

Jeninah Karungi-Tumutegyereize, Associate Professor

Department of Agricultural Production,
School of Agricultural Sciences,
College of Agricultural and Environmental Sciences,
Makerere University
P.O. Box 7062, Kampala, Uganda
Tel: +256 414-533580
Mobile: +256 705987559
Email: jkarungi@caes.mak.ac.ug
Alternative Email:jtumutegyereize@gmail.com

Professional Training and Experience

2007: PhD Agriculture (Crop Entomology) Makerere University (Mak.), Kampala, Uganda (Sandwich arrangement with the Swedish University of Agricultural Sciences)
1999: M.Sc. Crop Science, Mak., Kampala, Uganda
1997: B.Sc. Agriculture, Mak., Kampala, Uganda

Research Interests/Expertise

Applied ecological research with emphasis on insects in agro-ecosystems and pest management.

Publications

1. **Karungi J.**, Cherukut S., Ijala AR., Tumuhairwe, JB., Bonabana-Wabbi, J., Nuppenau, EA. Hoehner M., Domptail S., and Otte A. 2018. Elevation and cropping system as drivers of microclimate and abundance of soil, macrofauna in coffee farmlands in mountainous ecologies, *Applied Soil Ecology*, *In press*.
2. Agbahoungba S. **Karungi J.**, Badji A., Sadik K., Gibson P. 2018. Inheritance of cowpea resistance to flower thrips in Uganda germplasm, *Journal of Plant Breeding and Crop Science*, Vol. 10(1), pp. 21-32.
3. Richard Edema¹, Achille E. Assogbadjo² and Patrick R. Rubaihayo
4. Lederer, J. Ogwang, F. and **Karungi, J.** 2017. Knowledge identification and creation among local stakeholders in CDM waste composting projects: A case study from Uganda. *Resources, Conservation and Recycling*, 122: 339–352.
5. Agbahoungba, S., **Karungi, J.** Odong, T.L., Badji, A., Sadik, K. and Rubaihayo, P.R. 2017. Stability and extent of resistance of cowpea lines to flower bud thrips in Uganda. *African Crop Science Journal*, Vol. 25, No. 1, pp. 1 – 24.
6. Agbahoungba, S., **Karungi, J.** Odong, T.L., Badji, A., Kumi, F., Mwila, N. and Rubaihayo, P.R. 2017. Biochemical constituents influencing the resistance of flower bud thrips in cowpea (*Vigna unguiculata* (L.) Walp) germplasm, *Journal of Animal and plant sciences*, 28 (1): 1-21.
7. Agbahoungba, S., **Karungi, J.**, Talwana, H., Badji, A., Kumi, F., Mwila, N., Edema, R., Gibson, P. and Rubaihayo P. 2017. Additive main effects and multiplicative interactions analysis of yield performances in cowpea genotypes under Ugandan environments, *International Journal of Advanced Research* 5(6):349-360.
8. **Karungi, J.**, Erbaugh J. Mark, Ssonko Robinah N., Bonabana- Wabbi, Jackline, Miller, Sally A., and Kyamanywa, Samuel, 2016. Chapter 13. IPM Vegetable Systems in Uganda, in Muniappan, E.A. Heinrichs (eds.), *Integrated Pest Management of Tropical Vegetable Crops*, © Springer Science+Business Media Dordrecht 2016. DOI 10.1007/978-94-024-0924-6_13

