although in the springtime there

was no sign of any frass, their bushes were completely devoid of leaves at the end of summer. Entomologists like Steve Wullaert, operating light traps powered with 125W, 160W and even 250W lamps, counted up to 2000 specimens of the box tree moth in various localities in Flanders. In the Catalogue of the Belgian Lepidoptera (see Web Sites below) the species was not recorded from the Walloon provinces at all. But during the course of 2017, the species spread over the five southern Belgian provinces as well: Brabant Wallon, Hainaut, Liège, Luxembourg, and Namur. This is particularly annoying since our own native *Buxus* species, *Buxus sempervivens*, will probably be destroyed as well.

Apart from the well-known white form (Fig. 1), there is also a complete brown morph (Fig. 2) and a form that has a conspicuous brown stripe just above the inner margin of the fore wing (Fig. 3) (See next page). The two colour forms are much less common than the nominotypical white form and therefore, I tried to calculate the percentage of each three of them. Every weekend from mid August till mid September I caught all specimens of this species and counted the number of each form. In total I counted 1169 moths divided as follows:

white form:	870 specimens
74.4%	
brown form:	195 specimens
16.7%	
form with brown line:	104 specimens
8.9%	

It would be interesting to compare these figures with other populations and especially to study the genetic background. Mendel would be happy!



Fig. 4. Hundreds of *Cydalima perspectalis* coming to light at Paal (Province of Limburg, Belgium), 28 August 2017, © Steve Wullaert.

Houhun Li -Chinese Microlepidoptera Catalogue In Press

The Catalogue of the Microlepidoptera of China will be published in early 2018 by Science Press in Beijing. The editors are Houhun Li and Shuxia Wang of Nankai University, Tianjin, China. The catalogue is divided into two volumes. In this catalogue (Volumes I and II), 1402 genera and 7182 species are listed, including fossil categories (up to end of 2016).

In Volume I (Micropterigoidea – Tortricoidea) 655 genera and 4000 species are listed according to their current generic and systematic position. Seventeen new combinations are proposed and three new synonyms are established. One family, six genera, and 100 species are newly recorded for China.

In Volume II (Alucitoidea – Pyraloidea, and fossil Microlepidoptera) 747 genera and 3182 species are listed. Twenty-one new combinations are proposed and five new synonyms are established, and eight genera and forty-nine species are newly recorded for China. This includes eight pyralid and three crambid new combinations and forty-one pyralid and two crambid species that are new records for China.

A Chinese name has been given to each species. At the end of the book there are a large number of references and three indices: Chinese Names of Lepidoptera, Scientific Names of Lepidoptera, and Scientific Names of Botany.

