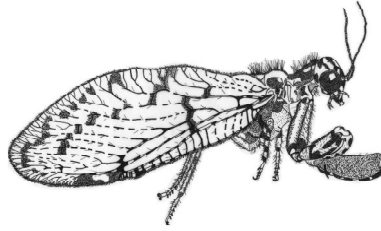


Lacewing News



NEWSLETTER OF THE INTERNATIONAL ASSOCIATION OF NEUROPTEROLOGY

No. 19

Autumn 2014

Presentation

Hi all! Here's the 19th issue of *Lacewing News*. Once again, I remember to all of you that this is NOT a formal journal for sharing scientific researches!

So don't hesitate and go on to send me any kind of pleasant and informal news for the next issue! Please send all communications concerning *Lacewing News* to agostino.letardi@enea.it (Agostino Letardi). Questions about the International Association of Neuropterology may be addressed to our current president, Dr. Michael Ohi (Michael.Ohi@mfn-berlin.de). Questions about the XII IAN Symposium (<http://www.neuropterology.unam.mx/>) may be addressed to Atilano Contreras-Ramos (acontreras@ib.unam.mx).



Ciao!



Prof. Principi and I

From György Sziráki

I really deeply admire Professor Maria Matilde Principi, as she always strived to reach the completeness and she was succeeded in it in all of her publications. Nothing was handled superficially, and nothing remained in obscure in her papers. As I regard also the detailed morphological examinations (e. g. the examinations of female internal genitalia some neuropterous insects) to be very significant, works of Professor Principi had really fundamental importance for me. It was the reason why the coniopterygid species *Parasemidalis principiae* Sziráki & Greve, 2001 was dedicated to her.

From Agostino Letardi

Although I am Italian, I have had the privilege to meet Professor Principi only two time (the second one during the Ferrara symposium in

2005). Thanks to my very essential correspondence with her, I received also three written replies (the first one - the only with scientific notes, in 1990, few months after my earliest paper concerning Neuroptera ...) which I cherish as precious memories of the truly *grand dame* of Neuropterology!

Bologna, gen. 1999

Maria Matilde Principi
Professore Emerito nell'Università di Bologna
Grazie delle pubblicazioni e del ricordo
dei miei lavori e grazie degli auguri che
Le vennero in questa occasione - M. Rausch
40126 Bologna
Via Filippo Re, 6
Istituto di Entomologia "Luigi Grandi"

From Horst and Ulrike Aspöck

It was in July 1964, when H.A. (at that time 25 years old) met Prof. Maria Matilde Principi at the XI International Congress of Entomology in London. A few years before he had asked her for reprints of her publications and had promptly received all her papers, which induced deepest admiration. Thus, it was a great day in London to see this outstanding scientist and very likeable lady and to have the opportunity to speak to her and to listen to her.



20 June 2005. Italy, Ferrara. From left to right: U. Aspöck, M. M. Principi, H. Aspöck, H. Rausch, R. A. Pantaleoni, R. Nicoli Aldini at the IX International Symposium on Neuropterology

The drawings in M.M. Principi's publications are of a quality and a density of information which

had been unknown before, and we both were impressed and deeply influenced in our further neuropterological research work by these papers. From that time onwards we had regular correspondence with Prof. Principi and there was a regular exchange of reprints. We keep all her publications – most of them with handwritten regards – as a particular treasure in our library. More than forty years elapsed, when an opportunity to meet Professor Principi came again. It was the unforgettable IX International Symposium on Neuropterology in Ferrara in June 2005, and it was an unforgettable day for us when H.A. could meet Professor Principi after so many years again and when U.A. could see her for the first time.



20 June 2005. Italy, Ferrara. Maria Matilde Principi and Ulrike Aspöck. IX. International Symposium on Neuropterology

Earlier this year we have published a paper (144 pages) on the authors of the taxa of Raphidioptera, which we had dedicated to Professor M.M. Principi (fig. 3) on the occasion of her 99th birthday.

Entomologischer Anzeiger 29 | 9452 | Jahr 22.3.2014

Die Autoren der Taxa der rezenten Raphidiopteren (Insecta: Endopterygota)

Herausgegeben von: H. Rausch & Ulrike Aspöck

Frau Professor Dr. Maria Matilde Principi, die Grundröße der Neuropterologie in Beratung, Förderung und Dankbarkeit gewidmet. Bis zu ihrem 99. Geburtstag, der dieses Vorkommnis für viele unserer Generationen, auch wir zählen uns zu ihnen Schülern, die bei Studium und Nacharbeit glücklich in der wissenschaftlichen Erlösung und kollektiven Überwindung der Neuropterologie

Inhaltsverzeichnis

Aktuelle ...	10
1. Einführung ...	10
2. Die 52 Autoren der Taxa der Artgruppe und der Gattungsgruppe der Raphidiopteren ...	15
2.1. Vorkennung und Erläuterungen ...	15
2.2. Nomenclatur und Liste der beschriebenen Taxa ...	19
3. Verzeichnis aller Publikationen mit Originalbeschreibungen von Taxa rezenter Raphidiopteren der Artgruppe und der Gattungsgruppe ...	124
4. Zusammenfassung ...	124
5. Dank ...	124
6. Literaturverzeichnis ...	125
7. Register aller Namen der Artgruppe und der Gattungsgruppe der Raphidiopteren ...	143

Title page of a publication on the 52 authors of the taxa of extant Raphidioptera, dedicated to Professor Maria Matilde Principi

Here is the English translation of our dedication text in German:

*Dedicated to Professor Dr. Maria Matilde Principi,
the Grande Dame of Neuropterology,
in admiration, adoration and gratitude.
With 99 years of age, she is the oldest
Neuropterologist in the world,
an idol of several generations,
also we feel to be among her scholars.
She has set standards in scientific research and
established illustration techniques of everlasting
significance in the field of Neuropterida.*

We felt her humanity, we appreciate her scientific force paired with noble modesty. We are grateful to have met her.

