

Sharon M. Tusiime

Cell Phone: +256701562035 or +256786563242

Email: smbabazi85@gmail.com

EDUCATION

- Doctor of Philosophy**, Horticulture, Iowa State University, Ames IA, USA Aug. 2019
Minor: Crop Production and Physiology - Seed Science and Technology
Dissertation: Current status and prospects of tomato seed production and distribution in Uganda
- Master of Science**, Horticulture, Iowa State University, Ames IA, USA July 2014
Thesis: Evaluating horticultural practices for sustainable tomato production in Kamuli, Uganda
- Bachelors**, Agribusiness Management, Makerere University, Kampala, Uganda May 2011
Research project: Profitability of groundnut products in Kampala markets, Uganda
-

RESEARCH EXPERIENCE

- Seed Specialist**, *Makerere University Regional Center for Crop Improvement (MaRCCI), Kampala, Uganda.* Dec. 2019 – present
- Develop and manage seed systems for the cowpea and sorghum breeding program
 - Establish and maintain viable research and product development networks with key partners for the seed business in Uganda and the region
 - Provide guidance to students as they implement experimental activities
 - Assist in any other appropriate activities as assigned by the director
- Postdoctoral Research Associate**, *Horticulture, Iowa State University, IA, USA* Sept. – Nov. 2019
Department of Horticulture, Iowa State University
- Assisted in teaching courses
 - Engaged in the scholarship of teaching and learning
 - Wrote and submitted peer reviewed research articles for publication
- Graduate Research Assistant**, *Horticulture, Iowa State University, IA, USA* Aug. 2012 – Aug. 2019
Department of Horticulture, Iowa State University
- Conducted laboratory experiments to determine the quality of tomato seeds on the Ugandan market.
 - Implemented laboratory experiments aimed at developing practices that improve tomato seed quality among small-landholder farmers in Uganda.
 - Surveyed approximately 550 small-landholder and youth farmers on tomato seed management and practices in Kamuli, Uganda.

RESEARCH EXPERIENCE CONTINUED

- Planned and executed surveys of approximately 560 key actors from private and public institutions involved in the tomato seed industry in Uganda.
- Conducted surveys and observations on seven seed companies to study their seed production and conditioning processes in Uganda and Kenya
- Organized and managed horticultural field plot experiments that evaluated sustainable practices for producing tomatoes among small-land holder farmers in Uganda.
- Translated research materials from English to Lusoga (local Ugandan language).

Research Intern, Kenya Plant Health Inspectorate Services (KEPHIS), Kenya

July – Oct. 2017

- Performed seed sampling, purity and germination tests on crop species including maize, beans, sorghum, rice, sunflower, green grams, tomatoes and onions.
- Independently conducted seedling evaluations for various crop species including maize, beans, sorghum, rice, green grams, tomatoes and onions.
- Provided germination and purity results and recommendations (to sale or not to sale seed lots) to clients including seed companies, private farmers.

Policy Intern, Ministry of Agriculture, Animal Industry and Fisheries, Uganda

June – Aug. 2016

- Assisted in editing and evaluating a working draft of the National Seed Policy.
- Compared seed related policies between Uganda and other countries.
- Participated in a seed policy stakeholders' workshop.

Program Assistant, Iowa State University- Uganda Program, Kamuli, Uganda

June 2011 – July 2012

- Evaluated five tomato cultivars for early blight disease resistance through controlled field plot experiments
- Trained rural farmers on best horticultural practices and cultivar selection using field plot experiments as demonstration plots.
- Coordinated, and managed a school garden and nutrition/lunch/feeding program in four primary schools in rural Uganda.
- Supervised and maintained university undergraduate interns conducting agricultural projects (Agroforestry, irrigation, bee keeping, poultry, health and sanitation and nutrition).
- Assisted in a research project that surveyed primary school students to evaluate the impact of a school garden on agriculture learning by primary school children in rural Uganda.

