

THE PYRALOID PLANET

Volume 6 – 20 June 2012
A newsletter for the Pyraloidea fans

Editorial

Dear fellow pyraloid fans,

2012 so far has been an exciting year for me, with an expedition to Bolivia, the completion of a manuscript on the phylogeny of Pyraloidea (see separate text on p. 4), and a mini-symposium on Crambinae here in Geneva.

Matthias Nuss and I went to **Bolivia** in February and March for 4 weeks. We landed in Santa Cruz and started to organize field work with the help of **Julieta Ledezma** of the Museo de Historia Natural Noel Kempff Mercado (MHNNKM) and Martin Jansen a herpetologist associated with the Senckenberg Institute (Germany). We were joined in the field by my old friend **Daniel Néron**, a birder, and by lepidopterist **Alejandra Valdivia** from

the MHNNKM. We rented a car and first went north to a large property near **Concepcion**. This cattle hacienda is owned by Lutz Werding, of German origin. Don Lutz did a marvellous thing in segregating part of his property as a forest reserve and built a very comfortable research station with the help of the Senckenberg Institute. The main attractions of this area are the very interesting chiquitano forest and cerrado. We collected



Bernard Landry, Matthias Nuss, Julieta Ledezma, Alejandra Valdivia, and three students from J. Ledezma's lab.

This issue was made possible with the help of Stacey Anderson, Franziska Bauer, Willy De Prins, Guillermo Fernandez, John Hawking, Jim Hayden, John Heppner, Houhun Li, Wolfram Mey, Matthias Nuss, Alma Solis, and Stephen Sutton.

The logo of **The Pyraloid Planet** was created by **Florence Marteau** of the Muséum d'histoire naturelle, Geneva, Switzerland, and the layout of this issue was made by **Corinne Charvet** of the same institution.

Systematics and Ecology of the Australian Acentropine Moths

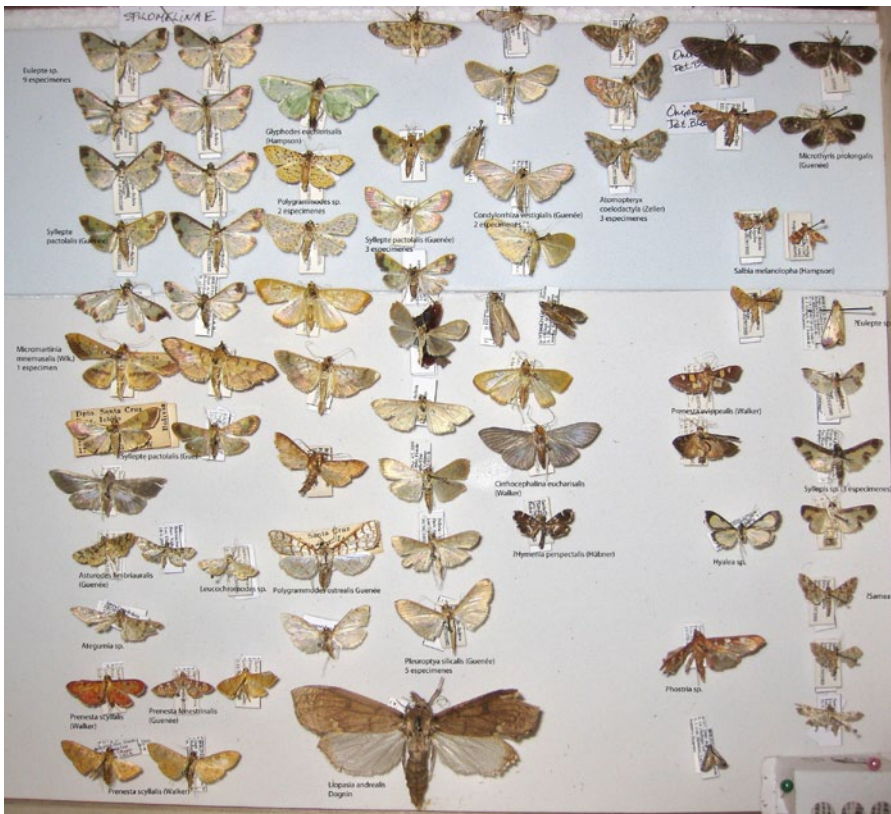
As part of my semi-retirement in 2007, I commenced a PhD on the revision of the Australian Acentropinae (Crambidae). Over the years I had worked on the taxonomy of the aquatic larvae of the Acentropinae and published a guide to the larvae from Australia (Hawking 2001). I've had a long history in aquatic science and have published on aquatic invertebrates. I have completed a Masters Degree in "The Ecology of Odonata" and have published many articles and books on dragonflies.