Nouvelles frontières

Davide Badano, PhD

CNR-IBAF (Consiglio Nazionale delle Ricerche,
Istituto di Biologia Agroambientale e Forestale)
Via Salaria Km 29,3000, 0015 Monterotondo
Scalo (RM)

&

Centro Nazionale per lo Studio e la
Conservazione della Biodiversità Forestale
"Bosco Fontana"

Strada Mantova 29, 46045 Marmirolo (MN)

E-mail: davide.badano@gmail.com



For as long I have memory, my curiosity has been attracted by the nature surrounding us and especially by the hidden multitude of insects. My

fascination with Neuroptera precisely began during a hot summer night: a small antlion came to lights of a small countryside house and I collected it. Under the lens of my microscope it revealed an unexpected, beautiful, shimmering eye pattern; however at the same time I was frustrated by lack of information about these insects in my books (now I know it was a specimen of *Neuroleon nemausiensis* Borkhausen). My wish to know more triggered my interest in this fascinating insect group. Attending at the University of Genoa, I spoke to my professor of Entomology, expressing my desire of carrying out research on Neuropterida for my thesis. He was highly perplexed because no one was familiar with lacewings at the institution! However, he eventually accepted my proposal, offering me the only possible help: a monumental copy of the "bible": "Die Neuropteren Europas" by H. Aspöck H., U. Aspöck U. & H. Hölzel, thus I immediately began a long, patient, work of translation from German but at the same time doubling my interest in the group. Meanwhile I was collaborating with the Museum of Natural History of Genoa "G. Doria", which houses the largest Italian collection of Neuroptera, mainly due to the activity of Felice Capra one of the few Italian Neuropterists of the 20th century, and I experienced with exotic taxa. For my thesis I carried out field samplings in a poorly known but biogeographically interesting area of north-west Italy, finally presenting it in 2008. Following the precious suggestions of Agostino Letardi, the same year I participated at 10th Symposium on Neuropterology in Piran, my first occasion to personally know the International Neuropterists' community. One year later, a great opportunity presented itself: under the supervision of Roberto A. Pantaleoni (in turn pupil of one of the greatest Neuropterists ever: Maria Matilde Principi), I started my PhD on the revision of the larvae of the European Myrmeleontidae and Ascalaphidae. Finding the larvae of a so large number of species, from different habitats and geographic areas required extensive field samplings, then followed by a considerable period spent rearing them in the laboratory, and finally the demanding comparative morphological studies. However, the final result was highly rewarding: a comprehensive, updated work on the identification of antlions and owlflies larvae, including some poorly known species in this

respect (see Badano & Pantaleoni 2014a and b in the “Recent Literature” section of this issue of *Lacewing News*). I successfully defended my thesis in 2013, earning the European doctorate. Presently, I am continuing working on the systematic and biology of Myrmeleontiformia and I am looking for collaborations with other Neuropterists in order to further investigate the fascinating, but still mysterious, world of the antlions.

Renato Jose Pires Machado

PhD candidate
Neuroptera & Mecoptera taxonomy
Department of Entomology
Texas A&M University
College Station, TX
E-mail: rjpmachado@neo.tamu.edu



My first contact with entomology was back in 2000, when I was an undergrad student at the State University of Londrina (UEL, Londrina, Brazil). Back then, although I already worked at the entomology department, my research was focused on biocontrol techniques for mosquitos, which didn't really satisfied me. I soon started looking for a different topic, and the change happened in 2005 when I was accepted by

INPA's (National Institute of the Amazonian Research) Master Program on Entomology, in Manaus, Brazil. There I met Dr. José A. Rafael, who cheerfully included me in his training program for new students to become taxonomists in orders for what we were lacking expertise in Brazil. Finally the order Neuroptera was introduced in my research life.

My Masters project consisted on a taxonomic review of part of the Brazilian Mantispidae, but I also had the opportunity to keep some side projects on the taxonomy of the order Mecoptera. During this time in the Amazon, I was also able to participate in many field expeditions and publish 4 papers related with Neuroptera, where I described a total of 7 new species in three different families (Ascalaphidae, Dilaridae and Mantispidae).

Back in 2010 I initiated contact with Dr. John Oswald, who introduced me to his recently approved grant to conduct research on the taxonomy of the Myrmeleontidae. He also told me that he was looking for two new students to work with that family, and long story short, a few months later I was accepted as a PhD student at Texas A & M University, where I have been studying since 2011.



Recently I had my PhD proposal approved and we decided that my research would be divided

into two parts. First I would make a taxonomic review of the Australian subtribe Periclystina, which is a very interesting group that has about 60 species described. In the second part of my research, I would be studying the phylogeny of Myrmeleontidae at a suprageneric level, trying to understand the relationships among the tribes and subtribes. I would therefore need to include morphological as well as molecular data in my analyses.

In order to accomplish the molecular component of my analyses we will need fresh material for the DNA extraction. We have been collecting specimens around the USA and we have also had the opportunity to collect samples in Australia in the beginning of 2013. However, there are some groups of antlions for which we haven't found any fresh material so far.

I am very thankful to Dr. Agostino Letardi for offering me the opportunity to share my research history on Neuroptera in this newsletter, especially since it is a great communication vehicle among those working on the same subject. I would therefore like to take this opportunity to ask for some help from my fellow neuropterists. I am looking for fresh Myrmeleontidae specimens, so that I can include as many genera as possible from all suprageneric groups in my analyses. I kindly ask you to please let me know if you have in your collections some recently collected antlions, or if you can store some specimens in 100% ethanol in your future field trips. That would greatly improve the quality of my research and help us know the group a little better.

Thank you for all the attention and I hope to meet you all in the next Symposium.

Field explorations and current researches

From Deon K. Bakkes

Greetings Neuropterologists.

I am currently working on a revision, phylogeny and the biogeography of the Psychopsidae for my MSc at the University of Pretoria, South Africa. I am focusing primarily on the African taxa, but I aim to incorporate the Australian and southeast Asian taxa as well.

I aim to reconstruct a phylogeny using combined morphological and molecular characters. With this, I aim to place a timeline onto the phylogeny



Peter Duelli

and evaluate the biogeography of the family – both from a worldwide perspective; using all five genera from Africa, Australia and southeast Asia, and an African perspective; using all of the African species with as wide a sampling scheme as possible.



Wynand Uys

For the molecular characters however, I need to use freshly caught material as the DNA is still intact. I have tried to sequence molecular characters from mounted material, but to no avail, as the DNA in these specimens is too old and degraded to be retrieved.



Wynand Uys

With this letter, I wish to ask the Neuropterology

community for aid in the form of any fresh specimens that may be loaned to me for the purpose of this project alongside my own collecting efforts. If you have caught any psychopids in Africa, Australia or southeast Asia recently, or plan to visit any of these places in the next year, please contact me by email at seventiguitarist@gmail.com so that we may discuss a loan. I am of course also open to aiding in your own research with specimens from South Africa.