**David Lees & Eglė Vičiuvienė-
Pyraloidea Collection
Natural History Museum, London**

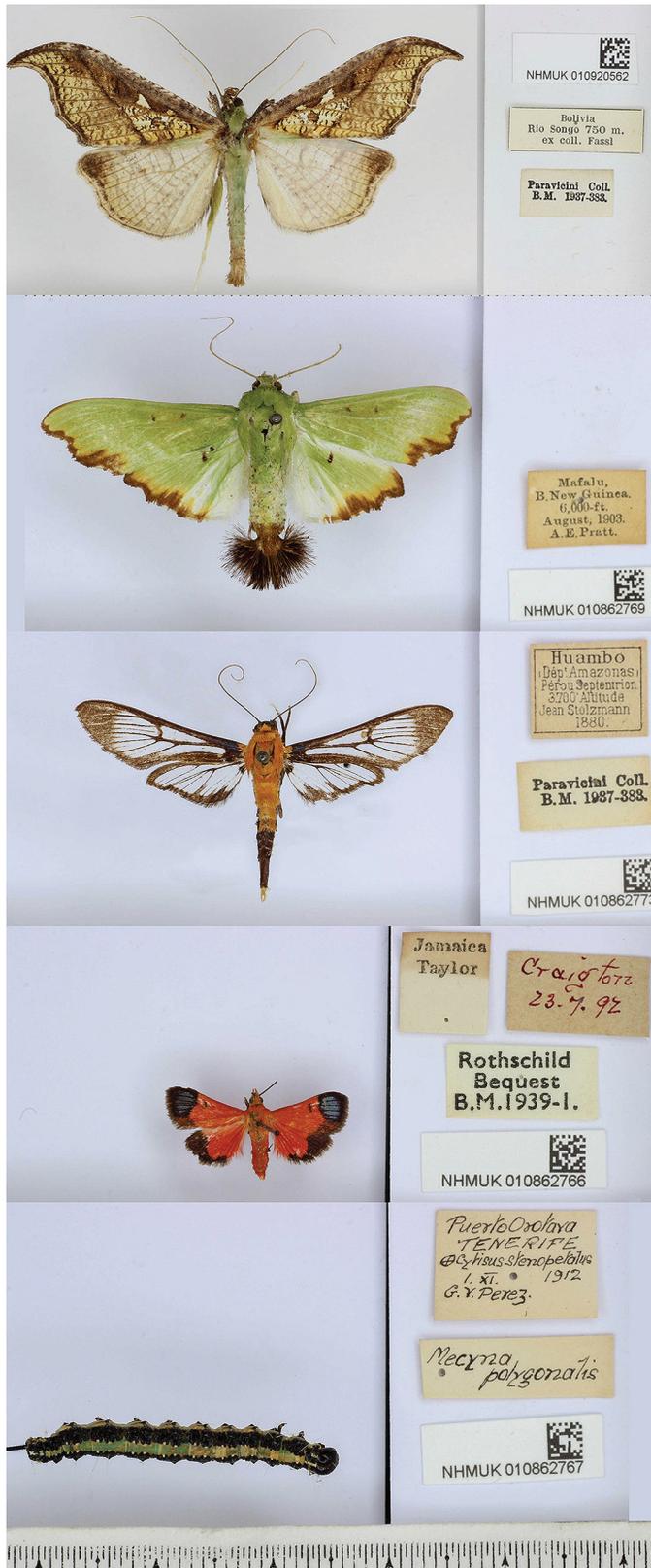
Eglė Vičiuvienė (Fig. 1) has joined the Natural History Museum in London as a volunteer. She is busy at work on the Pyraloidea collections (main and accessions), helping Microlepidoptera curator David Lees. The Pyraloidea is the only area of the Microlepidoptera collection for which there are no fully functional electronic index for locating species. The Spilomelinae and Pyraustinae, in particular, are mixed together and so it is sometimes pretty time consuming to find types. For the moment we rely largely on Lepindex and/or the manual card index, the only remaining card index on site which is retained because it has some of Michael Shaffer's notes since the card index was actually scanned. However none of this is updated with our current drawer numbers (which start "LG" for "Lower Ground").

So Eglė is painstakingly going through each drawer, at present focusing on the part of the collection richest in Spilomelinae, to re-index the collections. So far Eglė has indexed around 230 drawers housing around one hundred genera, hundreds of specimens, with many type specimens and many more undescribed species. This is however only a small fraction of the main/accession collections which number some 3800 drawers for Pyraloidea and an estimated 1250 for Spilomelinae/Pyraustinae. In the meantime, we have moved many of the drawers that contain pure Pyraloidea accessions from our unprocessed Microlepidoptera collections. Scientific Associate David Agassiz in particular has been helping in this process, and noctuid curator Alberto Zilli has also located quite a number of such drawers buried among the Macrolepidoptera

drawers. Many of these drawers are quite new accessions from recent fieldwork by Geoff Martin and others. Although it is a slow and time consuming process, Eglė hopes her work will contribute to the ease of access for lepidopterists who would in future like to work in the collections. Pyraloidea is a mega-diverse superfamily, as this mosaic of photos (Fig. 2) (See next page) illustrates. It is also highly overlooked, with many undescribed species. Eglė is very happy to be able to contribute to the documentation of these beautiful moths.



Fig. 1. Eglė Vičiuvienė at work.



Megaphysa herbiferalis (Guenée, 1854); *Parotis suralis* (Lederer, 1863); *Trichaea pilicornis* (Herrich-Schäffer, 1866); *Pyrausta cardinalis* (Guenée, 1854); *Uresiphita gilvata* (Fabricius, 1794), larva.