The Australian Acentropinae fauna currently consists of 47 species, in 17 genera (Shaffer *et al.* 1996) and fortunately representative specimens were held in the Australian National Insect Collection (ANIC) for examination. Field trips were conducted throughout Australia from 2007 – 2009, based on distributional data from ANIC and these yielded a substantial amount of adult and larval material, of which much was new. DNA and morphological analysis were undertaken on both adults and larvae to produce descriptions of the species and a phylogeny.

Analyses were undertaken on each species to obtain DNA sequence of the CO1, 18S, 28S and CAD genes and help establish a phylogeny. The CO1 gene was also used to associate the larval stages with described and undescribed adults. Descriptions of the adult morphology, genitalia and wing veins were made along with descriptions of the larvae, which included a considerable amount of new ecological information.



Paracymoriza eromenalis (Snellen),
Acentropinae



Some of the few specimens of Pyraloidea of the MHNNKM, Santa Cruz, Bolivia.

there 8 nights and the Crambinae were plentiful, with some 30 species found. Leaving Hacienda San Sebastian our plan was to reach **Buena Vista** and try to find *Myelobia* where large bamboos grow. We stayed with Robin Clarke and his wife Sonia at their Flora y Fauna Hotel. Nature abounds in this more humid area with much larger trees than in the chiquitano forest, but humans have 'invaded' the area and we found few moths of interest, perhaps partly due to the fact that the rains are more spread out in the year of late and insect phenology has consequently been perturbed. We stayed only two nights, collected a single specimen of *Myelobia*, and few other crambines altogether. The next part of the trip was spent in and near **Pampagrande**, in a dry Andean valley on the old road to Cochabamba. There we met Padre Andreas Langer, a priest and naturalist who has helped a great many other naturalists passing in the area over the last decades. He indicated collecting spots and facilitated collecting and specimen preparation. The vegetation of this area is quite fascinating, with various species of cacti, some quite large, but although there were few Crambinae, Matthias collected his first Scopariinae of the expedition, on a hill with more humid vegetation at about 1300 m in elevation. We finished our stay in Bolivia at **Refugio Los Volcanes**, a private resort especially

frequented by birders and certainly one of the two most beautiful natural places I have seen in my life. It was a successful trip with good collecting. Unfortunately, as of June 18, some of our specimens are still in Bolivia because the permit which would have allowed us to carry them out of the country didn't arrive in time.

For a mini-symposium on Crambinae I had invited **Graziano Bassi** of Italy and **Robert Schouten** of Holland, but unfortunately the latter couldn't come at the last minute. Nevertheless, Graziano and I had a productive time working on the collection, on a manuscript, and on GlobIZ to associate as many genera as possible to their proper tribe. We also selected the genera that we deemed most appropriate to study for a phylogenetic analysis of World Crambinae.

I hope that you enjoy the contributions below. I am happy to welcome two new students to our group. As usual please send any changes of address and additions to the 'Membership List' to me. You are also more than welcome to send PP to whoever you like. Also, if you would like to take over as editor of future issues of PP, please don't hesitate, and let me know.