Many thanks & all the best!
 Deon K. Bakkes (seventiguitarist@gmail.com)
 MSc (Entomology) candidate
 Dept. Zoology & Entomology
 University of Pretoria

From Horst and Ulrike Aspöck, Wien

Another neuropterological field trip to Morocco
 In May 2014 we spent (together with Rolf Bläsius and Axel Steiner, two German lepidopterologists) two weeks in Morocco searching for Neuropterida. Most of the time (13-22 May) was spent in the Anti-Atlas characterized by wonderful huge eremial habitats in altitudes between 600 and 1300 m.



13 May 2014, from Agadir to Tafraoute in the Anti-Atlas. The

fascinating landscape of the eremial of North Africa, habitat of many species of Myrmeleontidae, Ascalaphidae, Nemopteridae, Berothidae, Chrysopidae, Coniopterygidae ...

Our travel ended in the Haut Atlas. Each night we put up our light traps. Our main interest was devoted to Berothidae on one hand and to Crocinae on the other hand.



16 May 2014, Anti-Atlas, oasis of Igmir. Field laboratory in a typical Moroccan house.



16 May 2014, light trapping at the rocks outside the oasis of Igmir, 1095 m.



21 May 2014, Anti-Atlas, Taliouine, 1250 m. Searching for larvae of Inocelliidae – without success. *Inocellia peyerimhoffi* might reach the southern border of distribution in this part of North Africa, but has not yet been found so far. The southernmost records are from the Haut Atlas.

Once more we were impressed by the beautiful country and the charming hospitality of the people in the villages.



25 May 2014, Haut Atlas, Tifrit, 650 m. Searching for larvae of Crocinae in sandy crevices sheltered by rocks. Ulrike sieving sand with an old flour sifter borrowed from our hosts.



25 May 2014, a larva of a species of Crocinae (probably *Pterocroce*), collected in Tifrit (Haut Atlas). Photo: H. Bruckner.



19 August 2013, Tifrit (Haut Atlas). A species of *Nodalla* NAVÁS, the predominant genus of Berothidae in Morocco. Photo: H.

Bruckner.

Social meetings

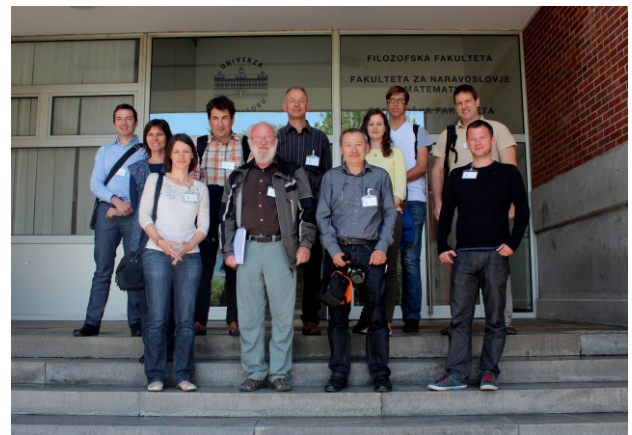
From Dušan Devetak, Maribor

Fourth Slovenian Entomological Symposium with International Attendance, May 2014, Maribor (Slovenia)



Logo of the 4th Slovenian Entomological Symposium (4SES) with International Attendance, May 9-10, 2014 in Maribor, Slovenia. The logo contains a figure of the owl-fly species *Libelloides macaronius*, described by Scopoli in 1763 from the surroundings of Idrija, Slovenia.

Slovenian entomologists organized the 4th Slovenian Entomological Symposium with International Attendance (4SES), May 9-10, 2014 in Maribor, Slovenia. More than fifty people attended the congress. The symposium was a unique opportunity for a meeting of Slovenian researchers with colleagues from Austria, Bosnia and Herzegovina, Italy, the Netherlands, Serbia, and the United Kingdom. Abstracts of the presentations (in English and Slovenian) are available on the website of the symposium (<http://4ses.fnm.um.si/index.php?lang=en>).



Participants of the 4SES involved in neuropterological studies: from left to right: 1st row: Vesna Klokočovnik, Matija Gogala, Dušan Devetak, Jan Podlesnik; 2nd row: Gerd Leitinger, Saška Lipovšek, Gregor Belušič, Predrag Jakšič, Polona Spital, Gregor Hauptman, Martin Vernik. Maribor, May 2014. Photo V. Klokočovnik.

The symposium program included lectures of invited speakers (Gerd Leitinger, Predrag Jakšić, Mirza Dautbašić), poster sessions, and group dinner. Talks dealt with different aspects of entomology: bio-diversity and faunistics, zoogeography, ecology, ecophysiology and physiology, ethology, applied entomology, wildlife management and insect conservation. Regarding taxonomic groups there was presented research in ten insect orders.

Fourteen entomologists involved in the study of Neuroptera participated the meeting, one of them from Austria, two from Bosnia & Herzegovina, and one from Serbia (see photos). Four neuropterological talks were presented:

- Behavioural variability in pit-building antlion larvae (Neuroptera: Myrmeleontidae) (Vesna Klokočovnik & Dušan Devetak).
- Xylophagous pests of Bosnian pine (*Pinus heldreichii*) in Bosnia-Herzegovina (Mirza Dautbašić & Osman Mujezinović).
- Biodiversity of the Neuroptera in Albania and Macedonia (Dušan Devetak).

The talks were informative and well received. The Slovenian Entomological Society decided to organize the next meeting in spring 2016.



Participants of the 4SES involved in neuropterological studies: 1st row, from left to right: Matija Gogala, Gerd Leitinger, Saška Lipovšek, Vesna Klokočovnik, Jan Podlesnik. Maribor, May 2014. Photo D. Devetak.

- Morphological traits in adult lacewings of the genus *Chrysoperla* Steinmann, 1964 (Neuroptera: Chrysopidae) in Slovenia and western Balkan countries (Polona Spital & Dušan Devetak).



Jan Podlesnik. 4SES, Maribor, May 2014. Photo D. Devetak.



Saška Lipovšek. 4SES, Maribor, May 2014. Photo D. Devetak.



Vesna Klokočovnik. 4SES, Maribor, May 2014. Photo D. Devetak.