Richard Mally- *Conogethes* paper in press

Shashank, P.R., V. Kammar, A.K. Chakravarthy & R. Mally. In pres. A new Indian species of shoot and capsule borer of the genus *Conogethes* (Lepidoptera: Crambidae), feeding on cardamom. Zootaxa.

The Spilomelinae genus *Conogethes* contains a number of economically important species such as the yellow peach moth *C. punctiferalis* (Guenée, 1854), *C. pinicolalis* Inoue & Yamanaka, 2006, and *C. pluto* (Butler, 1887). Chakravarthy et al. (1991) discovered that Indian specimens identified as *C. punctiferalis* consisted of two distinct lineages whose larvae feed on different plant species: cardamom (*Elettaria cardamomum*) and castor (*Ricinus communis*). Subsequent studies found additional support in the genetics, morphology, and behaviour for the distinctness of the two lineages (Shashank 2012, Shashank et al. 2014a, b). The lineage feeding on castor is considered to represent the true *C. punctiferalis*, and the other lineage on cardamom has now been formally described. In morphology it is closest to *C. pluto*, with which it shares the broad fuscous band on the labial palps, the wing maculation, and the two black dots on the dorsal metathorax. Moreover, a phylogenetic analysis of DNA CO1 barcode data shows them to be sister species. The larvae of both species are stem borers in Zingiberaceae and can cause economic damage to cardamom crops and ornamental gingers like *Alpinia*. The DNA CO1 barcode results further imply the existence of at least two more currently undescribed *Conogethes* species.

Fig. 2. Left. An eye-catching selection of spilomelinae and pyraustines from the NHMUK accessions collection. Top to bottom, to scale, (re-)identified as:

Thanks to all the people who supported us in this work, especially Alma Solis and Scott Miller, who provided material of *C. pluto* for comparative studies.



References:

Chakravarthy, A.K., H. Honda, & N.E. Thyagaraj. 1991: Comparison of containers for larval rearing in stalk and fruit feeding type of *Conogethes punctiferalis* (Guen.) (Lepidoptera: Pyralidae). *International Symposium on Plantation Crops* 9: 127–131.

Shashank, P.R. 2012: Biosystematics and pheromone components of *Conogethes*

punctiferalis (Guénee) (Lepidoptera: Crambidae) with special reference to populations infesting *Castor* (*Ricinus communis* L.) and Cardamom (*Elettaria cardamomum* Maton), Ph.D thesis, UAS, GKVK, Bangalore-65.

Shashank, P.R., A.K. Chakravarthy, B.R. Raju & K.R.M. Bhanu. 2014a: DNA barcoding reveals the occurrence of cryptic species in host-associated population of *Conogethes punctiferalis* (Lepidoptera: Crambidae). *Applied Entomology and Zoology* 49: 283–295.

Shashank, P.R., A.K. Chakravarthy, R. Chandrashekharaiah & K.R.M. Bhanu. 2014b. Behavioural studies on Shoot and Fruit Borer, *Conogethes punctiferalis* Guenée, (Crambidae: Lepidoptera) host-associated populations reveal occurrence of cryptic species. *Entomologia Generalis* 35 (2): 103–115.



C. pluto images of adult, larva, and pupa.

**Alma Solis-
Pyraloidea alcohol collection-
National Museum of Natural History
(NMNH), SI, Washington, DC**

During the past year each vial of the Pyraloidea alcohol collection was barcoded and databased. This was a 7-month long project by Cecilia Escobar (Fig. 1, 2) who was hired with a Smithsonian Collections Grant. I recently gave a presentation entitled “A Portal into the NMNH Snout Moth Larval Collection 130 Years in the Making” at the Entomological Collections Network in Denver, Colorado. See abstract is below. It will be available on the web in the near future. I am currently adding the taxonomic information to submit for entry into EMU and then it will be available on the web.