Undergraduate Research Assistant, Makerere University, Uganda

Nov. 2010 – May 2011

Research topic: Profitability of groundnut products in Kampala markets

- Developed and implemented a survey of over 50 market vendors
- Conducted qualitative and quantitative data analysis for the project

PUBLICATIONS

Peer-reviewed journal articles

Tusiime, S., G. Nonnecke, D. Masinde, and H. Jensen. Evaluating horticultural practices for sustainable tomato production in eastern, Uganda. 2019. *HortScience* 54(11):1934-1940.

Esther Lugwana Nampeera, Dorothy Masinde, Gail R. Nonnecke, **Sharon M. Tusiime**, John M. Wesonga, Komi K.M. Fiaboe, Lucy K. Murungi, Joseph J. Baidu-Forson, and Mary O. Abukutsa-Onyango. 2019. Farmers' knowledge and practices in the management of insect pests on leafy amaranth in four counties in Kenya. *Journal of Integrated Pest Management*. 10(1):31;1-12.

Natukunda, M.I., Natukunda, K., Kyeyune, G., **Tusiime, S.M.**, Agbemafle, I., and Bisikwa, J. 2020. Management strategies for the noxious invasive parthenium weed (*Parthenium hysterophorus* L.) in Uganda. *African Journal of Agricultural Research*. 15(1):1-9.

Sharon M. Tusiime, Gail Nonnecke, and Helen Jensen. 2020. Tomato seed value chain analysis and seed conditioning among seed companies in Uganda. *International Food and Agribusiness Management Review*. 23 (4)-Pages:501-514.

Tusiime, Sharon Mbabazi, "Current status and prospects of tomato seed production and distribution in Uganda" (2019). *Graduate Theses and Dissertations*. 17589.

<https://lib.dr.iastate.edu/etd/17589>

Sharon M. Tusiime, Gail Nonnecke. Evaluating practices that improve tomato seed quality among small-landholder farmers in Kamuli Uganda, (*In preparation for submission to HortScience. Expected submission: December 2020-February 2021*).

Sharon M. Tusiime, Gail Nonnecke and Dorothy Masinde. Tomato seed management practices among adult and youth farmers in Kamuli, Uganda, (*In preparation for submission to Journal of Agricultural Extension. Expected submission: December 2020-February 2021*).

Sharon M. Tusiime, Gail Nonnecke. Evaluating tomato seed quality and density in Kamuli, Uganda, (*In preparation for submission to HortScience. Expected submission: December 2020-February 2021*).

Abstracts

Tusiime, S. and G. Nonnecke. 2016. Current tomato seed management practices among in and out- of- school youth in Kamuli, Uganda. *HortScience* 51(9) Supplement—2016. American Society for Horticultural Sciences Annual Conference (abstr.).

PUBLICATIONS CONTINUED

Tusiime, S., G. Nonnecke, D. Masinde, and H. Jensen. 2016. Evaluating horticultural practices for sustainable tomato production in Kamuli, Uganda. HortScience 51(9) Supplement—2016. American Society for Horticultural Sciences Annual Conference (abstr.)

Duerfeldt, K., **S. Tusiime** and G. Nonnecke. 2016. Impact of sack gardening by youth in a Ugandan school garden program. HortScience 51(9) Supplement—2016. American Society for Horticultural Sciences Annual Conference (abstr.).

Research Report

Nonnecke, G., **S. Tusiime**, W. Riesselman, B. Havlovic, B. Breach, N. Howell, B. Carpenter, and F. Takenda. 2017. Thornless blackberry cultivars grown with a rotatable cross arm trellis system. Annual Research Report: ISRF16-36

RESEARCH PRESENTATIONS

Norman Borlaug lecture poster competition for graduate and undergraduate students; World Food Issues. Fall, 2018. Iowa State University, Ames, IA, USA.

Title: Evaluating tomato seed quality in Uganda.

Co-author: Dr. Gail Nonnecke.

Association for International Agriculture and Rural Development (AIARD). Summer, 2018. Washington DC, USA.

Title: Business “Un” usual: Aligning critical intersections of agriculture, health and food.

