

Dr Sylvia A. Henga Academic Profile

1.1.1 Personal Details

Name: Sylvia A. Henga
Title/Qualification: PhD
Department: AST
Designation/Position: Lecturer
Email:henga.sylvia@ku.ac.ke

Contact Address: 43844-00100, NRB



- **Area of Specialization:**

- Plant Breeding and Genetics
- Seed Science and Trade
- Biotechnology
- Agriculture

- **Research Interests:**

- Molecular and Biotechnology applications
- Variety development and commercialization

Google Scholar:https://scholar.google.com/citations?view_op=new_profile&hl=en

ORCID ID: <https://orcid.org/my-orcid>

1.1.2 Academic & Professional Qualifications

September 2014 to July 2019; Kenyatta University

- **PhD :Seed Science and Trade**

“Fingerprinting and Relating Juvenile characters of Rice (Orhyza sativa L) to Yield and Yield Components”

- Seed quality control, Genetic mapping and characterisation.

October 2006 to September 2010; University of Nairobi

- Msc in Plant Breeding and Genetics

“Regeneration of roots and shoots and assessing the potential of Jtropa curcas seedlings in vitro”

- Biodiesel Potential. Regeneration of planting materials, Tissue culture.

October 2002 to September 2006; University of Nairobi

Bsc. Agriculture

Summary

- PhD. Seed Science and Trade
- Msc. Plant Breeding and Genetics
- Bsc. Agriculture

- **Other Trainings**

- One Health for Development , University of Hohenheim, Germany-
- Communication and Basic Counselling Skills, Amani Counselling Centre(Certificate)
- Mentorship Training (Certificate)
- Training of Trainers, Kenyatta Universities
- Leadership Training, Kenyatta University
- Resource Mobilization and Fundraising Training by Kenyatta University

1.1.3 Employment History

- Kenyatta University
- Jomo Kenyatta University of Agriculture and Technology
- Kenya Community Development Foundation
- Liverpool VCT Care and Treatment(LVCT)

1.1.4 Achievements

- **Funding and Grants**

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- Visiting Research Grant, University of Hohenheim, WWF, 2022/201223
- Award of Msc Scholarship from the University of Nairobi
- Award of Research Scholarship by Village E-Science For Life(VeSeL)
- Scholarship By Kenyatta University PhD Tution Feee
- Research Dean's Fund by Kenyatta University
- NACOSTI scholarship for PhD Studies

- **Professional Achievement**

- Assisted and coach the Projects team, fourth years with improving levels of both quantitative and qualitative analysis of project results.
- Post Graduate Students Supervision; Undertook field monitoring visits in project sites,
- Mentorship to students

- **Programme/Curriculum Development**

- Development of new educational programs;

- Advanced plant Breeding

- Agricultural Biotechnology

- Seed Science and Trade

- Plant Physiology and Biochemistry

- Review of existing programs

- Counseling students and staff

- **Teaching Units**

- **Kenyatta University (2014-Present)**

- Agricultural Biotechnology

- Advanced Plant Breeding

- Seed Science and Technology

- Population and Quantitative Genetics

- Plant Physiology and Biochemistry

- Pesticides formulation, Use and Safety

- Plant Breeding

- Utilization of Plant Genetic Products

- Crop improvement

- Vegetables and Fruits Production

- **Jomo Kenyatta University of Agriculture and Technology(2010-2014)**

- Organic Farming

- Weed Science

- Crop Production

- Farming Systems

- Introduction to Agriculture

- Ornamental and Landscape Horticulture

- Fodder Crops production

- Animal Production

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1.2 Publications

Ndungu, J., Danga, B., Henga, S., & Makumbi, D. (2023). Estimation of Combining Ability of Maize Inbred Lines for High Plant Density Tolerance in Medium Altitudes of Kenya. *International Journal of Agriculture*, 8(2), 54–79. <https://doi.org/10.47604/ija.2066>

Selamawit A.G; Danga O. Danga, O.B; Henga S.A; Fekadu Gurmu: Evaluating indices for selection of drought tolerant Orange Fleshed Sweet Potato (OFSP) genotypes in Ethiopia. *International Journal of Agricultural Science and Food Technology*, August 2021, DOI:10.17352/2455-815X.000115

Selamawit. A.G; Benjamin.O. B.; Henga. S.A Phenotypic characterization of sweet potato (*Ipomoea batatas* L.) genotypes in Ethiopia for selection of those possessing optimal dual-purpose: International Journal of Agricultural Science and Food Technology, IJASFT March 2021, DOI:10.17352/2455-815X.000095-

