

CURRICULUM VITAE

Name: Prof. Justus Mong'are Onguso

Nationality: Kenyan

Marital status: Married

Languages spoken: English, Kiswahili, Japanese

Current address: I. B. R., JKUAT, P.O. Box 62000, Nairobi

Email: jonguso@jkuat.ac.ke; justusonguso@yahoo.com,

ACADEMIC BACKGROUND

2004-2007: PhD. (Agric.), Ehime University, Japan.

2002-2004: M.Sc. (Agric.), Ehime University, Japan.

April, 2001- September, 2001: Certificate in Japanese Language.- Osaka University of Foreign Languages, Japan.

1997-2002: M.Sc. (Genetics), Kenyatta University.

1990-1993: B.Sc. (Horticulture), JKUAT, Second class Honors, Upper Division

1988-1989: Maths, Biology, Chemistry, Moi Forces Academy, Nairobi

1984-1987: Cardinal Otunga High School, Division 1

1977-1983: Omorare Primary School,

EMPLOYMENT/ WORKING EXPERIENCE

2016- to date: Associate Professor (Horticulture), I .B. R., JKUAT.

Chairman, JKUAT Institutional Biosafety Committee

2017 to- date: External examiner, Department of Agriculture and Biotechnology, University of Eldoret.

March 2010- June 2016: Senior Research Fellow/Lecturer, I .B. R., JKUAT.

June 2007- March 2010: Research Fellow/Lecturer, I .B. R., JKUAT.

1994-June 2007: Research Assistant, I. B. R., JKUAT
July 2007- February 2019: Examinations coordinator, I .B. R., JKUAT
2000- Date: Acting director (From time to time) I .B. R., JKUAT.
January- April 2011. Acting director, ALISO, JKUAT
20th Sept.- 8th Oct. 2010. Acting director, ALISO, JKUAT
May 18th- May 29th: Resource trainer, Introduction to Microbiological techniques-
Biotechnology course, JKUAT
2003-2006: Research Assistant to Prof. Mizutani Fusao, Ehime University, Japan
July - Aug. 1996: Resource person, Practical Course in plant Organs, Cells and Tissue
culture, JKUAT
Jan 1994-June 1994: Casual Research Assistant, I. B. R., JKUAT
Jan. 1993-March 1993: Field attachment, Ekerenyo division, Nyamira district.
Jan- Oct. 1990: Science Teacher (Mathematics, Biology and Chemistry), Kiabonyoru High
School, Nyamira district.

FUNDED PROJECTS

17th May 2019-to date , Principal investigator Developing the microbial biotechnology
industry from Kenya's soda Lakes in line with the Nagoya
protocol.....Total budget Ksh. 15,000,000.
Development of food supplements comprising Aloe and Algae. Total budget Ksh.800,000
Socio economic impact of wheat rust in Kenya..... a collaborative project with KWS,
Maasai Mara and Kabianga University, Total budget Ksh. 5000,000.
Collection and molecular characterization of wild edible mushrooms in Kenya. Funded by
National Council of Science and Technology, Total budget Ksh.1,070,000
Assistant Country team leader: Disease diagnostics for sustainable cassava productivity in
Africa.

OTHER FUNDED PROJECTS INVOLVED IN

Tissue culture bananas for small scale farmers
Endophyte enhanced tissue culture bananas for East Africa.

Development of tissue culture protocols for Aloe

Value addition of Aloe and Mushrooms

DEVELOPED PROJECT PROPOSAL UNDER REVIEW

Mushroom production for alleviating poverty and malnutrition in Kenya. Proposal

Submitted to IDRC, Canada. Budget Ksh. 91.2 M

Characterization and modification of bacterial genome as a strategy to enhance bioremediation of xenobiotic pesticides in terrestrial and aquatic ecosystems.