Abstract: The Lepidoptera alcohol collection in the National Museum of Natural History (NMNH), Washington, DC is one of the largest and oldest on the planet. Within this large collection the snout moth or Pyraloidea collection has been maintained and curated as an everyday working tool. The development of this collection began in the late 1800’s when the Smithsonian Institution was just newly established. This collection has now expanded to over 1208 bale jars and about 6243 vials with mostly larvae, but including pupae. It also includes adults that are tied to genitalia and wings on microscope slides, and series of other pinned adults and “blown” larvae in the main collection. A database of each vial was completed this past year. It will be placed into EMU so that the collection is accessible to larval biologists worldwide and the data, such as host plant data, can be mined. This database also sheds light on the 19th and 20th century collabora-

tions between American snout moth larval biologists and those in Europe and Russia (Gerasimov) when studies on the morphology and identity of snout moth larvae was at its infancy in the United States.



**“Adventure at the U.S. Library of Congress”
or
“Looking for *Semniomima flaviceps*”**

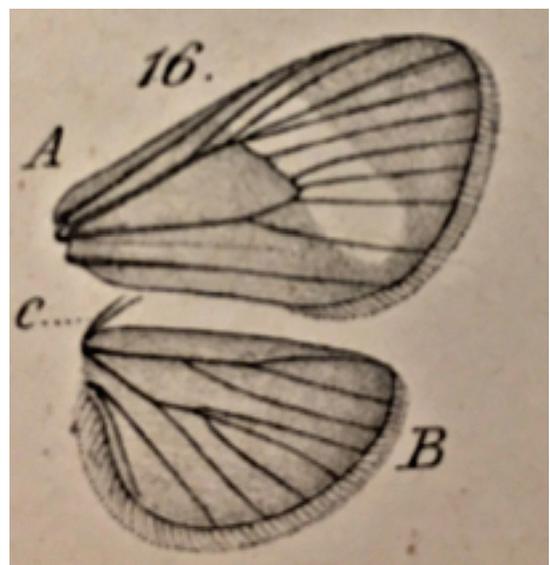
Recently via the Costa Rican Pyraustinae project, I delved into *Helvibotys* and then *Semniomima* (black & yellow pyraloids & one of Gene Munroe’s favorite groups). Due to the polyphyletic nature of pyraloid genera, one genus always leads to one or two other genera. The type species is *flaviceps* described from Argentina by Burmeister in 1878. The NMNH, Washington, DC, had some of the volumes, but not the moth volumes. I had to go to the Library of Congress (LOC), a building behind the U.S. Capitol. They assured me that they had the volumes and I was to go to the Special Collections & Rare Books Reading Room in the old Jefferson Building, but first I had to go to the newer Madison Building next door to get a “Reader Card” before they would let me in (I had to sign up on-line at least a couple of days before).

I arrived at the amazing reading room, old by American standards, high-ceiling, tall windows, and solid old oak tables. The registration folks were also very excited: the scientist that wanted to look at the MOTH book. After getting a small locker assigned to me to put my backpack into, I was allowed into the inner sanctum with my phone, a pencil, and paper. My excitement was building!

You can imagine my disappointment when I realized that they had the same 2 volumes (landscapes and mammals) as the NMNH, but NOT the moth volume. The helpful curator of rare books went away and came back to tell me that **what was on the LOC website was incorrect**. What I wanted was the 2nd part of the 5th volume of the Atlas. The curator then said that to locate it we would

have to go look at the “library index card.” The card file was in the bowels of the LOC via the Reference Room. In a room that was maybe only 7 feet high and as far as the eye could see there were card file cabinets. He said that according to the card file they did have this volume. He explained that all the volumes are now off-site; these particular volumes were in a facility in Federick, Maryland, about an hour northwest of Washington, DC. On the way out and back to the Rare Book Room, he spoke to the Reference Librarian about getting the correct volume from the facility. **She said: “Maybe you can get a “real person” to pull it from the shelf!”**

I was doubtful, but when I went back to the LOC two days later it was the correct volume!!! Burmeister’s two parts of the 5th volume is about Lepidoptera, mostly saturniids and sphingids, with beautiful black ink illustrations. But he described one pyraloid that is now the type species of *Semniomima*, Plate 17, figure 16. I was expecting a colored painting, but it is a black ink illustration of wing venation with some shading for the yellow on the wing (see below)



Hugh McGuinness & *Crambus*

The Lepidoptera section is very lucky to have Hugh in residence who has been volunteering at the NMNH, Washington, DC, for some time now. He finally launched into Pyraloidea, specifically the curation of the Nearctic *Crambus*. I was looking for something in *Crambus* recently and was stunned to see how fast he had sorted the *Crambus pro tem* which was about a cabinet full (~26 drawers). He is now about one-fifth the way into incorporating species into the main collection. And I am very lucky that he keeps bringing to my attention other parts of the collection that need work!



