



2014 AWARD Fellow

Olanike Omotola Omolehin

Position	Research Fellow
Institution	International Institute of Tropical Agriculture (IITA)
Country	Nigeria
BSc	Crop Science, University of Ibadan (UI), 2010
Mentor	Silvestro Meseka, Maize Breeder, Maize Improvement Program, IITA
Research Area	Provision of alternative forms of <i>Striga hermonthica</i> control through development of herbicide-resistant maize varieties for resource-poor farmers.

“Striga weed is one of the constraints to Nigeria becoming a country whose economy benefits not only from petroleum, but also from a booming agriculture sector.”

Olanike Omotola Omolehin “managed” her family’s kitchen garden from about age seven until she left home for secondary school. “I was in charge of checking what needed to be done and I would tell my father,” she recalls. “My parents also helped me keep snails and poultry that we used for food in our household.

Omolehin went on to study agronomy at university, including an undergraduate project in which she successfully crossed super sweet corn with normal white maize to produce a reduced sweet corn that Nigerians prefer.

In 2012 Omolehin won a scholarship from the Alliance for a Green Revolution in Africa to pursue MSc studies in plant breeding at UI. Based at IITA, she is targeting resistance to the weed striga and herbicide resistance in maize. “Some maize genotypes are susceptible to striga so farmers control the weed by manually applying herbicides. However, while farmers are targeting striga, they are also killing the maize, which is susceptible to herbicide,” she explains. Omolehin is working to identify maize genotypes that are resistant to herbicides.

“The reason we do not target resistance to striga is because this may affect yield,” she states. Once identified, the herbicide-resistant maize seed is coated (or dressed) with enough herbicide to kill striga. “You don’t need to carry a knapsack and spray the crop, just coat the seed before planting.”

Striga causes 70 to 100 percent losses of maize farmers’ crops in northern Nigeria, which produces most of the cereals in the country. “Striga is one of the constraints to Nigeria becoming a country whose economy benefits not only from petroleum, but also from a booming

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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.

AWARD is generously supported by the Bill & Melinda Gates Foundation, the United States Agency for International Development, and the Alliance for a Green Revolution in Africa. For more information, visit www.awardfellowships.org

agriculture sector," explains Omolehin. Striga is also a problem in other parts of Africa and the herbicide-resistant technology she has helped to develop can be used in other countries as well.

Omolehin, a research fellow at IITA, is finalizing her MSc studies and plans to take an examination that may allow her to go straight into PhD studies. She hopes to start a doctoral program in 2015 and is currently searching for scholarship opportunities. "I would like to do the degree outside the country so I can meet new people and explore new opportunities," she says.

As an AWARD Fellow, Omolehin looks forward to the networking opportunities. "I expect only one thing from the AWARD Fellowship—to get connections, connections, connections!" says Omolehin. "There is power in numbers." She feels that her visibility will improve and has already met fellows and mentors with whom who she can collaborate on projects and proposals, as well as share germplasm. She is also eager to learn new skills that will enable her to make a difference at her institution. "They will notice that they have an exceptional female on staff!" she says.

Omolehin also expects that skills acquired through AWARD's leadership training will advance her goal of helping smallholders. She plans to continue to work on the IITA team that is developing multiple stress-tolerant maize varieties, and provide them to smallholders. She also hopes to improve her skills in writing scientific papers and to publish her research results in respected journals, increasing her visibility. "This will help me achieve my goal of becoming a leading scientist in an international agricultural institute," she concludes.