Annual Horticulture Research Retreat. Fall, 2016. Department of Horticulture, Iowa State University, Ames, IA, USA.

Title: Current tomato seed management practices among in- and out of school youth in Kamuli, Uganda.

Co-author: Dr. Gail Nonnecke.

Norman Borlaug lecture poster competition for graduate and undergraduate students; World Food Issues. Fall, 2015. Iowa State University, Ames, IA, USA.

Title: Evaluating horticultural practices for sustainable tomato production in Kamuli, Uganda.

Co-authors: Dr. Gail Nonnecke, Dorothy Masinde and Helen Jensen.

RESEARCH PRESENTATIONS CONTINUED

Global Food Security Consortium. Graduate and undergraduate poster presentations. Spring, 2015 Iowa State University, Ames, IA, USA.

Title: Current tomato seed management practices among in- and out of school youth in Kamuli, Uganda.

Co-author: Dr. Gail Nonnecke.

Annual Horticulture Research Retreat. Fall, 2015. Department of Horticulture, Iowa State University, Ames, IA, USA.

Title: Current tomato seed management practices among in- and out of school youth in Kamuli, Uganda.

Co-author: Dr. Gail Nonnecke.

Norman Borlaug lecture poster competition for graduate and undergraduate students; World Food Issues. Fall, 2014. Iowa State University, Ames, IA, USA.

Title: Evaluation of tomato cultivars and production systems for better yield and disease tolerance in Kamuli District, Uganda.

Co-authors: Dr. Gail Nonnecke, Dorothy Masinde and Helen Jensen.

Annual Horticulture Research Retreat. Fall, 2014. Department of Horticulture, Iowa State University, Ames, IA, USA.

Title: Evaluating horticultural practices for sustainable tomato production in Kamuli, Uganda.

Co-authors: Dr. Gail Nonnecke, Dorothy Masinde and Helen Jensen.

Norman Borlaug lecture poster competition for graduate and undergraduate students; World Food Issues. Fall, 2012. Iowa State University, Ames, IA, USA.

Title: “Evaluation of tomato cultivars and production systems for better yield and disease tolerance in Kamuli District, Uganda.”

Co-authors: Dr. Gail Nonnecke, Amanda Snodgrass, Dennis Lutwama and Dorothy Masinde.

Service learning/school gardening program in Uganda. Summer, 2010. Makerere University, Kampala, Uganda.

Title: “Agroforestry and health and sanitation among primary school children in Kamuli, Uganda.”

Co-authors: Ikendi Samuel, Jacob Hunter, Peninah Nangobi and Katherine Taylor.

SKILL SET

- Seed quality testing (sampling, purity, germination, tetrazolium, seed health) and seedling evaluations
- Designing and implementing scientific field plot experiments
- Designing and implementing scientific laboratory experiments
- Designing and implementing surveys
- Supervising undergraduate students during research
- Designing research posters
- Quantitative and qualitative data analysis and interpretation using statistical packages including SAS, JUMP and SPSS
- Computer proficiency (Microsoft Word, Excel, PowerPoint)
- Proposal and grant writing
- Public speaking and presentation of scientific data/information to other scientists and the public
- Reviewing manuscripts and reports

TEACHING EXPERIENCE

Seed specialist, Makerere University Regional Center for Crop Improvement

Spring, 2020

- Teach CRS 8203, 3 credits: Seed Science and Seed Systems
- Provide guidance and mentoring for graduate students wishing to pursue MSc and PhD thesis work in seed systems
- Assist with teaching and supervision of graduate students as part of MaRCCI support to the Department of Agricultural Production

Graduate Teaching Assistant, Iowa State University

Spring 2013,2014,2015

Global Resource Systems: GRS 201, 3 Credits

- Assisted with instructing approximately 40 students each semester
- Taught students to conduct a comparative analysis of global resources and the various natural and human systems affecting those resources
- Graded individual reports, exams and quizzes
- Actively held office hours
- Developed grading rubrics and assisted students understand these
- Provided feedback to students
- Attended each class and recorded attendance

Global Resource Systems Study Abroad Course Preparation: GRS 495-UG, 1 cr.