The holotype of *C. youngellus* Kearfott, 1908 [NMNH].

Pyraloidea (and other) videos on YouTube

In the summer of 2016 a number of lepidopterists were involved in producing videos about specific taxa for training purposes. I was involved in 5 videos that included Pyraloidea that became available on YouTube in March, 2017.

Overview: identification characters of Lepidoptera eggs (Insecta)

<https://www.youtube.com/playlist?list=PLkbmLVCW0Cj8PP6YEB51sNqOu6wtzQyYp>

Overview: tympanal organs of Pyraloidea adults (Insecta: Lepidoptera)

<https://www.youtube.com/playlist?list=PLkbmLVCW0Cj8PP6YEB51sNqOu6wtzQyYp>

Identification to Lepidoptera Superfamily-under the microscope (Insecta)

<https://www.youtube.com/playlist?list=PLkbmLVCW0Cj8PP6YEB51sNqOu6wtzQyYp>

Overview: Pyraloidea larvae (Insecta: Lepidoptera)

<https://www.youtube.com/playlist?list=PLkbmLVCW0Cj8PP6YEB51sNqOu6wtzQyYp>

Overview: Pyraloidea adults (Insecta: Lepidoptera)

<https://www.youtube.com/playlist?list=PLkbmLVCW0Cj8PP6YEB51sNqOu6wtzQyYp>

Finally.....

Website:

Catalogue of the Lepidoptera of Belgium. De Prins, W., and Steeman, C. 2017.
<http://www.phegea.org/Checklists/Lepidoptera/Lepmain.htm>

Older papers available as pdfs and their websites:

The Lepidoptera of Rapa Island. 1971. J.F. Gates Clarke. Smithsonian Contributions to Zoology. No. 56. [Alma Solis has a few hard copies available; let me know if you would like one]
<http://bionames.org/references/471873b7ec0a38361d8ddd9c73df3306>

Crambidae of Aldabra Atoll. 2007. M. Shaffer & E. Munroe. *Tropical Lepidoptera* 14: 1-110. <http://bionames.org/references/471873b7ec0a38361d8ddd9c73df3306>

A “smattering” of publications

There were many papers published regarding the Pyraloidea or that included Pyraloidea since the last volume. Below are a few representatives:

The mystery of Euzophera costivittella Ragonot, 1887 (Lepidoptera: Pyralidae) in Britain. Agassiz, D. 2017. *Entomologist's Gazette* 68: 57–59.

Clave pictórica para las especies de Midilini de Venezuela (Lepidoptera: Crambidae, Midilinae). A. Acosta-Vásquez, J. Clavijo-Albertos & Q. Arias-Celis. 2017. *SHILAP Revta. lepid.* 45 (178): 243-254.

Diaphania costata (F.) (Lepidoptera: Crambidae: Spilomelinae), a commonly misidentified pest of ornamental Apocynaceae in the southern United States. Hayden, J. E., E. R. Hoebeke, M. A. Bertone & V. A. Brou, Jr. 2017. *Proceedings of the Entomological Society of Washington*. 119(2): 173- 190. DOI: 10.4289/0013-8797.119.2.173

Les types primaires de Pyraloidea de la collection Staudinger, conservée au Museum für Naturkunde de Berlin (Leibniz-Institut für Evolutions- und Biodiversitätsforschung). Korb, S. K. 2017. *Alexanor*. 27 (8): 516-526.

