

## CURRICULLUM VITAE FOR DR. MIRIAM KARWITHA CHARIMBU

### Dr. Miriam Karwitha Charimbu, Kenyan

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### Education and Training

- Visiting Scientist: 22/08/2024- 22/11/2024; International Maize and Wheat Improvement Center (CIMMYT)
- **Doctorate degree certificate:** 01/07/2011-04/06/2014 in Plant Pathology Nanjing Agricultural University, China
- **Master's Degree certificate** 29/08/2005-27/11/2009 in Plant pathology Egerton University, Kenya
- **Bachelor's Degree** 06/09/1999- 09/09/2005 in Science General Specializing in Botany, Zoology and Chemistry at Egerton University, Kenya

### **Work Experience:**

- **Post Doctorate certificate:** 30/07/2021-30/07/2022; Alliance for African Partnership (AAP) African Futures Early Career Research Leadership Program at Michigan State University, USA
- Lecturer Dept. of Crops, Horticulture and Soils, Egerton University Feb 2015 to present
- Enlisted as a Biosafety Expert in the National Biosafety Authority Kenya; November 2022 to present

### **Recent Key Projects**

1. Biotechnology Technical Assistance for Africa: Establishing Sustainable Networks of Next Generation Change Agents in Agricultural Biotechnology and Biosafety to Enhance Knowledge and Awareness in Africa. PTE Federal award No. FX24TA-10960R002, subgrant No. C-5235 funded by United States of America, Department of agriculture (USDA), 2024-2026.
2. Partnership for Seed Systems Development for Resilient Food and Nutrition Security in East Africa Project No. 118\_Ethiopia\_Kenya 2024-2026 Funded by AfricaUNINET (Total grant Amount in Euros 50,000).
3. Prevalence, Economic Importance and Management of Yellow Witchweed (*Alectra vogelii* B.) in Peanut (*Arachis hypogaea* L.) in East Africa | Weedy Peanut-EA, Project No. KoEF185 funded by Kooperation Entwicklungsforschung (KoEF) Research Cooperation (Total grant Amount in Euros 50,000).
4. Building Capacity in Plant Breeding and Biotechnology Education and Research through partnership program in Africa, Middle East and Europe for Agricultural transformation (BREEDTECH). Project number: 101128862, Granting authority: European Education and Culture Executive Agency 2024-2027 (Total grant in Euros 787,575)
5. 'Bamboo Living': Feasibility study and pilot plantation cultivation, training and awareness raising on the economic, social and environmental benefits of bamboo for refugees in camps and the host communities in Turkana County. Seed grant from Universidad Politécnica de Madrid, Spain 2024 (Total grant Euros 7,500)
6. Improving the Genetic Resistance of regionally adapted wheat germplasm for resistance to Fusarium Head Blight and relevant fungal diseases in Ethiopia, Kenya and Zimbabwe (Healthy Crops EKZ), project number P002 funded by Cooperation Development Research (KoEF) 2023-2026
7. Gender Inclusion Partnership: Peanut Production Improvements and Aflatoxin Mitigation for Food Security and Nutrition in East Africa (GenParPAflm) with the project No. P083\_Ethiopia\_Kenya Funded by Africa Uninet 2023-2025
8. Gender Based Freedom Through Educational Opportunities: A Documentary funded by Michigan State University College of Arts & Letters (CAL) 2023
9. Exploring the Potential of Togotia as a Future African Leafy Vegetable for Nutritional Security in Kenya (RIS 13171324 / RIS 9901661) 2022-2023 Funded by Innovate UK KTN Award 2022
10. Partnership Program in Integrated Agri-Aquaculture Systems for Food Security and Poverty Reduction in East Africa (P060) 2022-2024. Funded by AfricaUninet. (Total grant Amount in Euros 50,000).
11. Sustainable scaling of climate-smart agricultural technologies and practices in east west and southern Africa: The case of Kenya Nigeria and Malawi (RC21593) 2021-2022. Funded by African Economic Research Consortium (AERC)

