

## **Profile**



2011 AWARD Fellow **Grace Nakabonge** 

Position	Lecturer	
Institution	Makerere University	
Country	Uganda	
PhD	Plant pathology, University of Pretoria, 2006	
Mentor	Silvester Nyakaana, Associate professor  Makerere University, School of Biosciences,  Department of Biological Sciences	

Research area: Use of molecular techniques in sustainable management and conservation of plant genetic resources.

As a young woman, Grace Nakabonge dreamed of becoming a medical doctor, but revised her goal to focus on forest pathology—a passion that sprung from a part-time job assisting a forestry professor with data entry during her BSc studies at Makerere University. A visiting professor from South Africa also contributed to Nakabonge's newfound ambition to excel and earn the honors required to do a master's degree at the renowned Forestry and Agricultural Biotechnology Institute (FABI) at the University of Pretoria. After Nakabonge graduated with distinction, she won a PhD scholarship at FABI, where she completed her doctorate in 2006.

"In 2009 I won a research grant from the Makerere Carnegie Institutional Development Program," Nakabonge recalls. "This allowed me to pursue research on wild forestry species and especially the shea butter tree, *Vitelleria paradoxa*, to establish how this tree could be domesticated."

Based on her initial work with Plant Resources of Tropical Africa, Nakabonge is interested in characterizing different *V paradoxa* varieties, using molecular techniques to confirm genotypic differences between phenotypes. "I want to select genotypes with the best production potential for the nuts from which the oil is extracted," she explains. This very valuable tree has never been domesticated, yet it is the livelihood of women in the north and east of Uganda. They depend on *V paradoxa* for cooking oil, medicine, cosmetics, and cash. "But sometimes, they make the mistake of cutting down those valuable trees for firewood, which breaks my heart," she says. Once she has characterized the most efficient species, the urgent next step is awareness raising and education.

Nakabonge aims for a career in academia and to attract sufficient funding for her research. She says AWARD has already helped her to focus on her goals, and she plans to compete for an AWARD-sponsored research attachment to work at CIRAD in Montpellier, France, under the Agropolis Fondation umbrella.

With her ultimate goal of establishing and heading a biotechnology center in Uganda, she especially looks forward to being able to write better proposals, publish more, and become a skilled leader. "Working with the essence of life, DNA, is so exciting," Nakabonge says enthusiastically. "Linking an initially abstract concept to practical work, and coming up with a really interesting story; that is what makes science real."

Nakabonge 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