

UNIVERSITY OF YAOUNDE I



FACULTY OF SCIENCE  
DEPARTMENT OF BIOCHEMISTRY



*Antimicrobial & Biocontrol Agents Unit*

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LABORATORY FOR PHYTOBIOCHEMISTRY AND MEDICINAL PLANTS STUDIES  
ANTIMICROBIAL AND BIOCONTROL AGENTS UNIT

**Head, Prof. Dr. Fabrice FEKAM BOYOM, MS, DS, ScD**

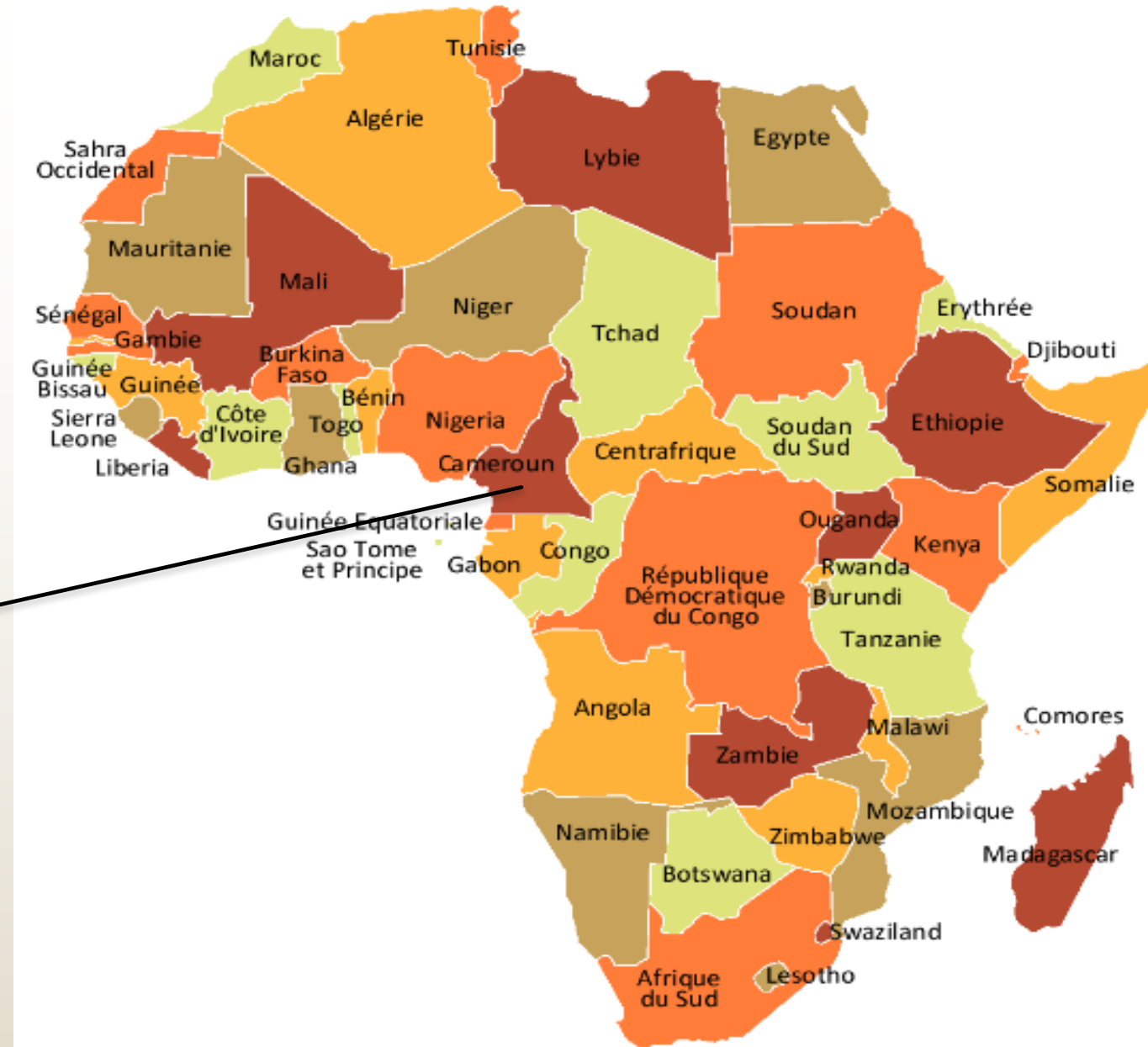
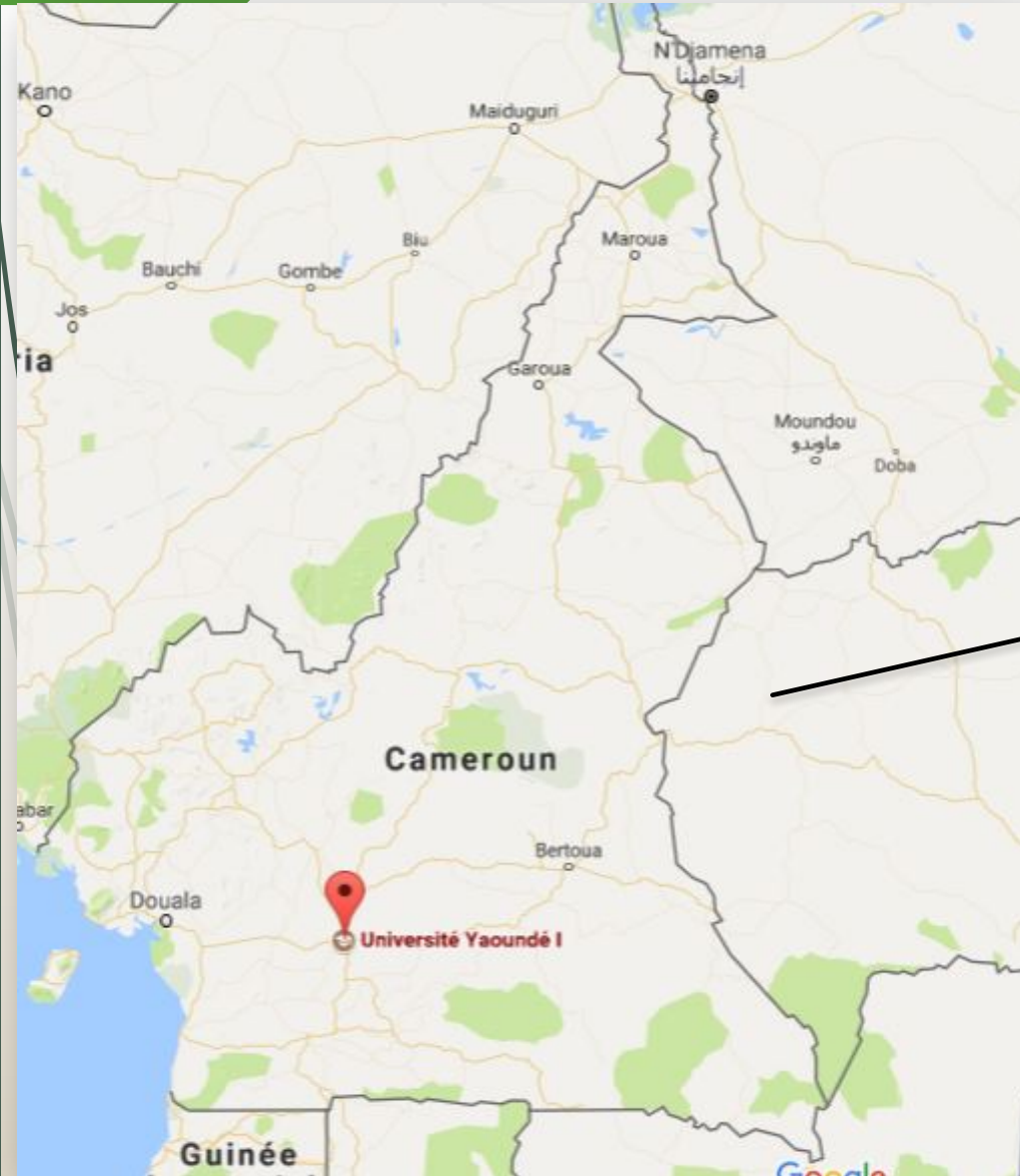
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# *Geographic place-Institute and Laboratory situation*

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# *Geographic place-Institute and Laboratory situation*

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❖ Cameroon: **Central Africa**

❖ Town: **Yaoundé**

❖ District: **Ngoa-Ekelle**



# *Main research question of the Laboratory*

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Can studying plants metabolites results in innovative drugs against endemic NTDs and plants diseases?