9. Kabi, S., **Karungi, J.**, Sigsgaard, L. and Ssebuliba, J.M. 2016. *Dysmicoccus brevipes* (Cockerell) occurrence and infestation behaviour as influenced by farm type, cropping systems and soil management practices. *Agriculture Ecosystems and Environment* 222:23-29.
10. Awio T., **Karungi J.**, Bua B. and Lamo, J. 2016. Relating water management regimes and rice genotypes with occurrence of insect pests and diseases of rice in Uganda. *Journal of Global Agriculture and Ecology*, 4(1): 12-20.
11. Mugisa, I.O., **Karungi, J.**, Akello, B., Ochwo-Ssemakula, M.K.N., Biruma, M., Okello, D.K. and Otim, G. 2015. Determinants of groundnut rosette virus disease occurrence in Uganda. *Crop Protection* 79: 117-123.
12. Ssekandi W., J. W. Mulumba, P. Colangelo, R. Nankya, C. Fadda, **J. Karungi**, M. Otim, P. De Santis & D. I. Jarvis. 2015. The use of common bean (*Phaseolus vulgaris*) traditional varieties and their mixtures with commercial varieties to manage bean fly (*Ophiomyia* spp.) infestations in Uganda, *Journal of Pest Science*, DOI 10.1007/s10340-015-0678-7.
13. Lederer J, **Karungi J**, and Ogwang, F. 2015. The potential of wastes to improve nutrient levels in agricultural soils: A material flow analysis case study from Busia District, Uganda. *Agriculture Ecosystems & Environment*, DOI:10.1016/j.agee.2015.03.024.
14. Mugisa, I.O., **Karungi, J.**, Akello, B., Ochwo-Ssemakula, M.K.N., Biruma, M., Okello, D.K., and Otim, G. 2015. Assessing the effect of farmers' practices on the severity of groundnut rosette virus disease in Uganda. *African journal of Agricultural Research*, 10(9): 995-1003.
15. Awio, T. Bua, B. **Karungi, J.** 2015. Assessing the Effects of Water Management Regimes and Rice Residue on Growth and Yield of Rice in Uganda, *American Journal of Experimental Agriculture*, 7(2): 141-149.
16. **Karungi, J.**, Nambi, N., Ijala, A. R., Jonsson, M., Kyamanywa, S. and Ekbom B. 2015. Relating shading levels and distance from natural vegetation with hemipteran pests and predators occurrence on coffee, *Journal of Applied Entomology*, 139 (9), 669-678 DOI: 10.1111/jen.12203.
17. Jonsson M., Ijala, A.R., Ekbom, B., Kyamanywa, S. and **Karungi, J.** 2014. Contrasting effect of shade levels and altitude on two important coffee pests. *Journal of Pest Science*. DOI: 10.1007/s10340-014-0615-1
18. Lederer, J., **Karungi, J.** and Ogwang, F. 2014. Nährstoffflüsse in Uganda: Eine Fallstudie aus dem Busia District, *Österr Wasser- und Abfallw*, 66:40-50. DOI 10.1007/s00506-013-0129-8.
19. Kirinya, J., D.B. Taylor, S. Kyamanywa, **J. Karungi**, J.M. Erbaugh, and J. Bonabana-Wabbi. 2013. Adoption of integrated pest management (IPM) technologies in Uganda: review of economic studies.

International Journal of Advanced Research (2013), Volume 1, Issue 6, 401-420.

20. Ssemwogerere, C., Ochwo-Ssemakula, M.K.N., Kovach, J., Kyamanywa, S. and **Karungi, J.** 2013. Species composition and occurrence of thrips on tomato and pepper as influenced by farmers' management practices in Uganda. *Journal of Plant Protection Research*, 53(2):158:164.
21. **Karungi, J.**, T. Obua, S. Kyamanywa, C.N. Mortensen and M. Erbaugh. 2013. Seedling protection and field practices for management of insect vectors and viral diseases of hot pepper (*Capsicum chinense* Jacq.) in Uganda, *International Journal of Pest Management* 59(2):103-110
22. Bua, B., **Karungi, J.** and Kawube, G. 2013. Occurrence and effects of pineapple mealybug wilt disease in Central Uganda, *Journal of Agricultural Science and Technology A* 3: 410-416.
23. Lubanga, U. K., **Karungi, J.**, Kyamanywa, S. and Ekbom, B. 2012. Assessing the potential of trap cropping in the management of different insect taxa on white cabbage. *International Journal of Tropical Insect Science*, Vol. 32(4): 218-223.
24. Gafishi Kanyamasoro, M., **Karungi, J.**, Asea, G. and Gibson, P. 2012. Determination of the heterotic groups of maize inbred lines and the inheritance of their resistance to the maize weevil. *African Crop Science Journal*, Vol. 20(1): 99 - 104.
25. **Karungi, J.**, Kyamanywa, S and Ekbom, B. 2010. Organic soil fertility amendments and tritrophic relationships on cabbage in Uganda: experiences from on-station and on-farm trials, *African Journal of Agricultural Research*, Vol. 5(21), pp. 2862 - 2867.
26. **Karungi, J.**, Lubanga, U.K., Kyamanywa, S and Ekbom, B. 2010. Oviposition preference and offspring performance of *Crocidolomia pavonana* (Lepidoptera: Pyralidae) on different host plants. *Journal of Applied Entomology*, 134: 704–713.
27. **Karungi, J.**, Agamile, P., Kovach, J. and S. Kyamanywa, S. 2010. Cover cropping and novel pesticide usage in the management of pests of hot pepper (*Capsicum chinense*). *International Journal of Tropical Insect Science*, Vol. 30, No. 2, pp. 84–92.
28. **Karungi, J.**, Ekbom, B. and Kyamanywa, S. 2006. Effect of organic versus conventional fertilizers on insect pests, natural enemies and yield of *Phaseolus vulgaris*. *Agriculture, Ecosystems and Environment*, 115: 51-55.
29. **Karungi, J.**, Kyamanywa, S. and Ekbom, B. 2006. Comparison of the effect of market crop wastes and chemical soil fertility amendments on insect pests, natural enemies and yield of *Brassica oleracea*. *Annals of Applied Biology*, 149: 103-109.
30. **Karungi, J.**, Adipala, E., Ogenga-Latigo, M. W., Kyamanywa, S. and Oyobo, N. 2000. Pest Management in cowpea. Part 1. Influence of planting time and plant density on cowpea field pests' infestation in