Polona Spital. 4SES, Maribor, May 2014. Photo D. Devetak.

From Agostino Letardi, Roma

24th Italian National Entomological Congress,
June 2014, Orosei (Sardinia, Italy)



The organizing committee of the 24th CNIE, i.e. professors of Entomology of the Sassari University (among them, Roberto A. Pantaleoni), decided to hold the meeting in Orosei, Sardinia. More than two hundred people attended the congress. The symposium was a unique opportunity for a meeting among Italian researchers in very different field of studies involving insects. Abstracts of the presentations and a book of posters (mainly in Italian) are available on the website of the symposium (<http://www.cnie24.it/>). Despite the presence of all the Italian researchers interested in neuropterology, we have had only one poster concerning Neuropterida:

- La larva di *Nemoptera* (Neuroptera: Nemopteridae): mirmecofila o predatore generalista? (Davide Badano).



Romano Dallai (in the center). 24CNIE, Orosei, June 2014. Photo A. Letardi.



Roberto A. Pantaleoni. 24CNIE, Orosei, June 2014; introductory lecture. Photo A. Letardi.



from left to right: Roberto A. Pantaleoni, Rinaldo Nicoli Aldini and Davide Badano. Photo A. Letardi.



Davide Badano. 24CNIE, Orosei, June 2014; poster session. Photo A. Letardi.



from left to right: Agostino Letardi, Laura Loru, Xenia Fois.

Nevertheless, it has been a unique opportunity to meet all of us together once more time, to discuss of our future projects, to collect Neuropterida in several part of Sardinia together and to spend some pleasant evening times together with the wonderful Sardinian cuisine!!!



Neuropterologist's gastronomic meeting. From left to right: Rinaldo Nicoli Aldini, Davide Badano and Roberto A. Pantaleoni. Photo A. Letardi.



Neuropterologist's collecting trip on Supramonte di Oliena. From left to right: Agostino Letardi, Davide Badano and Roberto A. Pantaleoni (plus Silvano Biondi, coleopterologist).

From Horst and Ulrike Aspöck, Wien

Beijing meets Vienna

Lacewing Festival from 14 July to 3 August 2014



14 July 2014, Arrival of Xingyue Liu in Vienna: in front of the Natural History Museum together with Ulrike Aspöck.

On 14 July 2014 Prof. Xingyue Liu from the China Agricultural University Beijing arrived at the airport Schwechat-Vienna – smart and unchanged since our last meeting in Beijing in 2011. We went immediately to the Natural History Museum Vienna to Ulrike's lab and could not believe that Xingyue had really arrived,



14 July 2014, Welcome dinner in the garden of an old Viennese restaurant. Xingyue Liu (right) together with Horst and Ulrike Aspöck.

but when he started conjuring the wonderful book “Chinese Insects Illustrated” from his remarkably small suitcase, followed by packages of fine tea and enormous amounts of Chinese sweets, we realized that he was really here. After he had nested in the guest room of the museum, we had our welcome dinner nearby in a garden – indeed a happy hour for each of us on a warm summer evening.



18 July 2014, Korneuburg near Vienna. Mass occurrence of *Sisyrina nigra* (RETZIUS) and *Sisyrina terminalis* CURTIS in the floodplain forests at the river Danube. Xingyue Liu (left) and Horst Aspöck.

In the following days Xingyue worked permanently and hard in the Neuropterida collection of the museum, at first predominantly on Megaloptera (for this reason the Megaloptera of the Museums of Prague, Basel, and Leiden had been sent on loan to Vienna). The Neuropterida collection of the Vienna museum was another wide field for Xingyue. The second platform of our joint activities was



19 July 2014, Lower Austria, Dürnstein. Xingyue Liu (right) and Ulrike Aspöck in a biotope of *Libelloides macaronius* (SCOPOLI) high above the river Danube. In the background left the famous Monastery of Göttweig.

the Aspöck collection (HUAC) in our flat and in the nearby “Kornhäusellnstitute (KI)” – our private institute harboring our Neuropterida collections, libraries and working facilities. We discussed and studied all burning questions concerning Megaloptera, Raphidioptera and Neuroptera. We discussed philosophies and theoretical aspects around computer analyses concerning morphological and molecular approaches and we had, of course, delicious intermezzi on the balcony of the KI with wine, pizzas and quick fantasy recipes of Ulrike’s secret kitchen.



20 July 2014, Lower Austria, Dürnstein. Xingyue Liu (right) and Ulrike Aspöck at the light trap, after midnight. Several specimens of *Mantispa styriaca* (PODA) came to the sheet.

We rented a car and made joint field trips to the floodplain forests near Korneuburg in the vicinity of the river Danube and collected tremendous amounts of Sisyridae at a lovely river channel. We also had a romantic light trapping in



20 July 2014, Lower Austria, Klosterneuburg. Xingyue Liu (right) and Horst Aspöck in a biotope where several species of Raphidioptera occur earlier in the year.

Dürnstein, Lower Austria, in the vicinity of Mediterranean vineyards, rocks and ruins. Although it was too cool for a tremendously crowded sheet, we were happy to be together with Xingyue in the nature during night taking comfort from the fact that our common species might be exotic for him.

Lunch time at the museum was always combined with a sportive sightseeing tour to the jewels of Viennese architecture and parks, Xingyue became a Viennese, indeed. When Xingyue left on 3 August, we missed him immediately and we are still missing him in the

relevance / Homology of the genital sclerites of the Megaloptera; molecular phylogeny of the Inocelliidae; revision of the Nevrothidae; a molecular analysis of the Berothidae of the world; revision of the Berothidae of China; revision of the Dilaridae.

Let us hope for another Vienna meets Beijing, Beijing meets Vienna, Vienna meets Beijing, ...

From David Bowles, USA



26 July 2014, Vienna. Xingyue Liu (left) and Ulrike Aspöck in the private institute (KI) of the Aspöcks working on Dilaridae.

KI and in the museum. But we have elaborated an enormous plan for further co-operation which keeps us excited and running.

