

Volume 9 – 23 July 2015 A newsletter for the Pyraloidea fans

## **Editorial**

Dear Pyraloidea fans,

I welcome you to this 9th edition of our worldwide newsletter.

The dissemination and databasing of taxonomic information is crucial for the future of our scientific endeavours and for society in general, although, as we all know, this latter aspect is very poorly integrated in most people's minds. GlobIZ (www.pyraloidea. org) is one important tool for the distribution of taxonomic information, and although not yet complete, it has become indispensable for anyone interested in Pyraloidea names.

Other initiatives are for example Plazi (www.plazi.org), an association whose aim is to support and promote the development and service of persistent and openly accessible digital taxonomic literature. To help make digital data about our biodiversity openly available, institutions and concerned citizens of the world can sign the Bouchout (www.bouchoutdeclaration. Declaration org). Museums and other institutions that have posted images of their specimens, especially primary types onto the Web are also extremely important, and I thank Robert Hoare for his commitment in this respect (see his contribution below). Regarding the Lepidoptera primary types in the Geneva museum. I have been maintaining a list and I want to make it available on the Web with images, eventually. Another Web site containing type images is AfroMoths (www.afromoths.net). This leads me to a small request. If your institution or an institution you know has images of Pyraloidea types posted on the Web, please let me know and I will provide a list in a future edition of PP.

The references and nomenclatural acts published in papers on Pyraloidea are incorporated into GlobIZ as soon as the GlobIZ team members become aware of them. Thus, one can search for them by year or author on the public page of GlobIZ (www.pyraloidea. org; database, search). Alternatively, GlobIZ team members are able to make more refined searches in the login sections of the site. Nevertheless, I would like to draw your attention to the publication of two 'new' taxa of family rank, the Lathrotelinae Clarke (see Minet, 2015), originally described as a new family, and Guyanymphulini (see Heppner, 2015) placed in Acentropinae.

On a personal note over the last year I



Bernard Landry in the Pyraloidea section of the Natural History Museum, London collections, in the basement of Darwin Centre 2, the beautiful so-called Cocoon.

have not been in the field very much, but I have been able to work on three Pyraloidea manuscripts and to increase the curatorial quality of our collection following a visit to the BMNH, London, in October last year. Thus, the Geneva Museum Pyraloidea collection currently numbers close to 20,000 specimens and slightly more than 2,000 species mostly identified to that level or to genus.

As usual I am very much grateful to the contributors of this issue of our newsletter, which you will no doubt find beautifully done and interesting. The references cited in the texts can be found in GlobIZ (www.pyraloidea.org) unless otherwise stated. As usual please don't hesitate to recruit new pyraloid fans by disseminating this issue widely. Also, send any change of address before the next issue. Finally, if you would like to become editor of PP, please do not hesitate to come forward and let me know. At this point I would gratefully pass it on to someone else.

All my best,

#### Bernard Landry

This issue was made possible with the help of Les Catchick, James Hayden, Robert Hoare, Théo Léger, Houhun Li, Richard Mally, Matthias Nuss, Eivind Palm, Mujie Qi, 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.

## **GlobIZ News 2015**

The Global Information System on Pyraloidea (<u>GlobIZ</u>) is still growing in terms of the quantity of taxa. During the last 12 months, the number of valid species included in the database increased by 384 (+ 120 synonyms). Altogether, there are 24,755 pyraloid names for 2,090 genera (+1,391 synonyms) and 15,207 species (+ 6,067 synonyms). During the same period, the efforts for corrections and additions to already existing records in the database increased much more. One outstanding example is the revised family group Lathrotelinae (Minet, 2015), containing four genera with altogether 37 described species. The latter were formerly placed in Acentropinae and Spilomelinae. Due to this change, the number of Spilomelinae species in the database actually decreased to just below 4,000.

Regarding the number of described pyraloid taxa included in GlobIZ, we certainly arrived in the saturation zone, which brings us to the question of how to further develop GlobIZ. We will discuss that during the next months, keeping in mind the main goal of freely accessible data to support research on pyraloids.

Thanks to all who contributed during the last 12 months and those who did not contribute yet are sincerely invited to join our team.