Abstract: The present paper gives some information about twenty-three primary types of Pyraloid Moths in the collection of Otto Staudinger preserved in Berlin (Museum

für naturkunde, Leibniz-institut für evolutions- und Biodiversitätsforschung). Fourteen lectotypes are designated in this collection: *Loxostege eversmanni* (Staudinger, 1892), *Catoptria laevigatella* (Lederer, 1870), *Tsarahyphycis mimeticella* (Staudinger, 1879), *Keradere noctivaga* (Staudinger, 1879), *Titanio pulchellalis* (Staudinger, 1879), *Ancylosis pallida* (Staudinger, 1870), *Talis pulcherrima* (Staudinger, 1870), *Ancylosis sabulosella* (Staudinger, 1870), *Faveria sordida* (Staudinger, 1879), *Evergestis spiniferalis* (Staudinger, 1870), *Epidauria strigosa* (Staudinger, 1870), *Cornifrons ulceratalis* (Staudinger, 1870), *Phycitodes binaevella unitella* (Staudinger, 1879) and *Ancylosis xylinella* (Staudinger, 1870).

Taxonomic review of the genus Orybina Snel-len, 1895 (Lepidoptera, Pyralidae, Pyralinae), with description of two new species. 2017. Qi, M., Y. Sun & H. Li. *Zootaxa*. 4303 (4): 545–558. <http://www.mapress.com/j/zt/Article545>.

Review of the genus Termioptycha Meyrick, 1889 (Lepidoptera, Pyralidae) from China, with descriptions of four new species. Rong, H., Y. Wang & H. Li. 2017. *Zootaxa*. 4329 (2): 159–174. <http://www.mapress.com/j/zt/Article159>.

Taxonomic revision of the Spilomelinae (Lepidoptera: Pyralidae s.l.) of the Galapagos Islands, Ecuador. Landry, B. 2016. *Revue Suisse de Zoologie*. 123(2): 315-399.

First Record of Myelobia smerintha (Hübner) (Lepidoptera: Pyralidae: Crambinae) in Sugarcane in Colombia. Sandoval-Cáceres, Y.P., E.V. Vergara-Navarro, B. Landry, J.M. Perilla-López, & N. Barreto-Triana. 2017. *J. Agric. Urban Entomol.* 33: 105–110.

A new phycitine genus and species of Pourouma-feeding moth (Lepidoptera: Pyralidae) from Panama. M. A. Solis & H. H. Neunzig. 2017. Proceedings of the Entomological Society of Washington. 119 (3): 464-470. <https://doi.org/10.4289/0013-8797.119.3.464>

Nordic-Baltic Checklist of Lepidoptera. Aarvik, L., B.Å. Bengtsson, H. Elven, P. Ivinskis, U. Jürivete, O. Karsholt, M. Mutanen & N. Savenkov, 2017. Nordic-Baltic Checklist of Lepidoptera. Norwegian Journal of Entomology. Supplement 3. 1–236.

Abstract. The Lepidoptera species recorded in Iceland, Norway, Sweden, Denmark, Finland, Estonia, Latvia and Lithuania are listed. The history of lepidopterology in the Nordic-Baltic area and in each country is outlined. The current understanding of Lepidoptera phylogeny is discussed, and the higher categories shown as a table. A total of 3 259 species have been recorded in the eight countries. The number of species for each country is: Iceland: 96, Norway: 2 286, Sweden: 2 804, Denmark: 2 583, Finland: 2 588, Estonia: 2 454, Latvia: 2 556, and Lithuania: 2 423.

Another new Lygodium-boring species of the musotimine genus Siamusotima (Lepidoptera: Crambidae) from China. Solis, M. A, P. Pratt, J. Makinson, R. Zoneveld, & E. Lake. 2017. Proceedings of the Entomological Society of Washington. 119 (3): 471-480. <https://doi.org/10.4289/0013-8797.119.3.471>.

Discovery of another fern-feeding group of moths: the larvae of Hoploscopini (Insecta: Lepidoptera: Pyraloidea) from Borneo. Mally, R., T. Léger, C. S. Vairappan, S. Sutton & M. Nuss. Raffles Bulletin of Zoology. 65: 100–108.

Stojanović, D. V. & Radaković, N. Z. 2016. *Fauna of Lepidoptera of the Đerdap (Iron Gate) National Park. Part II. Microlepidoptera (Superfamilia Pyraloidea).* Đerdap National Park and Institute of Lowland Forestry and Environment, University of Novi Sad, Donji Milanovac-Novu Sad.