Cheers,

Bernard Landry

The revision has confirmed the status of 11 genera, while synonymising three genera and proposing the erection of probably six new genera. Seventeen new species were recognised. The larvae were found to contain excellent morphological features that were extremely valuable in helping determine the systematic placement of the genera. The project is expected to be completed in August–September 2012.

References

- Hawking, J.H. (2001). An introduction to the identification of aquatic caterpillars (Lepidoptera) found in Australian Inland Waters. Identification Guide No. 37. Cooperative Research Centre Freshwater Ecology / Murray Darling Freshwater Research Centre: Thurgoona. Pp. 36.
- Shaffer, M., Nielsen, E.S., and Horak, M. (1996). Pyralidae. In: Nielson, E.S., Edwards, E.D. and Rangsi, T.V. (eds.). *Checklist of the Lepidoptera of Australia*. Pp 164 - 199. Monographs of Australian Lepidoptera. Vol. 4. CSIRO Publishing: Collingwood.

John Hawking

News from...

Franziska Bauer

Hello everyone, I am Franziska Bauer and I am currently working as a PhD student at the Senckenberg Natural History Collection, Museum of Zoology Dresden, with Matthias Nuss as my supervisor.



Sciota hostilis (Stephens) adult reared from a larva found in Denmark; photo taken on May 25, 2008 by Franziska Bauer.

In the past, I dedicated myself to research on the megadiverse Coleophorinae (Gelechioidea: Coleophoridae) on which I was able to shed a little bit of light (Bauer et al. 2012). Matthias Nuss, two further co-authors and I provided the first molecular phylogeny of the group. We revealed eight species groups, straightened up the confusing nomenclature and taxonomical concepts available for European species and drew conclusions regarding host-plant associations.

For my PhD, I am planning to run a similar strategy for Phycitinae. In fact, both groups can be compared to some extent. Phycitinae are also megadiverse and the current generic classification is dominated by traditional typological concepts, just as formerly in Coleophorinae. The estimated 3,450 described phycitine species are classified into 652 valid genera, an unmanageable jumble of family-, genus- and species-groups. This is where I take action: I am going to focus on reconstructing a phylogeny by means of molecular, morphological and ecological data which hopefully will help to move into a more natural classification of phycitines. Surely, I will not manage the world phycitines and therefore concentrate on European genera and some representatives from other continents.

Reference

- Bauer, F., Stübner, A., Neinhuis, C. & Nuss, M. 2012: Molecular phylogeny, larval case architecture, host-plant associations and classification of European Coleophoridae (Lepidoptera). *Zoologica Scripta*, Stockholm 41 (3): 248–265.

Franziska Bauer

Guillermo Fernandez

I have been working during the last 5 years with Joaquin Baixeras at the University of Valencia (Spain) as curator of the Lepidoptera collection. During these years I worked with different groups of moths and became interested in Pyralidae. At the same time I made my M.Sc. in “Biodiversity and Conservation”, the Master thesis topic was about the effects of light pollution on the arthropod fauna.

Two years ago, I met Matthias Nuss for the first time. We started talking about the possibility of doing my PhD on pyraloids. In May, during a common field trip in southern Spain, we agreed to focus on the phylogeny of Chrysauginae, and to study representatives of as many of the 130 known genera as possible. I will develop my work under the supervision of Matthias and Joaquin.

I don't have a fellowship for doing my PhD yet and will have to combine it with other work. Though I collected myself in Venezuela and Bolivia, I would be happy to receive some support with recently collected material from the Neotropics.

I hope to meet the pyraloid community in the near future.