Proposal submitted to the International Center for Genetic Engineering and Biotechnology (ICGEB), UNIDO, Italy. Budget Ksh. 8,500,000

Collection and molecular characterization of wild edible mushrooms for food security in

Kenya ...a joint project between JKUAT, KIRDI, ILRI, TZ and Luanda Ksh 12m

SELECTED RESEARCH PUBLICATIONS

1. Mauti, G. O., Kasigwa P. F., Munissi J. J.E. and **Onguso, J. M.** (2019). Activities of *Dioscorea sansibarensis* powders in anti-oviposition and reduction of *Bruchus chinensis* emergence on *Phaseolus vulgaris* (L.). J. stored prod. Reserch.....*in the press*
2. Anode1S.O, Magoma G., **Onguso, J. M.** and Abraha T. (2018). Bioremediation of Xenobiotic Pesticides by Bacterial Species Isolated from Flower Farm Soil around Lake Naivasha, Kenya. J. Bioremediat and Biodegrada 9: 1-7
3. Kuria, P., Mohammad, I., Ateka, E. M., Miano D, **Onguso, J. M.**, Carrington, J. C. and Nigel, J. T. (2017). Differential response of cassava genotypes to infection by cassava mosaic geminiviruses. Virus Research. 227: 69-81.

4. Mauti, G. O., **Onguso, J. M.**, Kowanga, D.K. and Mbaka, E. (2018). Biodegradation activity of *Aspergillus niger* Lipase isolates from a Tropical Country Garage. *Journal of Scientific Research* 5:15-18.
5. Kuria, P, Ateka, E. M., Miano, D, **Onguso, J. M.** and Nigel, J. T. (2016). Identification and analysis of cassava genotype TME3 bacteria artificial chromosome libraries for characterization of the cassava mosaic disease. *African Journal of Biotechnology*. 15: 1575-1596.
6. Mweu, C. M., Nyende A. B. and **Onguso, J. M.** (2016). Efficient somatic embryogenesis of *Jatropha curcas* L. from petiole and leaf discs. *International Journal for Biotechnology and Molecular Biology Research*. 7: 29-35.
7. Mburu M.N., Gikunju J. K., **Onguso, J. M.** and Wakibia J. (2016). Occupational Safety and Health Accidents among Biomedical Waste Handlers in Nairobi County. *J. Emnv. And Earth Sci*. 6: 8-17.
8. Wekesa, R, **Onguso, J. M.**, Nyende A. B. and Wamocho, L. S. (2015). Effect of 2, 4-dichlorophenoxy acetic acid and naphthelene acetic acid concentrations on callogenesis for in vitro regeneration in selected sugarcane varieties.
9. Wekesa, R, **Onguso, J. M.**, Nyende A. B. and Wamocho, L. S. (2015). Sugarcane in vitro culture technology: Opportunities for Kenya's sugar industry. *African Journal of Biotechnology*.14: 3170-3178.
10. Mukhongo R. W, Kavoo-Mwangi, M.A., Kahangi, E.M. Ateka, E.M., Were, A.B. Okalebo, J. R. Mutegi, M.E., Mwangi, K.E., Tepeni, T.T. Njuguini , **Onguso, J.M.** Okoth, S.A. and Jefwa, J.M. (2015). Occurrence of Arbuscular Mycorrhizal Fungi and *Fusarium* in TC Banana Rhizosphere Inoculated with Microbiological Products in Different Soils in Kenya. *International Journal of Soil Science*. 1:45-62.

11. Kimani N. C., **Onguso, J. M.**, Njau, P. (2015). Screening of Kenyan Bread Wheat Varieties for resistance to the emerging strains of stem rust fungus (*Puccinia graminis* f. sp. tritici) race ug99. *World Journal of Agricultural Research*. 3: 5-10.
12. Kibet, T. K., J. Kinyua, D. Kariuki, E. G. Mamati, **J. M. Onguso** and Wafula E. (2014). Occurrence of Fungivorous Nematodes in Ngere Tea Catchment Area, Murang'a County, Kenya. *International Journal of Life Sciences Research*. 2(3): 89-96.
13. Ojwang D. O., **Onguso, J. M.**, Matazyoh, L. G., Onyango C., Wamalwa M., Wanjala B. W. and Jagger H. (2014). Genetic diversity of Kenyan native oyster mushroom (*Pleurotus*). *Mycologia* 2014: 13-186.
14. Kavoo- Mwangi, A., E.M. Kahangi, E. Ateka, **J. M. Onguso** and J.M. Jefwa (2014). Commercial microbiological products affect nutrient uptake of tissue cultured banana in three soil types in Kenya. *International Journal of AgriScience*. 4(7): 344-355.
15. Muthee, M. M., **J. M. Onguso**, Kiinyukia, C, Makhonge, P. and Nyakundi, W. O. (2014). Biosafety practices and Biomedical hazards among the support staff of Kenyatta National Hospital, Mbagathi District Hospital and Kiambu District hospital in Kenya. *JAGST* 16(1): 64-79.
16. Kavoo-Mwangi, A., Kahangi, E., Ateka, E., **Onguso, J. M.** and Jefwa, J. (2014). Integration of Commercial Microbiological Products into Soil Fertility Practices as a Potential Option for Acclimatization and Growth of TC Banana in Kenya. *Open Journal of Soil Science*, 4, 259-271.
17. Muturi, S. M., Njeru, L. K., Njogu, P. M., **Onguso, J. M.** and Makonde H. (2014). Opportunities and Barriers for the Development of Biogas Technologies in Kenya. *African Journal of Science and Technology* 1: 182-187.

