Program and Abstracts

16th INTERNATIONAL AUCHENORRHYNCHA CONGRESS

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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Vietnam National Museum of Nature, Vietnam Academy of Science and Technology

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16th International Auchenorrhyncha Congress
12th International Workshop on Leafhoppers and Planthoppers of Economic Significance
Cuc Phuong NP, Vietnam, July 2nd - 8th 2019

PROGRAM

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

VNMN

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

PROGRAM

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

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

THE EXTINCT PLANTHOPPER FAMILY MIMARACHNIDAE (HEMIPTERA: FULGOROMORPHA) - MORE DIVERSE THAN EXPECTED?

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Planthoppers (Fulgoromorpha Evans, 1946) are one of the suborders within the Hemiptera Linnaeus, 1758, displaying enormous diversity with 33 extant and extinct families currently recognized (Szwedo 2018, Bourgoin 2019). Mimarachnidae Shcherbakov, 2007 is one of the extinct families of the superfamily Fulgoroidea Latreille, 1807, originally characterized by its simplified venation, setigerous metatibial pecten, and the spider-like dark silhouette and black eyespots of tegmina (Shcherbakov 2007). Mimarachnidae were well known from the compression/impression fossils in sedimentary deposits of Buryatia (Russia), Japan and Spain (some not formally described taxa come from Mongolia and probably also from Brazil), and also several representatives preserved as inclusions in the mid-Cretaceous Burmese amber, according to recent studies (Szwedo 2008, Szwedo & Ansorge 2015, Shcherbakov 2017, Jiang, Szwedo & Wang 2018, Zhang et al. 2018). The chronodistribution of the family is from the Early Cretaceous to early Late Cretaceous, and geographic distribution ranges from the high latitude region of northern hemisphere to tropical palaeoequatorial region according to the latest fossils records.

Moreover, the taxonomic and morphological disparity of Mimarachnidae, based on fossil representatives we found in the Burmese amber and as sedimentary fossils, far exceeds the known richness of fossils already known. The recent

described genera have already displayed morphological disparity, e.g. elongated head in *Jaculistilus* Zhang, Ren & Yao, 2018; giant size in *Dachibangus* Jiang, Szwedo & Wang, 2018; and rostrum reaching beyond the abdomen in *Burmissus* Shcherbakov, 2017. Taxonomic diversity of these fossils allows us to erect a number of new taxa of specific, generic and possibly higher levels. However, the relationships of the Mimarachnidae within the Fulgoromorpha and Fulgoroidea are not fully elaborated. Although our recent discoveries contest the relationships of Mimarachnidae with the Cixiidae-like group, and Neazoniidae Szwedo, 2007 could prove to be their nymphs, a set of new questions and possibility of new explanations remaining to be further elaborated.

Mimarachnidae also offers an unprecedented opportunity to observe morphological adaptations to sophisticated camouflage with several eco-morphological traits. Several similarities in morphology like flatoidinisation and laternarisation syndromes, present among modern planthoppers are observed in taxa ascribed to this family. Comparable to modern planthoppers in its disparity, Mimarachnidae provides exceptional and unexpected insights into not only the evolution of the Cretaceous planthoppers, but also the eco-evolutionary adaptations of these insects.

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