

CV - DR. PHOEBE ANYANGO SIKUKU

PERSONAL DATA

NAME: Dr. Phoebe Anyango Sikuku
SEX: Female
POSTAL ADDRESS: P.O. Box 333-40105, Maseno, Kenya.
DATE OF BIRTH: 9th September, 1976
PLACE OF BIRTH: Siaya County, Kenya
NATIONALITY: Kenyan
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RELIGION: Christian

EDUCATIONAL BACKGROUND

A. UNIVERSITY EDUCATION

- August 2008- Nov 2012, Maseno University
Qualification: Doctor of Philosophy in Botany.

Title of Thesis: Growth and development of NERICA rice (*Oryza sativa* L.) under Water deficit conditions.

- August 2004 – Nov 2007, Maseno University
Qualification: Master of Science in Botany (Plant Physiology and biochemistry).

Areas of concentration

Photosynthesis, Methods and techniques in Botany, Biometry experimentation and Methodology, Herbarium techniques, Applied ecology, Plant water relations, Plant Mineral nutrition, Secondary plant metabolism, Physiology of higher plants
Reproduction, Physiology of plant growth and development, Physiological plant Ecology and Plant production ecology.

Title of Thesis: Effects of water deficit on growth and development of NERICA (rainfed rice).

- August 1998 – July 2002: Maseno University
Qualification: Bachelor of Education (Science) degree conferred: B.E.D
Science Upper second Class honours, October 2002.

A. SECONDARY EDUCATION

January 1993 – November 1996: Moi Forces Academy- Lanet
Qualification: Kenya Certificate of Secondary Education, B+.

B. PRIMARY EDUCATION

January 1985 – November 1992: Ohando Primary School

Qualification: Kenya Certificate of Primary Education (KCPE), B.

SHORT COURSES ATTENDED

- 25th – 26th February 2021: Course on Quality Management System (QMS) International Organization for standardization (ISO)/International Electro technical commission (IEC), Kisumu, Kenya.
- 10th-28th August 2015: International course on Rice: Research to production. International Rice Research Institute (IRRI), Los Banos, Laguna, Phillipines.
- 3rd-9th May 2015: African Women in Agricultural Research and Development (AWARD) Women's Leadership and Management Course, Kampala Uganda.
- 15th-21st June 2014: African Women in Agricultural Research and Development (AWARD) Science Skills Course, Nairobi Kenya.
- 3rd-21st June 2013: International course on Monitoring, evaluation and impact assessment of food and nutrition security programmes. Centre for Development Innovation (CDI), Wageningen- Netherlands.
- 3rd July - 4th Aug- 2012: Certificate course on 'Development of Core Agricultural Researchers for Rice Promotion in Sub-Saharan Africa', ICCEA, Nagoya University- Japan.
- 22nd April 2007 to 28th August 2007: Lakeline Computer College- Maseno.
Qualification: Certificate in Computer studies, Distinction.

EMPLOYMENT RECORD

- **Nov. 2012 to date:** Lecturer, Department of Botany, Maseno University.
- **Oct. 2010 - Nov 2012:** Tutorial fellow, Department of Botany, Maseno University.
- **Sept. 2006- Oct. 2010:** Teachers Service Commission, Ngiya girl's high school, Graduate teacher.

Current Job Profile

- Supervision and examination of undergraduate students' research proposals and projects.
- Supervision and examination of postgraduate students' research proposals and theses.
- Setting and marking of examinations.
- Examination invigilation.
- Teaching undergraduate and postgraduate botany courses.
- Advising students on course units relevant to their programme of study.

- Undertaking research
- Processing of undergraduate and postgraduate examinations on behalf of Botany department.
- Handling/preparation of undergraduate and postgraduate teaching and examination time tables for botany department.
- Organizing botany department postgraduate seminars and workshops.
- Chairing departmental postgraduate committee meetings.
- Representing botany department in school board and SGS meetings.
- Coordinating the activities of the staff welfare in the department of Botany.
- Representing Botany department in the School of Physical and biological Sciences welfare meetings.

Have ability to handle the following subjects: Plant structure and function, Survey of plant Kingdom, Plant mineral nutrition, biochemistry, Plant growth and development, Seed science and technology, Ecophysiology, Phytochemistry, Photosynthesis, Plant water relations, Physiology of higher plant reproduction, Morphogenesis and developmental Anatomy, Plant ecology, Plant Physiology and Phycology.

