



**AWARD Fellow**  
**Felistus Patience Chipungu**

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| <b>Position</b>    | Plant breeder                                                                          |
| <b>Institution</b> | Department of Agricultural Research Services<br>Ministry of Agriculture and Irrigation |
| <b>Country</b>     | Malawi                                                                                 |
| <b>PhD</b>         | Breeding and Crop Improvement<br>Chancellor College, University of Malawi              |
| <b>Mentor</b>      | Dr. Eric Chilembwe, Lecturer<br>Agricultural Research and Extension Trust, Malawi      |

*Research area: Sweet-potato breeding for improved food security and nutrition*

Felistus Patience Chipungu is a sweet-potato breeder who works in Malawi's Ministry of Agriculture and Irrigation with the Department of Agricultural Research Services. She is determined to "put sweet potatoes on the map" in Malawi, where poverty, food insecurity and under-nutrition prevail.

Chipungu's goal is to help diversify local diets that are dependent on maize—a crop susceptible to drought and price fluctuations—by introducing improved sweet-potato varieties that she has bred to provide rural communities with increased nutrition and food security. Orange-fleshed sweet potato is a rich source of vitamin A, and can be eaten raw as a children's snack. Economical to produce, the crop is extremely drought resistant and requires very few agricultural inputs. In Africa, it is primarily grown by female smallholder farmers. Chipungu recently taught a large group of women farmers how to use sweet-potato pulp and flour—an affordable alternative to wheat—to bake bread and doughnuts.

In 2010, Chipungu was working on the molecular characterization of Malawian sweet-potato varieties, but she needed to upgrade her biotechnological skills. She decided to compete for AWARD-sponsored advanced science training.

Chipungu's winning proposal earned her an attachment at the International Potato Center (CIP) in Peru and Mozambique, where she studied under two leading sweet-potato researchers, Dr. Wolfgang Grueneberg and Dr. Maria Andrade. She was also introduced to heat-tolerant potato varieties developed at CIP, which are relevant for areas in Malawi where these are not yet grown. She returned to Malawi with 72 new sweet-potato varieties or accessions.

"I foresee major improvements in the livelihoods of rural Malawians through the adoption of these varieties," Chipungu reports with enthusiasm.

Chipungu also acquired two simple software programs from CIP for use in analyzing data from the breeding programs, and learned three methods of DNA extraction, equipping her to have a substantial impact on strengthening the sweet potato-breeding capacity in Malawi.

The technical skills that Chipungu gained through AWARD have also launched her onto the international stage. “The scientific writing course was a one-of-a-kind opportunity in my life,” says Chipungu. “I wrote two successful abstracts during the training. They earned me the participation in an international workshop in Lisbon, Portugal, and a place among a few high-caliber scientists at the Agricultural Research Connections (ARC) workshop in Nairobi, Kenya,” reports Chipungu. The goal of the ARC workshop was to explore collaboration among scientists from the U.S.A., the U.K., and sub-Saharan Africa. Chipungu joined Dr. Damaris Odeny, another AWARD Fellow, and other participants to establish the AFRI-SOL network, which aims to enhance research on African Solanaceae (nightshade family) crops.

Chipungu’s leadership and influence are increasingly being recognized in her workplace. “I usually represent the director in senior staff meetings, and I am member of the department’s agricultural research policy committee,” she said confidently. She has also become a board member of the Centre for Environmental Policy and Advocacy, and is on the planning committee for the National Agriculture Symposium.

“AWARD has shaped my career while contributing to the well-being of Malawians,” reflects Chipungu. Equipped with new-found leadership skills and enhanced technical expertise, it will not be long before this researcher puts sweet potatoes on the map, and on every dinner table, in Malawi.

*Chipungu is one of a growing number of African women agricultural scientists who have won an AWARD Fellowship. AWARD is a professional development program that strengthens the research and leadership skills of African women in agricultural science, empowering them to contribute more effectively to poverty alleviation and food security in sub-Saharan Africa. AWARD is generously supported by the Bill & Melinda Gates Foundation and the United States Agency for International Development. For more information, visit [www.awardfellowships.org](http://www.awardfellowships.org)*

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