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**EDUCATION**

**2018: Master student** in Medical Biochemistry (*Biochimie, Biodiversité et Santé*), University of Antananarivo

**2017: Doctor of Veterinary Medicine (DVM)**, University of Antananarivo

Thesis: “Seroprevalence of three abortive zoonotic diseases in small ruminants of the Ambovombe Androy district”

**2015: Diplôme d’Etudes en Langue Française (DELF) B2** and *Diplôme Approfondi de Langue Française (DALF) C1*, Alliance Française Antsirabe

**2008: baccalaureat série D, mention assez bien**

**CONFERENCE PRESENTATION**

**2017: “Elevage de petits ruminants : Prévalence et facteurs de risque de zoonoses abortives”:**

Oral presentation in *forum de la recherche 5<sup>ème</sup> édition : Agrobiodiversité*, Fianarantsoa Madagascar, organized by *Ministère de l’Enseignement Supérieur et de la Recherche Scientifique* (MENSUPRES)

**RESEARCH EXPERIENCES**

**2018 – Present: Research assistant.** With DRZVP/FOFIFA in Qualinnov II (INTERREG-V) project: Collecting information in order to make cartography of cysticercosis risk factors in Itasy Region

**2017: Research consultant.** With *Agronomes et Vétérinaires Sans Frontières* (AVSF) in ASARA project: Investigation of ethno-veterinary practices (use of medicinal plants to treat animals) in Anosy and Androy region

**2016: Intern.** In DRZVP/FOFIFA: conducted laboratory analyses about seroprevalence of zoonotic diseases in small ruminants in Ambovombe Androy district

**2015: Intern.** In FIFAMANOR Antsirabe: research internship on fertility disorders in dairy cows

## **TRAINING AND WORKSHOPS**

### **2018:**

- Geographic System Information (GIS) using QGIS, organized by Association SOANOTOHIZANA in Antananarivo, Madagascar
- Introduction to R and Statistical Analyses, organized by Ikala STEM in collaboration with TReND, The Company of Biologists, Ecology Konstanz and International Max Planck Research School for Organismal Biology in Antananarivo, Madagascar

### **2016:**

- Art of communication and negotiation, also writing and publishing scientific articles, organized by COACH (University of Oregon) and Tontolo Isainana in Antananarivo, Madagascar
- Skin diseases in pets, organized by World Small Animals Veterinary Association (WSAVA)

## **PROFESIONAL MEMBERSHIP**

### **Since 2017:**

- Ordre National des Docteurs Vétérinaires Malagasy (ONDVM)
- Active member of Groupe d'Etude et de Recherche sur les Primates de Madagascar (GERP)

## **SKILLS**

**Computer skills:** Microsoft office (word, excel, PowerPoint, access), R, QGIS

**Language skills:** Malagasy (native), French (fluent), English (professional proficiency)

## **ABSTRACT**

### **Title: Cartography of cysticercosis risk factors in Itasy region, Madagascar**

Cystocercosis is a parasitic zoonosis that has become endemic in Madagascar since its discovery in the country, in 1901. It is caused by *Cysticercus cellulosae*, which can lead to a serious problem for public health in addition to an important economic loss for pig farmers. Many studies were already performed about it; however, the information provided does not give an overview to predict suitable areas for *C. cellulosae* contamination. This study aims to map the areas at risk for swine cysticercosis in the Itasy region.

This study will adopt a Multi-Criteria Evaluation (MCE) approach to map cysticercosis risk factors. For that, available information on risk factors such as demography, poor farming practices, open defecation, sanitary system failures, climatic and physical conditions, will be collected and modeled according to their geographical importance, to have a database to Geographic Information System (GIS). Then, those factors will be weighted based on expert's knowledge and evaluation. A serological survey will be performed to assess the robustness of the resulting map which combining multiple factors with weights assignments.

The expected result is to product a risk map of cysticercosis in Itasy region, identifying suitable areas of *C. cellulosae* contamination in order to provide orientation for research and recommendations to decision makers and extension services also.

## STATEMENT OF INTEREST AND INTENT

I am a Veterinary Doctor who is just graduated last year. Now, I am also a master student in Medical Biochemistry (*Biochimie, Biodiversité et Santé*) at University of Antananarivo, Department of Sciences. I have recently heard about this annual E<sup>2</sup>M<sup>2</sup>: Ecological and Epidemiological Modeling in Madagascar workshop, and I am very interested. I am convinced that attending this workshop will be very helpful for me.

Currently, I am working with *Département de Recherches Zootechniques, Vétérinaires et Piscicoles* (DRZVP) / FOFIFA in a project (Qualinnov II \_ INTERREG-V), about performing cartography of cysticercosis risk factors. I am initiated in Geographic Information System and I have some notion in programming, but spatial modeling is something new for me. And even if I started to learn about statistical analysis with R, I think that I still have some lack about this, so this workshop is an occasion for me to improve my knowledge and fulfill my skill. It will be very useful for me, in order to be able to carry out the project which was mentioned previously.

Moreover, as I want to continue my study until having PhD, in order to have a career as a teacher-researcher, because I am convinced that research activity is one of keys to developing a country, and statistics with spatial analysis are the pillars of scientific research, I see this annual E<sup>2</sup>M<sup>2</sup> workshop as a precious luggage for me in the future.

I hope to be able to attend this workshop which will provide me a new horizon and a greater vision to plan a PhD project, beginning from my master study, and also which will give me an opportunity to gather with other researchers.