



The 13th African Small Mammal Symposium

Mekelle, Ethiopia

16-21 September, 2019

Programme and Abstract Book

Editors:
BRYJA Josef, MEHERETU Yonas

African Rodentia becomes African Mammalia

VAN DE PERRE F. (1), CIGAR J. (2), HEUGHEBAERT A. (2), LEIRS H. (1), VERHEYEN E. (1,3)

(1) Evolutionary Ecology Group - University of Antwerp, Antwerp, Belgium; (2) Belgian Biodiversity Platform, Belgium; (3) Royal Belgian Institute for Natural Sciences, Brussels, Belgium

The availability of online databases has become key in the advancement of taxonomy and conservation. The African Rodentia database contains extensive specimen and tissue collections of the Royal Museum for Central Africa (RMCA), the Royal Belgian Institute of Natural Sciences (RBINS) and the University of Antwerp (UA). Since its launch in 2007 the African Rodentia database has become an important reference with 100 unique visitors per month, about 50,000 page views/year and more than 150 registered users. Part of its popularity is thanks to its unique combination of taxonomical, ecological, geographical and genetic data, as well as data on parasitic and viral infections. While rodents, and in particular murids, still make up the largest part of the specimen collections, recent research has increasingly focussed on other mammal taxa like shrews and bats. Because of its proven usefulness for the diffusion of data on African rodents the African Rodentia database will therefore expand its taxonomical range to include all African mammal orders. Like its predecessor, African Mammalia maximizes its effectiveness by allowing users to query all fields, so not only on species names, but also on the collector, the locality, date of collecting, habitat, type of infection, availability of measurements, morphological and DNA sequence information. These same reasons that set apart African Rodentia from GBIF and other global databases, will allow African Mammalia to become an important reference for mammalogists working on the African continent.

(POSTER)

Vertebrate diversity patterns in the Congo Basin rainforests

VAN DE PERRE F. (1), WILLIG M. (2), PRESLEY S. (2), MUKINZI J.C.I. (3), GAMBALEMOKE S.M. (3), LEIRS H. (1), VERHEYEN E. (1,4)

(1) Evolutionary Ecology Group - University of Antwerp, Antwerp, Belgium; (2) University of Connecticut - Storrs, Connecticut, United States; (3) University of Kisangani, Centre de Surveillance de la Biodiversité, Kisangani, D.R. Congo; (4) Royal Belgian Institute for Natural Sciences, Brussels, Belgium

One of the most widely recognized patterns in ecology is the increase in species richness from poles to tropics. Literature suggest that the Congolian lowland rainforest does not follow this pattern: The Central Congolian forest (CCLF), south of the Congo river, is thought to harbor fewer vertebrate species and endemics than the Northeastern (NELF) and Northwestern lowland rainforest (NWLF) north of the Congo river. We used data from the Global Biodiversity Information Facility (GBIF) database on terrestrial vertebrates (mammals, birds, and reptiles), to

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/337424332>

African Rodentia becomes African Mammalia

Poster · September 2019

CITATIONS

0

READS

115

5 authors, including:



Frederik Van de Perre

University of Antwerp

15 PUBLICATIONS 63 CITATIONS

[SEE PROFILE](#)



Julien Cigar

Belgian Biodiversity Platform

6 PUBLICATIONS 102 CITATIONS

[SEE PROFILE](#)



André Heughebaert

Belgian Federal Science Policy Office

14 PUBLICATIONS 153 CITATIONS

[SEE PROFILE](#)



Herwig Leirs

University of Antwerp

423 PUBLICATIONS 8,564 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Fish fauna of the Congo Basin [View project](#)



Viral haemorrhagic fevers [View project](#)

African Rodentia becomes African Mammalia



Frederik Van de Perre, Julien Cigar, André Heughebaert, Herwig Leirs & Erik Verheyen

Since its launch in 2007 the **African Rodentia database** has become an important reference with on average 100 unique visitors per month, about 50,000 page views per year and more than 150 registered users. Because of its proven usefulness for the diffusion of data on African rodents the taxonomical range of the database was expanded in 2019 to include **all African mammal orders**.

The screenshot shows the African Mammalia database interface. At the top, there's a map of Africa with the title "African Mammalia". Below it, a navigation bar with links for Home, Taxa, Search, About, Register, and Login. A search bar shows the query "Soricidae » Sylvisorex akaibei". The main content area displays a photograph of a brown, striped rodent specimen with a green tag attached. Below the image is a detailed specimen information table:

Family: Soricidae	Genus: Sylvisorex	Species: Sylvisorex akaibei
Determination:	Sylvisorex akaibei	
Determinator(s):	Frederik Van de Perre	
Determination year:	-	
Determination occur.:	regional expert in the taxa with high certainty	

Below this is a "Specimen Information" section with tables for Specimen number (COB1174), Basis of record (preserved specimen), Sex (male), Sexual condition (abdominal testes, epididymis not visible), and Lifestage (-). There's also a thumbnail image of the specimen.

The "Distribution & Ecology" section includes a map of the collection locality in the Mongala-Bumba region of the Democratic Republic of Congo, and a table with details like Locality (Yangambi Biosphere Reserve), Country (Congo (DR)), Altitude (427 m), Latitude (0.796722173691), Longitude (24.494140625), and Habitat(s) (secondary forest).

The "Pictures" section shows three small images of the specimen from lateral, ventral, and dorsal views.

The "Measurements" section lists weight (5.0 g) and dimensions (hb: 70.00 mm, tl: 32.00 mm, hf: 12.00 mm, el: 7.70 mm). It also features a 3D anatomical model of the skull.

The "DNA Sequences" section displays a sequence for 16s rRNA.

The "Tests & Tissues" section indicates that parasites were tested (PA) on liver, spleen, kidney, and blood samples.

The **African Mammalia** database contains the extensive specimen and tissue collections of the Royal Museum for Central Africa, the Royal Belgian Institute of Natural Sciences and the University of Antwerp.

Functionality

- **Unique combination** of taxonomical, ecological, geographical, morphological, and genetic information, as well as pictures and data on parasitic and viral infections.
- **Query all fields**, so not only on species names, but also on the collector, the locality, date of collecting, habitat, type of infection, availability of morphological and DNA information, etc.
- **Blast** DNA sequences against the database.
- **Export** specimen information, measurements, and DNA sequences.

Visit African Mammalia now!



<http://projects.biodiversity.be/africanmammalia/>