18. Ng'eno, R.K., Njenga, P.K, Ngumi, V.W., **Onguso, J. M.** and Kahia, J. (2013). Micropropagation of an endangered medicinal plant, *Strychnos henningsii* (gilg), (loganiaceae) for sustainable conservation. International Journal of medicinal plants Research 2: 247-253.
19. Wandati, T. W. Kenji, G. M. and **Onguso, J. M.** (2013). Phytochemicals in edible wild mushrooms from selected areas in Kenya. Journal of Food Research 2(3): 137-144.
20. Kavoo-Mwangi, A., E.M. Kahangi, E. Ateka, **J. M. Onguso**, R.W. Mukhongo, E.K. Mwangi and J.M. Jefwa (2013). Growth effects of microorganisms based commercial products inoculated to tissue cultured banana cultivated in three different soils in Kenya. Applied Soil Ecology 64:152-162.
21. Kibet, T. K., J. Kinyua, D. Kariuki, E. G. Mamati and **J. M. Onguso** (2013). Diversity and distribution of soil nematodes in Ngere tea catchment area of Murang'a County, Kenya. African Journal of Agricultural Research 8: 1986-1989.
22. Ng'ang'a, M. P., EM Kahangi, **J. M. Onguso**, T Losenge and P Mwaura (2012). Analyses of extra-cellular enzymes production by endophytic fungi isolated from bananas in Kenya. African Journal of Horticultural Science 5: 12-17.
23. Muchiri, P. K., **J. M. Onguso**, and Nyende A. B. (2014). Utilization of Silk Oak (*Grevellea robusta*) leaves as a partial substitute for Wheat straw in Button Mushroom substrate preparation. 4th African conference on Edible and Medicinal Mushrooms (ACEMM4) 26th -29th May, 2014. Masinde Muliro University, Kenya.
24. Mwatu J. M., Amata, R. **Onguso J. M.**, Ateka, E. M., Kipyab P., Kimenye J. N., and Kasina M. (2013). Differences in resistance against sweet potato weevil (*Cylas* sp) among sweet potato (*Ipomoea batatas* Lam.) germplasm in Nairobi and Muranga Counties, Kenya. **MKU Conference** 16th -18th November, 2013, Thika, Kenya.

25. Ng'eno, R. K., Njenga P.K., Ngumi, V.W., **Onguso, J. M.** and Kahia, J. (2011). Micropropagation of *Strachnos heningsii* for sustainable conservation: effects of media, auxins, nodal position and leaf area. The 6th Jkuat Scientific, Technological and Industrialisation Conference 16th-18th November, 2011, AICAD, JKUAT.
26. Ochora, J.M., **Onguso, J. M.** and Kuya, I. J. (2011). On the agroforestry system and *in situ* conservation of medicinal plant germplasm in Trans- Nzoia district, Kenya. The 6th Jkuat Scientific, Technological and Industrialisation Conference 16th -18th November, 2011, AICAD, JKUAT.
27. Munyao, J. Khamadi, S., Muigai A.W., **Onguso, J. M.** and Waihenya, R. (2010). Determination of the co-existence of CCR5-Δ32 and CCR2-64I gene polymorphisms in hiv-1 exposed infants in Nairobi province, Kenya. INTROMID conference, JKUAT.
28. Yoshio, I. Maranga, R.M. and **Onguso, J. M.** (2010). Phenotypic and molecular characterization of *vibrio cholerae* isolated during the 2007-2009 cholera outbreaks in kenya. 29 World congress of biomedical laboratory sciences, KICC, Nairobi.
29. **Onguso, J. M.**, Mweu, C.M., Nyende A. B. and Kahangi, E. M. (2009). Effects of various dwarfing techniques on growth, yield and fruit quality of peach trees. 23rd - 28th Aug. UNEP, Nairobi.
30. Ochora, J.M., **Onguso, J. M.** and Kuya, I. J. (2009). Agroforestry system: the most viable strategy for *in situ* conservation of medicinal plant germplasm in Kenya. 23rd - 28th Aug. UNEP, Nairobi.
23. Mweu, C.M., **Onguso, J. M.**, Rugetho, J.N. and Nyende A. B. 2008. Regeneration protocol of *Aloe L.* 1st all Africa Congress on Biotechnology, 22nd-26th September, Nairobi.
24. Mweu, C.M., **Onguso, J. M.**, Rugetho, J.N. and Nyende A. B. 2008. Mass micropropagation of *aloe vera* L. through leaf derived callus. Jkuat Conference 2nd-5th Decetember
25. Mweu, C.M., **Onguso, J. M.**, Rugetho, J.N. and Nyende A. B. 2008. Regeneration protocol of *Aloe L.* Patent application No. KE/P/2008/000783(1).

