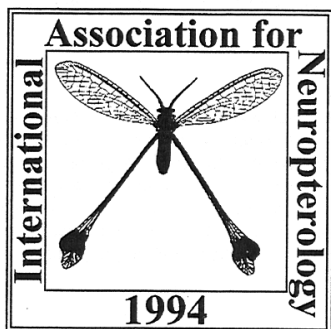
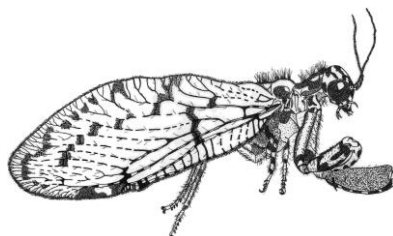




Lacewing News



NEWSLETTER OF THE INTERNATIONAL ASSOCIATION OF NEUROPTEROLOGY

No. 32

Spring 2021

Presentation

Greetings once again to everyone. As you probably know, our International Symposium, planned for 2020 in Brasil, has been postponed due to some troubles caused by Covid 19: hope to have best luck in 2022! As always, thanks to the few neuropterologists who kindly sent contributions, notes, and bibliographic references. Please send all communications concerning Lacewing News to agostino.letardi@enea.it (Agostino Letardi, photo on the left). Questions about the International Association of Neuropterology may be addressed to our current president, Dr. Xingyue Liu (photo on the right) (xingyue.liu@yahoo.com).



From right to left, the IAN president Xingyue Liu and the LN editor Agostino Letardi (photo Rinaldo Nicoli Aldini, in Laufen [DE] 2018)

INVITATION TO THE XIV INTERNATIONAL SYMPOSIUM OF NEUROPTEROLOGY

Dear colleagues and friends, on behalf of the International Association of Neuropterologists and the organizing committee, it is our pleasure to invite you all to the upcoming **14th International Symposium of Neuropterology** (ISN), which will take place on Lavras, Minas Gerais state, southern Brazil, in May 22-27, 2022.

Our host is the Universidade Federal de Lavras (UFLA) (Federal University of Lavras) (Fig. 1), which is a Brazilian public university located on the state of Minas Gerais, founded as an Agricultural School in 1908. Currently, the UFLA is considered one of the most important universities in Brazil with great importance in the studies about biological pest control, possessing 17 departments which offers 30 undergraduate courses, 30 master's degrees and 22 doctorate's degrees courses, and receives more than 11 thousand students per year. Lavras, Minas Gerais, is a small Brazilian city that has a pleasant climate, with annual temperature of approximately 19.6°C, mountainous terrain and is located in a transition area between the Cerrado and the Atlantic Forest (both considered as biodiversity hotspot), which reflects in the great diversity of flora and fauna present in that region. Such city possesses some interesting touristic options, among which we can highlight the Ipês Waterfalls, the Ecological Park Quedas do Rio Bonito, and the Bocaina Mountain. Initially, the symposium is scheduled to take place in person, in order to unite the community

of researchers and students interested in studies of the superorder Neuropterida, nevertheless, unfortunately, an online version of the symposium is not entirely ruled out if the situation of the Covid-19 pandemic in Brazil does not improve significantly by the end of this year (2021).

All individuals interested in any aspects of the biology, systematics, taxonomy, natural history, evolution, as well as applied studies on Neuropterida (Neuroptera, Megaloptera, and Raphidioptera), are welcome to attend and share results of their research. Contributions will be accepted in the form of talks or posters. Contributors are requested to publish an extended version of their talk or poster in a Proceedings volume.

Please, to know more details follow us on our:

Website:

<http://www.eventos.ufla.br/neuropterology/>

Instagram: <https://www.instagram.com/xivisn/>

Facebook: <https://web.facebook.com/XIV-International-Symposium-of-Neuropterology-346946413210958>

Um grande abraço!

Brígida de Souza,
Caleb C. Martins,
Renato J.P. Machado,
Stephan M. Carvalho.



Historic Center of Universidade Federal de Lavras (UFLA), Lavras, Minas Gerais state, Brazil.

Charles Henry (chenrybugs@gmail.com) signals:

I also want to draw your attention to the Ph.D. dissertation by my last graduate student, Katherine L. Taylor, who received her doctoral degree in May of 2020.