The XXV International Congress of Entomology will convene in Orlando FL September 25-30, 2016. The Entomological Society of America meeting will be co-located with the Congress as will the meetings of the entomological societies of Canada, China, Japan, and Brazil. Atilano Contreras-Ramos and I are volunteering to submit, and if selected, convene a symposium on the Neuropterida at the ICE. We have convened similar symposia the annual meetings of the ESA the past several years, and Atilano will graciously host the International Neuroptera Conference in Mexico City in May 2015. Looking at the ICE list of accepted thematic topics for symposia, the following appear most appropriate:

1. Biodiversity, Biogeography and Conservation Biology
2. Morphology, Systematics and Phylogeny

I suspect most of us favor No. 2, but some of our collective research interests clearly fall within No. 1. We would appreciate any feedback on this matter.



1 August 2014, Vienna. Xingyue Liu (right) together with Ulrike Aspöck (left) and Susanne Randolph (middle) in Ulrike's study in the Natural History Museum of Vienna.

Main topics – among others – are: Phylogenetic

If you are interested in giving a presentation at this symposium, please contact Atilano or myself with a proposed topic. Please submit proposed presentation titles by December 31, 2014. Although presentations can only be 15 minutes in length, we view this as an opportunity to have several presentations on major topics addressing the Neuropterida. The presentations would ideally be more than just update presentations and should be more exhaustive in scope and content (e.g., major revisions,

reviews, or large-scale faunistics). Ph.D. students who are at the end of their program would be good candidates. We recognize that the ICE symposium would only be one year after the Mexico City conference, and could interfere with travel plans and budgets. We also are not proposing to make the ICE symposium serve as another international Neuroptera conference.

We look forward to hearing from you.

Respectfully,

David Bowles
davidbowles@missouristate.edu

Recently published

From James E. Jepson



Fossil Insects: An Introduction to Palaeoentomology by David Penney and James E. Jepson (with artwork by Richard Bizley)
Soft Cover, 224 pages, 240 illustrations (mainly colour photographs). ISBN: 978-0-9574530-6-7
The book is available from Siri Scientific Press (<http://www.siriscientificpress.co.uk>)
Price: £24.99 (exc. post and packing)

A new book has been published (2014): **Fossil Insects: An introduction to Palaeoentomology** written by Drs David Penney (University of Manchester, UK) and James E. Jepson (Museum für Naturkunde, Berlin Germany) (both Fellows of the Royal Entomological Society), with original artwork by Richard Bizley (Lyme

Regis, UK).

It brings together two huge scientific disciplines: palaeontology and entomology. Fossils rarely feature extensively in books on insects, and likewise, insects rarely feature in books about fossils. Similarly, college or university palaeontology courses rarely have an entomological component and entomology courses do not usually consider the fossil record of insects in any detail. This is not due to a lack of insect fossils. The fossil record of insects is incredibly diverse in terms of taxonomic scope, age range (Devonian to Recent), mode of preservation (amber and rock) and geographical distribution (fossil insects have been recorded from all continents, including Antarctica).

In this book the authors aim to help bridge the palaeontology–entomology gap by providing a broadly accessible introduction to some of the best preserved fossil insects from a wide range of deposits from around the globe, many of which are beautifully illustrated by colour photographs.

Topics covered in the book are:

- Insects and their fossilization
- What are fossils and how are they preserved?
- Why and how to study fossil insects?
- The palaeospecies concept
- Identification of fossil insect species
- How to formally describe new fossil insects
- Significant fossil insect localities
- Diversity of fossil insects (47 different fossil and extant orders covered)
- Insect behaviour and ecology in the fossil record
- Sub-fossil insects
- Insect trace fossils
- How long does an insect species exist?
- How to become a palaeoentomologist

It is hoped that this book will encourage a few future researchers to enter the fascinating realm of palaeoentomology. The book is referenced throughout, but is broadly accessible to both amateurs and professionals. It should be of interest to both palaeontologists and entomologists.

Short news from neuropterologists

From Jeff Aldrich

I and my former post-doc (now Head of

Research, Sterling International, In., Spokane, WA), Dr. Qing-He Zhang, are preparing a manuscript on the "Chemical Ecology of Neuroptera" for the 2016 issue of Annual Review of Entomology. The first draft of this paper is due to the editor 1 January 2015. If you are interested in, please let me know via e-mail (address below) of recent work on neuropteran semiochemistry, so that we can produce the most comprehensive, up-to-date review possible.

Thanks, Jeff Aldrich
Jeffrey R. Aldrich consulting, LLC
850 Front Street, # 7887, Santa Cruz, CA 95061
drjeffaldrich@gmail.com
(301)503-8288

From Joshua R. Jones

On Tuesday, 9 September, 2014, I successfully defended my dissertation, entitled "Taxonomic revisions of six genera of entire-eyed owlflies (Ascalaphidae: Haplogleniinae), and first large-scale phylogeny of the owlflies". I will graduate in December 2014 with my Ph.D. degree. I am now preparing manuscripts of my dissertation chapters for publication. Feel free to email me with questions about my research.

Joshua Jones
Department of Entomology
Texas A&M University
College Station, TX 77843-2475, USA
email: doc.jones3000@tamu.edu

Obituary

From Atilano Contreras-Ramos

On Wed, 8 Oct 2014, Atilano wrote to me:

Hello Agostino,

I just found out from my friend and colleague David Bowles, that Dr. Maurice J. Tauber, entomologist (and neuropterist) passed away yesterday (October 7). As you for sure recall, his wife, and now widow, is Dr. Catherine Tauber (Kady Tauber), another recognized neuropterist. Perhaps this sad notice could be included in a forthcoming issue of the newsletter..., you may

find information about Maurice Tauber in the page below...

<http://entomology.ucdavis.edu/Faculty/Maurice-Tauber/>

I have had not enough time for a proper and complete remembrance of our colleague, so at the moment I just report a short tribute (see also <http://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=15521>)

"When I joined the faculty at Davis in 1973, Maurice was the first to welcome me to the biological-control community and he served as my mentor for several years while I developed my research program. Following his retirement from Cornell, I was absolutely delighted to host both Maurice and Kady in my laboratory at Davis. It's been a wonderful collaboration. Maurice was a outstanding scientist, colleague, and friend. His passing is a great loss for our profession." Les Ehler, emeritus professor, UC Davis Department of Entomology and Nematology.



