Phylogeography – Session 2

Biogeography of small mammals in south-western Angola: the first genetic evidence

Jarmila Krásová[1], Ondřej Mikula[2,3], Josef Bryja[2,4], Ninda Baptista[5], Radim Šumbera

[1]Department of Zoology, Faculty of Science, University of South Bohemia, České Budějovice, Czech Republic, jarmila.krasa@gmail.com
[2]Institute of Vertebrate Biology, Academy of Sciences of the Czech Republic, Brno, Czech Republic
[3]Institute of Animal Physiology and Genetics, Academy of Sciences of the Czech Republic, Brno, Czech Republic
[4]Department of Botany and Zoology, Faculty of Science, Masaryk University, Brno, Czech Republic
[5]Instituto Superior de Ciências da Educação da Huíla, Lubango, Angola

Angola represents one of the most understudied African countries with respect to biodiversity at all levels. Furthermore, Angola represents an area which holds particular interest for biogeographers owing to its immense habitat diversity and the confluence of three very different biomes: northern Congo basin lowland forests, eastern Zambezian miombo woodlands and southern Namib Desert. Although recent activities of various research groups brought some interesting results about the diversity and biogeographic affinities of Angolan birds, virtually nothing is known about mammals. Especially small mammals are a very useful model for testing the uniqueness/endemicity/biodiversity value since humans have had a strong impact on mammalian distributions in Angola, particularly on those of large carnivores and ungulates during the civil war (1975-2002), when widespread poaching affected strongly a range of species. A field expedition with the main purpose of collecting small mammals was conducted in July 2017. Altogether, we sampled 318 individuals at 11 different localities in south-western Angola. According to external identification, sampled specimens belong to 18 different genera. This high diversity reflects the habitat diversity of sampled localities as we were trapping in dry, semi-desert and desert habitats (typical for some *Elephantulus*, *Petromyscus* and *Gerbilliscus*) up to moist forest (here we found *Lophuromys*, *Aethomys* and *Mus*). Phylogenetic analyses based on DNA barcoding in the context of our collection of samples from mostly eastern and central Africa have revealed an interesting biogeographic pattern in four genera or species lineages (*Mus minutoides*, *Mus triton*, *Mastomys* and *Dendromus*). All of them were represented by two different species or lineages in south-western Angola, the first one has its relatives in the north (southern Democratic Republic of Congo) whilst the second easterly in Zambia.

459
Julius-Kühn-Archiv

Jens Jacob, Jana Eccard (Editors)

6th International Conference of Rodent Biology and Management and 16th Rodens et Spatium

Potsdam, Germany, 3-7 September 2018

Book of Abstracts

Universität Potsdam

JKI Julius Kühn-Institut

Julius Kühn-Institut
Bundesforschungsinstitut für Kulturpflanzen

459

Julius-Kühn-Archiv

Jens Jacob, Jana Eccard (Editors)

6th International Conference of Rodent Biology and Management and 16th Rodens et Spatium

Potsdam, Germany, 3-7 September 2018

Book of Abstracts

Julius Kühn-Institut
Bundesforschungsinstitut für Kulturpflanzen

Editors:
Jens Jacob[1] and Jana Eccard[2]
[1]Julius Kuehn Institute, Federal Research Centre for Cultivated Plants,
Institute for Plant Protection in Horticulture and Forests, Vertebrate Research,
Toppheideweg 88, 48161 Münster, Germany
[2]University of Potsdam, Institute of Biochemistry and Biology,
Animal Ecology Group, Maulbeerallee 1,
14469 Potsdam, Germany

Local Organizing Committee:
Jana Eccard, University of Potsdam
Jens Jacob, Julius Kühn Institute, Federal Research Centre for Cultivated Plants, Münster
Daniela Reil, Julius Kühn Institute, Federal Research Centre for Cultivated Plants, Münster
Christiane Scheffler, University of Potsdam
Elke Seydewitz, University of Potsdam

Scientific organising committee:
Emil Tkadlec (Czech Republic); Frauke Ecke (Sweden); Grant Singleton (Philippines): Heikki Henttonen (Finland); Jana Eccard (Germany); Jens Jacob (Germany); Lyn Hinds (Australia); Prince Kaleme (Congo); Xavier Lambin (UK); Zhibin Zhang (China)

International Steering Committee Rodens et Spatium:
Abraham Haim (Israel); Alexey Surov (Russia); Ana Maria Benedek (Romania); Boris Krasnov (Israel); Emil Tkadlec (Czech Republic); Éric Le Boulengé (Belgium); Farida Khammar (Algeria); František Sedláček (Czech Republic); Gert Olsson (Sweden); Grant Singleton (Australia); Heikki Henttonen (Finland); Jan Zima (Czech Republic); Jean-François Cosson (France); Linas Balčiauskas (Lithuania); Maria da Luz Mathias (Portugal); Molly McDonough (USA); Mustafa Sözen (Turkey); Nigel Yoccoz (Norway); Olga Osipova (Russia); Takuya Shimada (Japan); Victor Sánchez Cordero (Mexico); Xavier Lambin (United Kingdom); Yasmina Dahmani (Algeria)

International Steering Committee
International Conference of Rodent Biology and Management:
Andrea Byrom (New Zealand); Charley Krebs (Canada); Grant Singleton (Philippines); Jens Jacob (Germany); Jiqi Lu (China); Lyn Hinds (Australia); Nico Avenant (South Africa); Peter Banks (Australia); Peter Brown (Australia); Regino Cavia (Argentina); Rhodes Makundi (Tanzania); Roger Pech (New Zealand); Steven Belmain (UK); Sudarmaji (Indonesia); Zhibin Zhang (China)

Bibliografische Information der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation
In der Deutschen Nationalbibliografie: detaillierte bibliografische
Daten sind im Internet über http://dnb.d-nb.de abrufbar.

ISSN 1868-9892
ISBN 978-3-95547-059-3
DOI 10.5073/jka.2018.459.000

Alle Beiträge im Julius-Kühn-Archiv sind unter einer
Creative Commons - Namensnennung - Weitergabe unter gleichen Bedingungen - 4.0 Lizenz veröffentlicht.

Printed in Germany by Arno Brynda GmbH, Berlin.