12. Support to Capacity building of Turkana County Extension Systems for strengthening of the Sorghum, Cowpea, Sorghum and Oil crops Value Chains 2020-2022 contracted by Food and Agriculture Organization in support of the [EUTF funded Enhancing self-reliance for refugees and host communities in Kenya Project (UNJP/KEN/085/EC) and the IKEA Foundation funded A value chain approach for economic integration and self-reliance of refugees & host communities in East Africa (MTF/SFE/006/IKF)].
13. Sustainable Participatory Enhancement of Finger Millet value chain in Bomet, Kericho and West Pokot counties under Kenya Climate Smart Agriculture Project funded by world bank 2019-2022.
14. Pigeon pea Technologies, Innovations, Management Practices for Enhancing Productivity, Food and Nutrition Security of Smallholder Communities in Kenya under Kenya Climate Smart Agriculture Project funded by world bank 2019-2022.

#### Most Recent Consultancy

1. Efficacy test of Kichawi Kill on control of *Striga hermonthica* weeds in sorghum 2024 Funded by Toothpick Company Limited
2. Provision of service for a Situational Analysis Research on the Kenyan Agricultural Curriculum 2023 Funded by Seed Savers Network Kenya.
3. Provision of services of setting up crop production centers of excellence (ECC1276698) 2021-2022. Funded by International Finance Corporation (IFC)
4. Consultant: for extension service provision for Kenya Climate Smart Agriculture Project for bean value chain in Nyeri County Kenya funded by world bank; 2019-2022
5. Consultant: for extension service provision for Kenya Climate Smart Agriculture Project for bean value chain in Laikipia County Kenya funded by world bank; 2019-2022.
6. Consultant for ICM Solutions LTD Efficacy test of mycotal on Control of thrips and whiteflies in blueberry 2020-2021
7. Efficacy test of Success Bait on control of fruit flies in avocado (Hass variety) funded by Lachlan Kenya Ltd. 2020-2021

#### Recent Publications

- Stella Jepkosgei, Miriam Karwitha Charimbu, Paul Kimurto, Juliana J. Cheboi, and Nadigatla Ganga Rao. 2024. Management of pigeon pea pod borer (*Helicoverpa armigera*) using biopesticides and yield performance in arid and semi-arid areas of Kenya. African Journal of Agricultural research. Vol. 20(3), pp. 226-234, March, 2024 DOI: 10.5897/AJAR2023.16477 <https://academicjournals.org/journal/AJAR>
- OBARE I, Charimbu MK, Mafurah J, Mutoni C.K., Woyengo V W., Shah T, and Ferguson ME. 2023. Collection of cassava landraces and associated farmers' knowledge, genetic diversity and viral incidence assessment in western Kenya. Genet Resour Crop Evol; 2023. DOI: <https://doi.org/10.21203/rs.3.rs-3156124/v1>
- Margaret Nyaboke Nyang'au, Komivi S. Akutse, Khamis Fathiya, Miriam Karwitha Charimbu, Solveig Haukeland. (2023). Biodiversity and efficacy of fungal isolates associated with Kenyan populations of potato cyst nematode (*Globodera* spp.). Biological Control, 2023, 105328, ISSN 1049-9644. <https://doi.org/10.1016/j.biocontrol.2023.105328>.
- Phiri, A.T., Charimbu, M., Edewor, S.E., Gaveta, E. (2022). Sustainable Scaling of Climate-Smart Agricultural Technologies and Practices in Sub-Saharan Africa: The Case of Kenya, Malawi and Nigeria. **POLICY BRIEF**. October 2022/No.CCEDA006. [http://publication.aercafriclibrary.org/bitstream/handle/123456789/3493/CCEDA006\\_Kenya%20Nigeria%20and%20Malawi.pdf?sequence=1&isAllowed=y](http://publication.aercafriclibrary.org/bitstream/handle/123456789/3493/CCEDA006_Kenya%20Nigeria%20and%20Malawi.pdf?sequence=1&isAllowed=y)
- Austin Tenthani Phiri, Miriam Charimbu, Sarah Edore Edewor and Elias Gaveta. 2022. Sustainable Scaling of Climate-Smart Agricultural Technologies and Practices in Sub-Saharan Africa: The Case of Kenya, Malawi, and Nigeria. Sustainability 2022, 14, 14709. <https://doi.org/10.3390/su142214709>

**Additional information link:** <https://www.egerton.ac.ke/eprofile/18306>