BOOK OF ABSTRACTS

10TH WORLD CONGRESS OF HERPETOLOGY

5–9 August 2024

Compiled by

Indraneil Das

World Congress of Herpetology (WCH)

Institute of Biodiversity and Environmental Conservation
Universiti Malaysia Sarawak

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94300 Kota Samarahan
Sarawak, Malaysia

2024

COMPILER'S NOTES

The 10th World Congress of Herpetology is being held at the Borneo Convention Centre Kuching, in the State of Sarawak, Malaysia, 5–9 August 2024. The Congress is organised by the World Congress of Herpetology (https://www.worldcongressofherpetology.org) and the Institute of Biodiversity and Environmental Conservation (https://www.ibec.unimas.my), Universiti Malaysia Sarawak. The event is supported by Business Events Sarawak, Ministry of Tourism, Creative Industry and Performing Arts Sarawak, Sarawak Forestry Corporation, Sarawak Biodiversity Centre, AGARK DGHT, the Institute of Agriculture, University of Tennessee (UT AgResearch) and the Society for the Study of Amphibians and Reptiles.

A total of 1,481 abstracts of oral and poster papers were received at the website of the Congress (https://2024wch10.com), through an online conference management system (KonferenceX Content Management System), or came in via email. Only those submitted by registered delegates were included in this book of abstracts. Poster presentations include the full spectrum of herpetological topics, including subject material corresponding to Symposia. Also included are abstracts of Plenary Lectures, Special Presentations and Official Side Events.

Abstracts were formatted and lightly edited for content and style but did not undergo a full peer review. Any new taxon descriptions or other nomenclatural acts contained in this book of abstracts and programme should not be considered published in the sense of Article 8 of the International Code of Zoological Nomenclature (1999).

We welcome all delegates to the beautiful city of Kuching, Sarawak and to the 10th World Congress of Herpetology.

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30 July 2024

anthropogenic disturbances (e.g., climate change, change in land use), and are therefore strictly protected by both National and Community laws. To date, Information on growth and survival is available for one cave salamander species, *Speleomantes italicus*, thus strongly limiting our knowledge of the demographics of these salamanders. To fill this gap, we studied survival and growth rates in all species of Speleomantes genus. Over a period of 12 years, we repeatedly monitored 37 populations belonging to the eight *Speleomantes* species, including hybrids, producing a dataset that includes capture-mark-recapture data of 494 individuals. This study identified a moderate survival of juveniles (about 50%) and a high survival rate in adult *Speleomantes* (about 80%). Sexual maturity is reached between 5 and 7 years. The average seasonal growth rate of juvenile *Speleomantes* (SVL < 50 mm) is much faster than that of adults (≥ 50 mm) (1.18 vs. 0.21 mm); this is probably a strategy that individuals use to become unsuitable to predators and therefore reach a higher survival rate. These results are in line with those observed for *S. italicus* and support the hypothesis that the whole genus is characterized by a relatively high longevity of individuals.

A-0823 (Oral)
Out of the Himalayas: Phylogeny and Biogeography of Ablepharine Skinks (Reptilia: Scincidae) of Eurasia

Andrey Bragin[1], Spartak Litvinchuk[2,3], Leo Borkin[4], Daniel Jablonski[5], V. Deepak[6,7], Zeeshan Mirza[8,9] and Nikolay Poyarkov[1,10]
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Ablepharine skinks are an assemblage of small semi-burrowing lizards currently encompassing 23 species assigned to the two genera *Ablepharus* and *Protoblepharus*. They inhabit a wide range of natural habitats, from the Mediterranean to the Himalayas, and are frequently the most common reptiles in these regions. Despite their abundance, the diversity and evolutionary history of ablepharine skinks remain poorly understood, largely due to the limited number of samples examined in earlier studies, which mostly focused on the western members of the group. We present the largest molecular dataset of ablepharine skinks to date, including 306 specimens representing approximately 20 nominal taxa, which we use to assess diversity, phylogeny, and a biogeographic scenario for this group. Molecular data included a 4244-bp alignment of four mtDNA and three nuDNA genes. Within several ablepharine species complexes, we apply genetic and morphological data, as well as species distribution modeling, and report on ca. 10 putative new species and several lineages of unclear status. Our data show a close relationship between ablepharine skinks and the sphenomorphine skinks of Southeast Asia and suggest the group's origin in the Himalayan Region in the mid-Oligocene. The uplift of the Himalayas and the progressing aridification of Asia during the Miocene likely facilitated group diversification and dispersal from east to west, colonizing Central Asia, the Middle East, and the Mediterranean. Several unique features of snake-eyed skinks, such as a partial and then complete fusion of eyelids with a transparent window in the lower eyelid, an elongated body,

shortened limbs, and oviparity, likely evolved as an adaptation to more arid and hot environments. Our study identified several ablepharine species complexes in need of integrative taxonomic revisions in future studies. The Russian Science Foundation (Grant No. 22-14-00037) supported this work.

