



2013 AWARD Fellow
Miriam Ahunna Ofoeze

Position	Pupil Research Officer
Institution	National Root Crops Research Institute (NRCRI)
Country	Nigeria
BSc	Food Science and Technology Michael Okpara University of Agriculture, Umudike, 2004
Mentor	Professor Sanni Lateef Oladimeji Federal University of Agriculture, Abeokuta

Research area: Postharvest processing, use, and value addition of major and minor root and tuber crops, including extension services to educate and sensitize women, youths, and rural dwellers on processing of these crops and products to provide food security.

Miriam Ofoeze was raised in eastern Nigeria, where her mother, a teacher, and her father, a civil servant, also farmed, growing yams, melons, and maize. “My dad was only interested in yams because it’s a celebrated crop in our region, especially by men. It’s a big deal,” she says. Most other crops, such as maize and cassava, are left for women to grow. “It is very tedious work with huge postharvest losses. Seeing this prompted me to study food science to help preserve produce so we can move to limited, or better yet, zero waste.”

Today, Ofoeze’s work at NRCRI concentrates on cocoyam. Considered a woman’s crop in Nigeria, it is rich in beta-carotene. “Cocoyam is very nutritious, but when you eat it, your throat itches,” she says. “Women tend to store it for a very long time, soaked in oil, in an effort to mask the itching effect.”

The irritation upon consumption has been attributed to the presence of oxalic acid in the leaves and corms. During her research, Ofoeze succeeded in reducing the oxalic acid by fermenting the cocoyam for 48 hours, closely monitoring microbial growth, and then making flour. “I used the flour to make cookies, which turned out better than those made with regular wheat flour,” she enthuses. “I am very happy with my results.” She has already published a paper with her findings.

Ofoeze has been training rural women on this technique through an extension organization, so they can take the information to their communities. She is following up quarterly to see how they have adapted the new ideas and methods. “More research is needed to find suitable processing methods, and to evaluate the physicochemical properties of the products,” she continues. “We also need to further educate people on these products and processing methods.” She is confident that cocoyam will help address vitamin A deficiency in children, while providing a means of livelihood for rural women and youth in Nigeria and Africa as a whole.

Seeing her technologies in the hands of women farmers whose incomes are increasing as a result of her

input makes Ofoeze feel very fulfilled, and spurs her to work even harder. She appreciates working with the men as well, who she says took some time to trust her. "I tried to be focused and friendly, and now, they respect me."

Ofoeze plans to continue with a master's degree in Food Science and Technology, and is considering focusing on Child Nutrition and Food Science for her PhD. She has already published six papers in academic journals, and plans to write more.

Ofoeze expects the AWARD Fellowship to provide her with ample opportunities to network with peers and to grow professionally through mentoring. "I see the mentoring process as very valuable—it will guide me to reach my career goals," she says. She is also looking forward to taking AWARD courses to improve her science skills, and she hopes to learn more about cultural diversity along the way.

Ofoeze 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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