Maurice J. Tauber, from <http://entomology.ucdavis.edu/files/167392display.jpg>

Recent Literature on the Neuropterida (2014)

Organized by Agostino Letardi with the support of John D. Oswald and BotN project
(<http://lacewing.tamu.edu/bibliography/>)

- Acevedo, F.; Badano, D.; Monserrat, V. J. 2014. The larva of *Tricholeon relictus* Hölzel & Monserrat, 2002 a synanthropic antlion (Neuroptera, Myrmeleontidae). *Zootaxa* 3835(3): 364-370. [r#15627].
- Archibald, S. B.; Makarkin, V. N. 2014. A new species of *Archaeochrysa* Adams (Neuroptera: Chrysopidae) from the early Eocene of Driftwood Canyon, British Columbia, Canada. *Canadian Entomologist* 00: 1-11. doi: 10.4039/tce.2014.53
- Archibald, S. B.; Makarkin, V. N.; Greenwood, D. R.; Gunnell, G. F. 2014. The red queen and court jester in green lacewing evolution: bat predation and global climate change. *Palaios* 29: 185-191. doi: <http://dx.doi.org/10.2110/palo.2013.089> [r#15639].
- Ardila-Camacho, A. 2014. A new species of *Corydalus* Latreille, 1802 (Megaloptera, Corydalidae) and first record of *C. clavijoi* Contreras-Ramos, 2002 and *C. nubilus* Erichson, 1848 from Colombia. *Zootaxa* 3811(1): 107-118. [r#15649].
- Ardila-Camacho, A.; Arango Diaz, C. J.; Noriega, J.A. 2014. First record of *Glenurus heteropterix* Gerstaecker, 1885 (Neuroptera: Myrmeleontidae) from Colombia. *Check List* 10(3): 692-693. [r#15650].
- Ardila-Camacho, A.; Noriega, J.A. 2014. First record of Osmylidae (Neuroptera) from Colombia and description of two new species of *Isostenosmylus* Krüger, 1913. *Zootaxa* 3826(2): 315-328. [r#15651].
- Aspöck, H.; Aspöck, U. 2014. *Coniopteryx* (*C.*) *pygmaea* Enderlein, 1906, and *Coniopteryx* (*C.*) *hoelzeli* H. Aspöck, 1964 - a final statement (Insecta: Endopterygota: Neuropterida: Neuroptera). *Nachrichten der Deutsche Gesellschaft für allgemeine und angewandte Entomologie e.V.* 28(1): 6-9. [r#15648].
- Aspöck, H.; Aspöck, U. 2014. Die nördlichen und südlichen Verbreitungsgrenzen der Ordnung Raphidioptera (Insecta: Endopterygota: Neuropterida). *Nachrichten der Deutsche Gesellschaft für allgemeine und angewandte Entomologie e.V.* 28(1): 16-20. [r#15652].
- Aspöck, U.; Randolph, S.; Zimmermann, D.; Aspöck H. 2014. Perlhafte im Aufwind – Brainstorming zur Phylogenie der Berothidae (Neuropterida: Neuroptera). *Nachrichten der Deutsche Gesellschaft für allgemeine und angewandte Entomologie e.V.* 28(1): 21–22. [r#15653].
- Azevedo, de C. A. S.; Hamada, N. 2014. Ordem Megaloptera. In: Hamada, N.; Nessimian, J. L.; Querino, R. B. 2014. Insetos acuatricos na Amazonia brasileira: taxonomia, biologia e ecologia. Manaus, INPA ed., 335-342. [r#15654].
- Badano, D. 2014. La larva di *Nemoptera* (Neuroptera: Nemopteridae): mirmecofila o predatore generalista? In: Mannu, R. (ed). 2014. Poster XXIV Congresso Nazionale Italiano di Entomologia, Orosei, 9-14 giugno 2014: 33.
- Badano, D.; Pantaleoni, R. A. 2014. The larvae of European Ascalaphidae (Neuroptera). *Zootaxa* 3796(2): 287-319. [r#15569].
- Bentes, S. P. C.; Hamada, N.; Bruno, A. C.; Costa-Neto, A. M. 2014. Insetos aquáticos na concepção dos Baniwa que vivem na cidade de São Gabriel da Cachoeira, Amazonas, Brasil. In: Hamada,

- N.; Nessimian, J. L.; Querino, R. B. 2014. Insetos acquaticos na Amazonia brasileira: taxonomia, biologia e ecologia. Manaus, INPA ed., 141-153. [r#15655].
- Bentes, S. P. C.; Hamada, N.; Ferreira-Keppler, R. L. 2014. Caracterização morfológica de ovos de insetos aquáticos e seus habitats na Amazônia central, Brasil. In: Hamada, N.; Nessimian, J. L.; Querino, R. B. 2014. Insetos acquaticos na Amazonia brasileira: taxonomia, biologia e ecologia. Manaus, INPA ed., 51-68. [r#15656].
- Bozsik, A.; Canard, M.; Thierry, D. 2014. "Chryso(pa)perla carneaffinis"? (Neuroptera: Chrysopidae): incomplete history of a natural enemy. *Növényvédelm* 50(7): 309-318. [r#15657].
- Campos de Oliveira, V.; Oliveira Pes, A. M. 2014. Inventário da fauna de insetos aquáticos: coleta, preservação e criação. In: Hamada, N.; Nessimian, J. L.; Querino, R. B. 2014. Insetos acquaticos na Amazonia brasileira: taxonomia, biologia e ecologia. Manaus, INPA ed., 155-171. [r#15658].
- Canard, M.; Wilton, D.; Plant, C. W. 2014. On the occurrence of *Nineta pallida* (Schneider, 1846) and *N. inpunctata* (Reuter, 1894) in the British Isles and remarks on these rare green lacewings (Neu.: Chrysopidae). *Entomologist's Record and Journal of Variation* 126: 97-108. [r#15604].
- Devetak, D. 2014. Sand-borne vibrations in prey detection and orientation of antlions. Pp. 319-330. In: Coccoft, R.B.; Gogala, M.; Hill, P.S.M.; Wessel, A. (eds.). *Studying vibrational communication*. Springer ed., 462 pp. <http://www.springer.com/978-3-662-43606-6> [r#15659].
- Dobosz, R.; Abraham, L. 2014. *Omoleon jeanneli*, new record from Kenya and a redescription (Neuroptera: Myrmeleontidae). *Zootaxa* 3821(1): 133-138. [r#15605].
- Hamada, N.; Oliveira Pes, A. M. 2014. Ordem Neuroptera Familia Sisyridae. In: Hamada, N.; Nessimian, J. L.; Querino, R. B. 2014. Insetos acquaticos na Amazonia brasileira: taxonomia, biologia e ecologia. Manaus, INPA ed., 343-348. [r#15660].
- Hemalata, B.N.; Venkatesan, T.; Jalali, S.K.; Reetha, B. 2014. Distribution and characterization of microbial communities in *Chrysoperla zastrowi sillemi*, an important predator of sap sucking insect pests. *African Journal of Microbiological Research* 8(14): 1492-1500.
- Hock Ping, Guek. ; Pantaleoni, R. A. 2014. The genus *Ankylopteryx* Brauer, 1864 (Neuroptera Chrysopidae). *Biodiversity Journal* 5(1): I-II. [r#15661].
- Khabiev, G. N.; Krivokhatsky, V. A. 2014. Rare species of antlions (Neuroptera: Myrmeleontidae) new for the fauna of Caucasian and Middle Asian countries. *Zoosystematica Rossica* 23(1): 122-126. [r#15640].
- Khramov, A. V. 2014. Lacewings of the family Osmylidae (Insecta: Neuroptera) from the Upper Jurassic of Asia. *Paleontological Journal* 48: 300-309. [r#15607].
- Khramov, A. V. 2014. Early osmylids (Neuroptera: Osmylidae) from the Lower-Middle Jurassic of Kyrgyzstan. *Russian Entomological Journal* 23: 53-60. [r#15636].
- Koczor, S.; Knudsen, G. K.; Hatlell, L.; Szentkiralyi, F.; Toth, M. 2014. Manipulation of oviposition and overwintering site choice of common green lacewings with synthetic lure (Neuroptera: Chrysopidae). *Journal of Applied Entomology* doi: 10.1111/jen.12150 [r#15662].

