



2009 AWARD Fellow
Ruth Wanyera

Position:	Principal research officer
Institution:	Kenya Agricultural Research Institute (KARI)
Country:	Kenya
MSc:	Plant Protection/Plant Pathology Ukrainian Agricultural Academy, Ukraine, 1981
Mentored by:	Dr. Florence Olubayo Chairman and senior lecturer College of Agriculture and Veterinary Sciences University of Nairobi, Nairobi, Kenya

Research area: Molecular characterization of stem rust race Ug99 lineage for risk mitigation in smallholder wheat production systems in Kenya

Ruth Wanyera knows wheat. It has been the focus of her career for almost three decades. In 2009, Wanyera was invited by the late Nobel Prize laureate, Dr. Norman Borlaug, to a global conference in Mexico to present her research on stem rust—a virulent disease that threatens wheat production worldwide. Her role in this critical research, along with that of fellow researcher, Peter Njau, was described at the conference as “incalculable.”

Wanyera, 58, who holds an MSc in plant protection, has worked at KARI in Njoro, Kenya for 20 years, where she is the head of the plant pathology section and national wheat research coordinator. Prior to joining KARI, Wanyera served for eight years as an agricultural officer with Ministry of Agriculture in the scientific research division. She was recently promoted from senior research officer to principal research officer after a rigorous and competitive interview by the KARI Board of Management.

Wanyera and the scientists at KARI, along with collaborators at the International Maize and Wheat Improvement Center (CIMMYT) in Mexico, the International Center for Agricultural Research in the Dry Lands (ICARDA) in Syria, Cornell University in the USA and other partners, are playing a central role in reducing the world’s vulnerability to stem rust Ug99, the most stubborn wheat rust disease. The team helped establish the true magnitude of Ug99’s threat to world food security. It evaluated various wheat lines in Njoro’s research fields and worked with breeders to develop the capacity to evaluate 40,000 different wheat lines annually.

The KARI team is said to be a global asset in the battle against Ug99. Last year, they worked with international experts to test 48,000 wheat lines from more than 23 countries for resistance to Ug99. Named for its discovery in Uganda 11 years ago, the reddish brown, windborne fungus has decimated 80 percent of the wheat fields in some areas of Kenya.

At KARI, Wanyera is also involved in outreach (advisory services) and surveillance programmes covering wheat and other crops within KARI’s mandate regions. In the field, she answers questions about crop protection, interacting with farmers from all spheres of life. “Through these programs, I became interested

in rural women farmers who do most of the work with hardly any financial support. These women need advice and support to improve their daily activities so that they can sustain their families," says Wanyera.

Wanyera works with women stakeholders and leaders in agriculture, encouraging them to discuss issues and develop agricultural strategies to strengthen their roles and community-based action for improved food security.

"My desire is to fully incorporate women's participation, including girl children, in the development process, emphasizing the need to design and implement programs to provide productive resources to rural women," says Wanyera. "This is a process of change that brings benefit to all people, particularly to the poorest of the poor."

Through her work, Wanyera has travelled widely, making scientific presentations at seminars, workshops, and conferences in more than 15 countries. She has also coordinated a number of research projects published in conference proceedings and refereed journals. She has also co-authored book chapters and been awarded a number of research funds and consultancies. KARI recognized Wanyera with awards for her scientific presentation skills during a biennial conference.

Wanyera is a founding member of the Kenya Professional Association of Women in Agriculture and Environment (KEPAWAE) and was a provincial representative in Rift Valley Province from 1996-2003.

She is also a member of American Phytopathological Society and a Board of Governors member at Keriko Secondary School in Nakuru, Kenya.

In 2009, Wanyera won a two-year AWARD Fellowship which is benefiting her career already. "I have learned to be visible and confident through creation of increased networks, professional associations, publications in refereed journals," notes Wanyera. "I am acquiring people skills by attending project management and proposal writing courses. The AWARD program has challenged me to pursue a PhD level and I plan to undertake this. I will contribute to food security in Kenya through improved wheat production management technologies."

Wanyera is particularly enthusiastic about AWARD's mentoring component. During the program's first year, she is being mentored by a senior scientist from the University of Nairobi. In the second year, she will mentor a junior woman scientist herself-an opportunity she relishes.

"I am determined to mentor as many young women scientists as I can. I cherish my specialization and would like to be a role model to them. Women in agricultural research and development need not fear anything, but the fear is there anyway and we must overcome it. There is a lot of gender imbalance among wheat farmers, as well as rust researchers in Africa. To engage and build women's capacity, we need to do a lot of coaching and mentoring, which will in turn improve the livelihoods of many farmers in Africa."

Wanyera is one of 180 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, please visit www.awardfellowships.org
