
Poster Session 2 – Workshop Rodent-Borne Diseases

63 Rodents diversity and pathogen carriage at Limpopo National Park villages, Mozambique

Iara Gomes-Jaintil¹, Cristiane Silveira², José Fafetine³, Luís Neves⁴

¹Biotechnology Centre, Eduardo Mondlane University; Nova School of Business, Universidade Nova de Lisboa, Portugal, iara.m.gomes@uem.ac.mz

²Museu Nacional de História Natural e da Ciência, University of Lisbon, Portugal

³Biotechnology Centre; Veterinary Faculty, both Eduardo Mondlane University, South Africa

⁴University of Pretoria; Biotechnology Centre, Eduardo Mondlane University, South Africa

The Limpopo National Park (LNP) is a Mozambican Trans Frontier Conservation Area of global interest. Within the park, people, domestic and wild animals live together, as well as potential high diversity of rodents and rodent-borne pathogens also. Rodents are known pests and important carriers/reservoir of pathogens but also food source in rural communities increasing human exposure risk. Some data confirm occurrence of *Toxoplasmosis*, *Leptospirosis* and plague in Mozambique but little is known about rodent role in these diseases ecology in the country. As climate change may increase contact between humans and wildlife and therefore increase pathogens spillover, it is critical to study diseases occurrences and dynamics in risky areas like LNP. The present study aims to understand the diversity of rodents at LNP villages, their pathogen carriage and roles in disease ecology. Thus, with the permission of LNP authorities and villagers a total of 6 villages from core (2) and buffer (4) zones were studied. Rodents were trapped and specimens were ethically sacrificed. Skull, skin and tissue samples for DNA analyses (COI and Cytb genes) were used for taxonomic identification. Specimens' health-status was recorded and samples collected during meticulous necropsies. Pathogens screening is now being carried out (LAT for *Toxoplasma gondii*; MACROLepto for *Leptospira* "S" spp.). Thirty-five rodents of three different genera (*Rattus* sp., *Aethomys* sp. and *Mus* sp.) were captured, a rich rodent tissue and parasites collection was assembled and identification at species level is in process. The general health-status was poorer in rodents from core zone than those from buffer zone villages. Buffer zone rodents only had fleas while core zone rodents had mites, fleas and large endoparasites. *Toxoplasma gondii* and *Leptospira* spp. screenings are still under analysis. This study can assist other One Health approach studies and may allow health prediction and disease risk mapping in Mozambique.

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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



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Editors:

Jens Jacob¹ and Jana Eccard²

¹Julius Kühn Institute, Federal Research Centre for Cultivated Plants,
Institute for Plant Protection in Horticulture and Forests, Vertebrate Research,
Toppeideweg 88, 48161 Münster, Germany

²University of Potsdam, Institute of Biochemistry and Biology,
Animal Ecology Group, Maulbeerallee 1,
14469 Potsdam, Germany

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