189 pages; with color images of the habitus and the genital armatures of the recorded moths, a color UTM distribution map provided for each pyraloid moth species inhabiting the Đerdap National Park; smooth paper; hard cover in color; slip cover in color. In Serbian, with English resume. PRICE: 50 EUR + post charge.



Pyraloid Enthusiasts

Name	email		
David Agassiz	david.agassiz@gmail.com	Nagaraj Kammar	rajsk0000@gmail.com
Stacey Anderson	Stacey.Anderson@aqis.gov.au	Rajesh Kumar	rajesh.ento@gmail.com
J. E. F. Asselbergs	JEF.Asselbergs@hetnet.nl	Gregor Kunert	Gregor.Kunert@kbs-leipzig.de
Yang Seup Bae	baeys@incheon.ac.kr	Bernard Landry	bernard.landry@ville-ge.ch
George J. Balogh	bugdr@att.net	Jean-François Landry	landryjf@agr.gc.ca
Hans Bänziger	sangdao.banziger@cmu.ac.th	David Lees	davil@nhm.ac.uk
Henry S Barlow	hsbar@hotmail.com	Théo Léger	theo.leger@outlook.com
Alejandro Barro	abarro@fbio.uh.cu	Guillaume Leraut	guillaume.leraut@hec.edu
Graziano Bassi	graziano.bassi@alice.it	Patrice Leraut	pleraut@mnhn.fr
Franziska Bauer	franziska.bauer@senckenberg.de	Houhun Li	lihouhun@nankai.edu.cn
Stella Beavan	Stellabeavan@outlook.com	Weichun Li	weichunlee@126.com
Vitor O. Becker	vitor.o.becker@gmail.com	Jiayu Liu	fsliujayu@163.com
Rebecca Bennik	mbennik@hotmail.com	Jean-Michel Maes	jmmaes@yahoo.com
Will Bernstein	bugguycolorado@gmail.com	Koen Maes	kvmaes@gmail.com
Richard L. Brown	moth@ra.msstate.edu	Richard Mally	Richard.Mally@um.uib.no
Alain Cama	alain.cama@orange.fr	Geoff Martin	G.Martin@nhm.ac.uk
Everett D. (Tim) Cashatt	cashatt@museum.state.il.us	Edda Martinez	edda.martinez1@upr.edu
Danilo Cepeda Montero	museoent@uchile.cl	Hugh McGuinness	hdmcguinness@gmail.com
A.K.Chakravarthy	chakravarthyakshay@gmail.com	Mark Metz	mark.metz@ars.usda.gov
Fuqiang Chen	chenfq@ioz.ac.cn	Eric Metzler	spruance@beyondbb.com
José Clavijo	pepeclavijoa@gmail.com	Wolfram Mey	wolfram.mey@mfn-berlin.de
Matthew Cock	m.cock@cabi.org	Joël Minet	minet@mnhn.fr
Alexandre-Pierre Cotty	alexandre.cotty@gmail.com	Don Miller	entdon@gmail.com
Srećko Čurčić	srecko.curcic@yahoo.com	Scott Miller	MillerS@si.edu
Willy De Prins	Willy.deprins@gmail.com	Andrew Mitchell	Andrew.Mitchell@austmus.gov.au
Julian P. Donahue	julian.donahue@gmail.com	Charlie Mitter	cmitter@umd.edu
Xicui Du	lucy2073@sina.com	Hideshi Naka	chun@shushu.me
Marc Epstein	mepstein@cdfa.ca.gov	Herb H. Neunzig	hneunzig@bellsouth.net
Atousa Farahpour-Haghanih	papiliona@gmail.com	Valentin Nidergas	valentin.nidergas@gmail.com
Guillermo Fernandez	guillermo.fernandez@uv.es	Matthias Nuss	matthias.nuss@senckenberg.de
Clifford D. Ferris	cdferris@uwyo.edu	Eivind Palm	Epalm32@gmail.com
Vilhelmsen Flemming	flemming.vilhelmsen@anarki.dk	Steven Passoa	Steven.C.Passoa@aphis.usda.gov
Reinhard Gaedike	tinagma@msn.com	Eugenie Phillips	phillipsrodriguez@gmail.com
Barry Goater	barrygoater@tiscali.co.uk	Colin W. Plant	cpauk1@ntlworld.com
Kurt Grimm	kurtgrimm@bluewin.ch	Jerry A. Powell	powellj@nature.berkeley.edu
Chris Grinter	cgrinter@gmail.com	Qi Mu-jie	qimujie@163.com
Christian Guillermet	chring@club-internet.fr	Rahul Ranjan	rranjan720@gmail.com
John Hawking	J.Hawking@latrobe.edu.au	S. Rathikannu	rathikannu@gmail.com
James E. Hayden	jehayden63@gmail.com	Yingdang Ren	renyd@126.com
Bob Heckford	bob.heckford@btinternet.com	Amanda Roe	amandaroe5@gmail.com
John B. Heppner	jheppner@flmnh.ufl.edu	Daniel Rubinoff	rubinoff@hawaii.edu
Alvaro Herrera Villalobos	alherrer@inbio.ac.cr	Michael Sabourin	mothvet@yahoo.com
Robert J. B. Hoare	HoareR@landcareresearch.co.nz	Akio Sasaki	scopar089@ybb.ne.jp
Ronald W. Hodges	rwhodges@rhodges.net	Brian Scholtens	scholtensb@cofc.edu
Terence Hollingworth	alkibbir@gmail.com	Rob Schouten	rschouten@museon.nl
Martin Honey	m.honey@nhm.ac.uk	Christian H. Schulze	christian.schulze@univie.ac.at
Marianne Horak	marianne.horak@csiro.au	Andreas Segerer	Andreas.Segerer@zsm.mwn.de
Robin Howard	robin.lasdescargues@gmail.com	Jay Shaffer	jshaffe1@gmu.edu
Peter Huemer	p.huemer@tiroler-landesmuseum.at	Stephanie Shank	sgshank53@gmail.com
Utsugi Jinbo	ujinbo@kahaku.go.jp	M. Shankara Murthy	smurthyent@gmail.com
Ole Karsholt	okarsholt@snm.ku.dk	P. R. Shashank	spathour@gmail.com
Gareth Edward King	sterrhinae@gmail.com	Ayuna A. Shodotova	shodotova@mail.ru
		Thomas J. Simonsen	t.simonsen@nathist.dk
		Harsimran Singh (Dino)	dinotude.sym@gmail.com
		Frantisek Slamka	f.slamka@nexta.sk