POSTGRADUATE SUPERVISION

1. Wenani Moses (MSC/SC/00078/2021): The efficacy of *Bassela alba*, *Tagetes minuta* and *Cleome gynandra* plant extracts in management of angular leaf spot disease of common bean (Ongoing)
2. Wekesa Emmanuel (MSC/SC/00020/2021): Effects of aluminium chloride stress on growth, physiology, biochemistry and yield parameters of five selected finger millet varieties grown in Western Kenya (Ongoing)
3. Otieno Beverly (MSC/SC/00039/2021): Rice blast disease incidence, severity and agromorphological responses of selected rice genotypes to nitrogen fertilization in Kenya (Ongoing)
4. Vicky Korir (PhD/SC/0097/2019): Occurrence and Prevalence of Aflatoxin contamination, Phytochemical and Antifungal potential of Selected Medicinal Plant Extracts against *Aspergillus flavus* (Ongoing)
5. Kanigi Mercyline (MSC/SC/00024/2019): Phytochemical composition, Antioxidants and antimicrobial activity of crude extracts of selected medicinal plants (Ongoing)
6. Sunguti Allan (MSC/SC/00001/2016): Ethnobotanical study, Phytochemical Analysis and Antimicrobial activity of selected medicinal plants in Hamisi sub county, Kenya (Ongoing).
7. Millicent Othieno (MSC/SC/00024/2019): Effects of Maize- Soya beans intercropping patterns on growth, pod formation and yield of Soya bean in Kaimosi, Vihiga County.
8. Everlyne Mumbua Nganga (MSC/SC/0093/018): Farmers cultivars preferences, blast disease incidences and agronomic performance of rice genotypes under blast disease.
9. Buyela Daniel (PhD/SC/00027/2017): Microbial diversity, nutrient dynamics and greenhouse gas emissions in maize (*Zea mays*)-banana based agroforestry system in Kisii County Kenya.
10. Dennis Simiyu Wamalwa (PhD/SC/00001/2018): Physiological, Biochemical and yield responses of maize and Banana plants under *Calliandra calothyrsus*, *Sesbania sesban* and *Leuceana diversifolia* intercropping in Vihiga County, Kenya (2018 2022)

11. Dicreious Wafula (MSC/SC/00009/2017): Evaluation of Growth, Ecophysiology and Yield of Maize and Banana Plants in an Agroforestry tree Intercrop System in Kisii County, Kenya (2018 – 2022)
12. Ombati George (MSC/SC/00093/016): Characterization of *Bradyrhizobium liaoningense* of wild soya beans and determination of its inoculation effect on growth, chlorophyll concentration, nodulation and yield of glycine max (2017- 2021).
13. Obila Meso Simon (MSC/SC/00127/016): Characterisation of *Phaeoisoriopsis griseola*, Phytochemical screening and Fungicidal activity of selected plant extracts against *Phaeoisoriopsis griseola* of common bean (*Phaseolus vulgaris* L) (2017- 2020).
14. Anina Dzovu (MSC/SC/00034/016): Phytochemical composition, larvicidal activity of *Cocos nucifera* extracts on *Busseola fusca* and its effects on growth and yield of maize yield (2017- 2021)
15. Korir Vicky (MSC/SC/00008/016): Analysis of Pyrethrum Plant Extract and its anti-aphid effect on growth, yields, chlorophyll and phytonutrient contents of African Nightshade (2017- 2019).
16. Dennis Simiyu Wamalwa (MSC/SC0145/14): Effects of NPK blended fertilizer application on soil physico-chemical properties, growth, physiology and yield of two finger millet (*eleusine coracana l. gaertn.*) varieties grown in acidic soils of Kakamega western Kenya.

