



Position

Student – Researcher

Institution

Pan African University Life and Earth Science Institute, (PAULESI), University of Ibadan, Nigeria

Country

Côte d'Ivoire

Education

Msc, Agriculture and Forestry, Jean Lorougnon Guédé Daloa University, Côte d'Ivoire

Mentor

Prof. Fatogoma Sorho, Research and Innovation Officer, WASCAL - African Centre of Excellence on Climate Change, Biodiversity and Sustainable Agriculture, Félix Houphouët Boigny University (FHBU) of Cocody, Côte d'Ivoire

Research Area

Control of anthracnose using resistant variety in the species *Dioscorea alata*.

Ouattara Fatoumata

2021 One Planet Laureate Candidate

Ouattara Fatoumata was born in 1993 in Abidjan, the economic capital of Côte d'Ivoire, into a large family of eight children, three of whom are girls. Her father is a driver and her mother a shopkeeper.

Her parents, of modest means, worked hard and sacrificed their lives to pay for their children's education, including the girls, despite criticism.

The Ouattara family is from the northeast of Côte d'Ivoire. In this part of the country, it is not customary for young girls to go to school.

However, at one point, this dedicated father who chose to send all of his children to school could no longer afford their school fees.

Ouattara's older brothers interrupted their studies and started working to finance her schooling. The decision was unanimous: Ouattara must continue her studies because she was the only keen, assiduous girl and a good student.

She completed her primary and secondary education in Abobo, a commune in the district of Abidjan, located in Abidjan north.

A brilliant student, she obtained a scholarship after the BEPC and was sent to a school of excellence for girls in Bingerville, part of the Abidjan agglomeration. She obtained her scientific baccalaureate with the natural sciences option.

When she was young, Ouattara was initially attracted to medical studies; the reason behind this was her sickly childhood. But as she grew up, she changed her mind.

She was moved by famine in rural areas and wished to contribute to food security.

She then went to Daloa University in Natural Sciences, Agroforestry, and Environment. She worked on the rapid multiplication of cuttings of sweet potatoes during her bachelor's, comparing their two environments (fields and tunnels).

Due to her work, farmers could have cuttings (equipment available) even during the dry season. This was the first trigger, she recalls. She is very sensitive to agriculture and food security issues, which is why she opted for agriculture after the bachelor's degree and a master's in agriculture and forestry.

This research focused on promoting and developing the orange-fleshed sweet potato rich in vitamin A.

She focused on plant breeding to combat food insecurity. Her research focused on fighting anthracnose through resistant variety in the species *Dioscorea alata*. She was passionate about this research. It was a revelation.

Indeed, throughout her studies, she heard about climate change, declining yields, and sustainable agriculture.

As these were subjects close to her heart, she wanted to contribute to research in these areas. Without hesitation, she chose the sustainable agriculture and climate change option.

She continued to excel and was awarded a scholarship from the first year of university to her master's level.

"I want to make my parents proud and prove that school is also for women," she says.

Ouattara enrolled in a thesis at the FHBU at the Center of Excellence on Climate Change, Biodiversity, and Sustainable Agriculture (CEA-CCBAD), but she did not obtain funding. Nevertheless, she managed to win a Pan-African university scholarship for Ibadan in Nigeria for the first year of her thesis at the Pan-African University for Life and Earth Sciences. Her thesis research focused on the fight against anthracnose through resistant variety in the species *Dioscorea alata*. This work was part of sustainable agriculture in the face of climate hazards and improving sources of income for smallholders and women, who are prevalent at all levels of the value chain.

Today a PhD student, Ouattara, is conducting her research at the International Institute of Tropical Agriculture (IITA) in Ibadan, a city in western Nigeria. Her area of research is focused on plant breeding to combat food insecurity. The adverse effects of climate change in its current context are considerable on the agricultural sector of African countries. As agriculture is at the heart of economic productivity and food security, for Ouattara, it is necessary as a scientist to develop strategies for climate-smart agriculture.

Her current research focuses on the disease (anthracnose) in water yams. She aims to improve this species of yam. For the time being, she is not yet working with local communities. However, later in her project, she will develop new yam varieties, and when the disease is identified, she will test both yam varieties (old vs. new) with local farmers. "This is the goal of my work, to improve the yield, income, and living conditions of producers," Ouattara says.

Her mentor at the University of Cocody drew her attention to the One Planet Fellowship. Sensitive to agriculture and food security issues, Ouattara is happy to consolidate and broaden her knowledge in Nigeria. She aspires to return to her country, share her knowledge, and help improve agriculture in Côte d'Ivoire.

Ouattara's research focuses on the control of anthracnose using resistant varieties (sweet potatoes and yams) of *Dioscorea alata* to improve yields and combat food insecurity.

Her objective is to contribute to the sustainable development of communities, especially by integrating women and smallholder farmers into the heart of the fight against the impact of climate change. She aims for them to do this by adapting to climate variability to improve their existing conditions and incomes.

Thanks to AWARD's training, she is in the process of acquiring certain skills (self-confidence, leadership). She relies on the help of her mentor to better guide her on future goals. As she is in contact with many researchers, a network emerging and growing with this collaboration, Ouattara sees the opportunity to work alongside some successful candidates from other countries. This potential teamwork will undoubtedly accelerate the achievement of the objectives she has set for herself.

She intends to share her teachings and learnings and, therefore, positively influence her entourage and her institution. With the knowledge and skills gained from the Fellowship, Ouattara aims to set up a dynamic research team to disseminate good agricultural practices that will help to reduce crop losses caused by abiotic and biotic stresses.

In her opinion, scientific research in Africa presents several difficulties. The projects are interesting, but there is no funding. Her tip is to move toward funded specialisms, but always in the same field to overcome these obstacles.

Ouattara Fatoumata 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.

Do you have any further questions? Send an email to: oneplanet.award@cgiar.org

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