A-0824 (Oral)
Alien vs. Frog: New Data on Vietnamese Amphibians' Endoparasitic and Ectoparasitic Leeches (Amphibia: Anura)

Andrey Bragin[1], Alexei Trofimets[2] and Nikolay Poyarkov[1,2]
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Leeches (Hirudinea), which are well-known as ectoparasites feeding on vertebrate blood, often choose amphibians as prey. Feeding on amphibians has been reported for the members of various families of freshwater and land leeches in South and North America, Australia, Madagascar, and East and Southeast Asia. There have also been documented cases of predatory leeches consuming eggs, tadpoles, and juvenile amphibians. However, records of endoparasitic leeches in amphibians are rare. Only two studies report on finding usually free-living ectoparasitic leeches of the families Glossiphoniidae and Haemadipsidae inside the dorsal lymph cavities of *Lithobates catesbeianus* (Ranidae) in Canada in 1949 and of *Litoria becki* (Hylidae) in Papua New Guinea in 1963, respectively. Since then, no similar observations have been made. However, 60 years later, we describe four cases of large-sized endoparasitic leeches of the family Praobdellidae on the three species of anuran amphibians from Vietnam: Amolops daorum and *Amolops tonkinensis* (Ranidae) and *Bufo luchunnicus* (Bufonidae). Most notably, in all four cases, the leeches were found inside the body cavity attached to the liver of a frog. Our observation represents the third documented case of facultative endoparasitism in leeches on amphibians. The taxonomic status of endoparasitic leeches, the prevalence of this phenomenon among Asian leeches, and how and when the parasitic invasion occurs remain unclear. Further studies should investigate whether the host choice is random or species-specific, how the presence of the parasite affects the hosts' reproductive success and mortality, and how the leeches adjust to the lack of sexual partners. Also, for the first time in Vietnam, we present a description of three cases of ectoparasitic leeches of the families Glossiphoniidae and Haemadipsidae on amphibians *Boulenophrys rubrimera* and *Boulenophrys palpebralespinosa* (Megophryidae), and *Kurixalus* sp. (Rhacophoridae). The Russian Science Foundation (Grant No. 22-14-00037) supported this work.

A-0825 (Poster)
Hidden on the Roof of the World: New Data on Diversity of Himalayan Ablepharine Skinks (Reptilia: Scincidae)

Andrey Bragin[1], Spartak Litvinchuk[2,3], Leo Borkin[4], Daniel Jablonski[5], V. Deepak[6,7], Zeeshan Mirza[1] and Nikolay Poyarkov[1,10]
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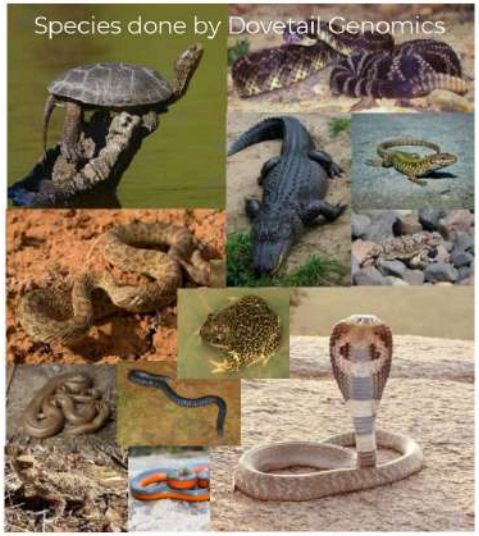

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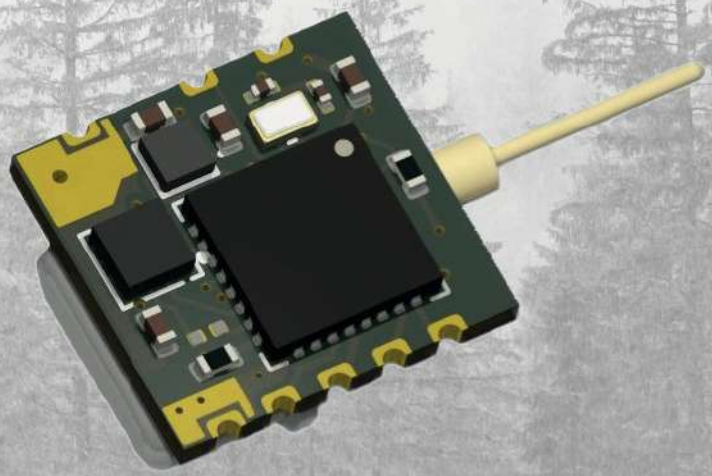

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