Guillermo Fernandez



Alma Solis

In press with Systematic Entomology is the most thorough molecular phylogeny of Pyraloidea to date. It was a collaborative effort by Jerry Regier, Charlie Mitter, and Mike Cummings from the University of Maryland and lepidopterists Jim Hayden, Bernard Landry, Matthias Nuss, Thomas Simonsen, Shen-Horn Yen, Andreas Zwick and Alma Solis as part of the Lepidoptera Tree-of-Life project. The study sequenced five nuclear genes of 42 pyraloids spanning both families and 18 of the 22 subfamilies, plus up to 14 additional genes in 22 of those pyraloids plus all 24 outgroups. Subfamily relationships within Pyralidae, all very strongly supported, differ only slightly from a previous morphological analysis, and can be summarized as ((Galleriinae + Chrysauginae) (Phycitinae (Pyralinae + Epipaschiinae))). In Crambidae the molecular phylogeny is also strongly supported, but conflicts with most previous hypotheses. I will be presenting these results at three meetings this year: the Lepidopterists' Society Meeting in Denver, Colorado, International Congress of Entomology in Daegu, Korea, and the National Entomological Society of America meeting in Knoxville, Tennessee.

At the Lepidopterists' Society meeting this year I will also be presenting a summary of all of the projects relating to the Acentropinae that I have been working on, some with collaborators, regarding species in *Petrophila*, *Oxyelophila*, *Usingeriessa*, and *Aulacodes*.

A phylogenetic analysis of *Schacontia* by Paul Goldstein, Mark Metz & myself will be submitted soon. This is a small genus in

the Glaphyriinae with highly derived genitalia and with a presumably unusual biology. The type species was originally described as a noctuid by Schaus. Gene Munroe thought it should be its own family at one time until I talked him out of it when we were working on the Neotropical Checklist. Stay tuned!

I was collecting at the Big Thicket National Park in Texas last summer with Mike Pogue. Texas has been in a drought for many years and it was HOT! Nevertheless, I was able to collect species of Acentropinae that survive due to the underground seeps that are throughout the park. I also managed to "pin" myself with a minuten in the foot. It had to be removed with surgery later.

In February of this year I was invited to conduct a weeklong Pyraloidea seminar at the University of El Salvador. I am conducting collaborative research on the *Diatraea* of El Salvador with Dr. Andrea Joyce, University of California at Merced. It also included a workshop on genitalia dissection of *Diatraea*, collection of adult moths in a nature area, and the identification and collection of Acentropine immatures. We managed to rear a species of *Petrophila* to adulthood! [You can see more about this event at <http://www.ars.usda.gov/News/News.htm?modecode=12-75-41-00>]

Also published including the Pyraloidea of Honduras: Miller, J.Y., D. L. Matthews, A.D. Warren, M. A. Solis, D. J. Harvey, P. Gentili-Poole, T.C. Emmel, C. V. Covell, Jr. 2012. An annotated list of the Lepidoptera of Honduras. *Insecta Mundi* 0205: 1-72.

Alma Solis



Schacontia chanesalis (Druce) (Glaphyriinae)

John Heppner

In July last year John Heppner wrote the following: 'I am not "retired" but employed now as Microlepidoptera Curator at the McGuire Center for Lepidoptera and Biodiversity, at the Florida Museum of Natural History, University of Florida. My research continues on micro-moths, especially, Choreutidae and Glyphipterigidae, but I also have projects on Brachodidae, Copromorphidae, Carposinidae, Alucitidae, Schreckensteiniidae, Attevidae, Urodidae, Tortricidae, some Pyralidae (new records for Vietnam and Taiwan, as well as new Nymphulinae from the USA [I do not approve the change to Acentropinae]), plus the pyralid related family Immidae. My faunal studies also continue in Florida, Peru, Guatemala, Taiwan, and Vietnam, as well as editing of the new Lepidopterorum Catalogus, and Atlas of Neotropical Lepidoptera and other projects. The FSCA and combined Lepidoptera collections housed in McGuire Center are now the largest Lepidoptera holdings in the world, outside of the British Museum (NHM), so lepidopterists should consult this collection prior to concluding their studies.'