Matthias Nuss

## Update on recently published Pyraloidea literature

My literature request to the 'pyraloid community' in early April 2015 couldn't be delivered to nine of the 110 recipients due to various reasons. We would therefore ask you to go through our "membership list" at the end of the Newsletter and carefully check your contact details. However, ten of you replied and provided their recently published literature on Pyraloidea, along with the PDFs. Most of the 23 submitted references were already gathered in GlobIZ, and I added the few ones that were missing.

With the vast number of scientific articles being published nowadays, a particularly important article is easily overlooked. Therefore please continue to forward any pyraloid-related published literature to me or the other editors of GlobIZ so that we can maintain a high level of literature coverage. Also, if you are in search of an article present in the GlobIZ literature report, feel free to contact me with a PDF request – we might have scanned it in the past.

Richard Mally

## An exciting new book

A preliminary guide to the pyralid moths of Borneo, part 1. Thyridoidea and Pyraloidea; Pyralidae *sensu* Regier J.C. *et al.*, 2012, by Stephen Sutton, Henry Barlow and Terry Whitaker. Natural History Publications (Borneo) Sdn Bhd in association with Southdene Sdn Bhd (Kuala Lumpur).

Photographs by Jonathan Brunton, Terry Whitaker & others. Images are copyright of Southdene Sdn Bhd. Paradox Runtime access by Victor Wah. QR coding by Biovis Informatics Sdn Bhd (Kuala Lumpur). Plates layout by Ahmad Basir Omar, Lim Kooi Fong and Banu Priya Kaliana Sundram. Printed in Taiwan.

This A4 size 100 page book is in the final stages of printing 250 copies as PP9 goes to press. The price is not yet fixed. This is Part 1 of 3 and covers the Thyridoidea and the Pyraloidea; Pyralidae. Parts 2 & 3 will deal with the Crambidae and should be available in early 2016.

The core of Part 1 is a set of 35 high quality colour plates each with a capacity for 35 half images of adult moths. Opposite each plate is a page of corresponding legends. The book is ring-bound to allow it to lie flat on a laboratory bench when identifying specimens. The plates are semi-matt to cut down on reflections.

In this publication we do not revise genera or provide formal descriptions of species.

We do not consider genitalic structure but only external features. It is an illustrated guide, not a taxonomic monograph. We have included many images of morphotypes at or near the species level to give a launch pad for those who want to explore the Bornean fauna further. Hopefully they will carry out the necessary generic revisions and species descriptions to provide an organised framework for scientific study of this highly diverse superfamily. It looks like being as speciose in Borneo as anywhere in the world.

Although this volume is largely concerned with the family Pyralidae of the superfamily Pyraloidea, we also include species in the superfamily Thyridoidea, which, for much of the period since they were first described, have been treated as close relatives of pyraloids. For the Thyridoidea, Thyrididae (the only known family) we list 168 named species and 127 unnamed 'species' (the latter make up 43% of the total of 295 taxa.)

For the Pyralidae we list 286 named species and 379 unnamed 'species' (the latter

making up 60% of the total of 665 taxa). Subfamilies included are the Galleriinae, Chrysauginae, Pyralinae, Epipaschiinae and Phycitinae.

88% of the images have never been published before except with the original descriptions in hard to access journals, or in Robinson, Tuck and Fletcher's *Smaller Moths of SE Asia,* which is itself hard to find (although we have recently located a limited source of new copies – please contact us if you want to buy one).

For both superfamilies we figure species with distributions which suggest they may be found in Borneo as well as those actually recorded on the island. The total number of images is 1077.

We hope that this publication, and Parts 2 & 3 to follow, will stimulate curatorial work as well as systematic, taxonomic, and ecological research on these moths.

Stephen Sutton, Henry Barlow, Terry Whitaker

## A commentary on the historic moth gracing the book cover of 'A preliminary guide to the pyralid moths of Borneo, Part 1'

Sacada decora Walker, 1862 was collected by Alfred Russel Wallace in Sarawak, quite possibly in Rajah James Brooke's mountain refuge. It was here that Wallace did his classic study of moth diversity and flight activity in relation to the phase of the moon (hardly bettered yet – see his 'The Malay Archipelago' first published in 1869).

In Sarawak Wallace collected many new species of moths which are now in the Hope Collections of the Oxford University Museum. Sacada decora is the type species of the genus and so has historical significance. The Latin 'decora' means 'pretty' or 'handsome' – the latter in this case because the heavily plumed antennae indicate that it is a male. This species, along with the huge diversity of moths he encountered, probably contributed to Wallace's emerging ideas on the origin of species diversity, which led, via the 'Sarawak Law', to his hypothesis of evolution through natural selection.