POSTGRADUATE THESIS EXAMINATION

1. Morphophysiological, Biochemical and Yield responses of Bambara groundnut landraces to sodium chloride salinity under Rhizobium Inoculation- Jane Gayalwa Ambede (PhD/SC/0032/16), Maseno University (2022).
2. Diversity and Antagonistic Potential of Endophytes, Phytochemical and Antimicrobial Activity of Selected Agroforestry Trees- Omuketi William Emitaro (PhD/SC/0074/17), Maseno University (2020).
3. Efficacy of *Acremonium zonatum* formulations on the biocontrol of water Hyacinth and its effect on non – target crop plants- Mutebi Chrispo Makheta (PG/MSC/0025/09), Maseno University (2020)
4. Seasonal variations of microbial and physicochemical characters of R. Kuywa water in Bungoma County, Kenya- Wekulo Keya John (MSC/SC/0004/16), Maseno University (2020).
5. Melliferous Taxa, Melittopalynology and Organoleptic characterization of Aboriginal Ogiek Honey in the Eastern Mau Forest Block- Phillip Omondi Onyango (PHD/SC/0151/13), Maseno University (2020).
6. Evaluation of Taro leaf blight (*Phytophthora colocasiae*) disease incidence, severity, environmental effects on the disease and agronomic performance of selected Taro (*Colocasiae esculenta*) accessions in western Kenya- Otieno Carren Odhiambo (PG/PHD/0087/2012), Maseno University (2019).
7. Molecular characterization of *Ustilago kamerunensis* of napier grass and evaluation of its interaction with *Candidatus Phytolasma oryzae* strain Mbita 1 under nutrients and moisture stress- Dennis Ondieki Omayio (PHD/SC/0038/15), Maseno University (2018).
8. Taxonomic Revision of *Lippia javanica* complex in East Africa Using Morphological and Molecular Characters and Evaluation of its pesticidal efficacy on Aphids – Collins Wafula Masinde (MSC/SC/0058/15), Maseno University (2018).

9. Screening of Selected Avocado Rootstocks Varieties for Tolerance to *Phytophthora cinnamomi* and Water logging in Lake Victoria Basin of Kenya – Shiranda Mary Adhiambo (PG/MS/024/10), Maseno University (2017).
10. Phytochemical Analysis and Antimicrobial Activity of *Carica papaya* L. Extracts against Selected Microorganisms – Arum Sophy Filet (MSC/SC/149/14), Maseno University (2017).
11. Characterization of *Xanthomonas campestris* pv. *vesicatoria* in African Nightshade (*Solanum scabrum* Mill) and its control using Plant Extracts of *Bidens pilosa* and *Euphorbia hirta* – Omuketi William Emitaro (MSC/SC/161/14), Maseno University (2017).
12. Study of Sugarcane Rhizospheric Microorganisms and Determination of Antagonistic Potential of Selected Isolates against *Sporisorium scitamineum* Causing Smut Disease in Kibos, Kisumu County, Kenya – Anton Elvis Okelo Juma (PG/MS/064/11), Maseno University (2016).
13. Evaluation of seven Amaranth species for growth, yield and physiological tolerance to soil water deficit - Jomo Oscar Mbera (PHD/SC/0137/13), Maseno University (2016).
14. Efficacy of *Acremonium zonatum* formulations on the biocontrol of water Hyacinth and its effect on non – target crop plants- Mutebi Chrispo Makheti (PG/MS/0025/09), Maseno University (2016).
15. A survey and Identification of Incidences and Severity of Maize Ear rot Causing pathogens and Similarities on response of some Maize hybrids to Diplodia in Nyanza-Christine Wesonga (2015)
16. Evaluation of seasonal evaporation, water extraction limits and rainfall use efficiency by NERICA 4 rice variety under different field management practices -Wabwile Electine Nakhone, Maseno University (2015)
17. Evaluation of antagonistic effects of actinomycetes species isolated from Maseno Soils on *Pyricularia grisea* infecting millet (*Eleusine coracana* (L.) Gaertn)-Were John Okumu, Maseno University (2015)
18. The effect of local isolates of *Fusarium oxysporium strigae* as an antimicrobial agent for *Striga hermonthica* weed control on Maize in western Kenya- Dorah Auma Oula, Maseno University (2015)
19. Physiological and growth response of four Soybean [*Glycine max* (L.) Merrill] varieties to aluminium stress- Mmayi Patrick, Maseno University (2014)