Spring 2013 - 2019

- Co-teach a course preparing undergraduate students to travel to Uganda to be part of a service learning and school gardening program.
- Teach students with cultural and technical concepts required to live and work in a developing country.

Service learning: GRS 494- UG, 4 credits

Summer 2013 - 2019

- Co-lead a team of about 16 undergraduate ISU students to Uganda to participate in a service learning and school gardening program.
- Assist students in creating and working through bi-national team projects including agroforestry, irrigation, health and sanitation, beekeeping, composting, school gardening.

TEACHING EXPERIENCE CONTINUED

| | |
|--|------------------|
| Independent Study-Service Learning: GRS 490- Z, 1 credit | Fall 2013 - 2019 |
| <ul style="list-style-type: none">• Co-teach a semester long post study abroad course to ISU undergraduate students after they return from Uganda.• Prepare students to give a University-wide seminar about their study abroad experience.• Assist students with developing and presenting posters about their bi-national team projects. | |

AFFILIATIONS, LEADERSHIP, AND SERVICE

| | |
|--|----------------|
| Member and Future Leader. Assoc. for Int. Agric. and Rural Dev., USA | 2018 – Present |
| Member. Gamma Sigma Delta Honor Society, Iowa State University | 2017 – present |
| Member. American Society for Horticultural Sciences (ASHS), USA | 2016 – present |
| Member. Dean’s Global Advisory committee, Iowa State University | 2015 – 2019 |
| Member. Pi Alpha Xi, National Honor Society for Horticulture, Iowa State University | 2015 – present |
| Senator. Graduate and Professional Student Senate representative for the Horticulture Department, Iowa State University | 2013 – 2014 |
| Vice President. Makerere University Agribusiness Student Association, Uganda. | 2009 – 2010 |

GRANTS AND SCHOLARSHIPS

| | |
|--|---------------------------|
| Consultancy: Capacity skills needs assessment, establish occupational standards, and develop a sector skills strategy and plan for the agriculture sector in Uganda | June 2021 to date |
| Borlaug poster competitions | Fall, 2015, 2016, 2018 |
| American Society for Horticultural Sciences (ASHS) travel grant | Summer, 2016 |
| Department of Horticulture scholarships and travel grant | 2016, 2017, 2018, 2019 |
| Dean of Agriculture and Life Sciences Global Funding for Graduate Students | Summer 2015 |
| Global Food Security Consortium | Summer 2015 |
| | Total. USD 359,425 |

HONORS AND AWARDS

| | |
|---|--|
| <ul style="list-style-type: none">• Graduate teaching excellence award, Graduate College, ISU. | Aug. 2019 |
| <ul style="list-style-type: none">• Selected to participate in a Seed Science and Technology short course. Iowa State University Seed Technology and Business. | Nov. 2017 |
| <ul style="list-style-type: none">• Norman Borlaug lecture poster competition for graduate and undergraduate students, Iowa State University.<ul style="list-style-type: none">○ First place, graduate poster○ Second place, graduate poster○ Third place, graduate poster○ Third place, graduate poster | Oct. 2018 Oct. 2016 Oct. 2015 Oct. 2014 |
| <ul style="list-style-type: none">• Annual Horticulture Research Retreat Award for Graduate Students, Iowa State University.<ul style="list-style-type: none">○ Third place○ Third place | Nov. 2015 Oct. 2014 |

SUBMITTED PROPOSALS

- Jointly submitted PASET Regional Scholarship Innovation Fund. Possible funding for 10 PhD students. Submitted to ICIPE 23 November 2020. USD 1,000,000
 - Jointly submitted a proposal to NARO: Improving and out-scaling innovative seed delivery models for increased availability of quality oil seed crops (groundnuts and soybean) among value chain actors in northern Uganda USD 200,000
 - Jointly submitted a proposal to Makerere University Research and Innovation Fund: Improving Livelihoods of Small-Scale Producers in Uganda Through Digital Advisory Services UGX 200,000,000
-