John Heppner

Jim Hayden

I have not done much on pyraloids the past year. I have a full-time job differentiating the invasive moths in Florida from the native ones. I think the number of undescribed pyraloids in Florida is overrated, but there are a few in taxa that have not been revised – please ask about loans from the FSCA/MGCL. I focus on taxa with economic importance or relatives. I am working on larval descriptions of:

- *Diasemiodes janassialis* (Walker), which is a pest on *Lobelia cardinalis* flowers at a couple of nurseries in Missouri; and,
- *Duponchelia fovealis*: a description needs to be provided for final-instar larvae. Steve Passoa has kindly helped with this.

I recently caught adults and larvae of *Penestola bufalis* (Guenée) in among mangroves in Vero Beach, Florida. They are saprophages in rotting intertidal leaf litter, like *Hymenoptychis* and *Tatobotys* (see Murphy, 1990), and similar to the behavior of *Duponchelia*.

I am still trying to get immature stages of *Sufetula* spp. in Florida. They sporadically infest the roots of palms in nurseries but are hard to detect; I have not had success with rearing larvae from wild-caught adults. I have recently seen one larva, and it looks like a crambine without stemmata and with a couple of chaetotaxic anomalies. Joël Minet informs me that he has the immatures of *Sufetula sunidesalis*, and I would like to know if anyone has seen larvae of *Diplo-pseustis* or other species.

Sangmi Lee and I were just awarded funding thru the USDA's 2012 Farm Bill. It is to produce an online Lucid identification tool for pyraloids and microleps that feed on Solanaceae, focusing on the *Leucinodes* group and Gnorimoschemini. We will collaborate with Richard Mally, who is studying the *Leucinodes* group, and Akito Kawahara's lab for sequencing. In the next six months, we will ask you all for loans of solanum-feeding pyraloids and micros for dissection and morphological illustration, and sequencing if possible (allowing for fresh specimens).

Jim Hayden

On the web

Pyralid & thyrnid moths of Borneo - an illustrated guide

The pyralid and thyrnid moths of Borneo project being put together by Terry Whitaker, Henry Barlow and myself has been much delayed by uncertainty as to whether to produce these in book form or online, and how much textual information to include. The decision has now been made to create an HTML 5 website for these two groups, to give a 'work-in-progress' illustrated guide which we hope will give researchers a starting point on matching names to images, to which they can contribute. We hope to start loading this site by April 2012.

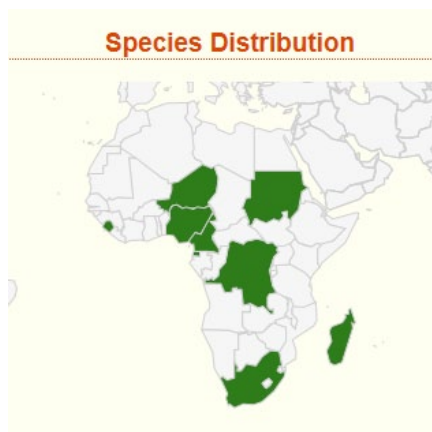
Initially the thyrnidids will go up as a set of plates of images with captions linked to text, because there is already a manuscript. This will be converted to HTML 5 format later (meaning image, name and text will be together when you search for a name). The pyralids, for which there is no manuscript, will be loaded straight to HTML 5. Synonyms and references will be in appendices.

Stephen Sutton

Afromoths

The website www.afromoths.net currently contains 32,380 species-group names. The ultimate aim of the website is to present information on ALL Afrotropical moth species. The actual database underlying the website currently contains close to 34,000 species-group names. This database was published online at the beginning of May 2012. It contains 1324 species-group names belonging to Pyralidae and 2159 to Crambidae. The number of referenced species-group names and names of which the original description has been checked from the primary source can be found below in Table. 1

A new feature of the website is the display of distribution maps (see fig.) showing the distribution of species per country in the Afrotropical region. The database currently contains this information in almost 48,000 distribution records.