So, in a small way, this moth may have been part of the evidence which, when Charles Darwin received it in a letter from Wallace, challenged him to publish 'The Origin of Species' (1859) without delay.

Stephen Sutton



Front and back cover of 'A preliminary guide to the pyralid moths of Borneo, part 1'.

# Pyraloid Moths of New Zealand on-line

I am delighted to be able to announce to pyraloid enthusiasts worldwide the completion of a near-comprehensive set of online images of New Zealand Pyraloidea. The images (taken by photographer Birgit Rhode) are accessible through the Larger Moths of New Zealand website: <u>http://www. landcareresearch.co.nz/resources/identification/animals/large-moths</u>. There are 8 pages in all; four of these are pages of images of set specimens arranged by taxonomic group: Crambidae: Crambinae; Crambidae: Scopariinae; Crambidae: smaller subfamilies; and Pyralidae. For each species, between one and five specimens are shown to indicate the range of variation and any sexual dimorphism. Biostatus is also given, and additional brief notes for some species. A fifth page has images of primary types of Pyraloidea held in the New Zealand Arthropod Collection (NZAC). The remaining pages constitute (1) an introduction to New Zealand Pyraloidea, with a brief discussion of diversity and biology for each subfamily, (2) factsheets dealing with the 9 endemic Pyraloidea listed as threatened, with details of identification features, ecology, status, threats and potential monitoring techniques, and (3) notes on Scopariinae, a very large unrevised subfamily in New Zealand, for which some of the taxonomic difficulties are discussed.

The New Zealand pyraloid fauna is over-



Some New Zealand pyraloids. A. Deana hybreasalis (Walker) (female); B. Exsilirarcha graminea Salmon & Bradley (male); C. Glaucocharis holanthes (Meyrick) (male); D. Musotima aduncalis (Felder & Rogenhofer) (male); E. Orocrambus xanthogrammus (Meyrick) (female); F. Scoparia subita (Philpott) (male).

whelmingly weighted in favour of Crambidae, with an estimated 238 species, including well-characterised unnamed taxa; only 24 species of Pyralidae have been recorded. Within Crambidae, Crambinae and Scopariinae dominate, with large endemic radiations in the genera Glaucocharis (18 species), Orocrambus (ca 50 species), Eudonia and Scoparia (collectively at least 120 species). In the last 3 genera, there is an extensive South Island alpine fauna, with a number of very local and poorly known taxa. Several endemic crambids [e.g. Kupea electilis Philpott, Orocrambus fugitivellus (Hudson), O. sophistes (Meyrick)] have brachypterous flightless females, and in one subantarctic species, Exsilirarcha graminea Salmon & Bradlev from Campbell Island, both sexes are flightless. One species, 'Argyria' strophaea Meyrick, remains unplaced to subfamily. Almost all subfamilies of New Zealand Crambidae are in need of taxonomic revision, with a number of known unnamed species (some of these threatened), and many other unresolved taxonomic problems, especially in Scopariinae. The life histories remain very poorly documented for most species.

Most New Zealand Pyralidae are adventive species, and many of the well-known cosmopolitan pests [e.g. Pyralis farinalis Linnaeus, Plodia interpunctella (Hübner), Galleria mellonella (Linnaeus)] are established. All four endemic pyralids are Phycitinae: two of these are local and rare (probably declining) South Island endemics, Delogenes limodoxa Meyrick and Sporophyla oenospora Meyrick, currently placed in endemic monotypic genera. A third, Homoeosoma anaspila Meyrick, is more widespread; the fourth, an unnamed species of Vinicia, is possibly confined to estuarine situations in the northern North Island. In Phycitinae, there are also two introduced bio-control agents: Pempelia genistella (Duponchel) introduced for control of gorse (Ulex europaeus) and Arcola malloi (Pastrana), introduced against alligator weed (Alternanthera philoxeroides). Several migratory species and more or less recently established arrivals from Australia complete the picture for Pyralidae.

The images should greatly assist with the identification of specimens of New Zealand Pyraloidea, especially when used in conjunction with the pages of introductory notes and the notes on Scopariinae; it is hoped that they will raise awareness of this group, which has been somewhat neglected in New Zealand, and inspire an increased level of interest and study. Given the major environmental changes in this country over the last two centuries, the increasing rate of arrival of adventive Lepidoptera, and the ongoing pressures on the native biota, it is essential that we step up our efforts to study, monitor and conserve these diverse and fascinating moths.