	<p>eastern Uganda. <i>Crop Protection</i>, 19: 231-236.</p> <p>31. Karungi, J., Adipala, E., Kyamanywa, S., Ogenga-Latigo, M.W., Oyobo, N. and Jackai, L.E.N. 2000. Pest management in cowpeas. Part 2. Integrating planting time, plant density and insecticide application for management of cowpea field insect pests in eastern Uganda, <i>Crop Protection</i>, 19: 237-245.</p> <p>32. Karungi, J., Adipala, E., Nampala, P. M., Ogenga-Latigo, M.W. and Kyamanywa, S. 2000. Pest management in cowpea. Part 3. Quantifying the effect of cowpea field pests on grain yields in eastern Uganda. <i>Crop Protection</i>, 19: 343-347.</p> <p>33. Karungi, J., Nampala, P. M., Adipala, E., Kyamanywa, S. and Ogenga-Latigo, M.W. 1999. Population dynamics of selected cowpea insect pests as influenced by different management strategies in eastern Uganda. <i>African Crop Science Journal</i>, 7(4), 487 – 495.</p> <p>34. Nampala, P., Ogenga-Latigo, M.W., Kyamanywa, S., Adipala, E., Karungi, J., Oyobo, N. and Jackai, L.E.N. 1999. Integrated management of major field pests of cowpea in eastern Uganda. <i>African Crop Science Journal</i> 7 (4): 479 –486.</p> <p>35. Adipala, E., Nampala, P. M., Karungi, J. and Isubikal, P. 2000. A review on options for management of cowpea pests. <i>Integrated Pest Management Reviews</i>, 5: 185-196.</p>
<p>Innovations Developed and Awards Won</p>	<p>Recipient of the prestigious International Integrated Pest Management Excellence award (2009); Young Affiliate Fellow, Academy of Sciences of the Developing World (TWAS, 2010), and Fellow, Uganda National Academy of Sciences (2014).</p>
<p>Research Projects (2010 to date)</p>	<p>2010-14: Developing and disseminating Integrated Pest Management (IPM) systems for major horticultural crops in Uganda, a USAID-IPM CRSP regional project, East Africa Site; as <i>Country Coordinator</i>.</p> <p>2010-14: Developing sustainable agricultural production systems through ecological resource management & value addition; Sida/SAREC funded, Swedish University of Agricultural Sciences-Makerere University Bilateral Project; as <i>Crop Science Subprogram Leader and Associate Program Coordinator</i>.</p> <p>2010-14: Epidemiology of groundnut rosette virus disease in Uganda; as <i>research team member and MSc student supervisor</i>.</p> <p>2011-14: The importance of landscape and local structure for biological control of insect pests of coffee and maize, a project between Swedish University of Agricultural Sciences, Makerere University and ICIPE; as <i>research team member and MSc students (2) supervisor</i>.</p> <p>2011-17 date: Developing ecological pest management approaches for pineapple mealybugs in Uganda, as <i>research team member and PhD student supervisor</i>.</p> <p>2011-15: Evaluating the effects of water management and rice residue utilization on carbon yield, pests and disease dynamics from rice fields in Uganda; as <i>research team member and MSc student supervisor</i>.</p>

