



Cuc Phuong NP,
Vietnam
July 2nd - 8th
2019

16th

INTERNATIONAL AUCHENORRHYNCHA CONGRESS

12th International Workshop on Leafhoppers
and Planthoppers of Economic Significance



Program
and
Abstracts

Organized by:



Vietnam National Museum of Nature, VAST



National Foundation
for Science & Technology Development

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**16TH INTERNATIONAL AUCHENORRHYNCHA CONGRESS
AND THE 12TH INTERNATIONAL WORKSHOP ON LEAFHOPPERS
AND PLANTHOPPERS OF ECONOMIC SIGNIFICANCE (IAC 2019)
IS BEING ORGANIZED BY THE FOLLOWING COMMITTEES:**

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PROGRAM

02-08/7/2019, Cuc Phuong, Viet Nam



	2 ND JULY	3 RD JULY	4 TH JULY	5 TH JULY	6 TH JULY	7 TH JULY	8 TH JULY
TIME	VIETNAM ACADEMY OF SCIENCE AND TECHNOLOGY (VAST) <i>18 Hoang Quoc Viet St, Cau Giay, Hanoi, Viet Nam</i>	CUC PHUONG NATIONAL PARK <i>Ninh Binh, Viet Nam</i>					
7:30		<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>
9:00	Congress participant arrivals: the registration	Oral session: Taxonomy, phylogeny, and biogeography	Collecting in Cuc Phuong National park	Oral session: Taxonomy, phylogeny, and biogeography	Oral session: Ecology, Behavior and bioacoustics	Morning - <i>Tràng An Scenic Landscape Complex</i> Afternoon - <i>Bái Đính Temple Spiritual and Cultural Complex</i>	Congress participant departures
10:30		<i>Coffee break</i>		<i>Coffee break</i>	<i>Coffee break</i>		
11:00		Oral session: Taxonomy, phylogeny, and biogeography	Collecting in Cuc Phuong National park	Oral session: Taxonomy, phylogeny, and biogeography	Oral session: Ecology, Behavior and bioacoustics		
12:30	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i> <i>(inside forest – Bong Center)</i>	<i>Lunch</i>	<i>Lunch</i>		



PROGRAM

02-08/7/2019, Cuc Phuong, Viet Nam



	2 ND JULY	3 RD JULY	4 TH JULY	5 TH JULY	6 TH JULY	7 TH JULY	8 TH JULY
TIME	VIETNAM ACADEMY OF SCIENCE AND TECHNOLOGY (VAST) <i>18 Hoang Quoc Viet St, Cau Giay, Hanoi, Viet Nam</i>	CUC PHUONG NATIONAL PARK <i>Ninh Binh, Viet Nam</i>					
14:30	IAC opening Congress participant arrivals: the registration (continued) until 15:00	Oral session: Taxonomy, phylogeny, and biogeography	Collecting in Cuc Phuong National park	Oral session: Taxonomy, phylogeny, and biogeography	Visit to Cuc Phuong National park (<i>Turtle Conservation Center, Endangered Primate Rescue Center, Carnivore and Pangolin Conservation Program</i>)		
15:30	Move to Cuc Phuong National Park	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>			
16:00-17:30			Collecting in Cuc Phuong National park	Poster presentation IAC board meeting	IAC closing remarks		
19:00	<i>Welcoming dinner</i>	<i>Dinner*</i>	<i>Dinner*</i>	<i>Dinner*</i>	<i>Dinner*</i>	<i>Farewell dinner</i>	
		<i>Light trapping</i>	<i>Light trapping</i>	<i>Light trapping</i>	<i>Light trapping</i>	<i>Dancing show</i>	

THE MORE, THE MERRIER – NEW ACHILIDAE (HEMIPTERA: FULGOROMORPHA) FROM SOUTH AFRICA

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Achilidae Stål, 1866 is one of the smaller fulgoroid families comprising ca. 515 species in 160 genera (Bourgoin 2019), with less than 10% of them known from fossils (Brysz & Szwedo 2019). Recently these planthoppers are reported from all continents, except for Antarctica, and from all climatic zones, with biggest diversity in tropics and subtropics of Northern Hemisphere. Biology of the immature stages seems to be related to decomposing wood, but the nature of this connection is still not clear, although nymphs of Achilidae are claimed to be mycetophagous. As imagines, Achilidae feed on phloem, thus belong to phytophagous opophags, as most of the Fulgoromorpha insects do. As of today Achilidae are known to feed on angiosperm and gymnosperm plants from 20 plant orders: Arecales, Asparagales, Asterales, Boraginales, Cornales, Cupressales, Ericales, Fabales, Fagales, Hamamelidales, Lamiales, Laurales, Malpighiales, Malvales, Myrtales, Pinales, Poales, Rosales, Sapindales and Vitales (Bourgoin 2019).

The internal classification of Achilidae is quite complicated, especially for such small number of species, distributed in 13 tribes (11 recent and 2 fossil ones), with a few more being yet to be established (work in progress). The tribes most recently recognised were Waghildini Szwedo, 2006, and earlier Ptychoptilini Emeljanov, 1990, both from the inclusions in the Eocene Baltic amber (Emeljanov 1990, Szwedo 2006). Revisionary work on Achilidae classification by Emeljanov (1991) add to the system recent tribes: Achillini Emeljanov, 1991, Amphignomini

Emeljanov, 1991, Ilvini Emeljanov, 1991, Seviini Emeljanov, 1991 and Tropiphlepsiini Emeljanov, 1991. Since then there were no data suggesting need to separate additional tribe-level units within Achilidae. The situation changed, as last year we identified specimens collected in South Africa, which do not match in all details to the limits and definitions of the tribes as currently recognised. One group can be preliminarily assigned to already known and most speciose tribe Plectoderini Fennah, 1950. However, taxonomic definition and limits and content of this tribe is in need of revision. The other group of specimens seems to represent something completely new. Based on characters available both groups are postulated as representing separate tribes, with unique combinations of diagnostic features, not known within fossil or recent tribes of the Achilidae.

Along with those new tribes proposed, the tribal relationships and postulated phylogenetic tree of Achilidae should be re-analysed and revised. Recognition of new taxa at tribal level, addition of new taxa and fossil material to the account challenges the existing proposal. The last classification scheme and phylogeny was proposed by Emeljanov in 1992, being slightly modified by Emeljanov & Fletcher in 2008, when the tribe Breddiniolini Fennah, 1950 was transferred to a closely related family Derbidae Spinola, 1839. However, this proposal was not including fossil data and fossils were not of use in any further analyses. In addition, the proposal of Emeljanov (1992) was not based on phylogenetic analysis of a full data set and most Achilidae tribes still lack good morphological definitions based on apomorphies. The recent findings of new recent and fossil material give the opportunity for reinterpretations and redefinitions of currently recognised units and more deep and detailed analysis of their relationships.

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