Acknowledgements. Many thanks to Birgit Rhode (NZAC), who put an immense amount of work and hard-won skill into photographing and editing images of the hundreds of specimens in the image galleries. Brian Patrick kindly compiled most of the Threatened Species factsheets. I am also especially grateful to Maia Vaswani, who visited the British Museum (Natural History), London, on my behalf and took images of genitalia of key taxa, mostly Scopariinae, which greatly assisted in identifications of specimens imaged, and clarified the correct application of many names. She also very kindly dissected the holotype of Homoeosoma ischnomorpha Meyrick. I gratefully acknowledge the financial assistance of the Terrestrial and Freshwater Biodiversity Information System (TFBIS) Programme towards this project (TFBIS number 267). The TFBIS Programme is funded by the New Zealand Government to help achieve the goals of the New Zealand Biodiversity Strategy, and is administered by the Department of Conservation.

Robert J.B. Hoare

1980's Michael Shaffer mentioned to me the loss of the specimens and that Joël Minet had been there studying the specimens prior to their return. About 20 years later, prior to 2001 and our move to the new space at the National Museum of Natural History, Washington (NMNH), four rooms of returned material to the Department of Entomology were discovered. The previous Collection Manager had failed to return specimens to the curators for many years. I was presented with the material that was returned by Michael to Jack Clarke; I later hand carried the four specimens back to the BMNH.

In preparation for the collection move I also found the original series from which those gifted specimens came from. So in addition to the 2 types we have 28 micropinned specimens collected on Rapa by Gustav Paulay, then at the University of Washington, Seattle, WA, in 1980, that he sent to Jack in 1983. Jack left a note with the specimens stating that there was correspondence associated with these specimens. I requested and received a copy of the correspondence from Pam Henson at the Office of the Smithsonian Institution Archives that had the numbers on the specimens with the collecting data and a little diagram of the pinned specimens and how they corresponded to the numbers. I labelled the specimens using the information in the letter. Just in case anyone is looking for this species, the adults were beaten from "dead leaves" and "dead fronds" on a variety of plant genera: Freycinetia, Asplenium, Pseudomorus, and Coprosma (respectively Pandanaceae, Aspleniacae, Moraceae, and Rubiaceae).

M. Alma Solis

# The *Lathroteles* specimens trail

In a recent article Minet (2015) resurrected the family name Lathrotelidae described by Clarke (1971) at the subfamilial level for *Lathroteles, Diplopseustis, Diplopseustoides,* and *Sufetula.* He mentions specimens at the Natural History Museum, London (BMNH) that "were unfortunately lost by the postal services when returned by M. Shaffer to J. F. G. Clarke (Smithsonian Institution, Washington, DC) ("I should have kept them", told me the former – "they were actually intended as a gift to the BMNH...")."

When I started to visit the BMNH in the

# Investigating the pyraloid diversity of Mount Kinabalu

We are just back from a collecting trip in the Malaysian state of Sabah in Northern Borneo, on the southern slopes of the mighty Mount Kinabalu to investigate the snout moth diversity at Mount Kinabalu National Park. We aimed to sample at different habitats ranging in altitude from lowland forest to alpine elevations a few hundred meters below the mountain's 4,095 metre summit [at least that was its height before the earthquake (see below)]. The freshly collected material will help us in our molecular phylogenetic work as well as enable us to integratively illuminate the local biodiversity through both morphological and DNA barcoding results.

A research trip of this scope needs a lot of preparation. A convincing research proposal as well as passing a number of bureaucratic procedures were necessary in order to apply for access to the National Park. Dr. Christian Schulze conducted research on Pyraloidea in Mount Kinabalu National Park almost 20 years ago. His work gave us an insight of what species to expect at our first collecting site in Poring Hot Spring. Dr. Stephen Sutton was of invaluable help in coordinating everything beforehand here in Sabah while we were still in Europe. After our arrival in Kota Kinabalu, the capital of Sabah province, Stephen helped us to get all the required permits in a record-breaking time. Professor Charles Vairappan of the Institute of Tropical Biodiversity and Conservation (ITBC) at Universiti Malaysia Sabah (UMS) in Kota Kinabalu is our project collaborator. His very generous support considerably raised the chances of success for our project proposal.