APPOINTMENTS AND COMMITTEES SERVED

1. Year 2021 - AD HOC Committee to investigate Maseno University students with more than 8 resits.
2. Year 2021 to date: Board member (Secretary), International Training Center for Environmental Research –Kenya (ITCER-Kenya)
3. Year 2019 to date: Chairperson, departmental postgraduate committee, Botany department, Maseno University.
4. Year 2017- Served in the Committee developing a new Bsc. Biology with IT course, School of Physical and Biological Sciences, Maseno University.
5. Year 2016 to 2019: Deputy CEO Nyando Development Centre for Environmental Conservation (NYADEC)

6. Year 2016 to date: Departmental Information Technology Champion, Botany department, Maseno University.
7. Year 2016 to date: Vice Chairperson of departmental ISO Committee, Botany department, Maseno University.
8. Year 2016 to 2022: Member of departmental ISO Committee, Botany department, Maseno University.
9. Year 2015 to date: Chairperson, Departmental Welfare Committee, Botany department, Maseno University
10. Year 2015 - to date: Committee Member, School Welfare committee, School of Biological and Physical Sciences, Maseno University
11. Year 2015 - Member of Committee for development of specialized common IT courses for the School of Physical and Biological Sciences.
12. Year 2014 to 2022: Chairlady, Department Course Restructuring and Brochure Committee, Botany department, Maseno University.
13. Year 2014 to date: Examination and Time table Coordinator, Botany department, Maseno University.
14. Year 2014 – 2019: Customer Complaint handling officer, Botany department, Maseno University.
15. Year 2011 to date: Member of course restructuring committee in the department of Botany, Maseno University.
16. Year 2011- Served in the committee for curriculum development for a bridging certificate course in biology, for Maseno University.
17. Year 2010 – 2011: Served in the committee for course restructuring in the department of Botany and horticulture, Maseno University.

CONFERENCES, WORKSHOPS AND SYMPOSIUMS ATTENDED

- 2023 - Foresight4Food Workshop on “Facilitating Foresight for Agri-Food Systems Change in Africa: A Leaders Capacity Development Workshop” held at Great Rift Valley Lodge, Naivasha, Kenya on 13th to 17 November 2023.
- 2023 - VLIR-IUC Project launch, held at Jaramogi Oginga Odinga University of Science and Technology, Bondo-Kenya from 27th to 29th March 2023.
- 2023 – International Day for women and girls as relates to the sustainable development goals Workshop, held at Maseno University, Maseno – Kenya on 14th February 2023.
- 2018 – Quality Assurance and University Examination Processes Workshop, held at Maseno University, Maseno- Kenya on 9th November 2018.
- 2018- EXCEED-SWINDON Workshop on “Holistic Approach to water resources management in Africa” held in University of Yaounde1, Cameroon from 3rd – 8th June 2018.
- 2018- African Women in Biosciences Workshop on Biosciences Biosafety Communication held at Royal Orchid Hotel on 25th-26th January 2018.
- 2017- Women in Biosciences Forum on “Forming a network that can address public concern on application of Biosciences in Agriculture” held at Royal Orchid Hotel on 20th April 2017.

- 2016- SATREPS International Symposium on “Tailor made rice breeding and cultivation technology development for Sub-Saharan Africa” held at KALRO- headquarters, Nairobi-Kenya on 6th December 2016.
- 2016- Science Forum 2016 (SF-16) on “Agricultural research for rural prosperity: Rethinking the pathways” held at the United Nations Conference Center in Addis Ababa, Ethiopia from 12th -14th April 2016.
- 2016- Pre-proposal Workshop on Ecosystem services, conservation and Land use changes in Mt. Elgon, National Park, held at LBDA, Kisumu-Kenya from 16th-17th March 2016.
- 2015- Global Summit on Plant Science held in San Antonio, Texas, USA from 21st -23rd September 2015.
- 2014 – Regional Rice Centre of Excellence Scientific Conference, held at Nashera hotel, Morogoro, Tanzania from 15th- 18th July.
- 2014- AWARD Mentoring Orientation Workshop, held at Eka Hotel, Nairobi, Kenya from 17th-21st 2014.
- 2013- Research Grants Writing Workshop, held at Maseno University, Maseno-Kenya from 26th-28th June 2013.
- 2013- Environmental and development conference on “Linking environmental Research to Kenya’s development Agenda and Vision 2030” held at Red Court Hotel, Nairobi- Kenya from 9th-12th April, 2013.
- 2013- Eastern Africa Agricultural Productivity Project (EAAPP) rice PIs and Co-PIs review and planning workshop held at Tom Mboya Hotel, Kisumu-Kenya from 6th-7th May 2013.
- 2012- Rice researcher’s forum symposium held at Panafric Hotel Nairobi on 29th February 2012.
- 2011- Rice researcher’s forum symposium launch held at AICAD JKUAT on 27th October 2011.
- 2009- Workshop on Rice Knowledge Bank held at Sunset Hotel, Kisumu-Kenya from 9th- 11th September 2009.
- 2004- National Environmental Management Authority (NEMA) Conference, Maseno-Kenya University.

