



2011 AWARD Fellow
Felister Mbutu Nzuve

Position	PhD student
Institution	Makerere University, Uganda Kenya Agricultural Research Institute (KARI), Njoro
Country	Kenya
MSc	Plant Breeding and Genetics, University of Nairobi
Mentor	Eunice Mutitu, Director Board of postgraduate studies, University of Nairobi Professor of Plant Pathology

Research area: Wheat breeding for resistance to stem rust.

Felister Mbutu Nzuve was only five years old when her father passed away. Her mother, barely managing with a tiny pension and the limited harvest from the family's small farm in the Makueni Hills of eastern Kenya, recognized her only daughter's potential. "We were very poor, and hunger was a well-known phenomenon in our family," says Nzuve. "The rains are unreliable in our area, and we did not use appropriate agricultural practices."

Thanks to financial assistance from her uncle, Nzuve graduated from high school, excelling in all subjects, especially the sciences. After graduating with a BSc in agriculture, she worked on a flower farm near Nairobi for two years before beginning an MSc degree in plant breeding and genetics at the University of Nairobi.

In 2005, Nzuve won a partial scholarship from the Consultative Group on International Agricultural Research's Generation Challenge Program on Maize. Immediately following, the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) offered her a PhD scholarship. Married with one small child and expecting a second, Nzuve started her studies plant breeding and biotechnology at Makerere University in Uganda, closely collaborating with the International Center for Maize and Wheat Improvement (CIMMYT) and KARI Njoro for her practical field work.

Although she originally intended to conduct further research in maize breeding, her work on wheat has already yielded exciting results. "Several wheat lines that I have tested contain resistance against stem rust, and I have been able to cross-breed them," she explains. Publishing this work earned her a travel grant from Monsanto to present her work the Borlaug Global Rust Initiative Technical Workshop in St. Paul, Minnesota in June 2011. That same year, the U.S. National Science Foundation's Basic Research to Enable Agricultural Development (BREAD) program supported her to visit Montana State University to learn about molecular marker screening and development for breeding. What gives her the most joy, however, is helping the women wheat farmers who come to KARI Njoro to ask for advice. "I love to talk and work with the women, communicating with them in Kiswahili to establish an immediate rapport."

Nzuve's longer-term goal is to work on underused crops, such as lab-lab, millet, sorghum, cassava, sweet potatoes, and pigeon peas. She wants to see these crops used much more frequently, and reintroduced in different parts of Kenya to improve food security.

"Seeing the results of my work in a fairly short time, and realizing that working with molecular markers is actually less difficult than I expected—thanks to working in an enabling environment such as with CIMMYT and KARI Njoro—has been a great experience so far," she says. "I really want to help improve agricultural productivity using proper farming methods in our country."

Career-wise, Nzuve plans to climb the academic ladder to eventually become a leading professor in plant breeding. Already having increased her professional network through AWARD, she looks forward to publishing more and in highly regarded journals. She sees substantial potential for collaboration with other AWARD Fellows and Mentors.

Nzuve is one of a growing number of African woman 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. For more information, visit www.awardfellowships.org