After a few days here we already made numerous friends. The people of Sabah are enormously friendly and want to help wherever they can. They often wonder what we are doing here and are curious about our research on 'rama-rama' (meaning 'moth' in Malay). English is broadly spoken in Malaysia, as it is one of the official languages along with Malay, but a basic knowledge of Malay vocabulary is helpful in the countryside, and the internet is of great help in this respect. However, the lack of internet access – as was the case for us during most of the time in the field – sometimes results in communicating with people in pure sign language.

After a somewhat underwhelming start in the lowland forests we changed to medium altitudes around 1,500 metres where we caught an amazing diversity of pyraloids at Kinabalu Mountain Lodge, a picturesque and quiet accommodation near Kinabalu Park Headquarters. This is not just an ideal location for bird watchers but also has a veranda facing south that allowed us to witness several stunning sunsets. However, the biggest attraction there was the veranda itself: once the veranda lights were turned on in the evening, hundreds of moths came and walls and ceiling were quickly covered in bugs. We were entranced by this place from the first night on when we arrived there at 3rd June.

On 5th June, after collecting late the night before, we were woken up early by several kids who were running and lumbering through the wooden lodge. At 7:15 a.m. noises grew louder and louder, and we thought that those kids were teasing us, as suddenly the whole building started shaking heavily. An earthquake – and not a small

one! When we heard a rumbling sound in the near distance we jumped out of the bed and ran outside, where the other guests and the staff had already gathered in a mix of panic and confusion. Everybody at the lodge and the house itself were okay, but this experience had a lasting effect on us, so that the many after-shocks kept us nervous and worried. However, we decided to stay there to continue collecting.



The 4,095 metres high Mount Kinabalu seen from the south, before the earthquake of 5th June 2015. Photo: T. Léger.



Pyraloidea encountered at light in Malaysia. Clockwise from upper right: Two specimens of Pagyda sp. together with Glyphodes cf. caesalis (Walker, 1859); Hoploscopa sp.; Neoanalthes pseudocontortalis Yamanaka & Kirpichnikova, 1993; Stericta sp.; Nevrina procopia (Stoll, 1781); Notesia tranquillalis (Lederer, 1863). Photos: T. Léger.



Mountain rainforest at Mesilau Nature Resort. Photo: T. Léger.



Théo at work on the veranda of Kinabalu Mountain Lodge. Photo: R. Mally

This earthquake with the eighteen fatalities as well as the aftermath with numerous landslides, floods that destroyed streets and bridges, and the many people in Mesilau and Ranau affected by water shortage and the power outage had a severe impact on Sabah. Mesilau Nature Resort, where we stayed only a couple of days before the quake, was evacuated and is now completely cut off from civilisation. Nobody knows if the landslides and boulders made it into the Resort area and damaged or even destroyed buildings. And with the upper mountain stations of Layang-Layang and Laban Rata damaged and closed, we had to alter our plans which originally saw us up there, collecting at 2,600 to 3,250 metres elevation.

During our stay here we had the chance to attend the "Rainforest Ecology, Diversity and Conservation in Borneo" Conference in Kota Kinabalu where we met colleagues from a variety of biological disciplines. We also presented results of our own research. After this short break in Kota Kinabalu we continued our collecting efforts but couldn't get up higher than 1,866 metres at Timpohon Gate. After collecting in the National Park one of us (Richard) worked in the DNA lab facilities at ITBC thanks to the support of Prof. Vairappan. The aim of this work was to get first molecular results from the collected material for two of our upcoming projects.

This was an exciting trip to probably one of the most beautiful places on our planet, and it results in a large number of collected pyraloids which will help us in our ongoing and future research projects as well as encourage revisionary taxonomic work on the pyraloids of Borneo. This latter goes hand in hand with the ambitious project of Stephen Sutton, Henry Barlow and Terry Whitaker on the Pyraloidea of Borneo. At the moment they are in the process of publishing the first of three volumes of their preliminary guide to the snout moths of Borneo. Pyraloid research is picking up pace here in South East Asia at the moment, and we would be happy to share both the work and the passion with everybody who is interested in helping.

We are very grateful to the Norwegian Meltzer Fond (Richard) and the Royal Entomological Society (Théo) for kindly supporting our project here in Sabah.