This thesis is generally available via the link, <https://opencommons.uconn.edu/dissertations/2498/>. None of the chapters have yet been published, but of course the plan is to do so as soon as possible. In case you would like a

synopsis of what this thesis contains, here's the abstract:

Rapid species radiations can provide insight into the process of speciation and diversification. *Chrysoperla carnea*, the common green lacewing, was once thought to be a single insect species with a near worldwide distribution. Species-specific vibrational mating songs revealed more than twenty morphologically cryptic species in the *Chrysoperla carnea*-group. Rapid diversification in this clade seems to have been driven, at least in part, by their precise substrate-borne vibrational duets performed prior to copulation. In this dissertation, I examine speciation in the *Chrysoperla carnea*-group by reconstructing the evolutionary history of the clade and identifying the genomic basis of a mating song trait critical to the maintenance of species boundaries in this group.

In Chapter 1, I assemble and annotate a de novo reference genome of *Chrysoperla carnea* sensu stricto, the first available for a neuropteran insect. In Chapter 2, I infer the evolutionary history of the *carnea*-group using reduced representation genome sequencing. Resolved species relationships indicate repeated phenotypic radiations, with multiple parallel evolution of ecomorphs on different continents. These analyses also reveal a history of hybridization in the clade.

In Chapter 3, I identify a single large genomic region associated with the mating song feature 'volley period' using QTL mapping. This genomic region contains several candidate genes for lacewing song phenotype, including the gene *doublesex*, which is critical to song production in *Drosophila*. Additionally, I demonstrate strong genetic linkage between volley period phenotype and preference for volley period. Overall, this dissertation advances our understanding of *carnea*-group lacewing diversification and speciation.

András Bozsik (dnabb@gmail.com) wrote:

I wish good health for all neuropterist colleagues and I hope that during this pandemic you were able to avoid the virus as well as to work on your scientific field. I am retired and I realized that it is good to be a fellow neuropterist and entomologist but - for me - it may be better to become an artist.

Thus, I would like to wish all the best for one of the best eco-winemakers, well known for each of us, Michel Canard. The attached pictures are two portraits of Michel, one is a charcoal drawing



(29 x 42 cm), the another is a crayon sketch (23 x 32 cm) with his product, a fine eco-wine worth drinking even for neuropterists.



Neuropterida Species of the World (Version 7)

by John D. Oswald

Back in 2018 we included an announcement in LN26 about the release of Neuropterida Species of the World (NSW) Version 6.0. NSW Version 6 has now had 8 subsequent data releases, which have added 150+ new species, >2000 searchable Neuropterida combinations, and many new taxonomic updates to the project. We are pleased to announce here that we are now putting the final touches on version 7.0 of the Neuropterida Species of the World, and making plans to release it sometime in May of 2021. In addition to a new round of data updates, the new version will contain several new features that we hope the neuropterology community will find useful.

Citations Table.—In NSW 7.0 a new “Citations” table will appear on all NSW Monograph Record pages. This table will contain a list of documented and annotated citations to the uses of names that fall within the ‘synonymy cloud’ of each valid neuropterid species. The concept of this table is similar to that of the annotated synonymical listings that are a part of most traditional taxonomic revisions. But, the new Citations table will extend that concept across the whole of the Neuropterida, will provide direct links to cited publications (for those present the Bibliography of the Neuropterida PDF set, so keep sending me your PDFs), and will give users several options to customize the set of citation records displayed. Two selectable versions of the table will be available – one sorted by year, and a second sorted by synonym name – and users will be able to restrict the record list to subsets of citations that are documented to contain information in a variety of general ‘topic’ areas. The initial dataset supporting the Citations table will contain >70,000 citation records (with >100,000 topic annotations), and will grow over time as additional citation data are collected.

Congener Navigation Control.—The upper right corner of each Monograph Record page in NSW 7.0 will contain a new “congener navigation control”. This control will allow users to quickly select and display the Monograph Record pages

of other valid species that fall within the same genus as that displayed on the currently-active Monograph Record page. This new control will make it faster and easier to access comparable data on congeneric species – since each species will no longer need to be searched for separately. You can also scroll the list to get a quick count of the number of valid species and subspecies in each genus.

LDL World Neuropterida Faunas Links.—The new version will also contain icon-based links in the Monograph Record page Countries table that provide convenient access to the published-do-date versions of the LDL World Neuropterida Faunas series. These links will help to highlight the faunistic work of the several members of our community who have developed publications in the LDL world faunas series (hopefully encouraging others to do the same!), and better link these individually-authored faunal publications into the growing family of LDL publications.

Keep an eye out in May for the next new version of the Neuropterida Species of the World! And, as always, if you note any errors in the NSW (or other LDL publications), or have ideas for other useful additions, please let us know.

Cheers,
John Oswald (j-oswald@tamu.edu)



lacewings and needlework

Recent Literature on the Neuropterida (2020-2021)

Organized by Agostino Letardi

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