FELLOWSHIPS AWARDED

- **2016:** Independent Science and Partnership Council (ISPC) early career scientist award to attend science forum (SF-16) at the United Nations Conference Center in Addis Ababa, Ethiopia.
- **2014-2016:** African Women in Agricultural Research and Development (AWARD)
- **2013:** Netherlands Fellowships Programme (NFP) to attend an international course on Monitoring, evaluation and impact assessment of food and nutrition security Programmes at Centre for Development Innovation (CDI), Wageningen-Netherlands.
- **2012 :** Japan International Cooperation Agency (JICA) fellowship to attend a course on Development of core agricultural researchers for rice promotion in Sub-Saharan Africa at ICCEA Nagoya University, Japan.

PUBLICATIONS IN REFEREED JOURNALS

1. Othieno, A.M., Netondo G.W. and **Sikuku, P.A.** 2023: Effect of Maize - Soya Bean intercropping patterns on Growth and Yield Parameters of Soya Bean in Kaimosi, Vihiga County Kenya. **Asian Journal of Research in Botany 6(2): 390-330.**
2. Wafula D., Musyimi, D.M, **Sikuku, P.A.** 2023: Growth, Chlorophyll Content and Yield of Maize and Banana Plants in an Agroforestry System in Kisii County, Kenya. **Current Research in Agricultural Sciences 10(2): 50-61.**
3. Buyela, D.K., Musyimi, D.M, **Sikuku, P.A.**, and Manono, B.O. 2023: Soil carbon and nutrient dynamics in a maize-banana based agroforestry system in Kisii Kenya. **IAR Journal of Agriculture Research and Life Sciences 4(1): 14-31.**
4. Buyela, D.K., Musyimi, D.M, **Sikuku, P.A.**, Manono, B.O. and Odhiambo, D.G. 2023: Soil Microbial Biomass, Microbial Population and Diversity in Maize-Banana Based Agroforestry System in Kisii County, Kenya. **Asian Journal of Research in Crop Sciences 8(4):230 – 239.**
5. Ombati G. M, Musyimi D.M. and **Sikuku, P.A.** 2022: Effect of inoculating *Bradyrhizobium liaoningense* on growth, chlorophyll concentration, nodulation and yield of soya beans. **Bacteria; Empire 5(3): 1-6.**
6. Nganga, E. M., Kyallo, M., Orwa, P., Rotich, F., Gichuhi, E., Kimani, J.M., Mwangera, D., Waweru, B., **Sikuku, P.**, Musyimi, D.M., Mutiga, S.K., Ziyomo, C., Murori, R., Lusike W., Correll, J. and Talbot, N., 2022: Foliar diseases and the associated Fungi in Rice Cultivated in Kenya. **Plants 11: 1264.**
7. Wamalwa, S.D, Musyimi D.M. **Sikuku P. A.** and Odhiambo D.G. 2021: Growth and Gas exchange responses of maize and banana plants in an intercrop with agroforestry tree species in Vihiga County, Kenya. **Asian Journal of Research in Crop Sciences 6(3):33-51.**
8. Wamalwa, S.D, **Sikuku P. A.** and Musyimi D.M. 2021: Mineral Nutrient uptake of maize and banana in an intercrop with agroforestry tree species in Vihiga County, Kenya. **IAR Journal of Agriculture Research and life Sciences 2(3):1-13.**
9. Korir, V.J., **Sikuku P.A.** and Musyimi D.M. 2021. Phytochemical Analysis of Pyrethrum Plant Extract and its Anti-Aphid Effect On African Nightshades (*Solanum Scabrum* Mill). **East African Scholars Journal of Biotechnology and Genetics 3(1):21-29.**
10. Obila, S.M, Musyimi, D.M. and **Sikuku, P.A.** 2020: Phytochemical and fungicidal activity of selected plant extracts against *Phaeoisariopsis griseola* of common bean. **International Journal of Microbiology and Mycology 11(5):1-11.**
11. Wamalwa, S.D, **Sikuku P. A.**, Netondo G.W and Buyela D.K. 2019. Influence of NPK Blended fertilizer application on Chlorophyll content and Tissue mineral contents of two Finger millet varieties grown in Acid soils of Kakamega, western Kenya. **International Journal of Plant and Soil Science 27(14): 1-9.**
12. Sikuku, P.A., Musyimi, D.M. and Amusolo, M. 2018. Effects of seed depth on germination, growth and chlorophyll content of *Senna spectabilis*, **Discovery Science 14:84-92.**
13. Wamalwa S.D, Netondo G and **Sikuku P.** 2017. Effect of NPK blended fertilizer rates on growth and yield attributes of finger millet varieties grown in acidic soils of Western Kenya. **Archives of current research International 11(4): 1-11**
14. Musyimi D.M, **Sikuku, P.A.**, **Opande G.** and Korir V.J. 2017. Allelopathic effects of *Eucalyptus camaldulensis* and *Eucalyptus globules* leaf extracts mixture on germination and growth of Sorghum. **IJRDO-Journal of Biological Science 3(7):58-78**