Spoladea recurvalis (Fabricius, 1775)

Future improvements encompass a.o. the display of images, mainly of adult specimens from museum collections, preferably primary types. The database contains already about 1000 of such images, mainly from the Royal Museum for Central Africa, Tervuren, Belgium.

Willy De Prins

GlobIZ News 2012

During the last 12 months, the number of valid species included in the Global Information System on Pyraloidea (GlobIZ) increased by 1,311 (+ 577 synonyms) to a total of 13,819 (+ 5,448 synonyms). Some 7,700 changes were made by 10 contributors to GlobIZ pages in 2011.

Bernard Landry continued his work on crambines and exceeded the number of 2,000 valid species by 35.

It might be difficult to judge the completeness of the dataset, since nomenclature of pyraloids is comprehensive and always changing. Gaps still exist for Phycitinae, Spilomelinae, Pyraustinae and Pyralinae (given by decreasing numbers). All of the other pyraloid subfamilies are now completed in terms of quantity and so are *all* pyraloids of the New World.

Everybody is welcome to verify data using the public domain www.pyraloidea.org and report missing data or mistakes to Bernard Landry or Matthias Nuss. Moreover, I would be more than happy to provide anybody interested in editing data the right to enter the database for that purpose.

Matthias Nuss

Diagnostics of Australian pyraloid pests

In the framework of a scholarship provided by the Office of Chief Plant Protection, in Australia, a diagnostic protocol was developed for 12 exotic Pyraloidea species. These moths are pests on rice, sugarcane, citrus fruit and mangoes. Two species not previously recorded in Australia have been confirmed as established in the Northern Territory (*Chilo polychrysus* (Meyrick) and *Scirpophaga nivella* (Fabricius)). Also, the previously unknown genitalia of three of these species are illustrated (*Citripestis*

Table 1

	Species-group names	Names with reference to the original description	Original description checked
Pyralidae	1324	840 (63%)	442 (33%)
Crambidae	2159	1052 (49%)	670 (31%)

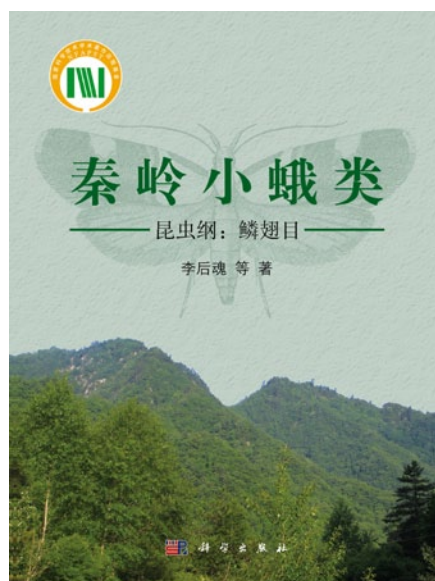
eutraphera (Meyrick), *Deanolis sublimbalis* Snellen and *Orthaga eadrusalis* Walker). The protocols have been approved by the Department of Agriculture, Fisheries and Forestry Australia and Biosecurity New Zealand. View them at www.padil.gov.au.

Stacey J. Anderson

New Books

Microlepidoptera of Qinling Mountains

Houhun Li *et al.*, 2012. *Microlepidoptera of Qinling Mountains (Insecta: Lepidoptera)*. xviii + 1272 pp. + 35 col. pls. Beijing: Science Press. [ISBN 978-7-03-033316-2] (In Chinese with English summary).



This work deals with the microlepidopteran species in the Qinling Mountains, Shaanxi Province, China. A total of 1043 species in 423 genera of 28 families under 13 superfamilies are recognized. 835 species are described in detail, accompanied by colour figures of the adults, and drawings of male and female genitalia characters. Recorded hostplants and distribution data are provided.

One new species is described in Pyralidae: *Faveria acutivalva* Ren *et al.*, 2012 (= *Oligochroa leucophaeella* sensu Inoue, 1982).