	<p>2012-16: Developing ecological management strategies for the aphid vectored cucumber mosaic virus on tomato in Uganda; a grant won from the Regional Universities' Forum for Capacity Building in Agriculture (RUFORUM); <i>as Principal Investigator/Team leader.</i></p> <p>2012-16: Enhancement of passion fruit productivity in Uganda: Identification and development of a management package for aphid vectors and associated viral diseases a grant won from the Regional Universities' Forum for Capacity Building in Agriculture (RUFORUM); <i>as research team member and MSc student supervisor.</i></p> <p>2012-16: Trade-Offs and Synergies in Managing Wetlands Resources for Improved Food Security and Adaptation to Climate Change effects in the Lake Victoria Basin; <i>as supervisor of MSc student.</i></p> <p>2013-17: Epidemiology and Distribution of Cassava Brown Streak Disease in East Africa, a regional project between Mikochoeni Agricultural Research Institute, Tanzania; Rwanda Agricultural Board; and Makerere University, <i>as supervisor of MSc student.</i></p> <p>2015-17: Integrating insects in poultry and fish feed (INSFEED) project. Implemented by Makerere University, in partnership with Uganda national bureau of standards, National agricultural research organization and other partners. Funding was from the International Development Research Centre (IDRC) and Australian Centre for International Agriculture Research (ACIAR); <i>as Research team member.</i></p> <p>2015- to date: Productivity and biological diversity in the coffee-banana system in the Mt. Elgon Region of Uganda: Establishing Trends, Linkages and Opportunities – A bilateral project between Makerere University and Justus Liebig University, Giessen, Germany, a grant won from the Volkswagen Foundation, Germany; <i>as Senior Postdoctoral Fellow/Bilateral Team leader.</i></p> <p>2015- to date: Enriching livelihoods of small scale hot pepper farmers through partnerships for germplasm improvement and adaptation - A bilateral project between Makerere University and EMBRAPA Vegetable Crop, Brazil, a grant won from the Africa-Brazil Agricultural Innovation Marketplace; <i>as Principal Investigator/Bilateral Team leader.</i></p> <p>2015- to date: Building Research and Training capacities to develop innovations in sustainable intensification of maize-based cropping systems for improving productivity, food security and resilience to climate change in Uganda – a grant won from Sida under the Swedish University of Agricultural Sciences-Makerere University Bilateral Project; <i>as Research Team member and supervisor of 2 graduate students.</i></p> <p>2015- to date: Crops for Healthy Diets: Linking Agriculture and Nutrition – A multi-national project in Germany, Uganda, Kenya and Malawi – <i>as a research team member (Agronomy) and supervisor of a graduate student.</i></p> <p>2017- to date: Capacity building on the water-energy-food security Nexus through research and training in Kenya and Uganda (CapNex) – A grant won from the Austrian Partnership Programme in Higher Education &</p>
--	--

	<p>Research for Development (APPEAR) - <i>As a country (Uganda) coordinator.</i></p> <p>2018- to date: Making Potato Value Chain Enhance Productivity and Incomes in Uganda funded by RUFORUM Community Action Research Programme PLUS (CARP+); <i>as a research team member (Agronomy).</i></p> <p>2018- to date: Education and Training for Sustainable Agriculture and Nutrition in East Africa (EaTSANE) – Long term EU- Africa research and innovation Partnership on food and nutrition security and sustainable Agriculture (LEAP-Agri) - <i>as a research team member (Agronomy).</i></p>
<p>Professional Membership and Activities</p>	<ul style="list-style-type: none"> • Member of the Organization for Women in Science for the Developing World (OWSDW) formerly Third World Organization for Women in Science, No. 3711 • Member of the African Crop Science Society • Member of the International Association for the Plant Protection Sciences (IAPPS) • Member of Association of Uganda Professional Agriculturists (ASUPA).