



2013 AWARD Fellow
Folayemi Isaac-Bamgboye

Position	Master's Student
Institution	Federal University of Technology, Akure, Nigeria
Country	Nigeria
Higher National Diploma	Food Science and Technology
Mentor	Professor Ibiyinka Fuwape, Federal University of Technology, Akure

Research area: Development of new food products from pseudo-cereals to promote underused, indigenous species for improved nutrition, health, and livelihoods.

Folayemi Isaac-Bamgboye developed an interest in Food Science early on. "Growing up, I loved carrots and I was always looking for ways to preserve them so that they could be available all year round," she says. This led her to pursue a master's degree in Food Science and Technology with a special interest in Food Microbiology and Safety, which she is now completing after obtaining a BSc in Statistics.

Today, as a researcher in Food Microbiology and Safety, Isaac-Bamgboye's current work is focused on developing two products using *Amaranthus hybridus*, an under-used but nutritionally promising grain. It is known as a pseudo-cereal because it does not belong to the grass family, but is used in the same way as cereal grains.

"I am developing two products from *Amaranthus hybridus*: a weaning food and a refreshing, non-alcoholic beverage," says Isaac-Bamgboye. "I am assessing their microbiological safety, shelf stability, and physicochemical properties compared to the traditional versions of these two products, which are based on maize and sorghum, respectively."

Amaranth is known to be a richer source of vitamins, such as riboflavin, ascorbic acid, vitamin E, and folic acid, than either maize or sorghum. It also has unique functional properties and lower anti-nutrients like tannins, which are present in sorghum, and a better amino-acid profile and protein content than most cereals.

Isaac-Bamgboye is working with two rural communities, who have given her land to cultivate these grains, and she is preparing to teach women farmers how to grow them. "I love coming up with nutritious, healthy, and safe products that meet the needs of people who are food insecure and malnourished," she says. "I am passionate about using underused crops that are not so popular and promoting them as much as possible. If I can achieve this, it will reduce poverty and hunger, and rural women will be empowered economically so that they will not be dependent on their husbands for the nutritional needs of their families."

In terms of career goals, Isaac-Bamgboye wants to further her education, publish papers, and influence policies to support agriculture and food security in Nigeria. She expects that the AWARD Fellowship will help her increase her visibility through networking. "It will help me build confidence to empower myself and others," she asserts. Hoping to eventually enter academics, she values the science, leadership, and proposal writing courses available to her as an AWARD Fellow.

"AWARD validated my goals and helped me realize I am on the right track," she concludes. "It has given me the push I needed to take a step forward in my career, and have already become more confident."

Isaac-Bamgboye is one of a growing number of African women agricultural scientists who have won an AWARD Fellowship. AWARD is a career-development program that equips top women agricultural scientists across Sub-Saharan Africa to accelerate agricultural gains by strengthening their research and leadership skills through tailored fellowships. AWARD is a catalyst for innovations with high potential to contribute to the prosperity and well-being of African smallholder farmers, most of whom are women.

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