



KONINKLIJK MUSEUM
VOOR MIDDEN-AFRIKA
MUSÉE ROYAL
DE L'AFRIQUE CENTRALE



The importance of a biodiversity knowledge database

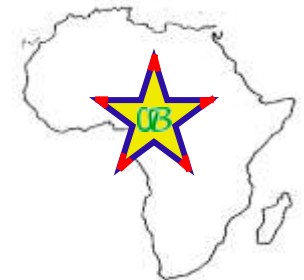
Congo Network Workshop

June 3, 2011

Dries Lauwers, Royal Museum for Central Africa, Tervuren



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Introduction

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1. Which gaps in the scientific knowledge about the Congolese biodiversity still need to be filled?
2. How can new biological collections complement already existing collections?

Gap Analysis of biological collections

- A. How are biological specimens from the DRC distributed in collections worldwide?
- B. Which taxa are represented in the collections and which are missing?
- C. Which regions of the DRC were sampled and which were not investigated?

GBIF



- International government-initiated and funded initiative focused on making biodiversity data available.
- Online dataportal with 267 million records.

www.gbif.org

Results

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- In GBIF there are 97 institutions with records from the DRC, but most have only a very small collection.
- > 95% of the records are kept in only 15 institutions

	Royal Museum for Central Africa	Royal Belgian Institute for Natural Sciences	Royal Botanic Garden of Belgium	Museum of Comparative Zoology, Harvard
Arthropoda	27090	2390		
Mammalia	24680	4744		8727
Aves	15042	7730		1787
Fish	29063	64		599
Amphibia	15346	7645		14142
Reptilia		6890		1632
Mollusca		636		
Other invertebrates	15	39		
Plants			22503	
Fungi				
Monera				
Protozoa			440	
Total	111236	30138	22943	18702

	American Museum of Natural History	National Herbarium of the Netherlands	Field Museum, Chicago	National Museum of Natural History, Washington
Arthropoda				368
Mammalia	8727		2031	1055
Aves	2931		1004	16
Fish			23	701
Amphibia	2		2912	735
Reptilia			433	918
Mollusca				67
Other invertebrates				42
Plants		7276		1852
Fungi				24
Monera				13
Protozoa				6
Total	11660	7276	6403	5797

	National Institute of Genetics, Japan	Museum National d'Histoire Naturel, Paris	Missouri Botanical Garden	National Museum of Nature and Science, Japan
Arthropoda	4496	648		178
Mammalia				
Aves				2
Fish		1917		2544
Amphibia		47		
Reptilia		97		
Mollusca				
Other invertebrates				
Plants		539	2805	7
Fungi		35		1
Monera				
Protozoa				
Total	4496	3283	2805	2732

	Cornell University Museum of Vertebrates	Royal Botanic Gardens, Kew	Academy of Natural Sciences, Philadelphia
Arthropoda			
Mammalia			
Aves	33		327
Fish	1588		
Amphibia	2		70
Reptilia	6		95
Mollusca			648
Other invertebrates			
Plants		1322	
Fungi			
Monera			
Protozoa			
Total	1629	1322	1140

Results

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 - RBINS has 30.138 records from DRC, but they are not (yet) uploaded in GBIF
 - In GBIF, RMCA has no records of reptiles from DRC
 - In GBIF, RMCA has 24.680 records of mammals, but only rodents
 - The collection of the NBGB is only partially uploaded in GBIF
 - ...

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⇒ Detailed inventory of these collections is a must to identify the gaps in biodiversity knowledge of the Congo Basin.

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- ⇒ Detailed inventory of these collections is a must to identify the gaps in biodiversity knowledge of the Congo Basin.
- ⇒ Currently it is impossible to draw definitive conclusions, some observations can be made.

Observation 1

- The majority (68% ?) of all records is kept in collections in Belgium: RMCA, NBGB and RBINS.

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⇒ Quick win scenario: inventory of these collections .

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- Making an inventory is not enough. This information has to be shared and published online.

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- For the boyekole ebale congo 2010 expedition a portal combining all expedition data is being created at the moment and will be available on:

<http://data.congobiodiv.org>

Observation 2

- Even from the incomplete dataset it is possible to identify a few gaps in the collections:
 - Very few records of invertebrates except for arthropods.
 - Almost absent: micro-organisms (fungi, monera, protozoa, chromista)

Collaboration with other partners

Collaboration with other partners

- Which projects/organisations are active in the region and are possible partners?
- Overview can be found on:

www.rdcsciences.org



Actif dans une collaboration scientifique internationale en RD Congo ?

Connexion/Inscription



Enregistrez votre projet

Ce site interactif se propose de réaliser le premier inventaire géographique des projets de recherche scientifique reliant des partenaires congolais et internationaux.

L'objectif ?

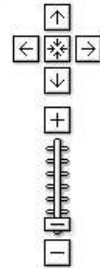
Etre un lieu de concentration de l'information, une vitrine des collaborations scientifiques en RDC.

Pourquoi participer ?

Une participation à cet inventaire permet d'offrir une vision de la distribution spatiale des domaines d'études et des zones d'étude. Cette vision plus large permet de décloisonner les initiatives, d'envisager de nouvelles synergies, d'enrichir sa propre recherche.

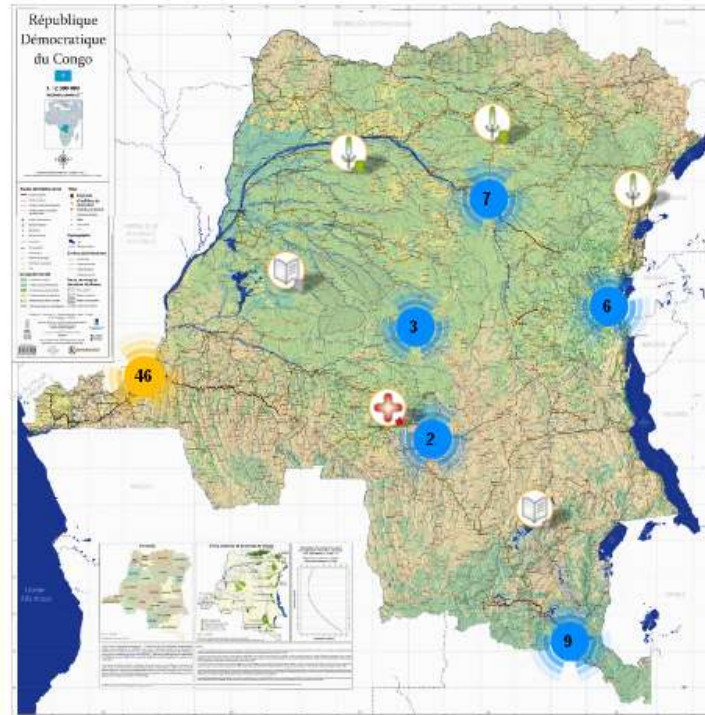
Elle peut profiter à chacun des acteurs de la recherche scientifique en RDC, qu'il soit scientifique, décideur politique, bailleur de fond,...[Cliquez pour plus de détails](#)

Carte des projets scientifiques en RDC



Kaar

[Fermer la légende](#)



Liste des projets

► [Formulaire de recherche](#)

Légende



- Sciences médicales et sanitaires
- Sciences de l'ingénieur et technologiques
- Sciences sociales
- Sciences humaines
- Sciences exactes et naturelles
- Sciences agricoles

[Cliquez ici pour mettre hors de clustering](#)

Cela vous donne la possibilité de basculer les différents types de projets et les références directement au tableau ci-dessous.

Thank you for your
attention