15. Musyimi, D.M., Opande, G.T., Chesire J., **Sikuku, P.A.** and Buyela D.K. 2017. Antimicrobial potential and screening of phytochemical compounds of *Lantana camara* Linn. **IJRDO-Journal of Biological Science** 3(6):18-35
16. **Sikuku, P.A.**, Kimani, J.M., Kamau, J.W. and Njinju, S. 2016. Influence of Nitrogen Supply on Photosynthesis, Chlorophyll content and Yield of Improved Rice Varieties under upland Conditions in Western Kenya. **American Journal of Experimental Agriculture** 13(2):1-14
17. Musyimi, D.M., Okello, L.O., Okello, S.V., and **Sikuku, P.A.** 2015. Allelopathic potential of Mexican sunflower [*Tithonia diversifolia* (hemsl) a. Gray] on germination and growth of Cowpea seedlings (*Vigna sinensis* l.). **Scientia Agriculturae** 12(3):149-155
18. Mmayi M.P., Musyimi D.M., Netondo G.W. and **Sikuku, P.A.** 2015. Chlorophyll fluorescence parameters and photosynthetic pigments of four Soy bean (*Glycine max*) varieties under aluminium chloride stress. **Scientia Agriculturae** 10(2):84-94.
19. **Sikuku, P.A.**, Kimani, J.M., Kamau, J.W. and Njinju, S. 2015. Evaluation of Different Improved Upland Rice Varieties for low Soil Nitrogen Adaptability. **International Journal of Plant and Soil Sciences (IJPS)** 5(1):40-49.
20. Musyimi, D.M., Okello, S.V., **Sikuku, P.A.** and Mutevu, J.M. 2014. Effects of fresh leaf materials of *Sesbania sesban* (L.) Merrill on the growth and photosynthetic pigments of nightshade (*Solanum nigrum*) L. var. popolo). **International Journal of Agronomy and Agricultural Research (IJAAR)** 4 (5): 10 - 21.
21. Sikuku, P.A., Musyimi, D.M., Kariuki S. and Okello, S.V. 2013. Responses of slenderleaf rattlebox (*Crotalaria ochroleuca*) to water deficit. **Journal of Biodiversity and Environmental Sciences (JBES)** 3 (12): 245-252.
22. Sikuku P.A., Onyango J.C. and Netondo G.W. 2012. Yield component and gas exchange responses of NERICA rice varieties (*Oryza sativa* L.) to vegetative and reproductive stage water deficit. **Global Journal of Science Frontier Research** 12 (3): 51 - 61.
23. Sikuku P.A., Onyango J.C. and Netondo G.W. 2012. Physiological and biochemical responses of Five NERICA rice varieties (*Oryza sativa* L.) to water deficit at vegetative and reproductive stage. **Agriculture and Biology Journal of North America** 3(3): 93 – 104
24. Musyimi D.M., Kahihu S.W, Buyela D.K. and **Sikuku P.A.** 2012. Allelopathic effects of Mexican sunflower (*Tithonia diversifolia* (Hemsl) A.Gray] on germination and growth of Spider plant (*Cleome gynandra* L.). **Journal of Biodiversity and Environmental Sciences** 2(8):26-35.
25. Sikuku P.A., Netondo G.W., Onyango J.C. and Musyimi D.M., 2010. Effects of Water Deficit on Physiology and Morphology of three varieties of NERICA rainfed rice (*Oryza sativa* L.). **Journal of Agricultural and Biological Science** 5(1): 23-28.
26. Sikuku P.A., Netondo G.W., Onyango J.C. and Musyimi D.M., 2010. Chlorophyll fluorescence, protein and chlorophyll content of three NERICA rainfed rice varieties under varying irrigation regime. **Journal of Agricultural and Biological Science** 5(2):19-25.
27. Sikuku P.A., Netondo G.W., Onyango J.C. and Musyimi D.M. (2010). Effects of water deficit on days to maturity and yield of three NERICA rainfed rice varieties. **Journal of Agricultural and Biological Science** 5(3):1-9.