Three genera and thirty-six species are newly recorded to China, including the following Pyraloidea: *Faveria manoi* (Yamanaka, 1993), *Acrobasis obtusella* (Hübner, 1796), *Euzophera (Euzophera) albicostalis* Hampson, 1903, *Ancylosis (Heterographis) umbrilimbella* (Ragonot, 1901), *Ancylosis (Heterographis) xylinella* (Staudinger, 1870), *Phycitodes saxicola* (Vaughan, 1870), *Circo-botys malaisei* Munroe & Mutuura, 1970.

The following pyraloid genus and species group names are synonymized: *Rufalda* Roesler, 1972 (= *Glyptoteles* Zeller, 1848); *Rufalda absolutella* Roesler, 1972 (= *Glyptoteles leucacrinella* Zeller, 1848).

Two combinations are introduced in Pyralidae: *Faveria manoi* (Yamanaka, 1993), *Acrobasis subflavella* (Inoue, 1982).

Acrobasis inouei Ren, 2012 is proposed as a replacement name for *Conobathra tricolorella* Inoue, 1982, and *Edulicodes inouella* Roesler, 1972 is recalled from synonymy.

The studied specimens are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, except those of Zygaenidae and Limacodidae in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

Houhun Li

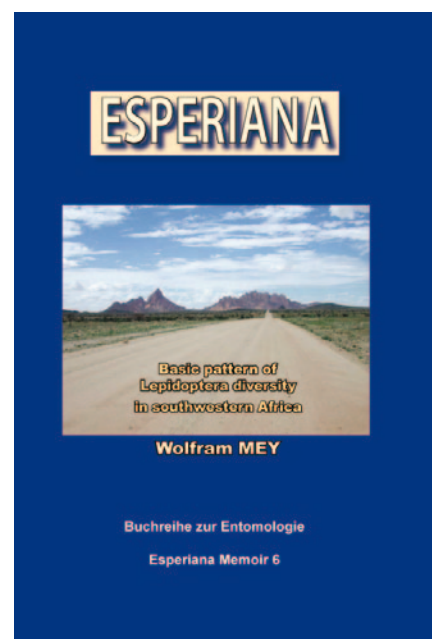
New species and genera of Pyraloidea from southwestern Africa

It is not new knowledge that the Pyraloidea of Africa south of the Sahara is a poorly known group. The regions with the highest level of faunistic and taxonomic exploration are southern Africa and Madagascar. However, even these regions have been investigated rather unevenly. In South Africa the best explored areas are the former provinces of Transvaal and Natal, whereas the interior and the western parts have remained less studied. Both sides of the continent have a completely different climate with humid conditions in the east and along the south coast, and arid and semiarid conditions in the west. The biodiversity of Lepidoptera follows this gradient. The fauna is much richer and more speciose in the east than in the dry west.

In the frame of an international project (BIOTA- South Africa) I was studying the

Lepidoptera fauna of Namibia and western South Africa since 2007. One of the tasks was the elaboration of a field guide. While working on this topic it soon became obvious that a large part of the fauna was still undescribed. Even common and widespread species turned out to be without names. A field-guide should of course include the abundant species of a region. They probably have an ecological significance, and thus, are important elements of the corresponding local ecosystems. Therefore, I decided to postpone the work on the identification book, and started at first describing and naming these species for later consideration in the planned field-guide. In the last volume of *Esperiana Memoir* the descriptions of these species were published. In addition, some new genera were established. The new taxa belonging to Pyraloidea are listed in Table 1.