Henga S.A, Muriira G, M.W.Githendu, W.M.Thagana Fingerprinting and Accessing Relatedness of Selected Rice (*Oryza sativa* L) Genotypes in Kenya. International organisation of Scientific Research (IOSR)

Henga, S.A, Githendu,M, Thagana W, Rice seedling, vegetative growth and vigour as influenced by seed storage period.African Journal of Environmental Science and Technology(AJEST)

Henga, S.A, Githendu,M, Thagana W, Assessing Seed Vigor Characters of Selected Rice (*Oryza sativa* L.) Genotypes Using Accelerated ageing method. [Asian Journal of Agricultural and Horticultural Research](#) (AJAHR)

Henga S.A., Assessment of the effect of Media and container on germination of *Jatropha curcas*, International Journal of Multidisciplinary Research Academy

1.2.3 Conference/Workshops/Seminar Papers

1.2.3.1 Conference Papers

- Kenyatta University School of Agriculture Conference 2016
- Kenyatta University School of Agriculture Conference 2017
- Egerton University Conference 2018
- Eldoret University, 2019
- HAK Conference, 2019

1.2.3.2 Workshops Papers

HAK Workshop Participation- Interaction of Genotype and Storage time on rice Juvenile growth in Kiambu County, Kenya ;Sylvia Henga*, Wilson Thagana, Mukiri Githendu

1.2.3.3 Seminar Papers

Assessing seed Seed quality of Rice, *Oryza Sativa*, KU

1.2.5 Student Co-authored Publications

- Phenotypic characterization of sweet potato (*Ipomoea batatas* L.) genotypes in Ethiopia for selection of those possessing optimal dual-purpose Selamawit Abebe Gitore1*, Benjamin Danga2, Sylvia Henga2 and Fekadu Gurmu3-

1.3 Research

- Rice seed quality
- Rice genetic characterisation/Fingerprinting
- Biofuel and renewable energy crops

-Potato seed and seedling development

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1.4 Funded Projects

-Fingerprinting and Relating juvenile characters of Rice to yield and yield components-
NACOSTI

-Development of Roots and Shoots in-vitro and optimization of germination conditions of *Jatropha curcas*

1.5 Conferences/Workshops/Seminars Attended

1.5.1 Conferences Attended

- Kenyatta University School of Agriculture Conference 2016

-Kenyatta University School of Agriculture Conference 2017

-Egerton University Conference 2018

1.5.1 Workshops Attended

-Enable Horticulture Workshop

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1.5.1 Seminars Attended

-Post graduate seminars AST Department

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1.6 Supervision of Postgraduate Students

1.6.1 Masters

-Christabel Makari

-John Ndungu

-Adrian Kimani

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1.6.2 Ph. D

Selamawit Abebe-

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1.7 Professional/Consultancy (Editor/Peer review in journals, Networks/Collaborations, External Examiner, Patents)

1. - World Bank proposal writing committee member(2014-2015)

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1.8 Community Service and Other Engagements

- Student Mentor

-Counsellor

-Church welfare coordinator

1.9 Affiliation of Professional Bodies

-Member of Horticultural Association of Kenya

2.0 National and International awards and Recognitions

-Visiting Research grant, University of Hohenheim, Germany

-NACOSTI Grant for Msc Studies

-University fo Nairobi Msc Scholarship-Merit

-VeSeL Research scholarship for Msc.

-Certificate, for Basic counselling

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2.1 Administrative Positions Held

2.1.1 Recognized university administrative positions

1. Departmental Board of Post graduate Studies -Member

- 2 Curriculum Development committee

- 3...Departmental Welfare Committee

2. School Website Coordinator

3. Departmental Timetabler
4. Coordinator, 4th year projects-2015-2017
5. Class Advisor-4th year 2015-2017
6. Secretary to departmental board of postgraduate studies
7. Member of attachment committee
8. Farm management committee member (2014-2015)
9. Acting Digital coordinator-AST
10. Student Mentor
11. Member of conference committee
12. Assistant Examination coordinator

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2.1.2 Other administrative positions Held

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- -Communication and Basic Counselling Skills, Amani Counselling Centre(Certificate)
- Mentorship Training (Certificate)
- Training of Trainers, Kenyatta Universities
- Leadership Training, Kenyatta University
- Resource Mobilization and Fundraising Training by Kenyatta University