26. **Onguso, J. M.** (2007). Effects of various dwarfing techniques on growth, yield and fruit quality of peach trees grafted on vigorous rootstocks. PhD. Thesis, Ehime University, Japan.
27. **Onguso, J. M.**, Kahangi, E. M., Ndiritu, D. W. and Mizutani, F. (2004). Genetic characterization of cultivated bananas and plantains in Kenya by RAPD markers. *Scientia Horticulturae* 108: 235-239.
28. **Onguso, J. M.**, Kahangi, E. M., Ndiritu, D. W. and Mizutani, F. (2002). Determination of the optimum reaction conditions for PCR in Kenyan *Musa* germplasm. *Online journal of Biological Sciences* 2 (2): 64-66.
29. **Onguso, J. M.** (2002). Genetic characterization of cultivated bananas and plantains in Kenya. M.Sc. Thesis, Kenyatta University, Nairobi.
30. **Onguso, J. M.**, Kahangi, E. M., Ndiritu, D. W. and Mizutani, F. (2002). The application of RAPD markers in characterizing some Kenyan *Musa* germplasm. April 3-4, 2002, Chiba University, Japan. *J. Japan. Soc. Hort. Sci.* 71 (Suppl. 1):342.
31. **Onguso, J. M.** (2004). Development of dwarfing techniques in peach trees grafted on vigorous rootstocks. M.Sc. Thesis, Ehime University, Japan.
32. **Onguso, J. M.**, Mizutani, F. and Sharif Hossain A. B. M. (2004). Effects of partial ringing and heating of trunk on shoot growth and fruit quality of peach trees. *Bot. Bull. Acad. Sin.* 45: 301-306.
33. **Onguso, J. M.**, Mizutani, F. and Sharif Hossain A. B. M. and El-Shereif, A. R. (2006). Monitoring the residual effect of partial ringing and heating of trunk on shoot growth and fruit quality of peach trees over three years period. *Int.J. Agr. Biol.* 8: 84-88.
34. Sharif Hossain A. B. M., Mizutani, F., **Onguso, J. M.**, El-Shereif, A. R. and Yamada, H. (2006). Dwarfing peach trees by bark ringing. *Scientia Horticulturae* 111: 554-559.
35. Sharif Hossain A. B. M., Mizutani, F., **Onguso, J. M.** and El-Shereif, A. R. (2005). Effect of interstock and spiral bark ringing on the growth and yield of peach. *Bulg. J. Agric. Sci.*, 11: 309-316.

36. El-Shereif, A. R., Mizutani, F., **Onguso, J. M.** and Sharif Hossain A. B. M. (2005). Effects of different temperatures and sampling dates on bud break and sampling dates of 'Muscat Bailey A' grapevine buds. *Inter. J. Bot.* 1: 17-23.
37. Bhusal, R. C., **Onguso, J. M.**, Hossain, A. B. M. S., El-Shereif, A. R., Mizutani, F. (2003). Effects of short-term flooding on fruit growth, fruit quality and flowering in 'Miyauchi' iyo (*Citrus iyo* Hort. ex Tanaka) tangor trees. *Bull.Exper. Farm Fac. Agric., Ehime Univ.*, 25:1-7.

