

# Student Profile



## Eric Owusu-Mensah

PhD in Food Science & Technology candidate  
Kwame Nkrumah University of Science and Technology  
Associated with the SASHA Breeding program

Eric Owusu-Mensah is a young, successful Ghanaian entrepreneur and researcher, interested in evaluating sweetpotato germplasm for suitability in its use in both sweet and non-sweet food products. Eric studies at the Kwame Nkrumah University of Science and Technology in Kumasi, Ghana, and has been working with the SASHA project's West Africa program since 2010.

"I became interested in adding value to food products because here in Ghana, we suffer a lot of post-harvest losses," Eric begins. With previous experience in food science through a Master's thesis researching the production of sugar syrup whereby Eric optimized rice malt and use it to produce sugar from cassava starch, Eric has been able to build his own food processing company. Quama Food has been manufacturing fresh yoghurt since 2008, two years after a work experience in the Ministry of Trade and Industry prompted Eric's interest in adding value to local raw materials. Eric built the company from a single room and employee to a staff of fifteen that has taken over since he stepped back to pursue his PhD. The transition back to school has been seamless, though Quama Food is simply on the backburner for now, until Eric finishes his dissertation in 2013.

His main objective in his PhD research has been to identify sweetpotato genotypes with desirable levels of amylase activity and sugar, and assess their potential use in product development. Eric has broken down his research objectives into two stages: harvest and post-harvest. At harvest, he intends to determine amylase activities, sugars, and starches of sweetpotato genotypes from three different production environments (Fumesua – Forest zone, Komenda – coastal savannah, and Ohawu/Tono – guinea savannah) to find out whether production is affected by its environment. In the post-harvest stage, Eric will once again determine amylase activities, sugar content, and sensory attributes to understand changes undergone by sweetpotato when stored and processed. Eric then plans to characterize the orange-fleshed sweetpotato varieties with which he is working in order to classify them as either low-sweet roots or sweet roots. Eric has just begun his project, with his first harvest date set for September, 2011. He believes that his research will have an impact on current research into value addition to sweetpotato and the production of sugar syrup, as well as supporting the use of sweetpotato as a crop for food security.

However, his research has already had an impact. Working with Dr. Ted Carey of CIP Ghana, he has been able to enhance his research skills and transform himself into a more knowledgeable businessman. "I am very grateful for the way that [Dr. Carey] is open and ready to assist in any way possible," Eric says.

Working with the SASHA project has already gotten Eric making plans for the next Quama Food product on the market: sweetpotato yoghurt!