# Main research activities of the Laboratory

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To seek answers to this main question, research at AmBcAU focuses on:

- ❖ Natural products isolation and characterization
- ❖ *In vitro*/*In vivo* antiparasitic screening
- ❖ *In vitro*/*In vivo* antibacterial and antifungal screening



# *Main research activities of the Laboratory*

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To seek answers to this main question, research at AmBcAU focuses on:

❖ Cytotoxicity and toxicity studies

❖ Biological control studies against plants pests



# *Long-term scientific goals*

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- ❖ To become an independent research leader in the field of drug discovery against NTDs
- ❖ To formulate efficacious, safe, and cost-effective phytodrugs against NTDs

## *Main research question of my proposal*

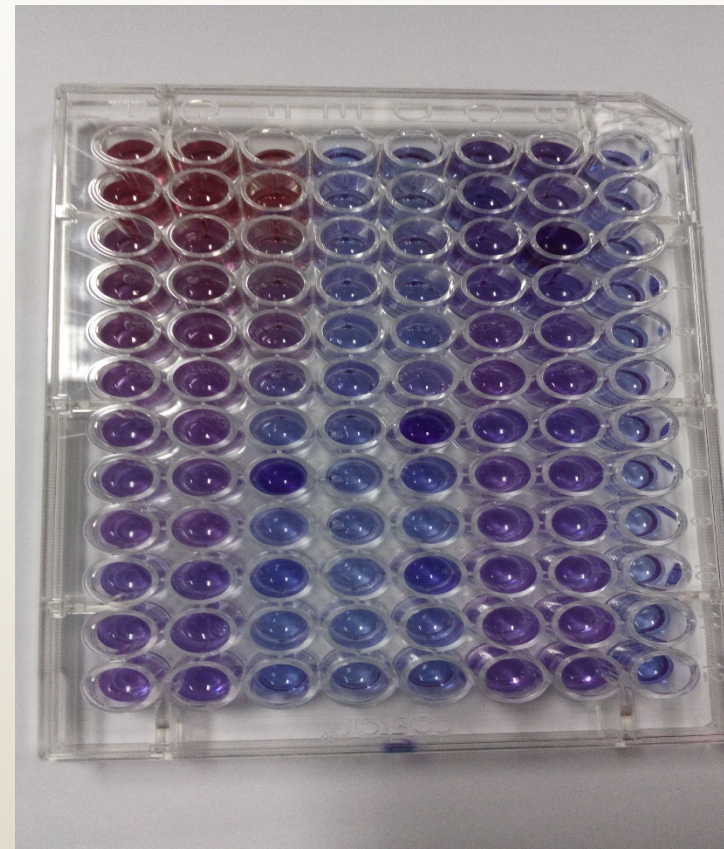
- ❖ The impact of Trypanosoma's gene regulation on its pathogenicity (VSG)
  - ❖ Drug sensitivity activity
  - ❖ Combination of the potents compound
  - ❖ targets
  - ❖ What are intermediate metabolites release during parasite-extract interaction

# *My hands-on laboratory expertise*

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I am comfortable in:

- ✓ *In vitro* screening of drugs against protozoan, fungal, and bacterial pathogens



# *My hands-on laboratory expertise*

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I am comfortable in:

- ✓ Antioxidant screening



- ✓ Mammalian cells culture and cytotoxicity assays

# *Needed ressources/expertise to promote my project.*

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- ❖ **Chemistry**: Structure elucidation
- ❖ **Genetic**: identification of new drug targets
- ❖ **Pharmacokinetics**: biodisponibility, drug metabolism

## *Faced difficulties*

- ❖ Funding
- ❖ Equipement



**THANK FOR YOUR KIND  
ATTENTION**