POSTGRADUATE STUDENT SUPERVISION

1. Richard Wekesa: Effect of 2,4-Dichlorophenoxy acetic acid and Napthalene acetic acid concentration on callogenesis, somaclonal variation and performance of three sugar cane varieties in Western Kenya-----PhD-----Graduated in 2017.
2. Paul Kuria: Characterization of Natural Resistance mechanisms of cassava genotypes----PhD----- Graduated in 2017.
3. Kavoo A. Mumo: Efficacy of commercial biological and chemical products on root health and nutrient uptake of tissue culture banana under different soil conditions in Kenya. ---PhD. ---- Graduated in 2013.
4. Cecilia M. Mweu. Improvement of *Jatropha curcas* for oil production using genetic transformation techniques. ---PhD-----Graduated in 2012.
5. Cyrus kimani Ndung'u: Screening of Kenyan commercial wheat varieties for resistance to stem rust. MSc..... Graduated in 2017.
6. Mburu Moses Nguthu: Occupational safety and health hazards among biomedical waste handlers in Nairobi County. MSc..... Graduated in 2017.
7. Wesonga Christoper Wepuko: Natural Products from Extremophiles: Isolation, Characterization and Cloning of Phytoene Desaturase Gene (*CrtI*) from *Paracoccus Sp .L-BOG37*. MSc... Graduated in July 2016.

8. Hamba Tola: Nutrient analysis and Micropropagation of Anchote (*Cocinia abyssinca*) from Ethiopia. MSc... Graduated in 2014.
9. Tom Kosgei Kibet: Characterization of soil nematodes from small scale tea growing areas in Kenyan. ---MSc.... Graduated in 2013.
10. Moses Muthee: Evaluation of biosafety awareness and practices among hospital support staff of Kenyatta National Hospital, Kiambu District Hospital and Mbagathi Level 5 hospital- Kenya. MSc. Graduated in 2013.
11. Teresia W. Wandati: Nutritional analysis of wild edible mushrooms growing in Kenya and product development from the mushrooms. ... Graduated in 2013.
12. Ojwang Daniel: Genetic characterization of Pleorotus mushrooms in Kenya. ---MSc.....Graduated in 2012.
13. Maina P. Ng'ang'a: Genetic identification and extracellular enzymes of endophytic isolate from local banana (*Musa spp*) on solid media. ---MSc.-----Graduated in 2012.
14. James Munyao King'oo: Genetic characterization of Hiv-1 subtypes vertically transmitted from mother to child within Nairobi. ---MSc.---Graduated in 2010.
15. Robert M. Maranga: Phynotypic and molecular characterization of pathogenic *Vibrio cholerae* isolated from cholera outbreaks in Western Kenya. ---MSc.---Graduated in 2010.
16. Ngeno K. Robert: Micropropagation (Tissue culture) and Macropropagation of *Strychnos henningsii* for sustainable conservation. ---MSc. ...Submitted Thesis
17. Samwel Mwangangi Muturi: Molecular Characterization of Anaerobic Bacteria in selected Biogas plants from Embu, Meru, Thika and Tharaka-Nithi Counties, Kenya. PhD----On going.

18. Priscillar Mumo Mutungi: Use of endophytic microorganisms in crop adaptations to increased salinity and resistance to pests and diseases. PhD----On going.
19. Jason Mwatu: Genetic variation among resistant cultivars and effective *Bacillus thuringiensis* against sweet potato weevil (*Cylas* spp) ---MSc..... On going.
20. Ziporah Kagima: Micropropagation of an endangered commiphora species (*Commiphora eminii* ssp. *Zimmermannii*) -----MSc..... On going.
21. Geoffrey Omari Omare: Bioremediation of petrol contaminated soils in Kenya-----PhD -
---On going
22. Saphan Anode Ochieng: Bioremediation of Xenobiotic pesticides found around L. Naivasha by bacterial species---MSc..... On going.
23. Rita Mudza Mwachungu. Assessment of HIV service delivery to men who have sex with men in Kilifi county, using qualitative research methods..MSc... On going.
24. Aliou Ba. Inheritance of important traits in cultivated hexaploid Sweetpotato families using SNP markers---MSc..... On going.
25. Cathere Wambui Maina. Investigation of suitability of locally available lignocellulosic wastes as substrates for cultivation of *Lentinus edodes* (higher basidiomycetes) in Kenya. ---MSc..... On going.

UNITS I HAVE TAUGHT AT POSTGRADUATE LEVEL

1. Plant Micropropagation
2. Genetic Transformation of Plants
3. Animal Biotechnology and Tissue Engineering
4. Seminars and Report writing
5. Plant Genetic Engineering
6. Bio-policy, Bioethics Policy Management
7. Biostatistics and experimental design

8.