Théo Léger & Richard Mally

## News from...

### James Hayden

Linwood C. Dow passed away in August 2014 and willed the remainder of his collection to the Florida Museum of Natural History, McGuire Center. "Woody" Dow was one of the major moth collectors in Florida in the 1980s and 1990s, and he also collected extensively in Belize and Puerto Rico. He specialized in pyraloids, and he took interest in difficult taxa, such as *Desmia* and Prionapterigini, making dissections where necessary. He collaborated with Herb Neunzig on the Phycitinae of Belize (1993). His collection of several tens of thousands of specimens is currently being accessioned.

#### **Théo Léger**

I started two years ago under the supervision of Bernard Landry and Matthias Nuss a project aiming to reconstruct the phylogeny of the Crambinae and the Scopariinae, two subfamilies that the study of Regier *et al.* (2012) proved to be sister-groups. I drew a first taxon sampling from the specimens stored in alcohol by Bernard and Matthias over the previous years and the DNA extractions available at the Senckenberg Museum für Tierkunde Dresden (SMTD). James Hayden and Robert Hoare provided me with helpful material from the U.S.A. and New Zealand respectively, and I completed the sampling of the European fauna. My collecting trip to Malaysia with Richard Mally (see above) aimed to bring back important Asian taxa missing from my sample.

I first focussed on building a molecular alignment of the four nuclear genes GAPDH, IDH, MDH and rps5 which proved to perform well in resolving the phylogeny of the Lepidoptera (Wahlberg & Wheat, 2008). I designed new nested primers for these genes (short DNA fragment that specifically bind a targeted gene to amplify it) targeted to my groups in order to increase the PCR efficiency. The first results suggest the monophyly of these two groups as well as their sister-group relationship excluding Heliothela and Hoploscopa, which most probably represent independent lineages. We are planning to show our results during the SEL meeting in Dresden at the end of September, and in a first paper in the following months.

We are still interested in freshly collected or 95%+ ethanol preserved material to further detangle the phylogeny of these groups. Particularly of interest are the Australasian and the Nearctic regions for which we still lack material. We are in particularly looking for the following genera: *Corynophora*, *Hednota*, *Neargyria*, *Phanomorpha* (Australasian), *Cosipara*, *Eufernaldia*, *Haimbachia*, *Hemiplatytes* (Nearctic), *Diptychophora* (Neotropics), and *Afroscoparia* (Paleotropics). Thank you for your help!

#### **Eivind Palm**

I have made a new article on European phycitines in our small Danish "Lepidoptera" periodical. This is number 3. This time I have written about Anerestiini and taken into account all the species mentioned in Karsholt & Razowski, 1996, although some of the names appear to be synonyms. I have gathered all the information known to me about the species, flying period, distribution, etc. And I have added pictures of as many species as I could get from the Zoological Museum in Copenhagen and my own collection, including also some pictures kindly lent to me by F. Slamka and J. Ylla. You can obtain a PDF copy if you write me an E-mail.



Peoria semirosella (Ragonot); Greece, Samos, 50 m, 4.vi.1989, C. Garrevoet leg., coll. ZMUC. Photo E. Palm

## Houhun Li and Mujie Qi

The staff of the Lepidoptera laboratory at Nankai University, Tianjin, started to establish a "Checklist of Microlepidoptera of China" beginning this January. The list also includes all of the Chinese species of Pyraloidea and the book is now undergoing edition. Presently, one Ph.D. student of the lab is studying the Epipaschiinae of China. We plan to attend the XIXth European Congress of Lepidopterology this autumn in Dresden, Germany, where we will give a talk on the fauna of the Chinese Phycitinae. Dr Mujie Qi finished his studies in Professor Yang-Seop Bae's laboratory, Incheon National University, Korea, and came back to China early this year. He is now revising the Chinese Pyralinae in the Lepidoptera laboratory at Nankai University as a postdoctoral fellow for two years. Additionally, he will continue to work on the Phycitinae and Pyralinae of Southeast Asia.



Qi Mujie on Mount Baxian, China, July 2015.

## **M. Alma Solis**

Polygrammodes quatrilis Druce photographed in Ecuador was sent to me for identification. The junior synonym, *P. nigrifrons* Schaus, seems to be a better descriptive name. Unfortunately, the 100 year-old specimens in the NMNH collection don't look anything like this (black is brown and white is translucent).



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