BOOK CHAPTER

1. Sikuku P.A, Kimani, J.M, Kamau, J.W. and Njinju, S. (2019). Response of Improved Rainfed Rice Varieties to low Soil Nitrogen. In: Ferreira, A.O. New Perspectives in International Plant and Soil Research. Book Publisher International, United Kingdom, Pp 129-140.

ABSTRACTS

1. Sikuku P.A., Kimani, J.M., Kamau, J.W. and Njinju, S. 2015. Influence of nitrogen supply on photosynthesis, chlorophyll content and yield of improved rice varieties under upland conditions in western Kenya. **Journal of Plant Physiology and Pathology 2(5): 35**
2. Sikuku P.A., Onyango J.C. and Netondo G.W. 2012. Biochemical and yield component responses of five Nerica rainfed rice varieties (*Oryza sativa* L.) to vegetative and reproductive stage water deficit. Book of abstracts and programme of Environmental and development conference on “Linking environmental research to Kenya’s development Agenda and Vision 2030” held at Red Court Hotel, Nairobi Kenya from 9th-12th April, 2013

GRANTS

1. Use of African Indigenous Vegetables in Mitigation of Hypertension and Nutritional Security in Western Kenya. May 2020- May 2023, 199900USD by National Research Fund-Kenya- Principal Investigator.
2. Improving Production and Quality of Bixa Orellana (ANNATO) by use of Organic Fertilizers for Commercialization in Coastal Kenya. May 2020- May 2023, 170000USD by National Research Fund- Kenya- Co-Investigator
3. Enhancement of climate smart vegetable production and commercialization in Lake Victoria Region of Kenya. May 2017- May 2020, 156790USD by National Research Fund-Kenya- Co-Investigator.
4. Mitigation of Climate change through sustainable integration of Maize based Agroforestry Systems for food security and poverty reduction in western Kenya. May 2017- May 2020, 100,000USD by National Research Fund- Kenya- Co-Investigator
5. Development and validation of demand driven rice varieties for enhanced yield under small scale farmer’s conditions under major rice producing regions of Coast, Central and Western. May 2014- 16: 6,7000 USD by EAAPP - Co- investigator

RESEARCH INTERESTS

- Plant stress physiology-water stress, salinity stress and nutrient stress.
- Climate change mitigation.
- Environmental conservation and Poverty reduction.

PROFESSIONAL ORGANIZATION AFFILIATIONS

1. American Society of Agronomy
2. Crop Science Society of America
3. Organization for Women in Science for the Developing World (OWSD)
4. Kenya Rice Researchers Forum
5. African Women in Agricultural Research and Development-Kenya Chapter (KeAWARD)

HOBBIES

- Reading Scientific journals.
- Carrying out research.
- Reading Christian literature.

REFEREES

1. Prof. G.W Netondo (PhD), Dean, School of Biological and Physical Sciences
Maseno University, Private Bag, Maseno – KENYA.
Email: godfreynetondo@yahoo.co.uk. Mobile phone: +254 722 538 943
2. Prof. David Musyimi ((PhD), Chairman, Botany Department, Maseno University, Private
Bag, Maseno – KENYA. Email: davidmusyimi2002@yahoo.com.
Mobile Phone:+254 703552499