RECOGNITION

Ranked as “**Very Good**” in the staff performance of 2007 and 2008, 2009-2010 and 2011-2012. Good in 2018-2019.

SEMINARS/WORSHOPS ATTENDED

28th February, 2019. UNEP_GEF Project for sustainable capacity building for effective participation in the BCH (BCH-III) Ksms

20th-21st November 2018: Resource person. Training program on Bio prospecting Technology, SAJOREC, Kenya..

28th June 2017: Annual Institutional Biosafety Committee (IBC) training, Kenya School of Monetary Studies, Nairobi.

16th June 2017: Conference on State of Agricultural Biotechnologies in Sub-Saharan Africa (SSA). ILRI, Kenya.

4th Nov. 2016: Presented a paper, Tissue culture and value addition Aloe foe enhanced human nutrition, at the joint seminar on Innovation for Harnessing Bio-Resources. iPIC, JKUAT.

27th -28th Feb. 2014: Conference on effective student supervision, organized by PAUISTI. AICAD, JKUAT.

17th -28th Feb. 2014: Coordinator/Resource trainer, Techniques in Molecular Biology Course, IBR, JKUAT.

18th -29th November 2013: Coordinator/Resource trainer, Applied Tissue Culture Course, IBR, JKUAT.

20th Dec. 2013: Consultative meeting on Biotechnology, Royal Garden Hotel, Kisumu

23rd Oct. 2013: National banana conference. KARI EQs.

31st May 2013: Springer author worksop on publishing. NSC, JKUAT.

13th-14th Aug. 2012: Executivev workshop on Agricultural Biotechnology. AICAD, JKUAT.

19th June – 30th July 2012: Training Course on Edible Mushroom Technology for developing countries, Fuzhou, China.

3rd – 6th March 2012: Tools and process of mentoring workshop. AICAD, JKUAT.

3rd – 6th March 2012: Consultative workshop on Biotechnolgy. KICC, Nairobi

20th March 2012: Internal Quality Auditing Course. AICAD, JKUAT.

8th – 9th November 2011: Workshop on effective teaching. AICAD, JKUAT.

3rd – 6th September 2011: Launch of Bioprospecting Strategy and Expert Dialogue
Workshop. Safari Park Hotel, Nairobi.

3rd – 6th May 2011: Training course on Communicating Biosafety Issues in Modern
Biotechnology, Lukenya Getaway, Machakos

3rd – 6th May 2011: NCST Workshop, KICC, Nairobi

March 2011: NCST Workshop, NSC, JKUAT.

2nd - 4th March 2011: Regional workshop of the Pan African University, AICAD, JKUAT.

25th Feb. 2011: Guest speaker on Agriculture Project planning, management, monitoring
and evaluation, during the National Conference for patrons and Agriculture teachers,
JKUAT, Nairobi

4th February 2011: Gender and disability mainstreaming workshop, AICAD, JKUAT.

3rd July 2010: Guest speaker on Biotechnology in Agriculture, Young Farmers Clubs of
Kenya National Rally, Jamuhuri Park, Nairobi.

4th June 2010: Secretariat member, Intellectual property (IP) Launch/ workshop for
JKUAT, AICAD, JKUAT.

29th – 31st May 2010: Education for sustainable development (ESD) final curriculum Policy
formulation retreat, Utalii Hotel, Nairobi.

27th May 2010: Secretariat member, Education for sustainable development (ESD)
Stakeholders' Consultative Workshop, KICC, Nairobi.

12th - 16th April 2010: Training workshop in capacity building for improved production of
clean banana plantlets through use of Micro-propagation, KARI, Thika, Kenya.

10th - 11th April 2010: Education for sustainable development (ESD) curriculum Policy
formulation retreat, Kenya School of Monetary Studies, Nairobi.

6th - 7th March 2010 Education for sustainable development (ESD) Policy development
workshop, Kenya School of Monetary Studies, Nairobi.

25th - 27th February 2010: Resource Person, National ASK seminar for High School Agric
teachers. JKUAT, Juja.

25th - 26th February 2010: Modernising local sustainable technologies as an engine for
sustainable development, Safari Park Hotel, Nairobi.