The taxonomic work on these various subfamilies and genera was an extraordinary challenge. In nearly all groups the available taxonomic basis proved to be too weak for daring descriptions and additions of new species and new names. I had to dive deep into pyraloid taxonomy, deeper and longer than anticipated for sorting out things. A great advantage was the accessibility and availability of the important, type-rich collections in the museums of London, Paris, Geneva, Vienna, Cape Town and Pretoria. During the last years I was a regular visitor in the museums of London and South Africa, and I could study most of the type material of the species described from southern Africa. There are only a few lepidopterists with a good knowledge on the African fauna or





Crambicybalomia ariditatis Mey (Cybalomiinae)

with a specialisation in some families. I was fortunate enough to receive much help and support from all of them. Therefore, not all new species are my “babies” but a number of species and genus descriptions are results of joint work. Thanks again to D. Agassiz (Acentropinae), G. Bassi (Crambinae, Cybalomiinae) and K. Maes (Crambidae, excl. Crambinae).

Some of the new taxa are provisionally placed in a genus (e.g. *Sclerobia*) or subfamily (e.g. *Flohtschape*). Don't worry too much. I keep on working on Pyralidae and I am confident to find the correct placement in the system sooner or later.

Reference

Mey, W. (2011). Basic pattern of Lepidoptera diversity in southwestern Africa. *Esperiana* Memoir 6, 320 pp

Wolfram Mey

Table 1: Synopsis of species and genera of Pyraloidea described or commented in *Esperiana* Memoir 6, 2011

Pyralidae

Galleriinae

Paroxyptera hererofiliella spec. nov.

Pyralinae

Hypotia brandbergensis LERAUT, 2004

Hypotia bolinalis (WALKER, 1859)

Hypotia namaensis spec. nov.

Hypotia pronamibiella spec. nov.

Hypotia juergensi spec. nov.

Hypotia namaquensis spec. nov.

Hypotia quagga spec. nov.

Hypotia deckerti spec. nov.

Hypotia faucis spec. nov.

Triphassa argentea spec. nov.

Actenia fuscosserrata spec. nov.

Actenia dirempta spec. nov.

Epipaschiinae

Isolopha magna spec. nov.

Otjipagapaga gen. nov.

Otjipagapaga prima spec. nov.

Otjipagapaga secundaria spec. nov.

Otjipagapaga dentilinealis (HAMPSON, 1906), comb. nov.

Salma gamsbergpastalis spec. nov.

Salma mombopastalis spec. nov.

Flohtschapa gen. nov.

Flohtschapa rynchopalpata sp. nov.

Phycitinae

Merulempista colorata spec. nov.

Sclerobia triangulata spec. nov.

Gaana nigronevosa spec. nov.

Elegia inconspicuella (RAGONOT, 1888)

Namibicola karios sp. nov.

Namibicola palmwagos sp. nov.

Pogononeura hirticostella RAGONOT, 1888

Pogonotropha dicksoni spec. nov.

Crambidae

Crambinae

Surattha luteola Bassi & Mey, spec. nov.

Surratha africalis HAMPSON, 1919

Prionapteryx splendida Bassi & Mey, spec. nov.

Prionapteryx amathusia Bassi & Mey, spec. nov.

Parancylolomia Bassi & Mey, gen. nov.

Parancylolomia relicta Bassi & Mey, spec. nov.

Glaucocharis maculosa Bassi & Mey, spec. nov.

Crambus proteus Bassi & Mey, spec. nov.

Coniesta williami (DE JOANNIS, 1926) [*Diatraea*], comb. nov.

Acentropinae

Eoophyla assegaia spec. nov.

Eoophyla munroei Agassiz & Mey, spec. nov.

Cybalomiinae

Hyperlais xanthomista spec. nov.

Hyperlais conspersalis spec. nov.

Hyperlais transversalis spec. nov.

Crambicybalomia gen. nov.

Crambicybalomia ariditatis spec. nov.

Ptychopseustis lucipara spec. nov.

Ptychopseustis schmitzi spec. nov.

Odontiinae

Autocharis arida Maes & Mey, spec. nov.

Emprepes maesi spec. nov.

Tegostoma aridalis spec. nov.

Pyraustinae

Metasia grootbergensis sp. nov.

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