- Komatsu, T. 2014. Larvae of the Japanese termitophilous predator *Isoscelipteron okamotonis* (Neuroptera, Berothidae) use their mandibles and silk web to prey on termites. *Insectes Sociaux* 61:203-205 [r#15663].
- Kondratieff, B.C.; Cranshaw, W.C. 2014. Owlflies in Colorado (Neuroptera: Ascalaphidae). *Entomological News* 123(5): 393-394. [r#15664].
- Letardi, A.; Tabilio, M.R.; Nobili, P.; Toth, M. 2014. Strategie di gestione di un “predatore chiave” in frutteti a gestione biologica. P. 118. In: Alba, E.; Benedetti, A.; Bucci, G.; Ciaccia, C.; Pacucci, C.; Pinzari, F.; Scarascia Mugnozza, G. (eds). *Atti del X Congresso Nazionale sulla Biodiversità. CNR (Roma, Italy) 3-5 Set 2014*. 216 pp. doi: 10.13140/2.1.4988.8640
- Liu, Q.; Zhang, H.-c.; Wang, B.; Fang, Y.; Zheng, D.-r.; Zhang, Q.; Jarzembowski, E. A. 2014. A new saucrosmylid lacewing (Insecta, Neuroptera) from the Middle Jurassic of Daohugou, Inner Mongolia, China. *Alcheringa* 38:301-304 [r#15678].
- Liu, Q.; Zheng, D.-r.; Zhang, Q.; Wang, B.; Fang, Y.; Zhang, H.-c. 2014. Two new kalligrammatids (Insecta, Neuroptera) from the Middle Jurassic of Daohugou, Inner Mongolia, China. *Alcheringa* 38:65-69 [r#15642].
- Liu, X.-y.; Aspöck, H.; Aspöck, U. 2014. New species of the genus *Nipponeurorthus* Nakahara, 1958 (Neuroptera: Nevrothidae) from China. *Zootaxa* 3838(2):224-232. doi <http://dx.doi.org/10.11646/zootaxa.3838.2.7>. [r#15632].
- Liu, X.-y.; Price, B.W.; Hayashi, F.; De Moor, F.; Yang, D. 2014. Revision of the Megaloptera (Insecta: Neuropterida) of Madagascar. *Zootaxa* 3796(2): 320-336. [r#15665].
- Liu, X.-y.; Ren, D.; Yang, D. 2014. New transitional fossil snakeflies from China illuminate the early evolution of Raphidioptera. *BMC Evolutionary Biology* 2014 14:84. [r#15601].
- Liu, X.-y.; Winterton, S. L.; Wu, C.; Piper, R.; Ohl, M. 2014. A new genus of mantidflies discovered in the Oriental region, with a higher-level phylogeny of Mantispidae (Neuroptera) using DNA sequences and morphology. *Systematic Entomology*. doi: 10.1111/syen.12096
- Loru, L.; Fois, X.; Ramasani S.V.; Fadda, L. M. ; Pantaleoni, R.A. 2014. An innovative, low-cost, small-scale rearing method for green lacewings (Neuroptera Chrysopidae). *Biodiversity Journal* 5(2): 221-224. [r#15635].
- Makarkin, V.N. 2014. A new fossil genus of Osmylidae (Neuroptera) from the early Cretaceous of Baissa, Transbaikalia. *Far Eastern Entomologist* 278: 8-12. [r#15606].
- Makarkin, V.N. 2014. A remarkable new genus of Mantispidae (Insecta, Neuroptera) from Cretaceous amber of Myanmar and its implications on raptorial foreleg evolution in Mantispidae: A comment, *Cretaceous Research* <http://dx.doi.org/10.1016/j.cretres.2014.06.012> [r#15671].
- Makarkin, V. N.; Archibald, B. 2014. An unusual new fossil genus probably belonging to the Psychopsidae (Neuroptera) from the Eocene Okanagan Highlands, western North America. *Zootaxa* 3838(3): 385-391. [r#15633].
- Makarkin, V. N.; Ruchin, A. B. 2014. A contribution to the knowledge of Neuroptera and Raphidioptera of Mordovia (Russia). *Caucasian Entomological Bulletin* 10(1):111-117. [r#15631].