5th - 6th December 2009: Education for sustainable development (ESD) curriculum Policy
formulation retreat, Senate Hotel, Juja

29th Nov.– 2nd December 2009: Education for sustainable development ESD curriculum workshop for JKUAT staff, KCB Leadership Centre, Karen

9th - 11th September 2009: Education for sustainable development ESD curriculum orientation training workshop for JKUAT teaching staff, AICAD, JKUAT.

14th - 15th September 2009: Public health emergency preparedness and response, Utalii, Nairobi, Kenya.

20th -31st July 2009: Resource person, Introduction to molecular Biology- Biotechnology course, IBR, JKUAT.

18th -29th May 2009: Resource trainer, Introduction to microbiological techniques- Biotechnology course, IBR, JKUAT.

26-27th March 2009: Virus indexing for tissue culture bananas, Nairobi, Kenya

8th-10th Nov. 2008: Internal Quality Auditing Course, KEBS, Nairobi, Kenya.

11th-15th August 2008: Environmental Biosafety short course, Moi University, Kenya.

14th-16th: April 2008: Bio-Earn Programme on financial management and reporting training workshop, Entebbe-Uganda.

October 2006: Presented a paper in the ISHS, Seoul, Korea.

5th-6th Dec. 2000: Patent documents, untapped sources for researchers, Lillian towers, Nairobi.

April 2000: Training course in Plant Tissue Culture, JKUAT, Kenya.

Jan.- June 1999. Practical training on RAPD markers, NBPGR, New Delhi, India.

THESES EXAMINED

Hunja Murage PhD: Mass propagation of bamboo and its adaptability to waste water gardens ----PhD

Evans Nyakeri: Isolation and characterization of extreme halohalicaliphilic micro-organisms from lake Magadi, Kenya.

Daniel Anyika Kwalima: Characterization of growth condition and requirements of *Bacillus thuringiensis* isolates from various sources in Kenya.

Johnstone Omukhulu Neondo: Micropropagation of *Allanblackia stuhlmannii* ‘eng.’ ‘Musambu’, an economically important wild tree species

Simon Ngare Mwangi: Genetic diversity and nitrogen fixing potential of legume nodulating bacteria from different land use systems in taita taveta district, Kenya

Salano Odilia Atamba: Isolation and characterization of fungi from Lake Magadi of the Kenyan rift valley

Juliah Khayeli Akhwale: Isolation and characterization of antibiotic and exoenzymes producing actinobacteria from guts of fungus-cultivating termites *{Macrotermes michaelseni}* (Sjostedt)

Philip Mwenda Miriti: Isolation and characterization of soil bacteria capable of degrading selected organic pesticides applied in horticultural farms in Kenya

Dennis Misiko Mukhongo: Genetic diversity and population structure of the indigenous sheep in Kenya based on microsatellite analysis.

Felix Bii: Characterization of fusarium species on maize (*Zea mays*) and determination of their mycotoxins in Eastern province of Kenya ---MSc.

George Mwenda Mutegi: Diversity and symbiotic efficiency of *rhizobia* isolated from Embu, Kenya ---MSc.

Georger Ochieng Asudi: Collection and characterization of papaya germplasm in Kenya---MSc.

Mwirigi Peter: Collection, morphological characterization and in vitro propagation of Kenyan Yam (*Diospora* spp.) ---MSc.

ADMINISTRATIVE EXPERIENCE

Examination Coordinator, IBR

Committee member, JKUAT Bio-safety Sub-committee

Committee member, JKUAT Ethics Review Sub-committee

Chairman, IBR Risk Management policy

IBR academic assurance committee

Msc. Students' academic advisor

Research and production coordinator

Chairman, Tender committee

Ag. Director (from time to time)

Chairman, Shows, exhibitions / extension committee

IBR, ISO coordinator

Internal QMS auditor for JKUAT quality management systems

Member, Research and Development Shows committee

NATIONAL APPOINTMENT

May, 2009 to-date: Chairman, technical committee on clean rooms and associated environment, Kenya Bureau of Standards.

PROFESSIONAL MEMBERSHIP

1. Japanese society for Horticultural Science
2. Horticultural Association of Kenya (HAK)
3. Japanese society for Agricultural Technology Management

Computer Literacy

MS Word, MS Excel, Power Point, Publisher.

Peer Reviewing

Hortscience

Scientia Horticulturae

International Journal of Biotechnology, Chile

Journal of Agriculture Science and Technology (JAGST)---Kenya

REFEREES

Prof. E. M. Kahangi,
Hort. Dept, JKUAT
P.O. Box 62000,
Nairobi.
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