M. Alma Solis	alma.solis@ars.usda.gov
Wolfgang Speidel	speidel@zsm.mwn.de
Felix Sperling	Felix.Sperling@ualberta.ca
Hari Sutrisno	sutrisnohari@yahoo.com
Stephen Sutton	stephensutton7@gmail.com
Juergen Thiele	thithy@t-online.de
Peter Ustjuzhanin	petrust@mail.ru
Erik van Nieuwerkerken	erik.vannieuwerkerken@naturalis.nl
Héctor Vargas	havargas@uta.cl
Francesca Vegliante	francesca.vegliante@senckenberg.de
Flemming Vilhelsen	flemming.vilhelsen@anarki.dk
David L. Wagner	david.wagner@uconn.edu
Terry Whitaker	t.whitaker1@btinternet.com
Steven Whitebread	whitebread@one-name.org
Richard A. Worth	rworth@oda.state.or.us
Chunsheng Wu	wucs@ioz.ac.cn
Lijun Xu	zhilanmeng@qq.com
Hiroshi Yamanaka	hycopm@po1.ctt.ne.jp
Zhaofu Yang	yangzhaofu@nwsuaf.edu.cn
Shen-Horn Yen	shenhornyen@gmail.com
Ping You	youping@snnu.edu.cn
James D. Young	Jim.d.young@aphis.usda.gov
Dandan Zhang	zhdd61@163.com

Please welcome Stacy Anderson, Danilo E. Cepeda Montero, Srećko Ćurčić, Nagaraj Kammar, Don Miller, Steven Whitebread, and Jim Young.

Refer or forward the details to me about anyone who wishes to be put on the Pyraloid Planet distribution list.

If you have any suggestions, comments, and, more importantly, additions for next year's edition, please send to me ASAP or during the year, so you don't forget. The next deadline will be October 2018.