

Building a robust pipeline of scientists leading climate change research in Africa

# Candidate Profile



#### **Position**

Associate Professor - Ph.D. Student

#### Institution

Faculty of Agronomic Sciences of the University of Abomey-Calavi (UAC)

# Country

Benin

#### **Education**

MSc, Genetics, Biotechnology and Biological Resources, University of Abomey-Calavi

## Mentor

Rodrigue Idohou, Ph.D., National University of Agriculture, Benin

### Research Area

Genetics and plant improvement

# Thibault Kafoutchoni Konoutan

2020 One Planet Laureate Candidate

Thibault Kafoutchoni Konoutan is a research assistant at the University of Abomey-Calavi (UAC) in Benin. He is also working on his Ph.D. thesis in genetics and plant improvement at the same university. His research is based on the Geocarpa groundnut genetic improvement preselection, a neglected leguminous plant from West Africa. At the end of his thesis, he hopes to have collected enough data to facilitate the hybridization and development of new cultivars for these crops.

To date, he has received at least nine research and travel grants, including from the International Foundation for Science (IFS), the Rufford Foundation (Rufford Small Grant for Nature Conservation), and the CONNECTED Virus Network (Bristol University, UK).

Thibault was born in 1990, in Cotonou (Benin), under sad circumstances. His father died suddenly three months before his birth, and his 25-year-old mother, left to look after the baby alone with no support from his father's family, was thrown out on the street. His father's premature death would continue to haunt their lives.

The young Thibault began his studies at a private school, but he was placed in a state school from Year 5 until the end of his secondary school studies due to increasing school fees.

An excellent student, Thibault was consistently top of his class until junior high. Unfortunately, in 2007, he failed the maths test in his final exam and obtained his High School Diploma in Maths and Natural Sciences with a low pass rate. "It was a huge shock," he says sadly.

He was profoundly affected by this event at the age of 17 because he had always wanted to study medicine and had an average pass rate of 18/20 in Biology for his high school diploma. His dream of becoming a doctor had been shattered.

Aware of the sacrifices made by his mother and in the hope of winning a scholarship if successful, Thibault decided to prepare for the national entrance exams.

Unfortunately, the exams were canceled that year, and candidates were admitted based on their high school results. Yet another setback! In October 2007, he reluctantly enrolled on the CBG program (Chemistry, Biology, Geology) at the University of Abomey-Calavi.

To finance his studies, he began tutoring firstyear students and, through recommendations, gave private lessons to senior secondary school students. As a result, during the first two years of university, he managed to finance his studies and even help his mother. At 19 years old, he decided to leave the family home to no longer burden his mother, whose unfailing support he will never forget.

In 2012, Thibault obtained a Bachelor's degree in Natural Sciences. He wanted to continue his studies on a Master's degree in Genetics but could not afford it. As a young graduate, he was recruited to work in computer maintenance for a Construction and Public Works (BTP) company. For three years, Thibault was fully invested in his work, thus learning how to compile tender documents, monitor construction sites, and complete accounting and other tasks. Over time, he gained his boss's trust and even became the company manager. During this time, he continued to save money so that he could enroll in a postgraduate course.

A national entrance exam was launched to recruit pilots. The entrance exams were held over two intensive weeks. Out of 10,000, only 50 candidates are pre-selected. Thibault was delighted to discover he had ranked among the top 30. He was very hopeful about this new and fortuitous opportunity. He won a scholarship, but his place was awarded to another candidate at the last minute. Once again, fate dealt him a cruel blow, and another dream was dashed. Thibault was devastated. "This event was the greatest discouragement of my life, but in some ways, it also served as a catalyst."

"I'm a part of this 2020 One Planet Fellowship program because, at certain points in my life, everything just fell into place so that I would meet people along the way who would show me incredible support," he emphasizes.

Motivated by his desire to impact people's behavior concerning climate change positively, he opted to specialize in genetics for his Master's degree. His thesis focused on the genetic improvement of Doyiwé (geocarpa groundnut), a neglected legume, and probably one of the most expensive in the world. The geocarpa groundnut (Macrotyloma geocarpum), commonly known as doyiwé in Benin, is a legume of the Fabaceae family, native to West Africa where it is

Thibault research focuses on the genetic improvement of Doyiwé (geocarpa groundnut). He aims to develop a resilient variety of doyiwé to increase yields and mprove the livelihoods of smallholder farmers a Benin.

grown by small-scale farmers in countries such as Ghana, Nigeria, Togo, and Burkina Faso. It is a nutrient-rich plant that is relatively drought-resistant and could help reduce extreme poverty due to its high economic value.

Thibault aimed to develop at least one resilient variety of doyiwé that would produce a high yield. Thibault published his first paper and obtained a grant from the International Foundation for Science (IFS). His key focus is improving the well-being of smallholder farmers. He is particularly outraged by the extreme poverty faced by those who work to feed others in a world that is supposed to be fair. Thibault is committed to helping farmers, and this is an integral part of his project. It is essential to meet with these farmers to understand their needs and expectations and identify their difficulties.

Thibault is highly motivated to be selected for the One Planet Fellowship because he had been in Kenya and met colleagues attending the orientation and mentoring workshop for the first One Planet cohort. This chance meeting was an opportunity to experience the atmosphere among the group. As he marveled at the conversations taking place around him, he quickly understood the need to seize this opportunity.

Thibault aims to become one of the world's leading experts in the genetic improvement of neglected plants in Benin, mainly through modern tools to accelerate the selection process.

Over the next ten years, he plans to become a Full Professor in genetic improvement at a university in Benin. "That is my biggest dream," he states. He also hopes to develop and trade, making an improved plant variety adopted by West African groundnut producers. This may involve working for the CGIAR group, as universities lack funding and equipment.

One of the main benefits of the One Planet Fellowship is having access to a working and collaborative network. Thibault intends to make the most of his time with this group of experts.

At the start of the Fellowship, he first identified colleagues within cohort two with similar and complementary research topics. He is aware that to get the most out of this unique experience, he must make optimal use of his time with this network of experts.

According to Thibault, the One Planet Fellowship offers, among others, an opportunity to update his knowledge of current issues in climate change and agriculture and to develop new ideas.

He believes that the researcher's objectives are not always aligned with these communities' real needs/problems. This program will also help him integrate these factors into his work for the well-being of communities and ensure positive and sustainable impact.

He cites the lack of funding for research work as a significant challenge for researchers. Governments allocate insufficient national budgets to research, and financing is sometimes non-existent or inaccessible for young researchers. In response to this issue, Thibault continues developing projects and looking for funding sources (small grants), particularly amid the current COVID-19 crisis.

He complains that many field experiments have been abandoned due to the blockades to curb the pandemic. Additionally, he needs to be more assertive when looking for funding to compensate for a lost time.

However, he has previously stated that this strategy may prove to be counter-productive. He has also not forgotten his struggles with English at the start of his career. Fortunately, upon the kind advice of his mentors, he decided to study for an English exam (TOEFL). Today, he has made enormous progress in English, and oddly enough, he now feels less comfortable in French.

Thibault Kafoutchoni Konoutan is one of the growing number of candidates selected to participate in the One Planet Fellowship. The One Planet Fellowship is a career development initiative that is building a robust pipeline of highly connected, inter-generational scientists equipped to use a gender lens to help Africa's smallholder farmers cope with climate change. The One Planet Fellowship is funded by the Bill &Melinda Gates Foundation, the BNP Paribas Foundation, the European Union and Canada's International Development Research Centre (IDRC). African Women in Agricultural Research and Development (AWARD) and Agropolis Fondation are jointly implementing the Fellowship.