

GTI WORKSHOP 2019

Theme: **Taxonomy and systematic of freshwater mollusks (Gastropoda) of Benin**



GTI Alumni:

Cosme Z. KOUDENOUKPO, PhD.
Researcher at Faculty of Agronomical
Sciences/University of Abomey-Calavi

GTI Supervisor:

Prof. Thierry BACKELJAU
Researcher at *Royal Belgian
Institute for Natural Sciences*

PLAN

- **Introduction**
- **Activities conducted**
- **Main results**
- **Conclusion and outlooks**
- **Thanks**

A dynamic splash of clear water against a white background. The water is captured in mid-air, creating a horizontal line of turbulent water with numerous small, glistening droplets scattered below it. The lighting is bright, highlighting the transparency and texture of the water.

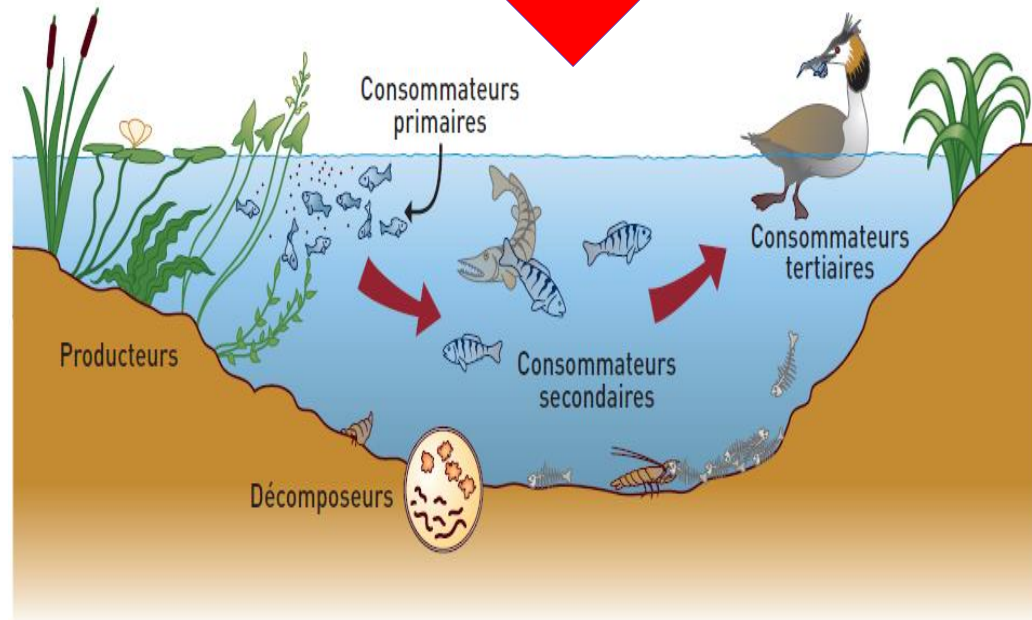
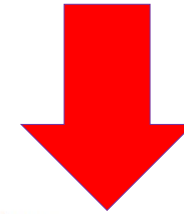
INTRODUCTION

Water importance



**Water for
drink**

Water for environment



Human stress on ecosystems



Outgrowth pressure



- ❖ **WORSENING WATER QUALITY**
- ❖ **HEAVILY ORGANIC POLLUTION**
- ❖ **EXTINCTION OF AQUATIC SPECIES**

Justification

Emergency of Restoration

**Taxonomic identification
Protection of Biodiversity
Ecosystem favour**

Data collection



Data collection



Dissection of mollusks



Species identified

Malacological survey  48 species

Dominant species



Species identified

Edible freshwater mollusk



***Lanistes varicus* (O. F. Müller, 1774)**

PhD defence



Manuscript finished

Checklist of the fresh and brackish water snails (Mollusks: Gastropoda) of Benin, West Africa

Cosme Z. Koudenoukpo^{1,2*}, Hamed O. Odountan³, Rose Sablon⁴, Antoine Chikou¹ & Thierry Backeljau⁴

- *1 Biodiversité et ressources en eau du Bénin (BioREB-ONG), 01BP 1442, Abomey-Calavi, Bénin.*
- *2 Laboratory of Hydrobiology and Aquaculture, University of Abomey-Calavi, Benin*
- *3 Laboratory of Ecology and Aquatic Ecosystem Management, Department of Zoology, University of Abomey-Calavi, Abomey-Calavi, Republic of Benin*
- *4 Capacities for Biodiversity and Sustainable Development (CEBioS), OD Nature, Royal Belgian Institute for Natural Sciences, Brussels, Belgium.*

(Zoo taxa)

Manuscript finished

Distribution patterns of freshwater mollusks along environmental gradient in the Sô River basin (Benin, West Africa): an approach based on SOM (Self-Organizing-Maps)

**Cosme Z. Koudenoukpo^{1,2*}, Marie-Lucie O. Susini³, Hamed O. Odountan⁴,
Rose Sablon³, Antoine Chikou¹ & Thierry Backeljau⁴**

- *1 Biodiversité et Ressources en Eau du Bénin (BioREB-ONG), 01BP 1442, Abomey-Calavi, Bénin.*
- *2 Laboratory of Hydrobiology and Aquaculture, University of Abomey-Calavi, Benin*
- *3 Capacities for Biodiversity and Sustainable Development (CEBioS), OD Nature, Royal Belgian Institute for Natural Sciences, Brussels, Belgium.*
- *4 Laboratory of Ecology and Aquatic Ecosystem Management, Department of Zoology, University of Abomey-Calavi, Abomey-Calavi, Republic of Benin*

Manuscript finished

Biodiversity assessment of coastal lagoon (South-Benin, Africa): mollusks distribution along environmental factors using artificial neural network

Cosme Z. Koudenoukpo^{1,2*}, Marie-Lucie O. Susini³, Luc Janssens de Bisthoven³, Antoine Chikou² & Thierry Bakeljau³

- *1 Biodiversité et Ressources en Eau du Bénin (BioREB-ONG), 01BP 1442, Abomey-Calavi, Bénin.*
- *2 Laboratory of Hydrobiology and Aquaculture, University of Abomey-Calavi, Benin*
- *3 Capacities for Biodiversity and Sustainable Development (CEBioS), OD Nature, Royal Belgian Institute for Natural Sciences, Brussels, Belgium.*


Paper published



African Journal of Aquatic Science

ISSN: 1608-5914 (Print) 1727-9364 (Online) Journal homepage: <https://www.tandfonline.com/loi/taas20>

Spatio-temporal variation of environmental variables and aquatic macroinvertebrate assemblages in Lake Nokoué, a RAMSAR site of Benin

OH Odountan^{1,2,3*} , L Janssens de Bisthoven⁴ , CZ Koudenoukpo¹  and Y Abou¹ 

- Carry on sampling on other ecosystem
- to raise awareness
- restore mollusk habitats
- make available a document on molluscs in Benin

THANKS



Belgique

partenaire du développement



*Global
Taxonomy
Initiative*



Laboratoire de Biomathématiques & d'Estimations Forestières



THANK FOR YOUR ATTENTION

