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## Phylogeography – Session 2

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### **Ethiopian rodents - extremely diverse, endemic and endangered**

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Ethiopia is an African country with very diverse geomorphology, which is reflected in its amazing biodiversity. For example Ethiopian highlands, harbouring the largest areas of Afromontane ecosystems in Africa and one of the most striking elevational ecological gradients on the Earth, are known as one of the most important centres of endemism in the world. Other ecosystems, e.g. Somali-Maasai and Sudanian savannahs, rain forests or semi-deserts, have been less studied, however, available data suggest they also often host endemic evolutionary lineages of otherwise widespread taxa. In this presentation we summarize both published and unpublished genetic data about Ethiopian rodents, collected in two last decades. Using huge genetic datasets of rodents from Ethiopia as well as other regions of sub-Saharan Africa, we will describe their major evolutionary patterns and biogeographical relations. Not surprisingly, the Ethiopian highlands served as a cradle of diversity for numerous mountain taxa - many of them remained endemic in Ethiopia (and often diversified at elevational gradient or in "local" allopatry), but some others dispersed and speciated in southern parts of Eastern Afromontane biodiversity hot-spot. More surprisingly, we found that even taxa living now in the wide belt of Sudanian savanna started their Plio-Pleistocene diversification in Ethiopia, i.e. in the easternmost part of this ecosystem. Last, but not least, unique and geographically restricted Ethiopian rainforests harbour the so-called "palaeoendemics", i.e. the evolutionary lineages that survived here several millions years, but are now highly endangered because of intense exploitation by humans. The research was funded by the Czech Science Foundation project No. 18-17398S and the Russian Foundation for Basic Research project No. 18-04-00563.

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# Julius-Kühn-Archiv

Jens Jacob, Jana Eccard (Editors)

6<sup>th</sup> International Conference of Rodent  
Biology and Management  
and  
16<sup>th</sup> Rodens et Spatium

Potsdam, Germany, 3-7 September 2018

Book of Abstracts



Julius Kühn-Institut  
Bundesforschungsinstitut für Kulturpflanzen

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