- Makarkin, V.N.; Wedmann, S.; Weiterschan, T. 2014. First record of the family Ithonidae (Neuroptera) from Baltic amber. *Zootaxa* 3796(2): 385-393. [r#15568].
- Monserrat, V. J. 2014. Los beròtidos de la Península Iberica (Insecta: Neuropterida: Neuroptera: Berothidae). *Heteropterus Revista de Entomologia* 14(1): 31-54. [r#15628].
- Monserrat, V. J. 2014. Los osmilidos de la Península Iberica (Insecta: Neuropterida: Neuroptera: Osmylidae). *Heteropterus Revista de Entomologia* 14(1): 55-72. [r#15630].
- Monserrat, V. J.; Acevedo, F.; Pantaleoni, R.A. 2014. Nuevos datos sobre algunas especies de Crisòpidos de la Península Ibérica, islas Baleares e islas Canarias (Insecta, Neuroptera, Chrysopidae). *Graellsia* 70(1): e002. doi: 10.3989/graellsia.2014.v70.100 [r#15645].
- Monserrat, V. J.; Gavira, O. 2014. A new European species of *Nevrorthus* in the Iberian Peninsula (Insecta, Neuropterida). *Zootaxa* 3796(2): 349-360. [r#15578].
- Monserrat, V. J.; Triviño, V.; Acevedo, F.; Garcia, A. 2013. Nuevos datos sobre algunas especies de Hemerobidos de la península Iberica e Islas Canarias, incluyendo una nueva especie invasora de origen neotropical en Portugal (Insecta, Neuroptera, Hemerobiidae). *Graellsia* 69(2): 157-168. [r#15600].
- Ochse, M.; Gruppe, A. 2014. Zum Vorkommen der Vierfleckigen Ameisenjungfer *Distoleon tetragrammicus* (Fabricius, 1798) in Süddeutschland (Neuroptera: Myrmeleontidae, Nemoleontinae). *Entomologische Zeitschrift* 124(1): 3-6. [r#15670].
- Onore, G.; Badano, D.; Pantaleoni, R. A. 2014. Heliographic signalling in *Haploglenius* Burmeister, 1839 (Neuroptera Ascalaphidae). *Biodiversity Journal* 5(1): 87-91. [r#15564].
- Ovthsinnikova, O.G.; Wang, Z.-I.; Ovchinnikov, A.N.; Wang, X.-I.; Krivokhatsky, V.A. 2014. Description of the larva and biological notes on *Vermiophis taihangensis* Yang & Chen, 1993 (Diptera: Vermileonidae) from China. *Zootaxa* 3790 (3): 487-494. [r#15560].
- Pantaleoni, R.A. 2014. Le Crisope. In: Butturini, A.; Galassi, T. 2014. *Difesa fitosanitaria in produzione integrata. Manuale dei metodi e delle tecniche a basso impatto*. Edagricole, Bologna, Milano. XVII + 397 pp. [r#15634].
- Randolf, S.; Zimmermann, D.; Aspöck, U. 2014. Head anatomy of adult *Nevrorthus apatelios* and basal splitting events in Neuroptera (Neuroptera: Nevrothidae). *Arthropod Systematics & Phylogeny* 72(2):111-136. [r#15637].
- Ruchin, A. B.; Egorov, L. V.; Artaev, O. N.; Alekseev, S. K.; Zav'yalov, N. A. 2014. Новые данные по редким видам беспозвоночных и позвоночных животных мордовии с обсуждением статуса охраны некоторых видов. *Труды Мордовского Государственного Природного Заповедника Имени П. Г. Смидовича* 12:196-216 [r#15507].
- Satar, A.; Tusun, S.; Aykut, M. 2014. Morphology and surface structure of third instar larvae of *Solter ledereri* Navás, 1912 (Neuroptera: Myrmeleontidae) from Turkey. *Entomological News* 124(1): 67-72. [r#15603].
- Satar, A.; Tusun, S.; Bozdogan, H. 2014. Third instars larvae of *Gepus gibbosus* Hölzel, 1968 (Neuroptera: Myrmeleontidae). *Zootaxa* 3793(2): 281-285. [r#15565].

- Shi, C.; Ohi, M.; Wunderlich, J.; Ren, D. 2014. A remarkable new genus of Mantispidae (Insecta, Neuroptera) from Cretaceous amber of Myanmar and its implications on raptorial foreleg evolution in Mantispidae, *Cretaceous Research* <http://dx.doi.org/10.1016/j.cretres.2014.04.003> [r#15638].
- Tauber, C. A.; Winterton, S. L. 2014. Third instar of the myrmecophilous *Italochrysa insignis* (Walker) from Australia (Neuroptera: Chrysopidae: Belonopterygini). *Zootaxa* 3811(1):95-106. [r#15666].
- Wang, Y.-y.; Liu, X.-y.; Yang, D. 2014. The complete mitochondrial genome of a fishfly, *Dysmicohermes ingens* (Chandler)(Megaloptera: Corydalidae: Chauliodinae). *Mitochondrial DNA, Early Online*: 1-2. [r#15669].
- Wichard W. 2014. Acuáticas Neuropteros im Baltischen Bernstein. *Nachrichten der Deutsche Gesellschaft für allgemeine und angewandte Entomologie e.V.* 28(1): 5. [r#15667].
- Yan, Y.; Wang, Y.-y.; Liu, X.-y.; Winterton, S.L.; Yang, D. 2014. The first mitochondrial genomes of antlion (Neuroptera: Myrmeleontidae) and Split-footed Lacewing (Neuroptera: Nymphidae), with phylogenetic implications of Myrmeleontiformia. *International Journal of Biological Sciences* 10(8): 895-908. doi: 10.7150/ijbs.9454 [r#15668].
- Yang, Q.; Makarkin, V. N.; Ren, D. 2014. Two New Species of *Kalligramma* Walther (Neuroptera:Kalligrammatidae) From the Middle Jurassic of China. *Annals of the Entomological Society of America* 107(5): 917-925. doi: <http://dx.doi.org/10.1603/AN14032> [r#15646].
- Yang, Q.; Wang, Y.-j.; Labandeira, C. C.; Shih, C.-k.; Ren, D. 2014. Mesozoic lacewings from China provide phylogenetic insight into evolution of the Kalligrammatidae (Neuroptera). *BMC Evolutionary Biology* 14(126):1-30 [r#15641].



A joke for
LacewingNews:

*Habitat of *Tricholeon relictus* (Victor J. Monserrat' house)*

Text of the cartoon:

- Where will the owner of the house?
- It will be gone to the field with that ridiculous light trap. Why is that?
- How well we are here !

author
L.M.Díaz-Aranda

Picture of the semester



Larva of Ascalaphidae. Photo from www.flickr.com

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Lacewing News - Newsletter of the International Association of Neuropterology](#)

Jahr/Year: 2014

Band/Volume: [19](#)

Autor(en)/Author(s): diverse

Artikel/Article: [Lacewing News 19 1](#)