Dr. John Maingi Muthini

PERSONAL INFORMATION
Permanent Address: P.O Box 5191-00200, Nairobi, Kenya.
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Languages: English, Kiswahili, and Kikamba

ACADEMIC BACKGROUND
UNIVERSITY
2009: PhD (Microbiology), Kenyatta University
1997: M.Sc. (Microbiology), Kenyatta University.
1990: Bachelor of Education degree (Science-Botany and Zoology)
Kenyatta University.

SECONDARY
1985 – 1986: 'A' Level – KACE, Nkubu High School.
1981 – 1984: 'O' Level – K.C.E., Thomeandu Boys' Secondary School.

EMPLOYMENT HISTORY/ WORK EXPERIENCE

September 2013 to date:	Lecturer and Chairman, Department of Microbiology, KenyattaUniversity.
August 2009 to date:	Lecturer, Microbiology Section, Department of Plant and Microbial Sciences, Kenyatta University.
May 2004 – August 2009:	Tutorial Fellow, Microbiology Section Department of Plant and Microbial Sciences, Kenyatta University.
April 2000 – April 2004:	Senior Lecturer, Department of Applied Sciences, Kenya Polytechnic.
Nov. 1997 – April 2000:	Teacher, Matuu Memorial Girls' High School.
August 1995 – Nov. 1995:	Deputy Headmaster, Thomeandu Boys' Secondary School.
May 1990 – August 1995:	Teacher, Mutonguni Secondary School.

SUPERVISION
i) I am currently supervising 16 Master of Science (Microbiology) and 4 PhD. students.
ii) I have successfully supervised 23 Master of Science (Microbiology) students who have since graduated.
iii) Five Master of Science students have already submitted their theses for examination.

THESIS EXAMINATION
I have been an internal examiner of twenty (27) Masters Theses and one (4) PhD Thesis.

CONFERENCES/SEMINARS/WORKSHOPS
26th November – 27th November 2012: PACN Congress on Agricultural Productivity, Water and Waste. United Nations Conference Centre, Addis Ababa, Ethiopia.

22nd October - 26th October 2012: 13th Biennial KARI Scientific Conference. KARI Headquarters, Katangat Road, Loresho, Nairobi.
21st February 2011 to 25th February 2011: Attended Global Biological Resources Network Workshop at Methodist Guest House, Lavington, Nairobi.

2nd May to 8th May 2010: SUCAPRI (Strengthening University Capacity for Promoting, facilitating and teaching Rural Innovation Processes) workshop on Moodle and Wiki held at AVU, Kenyatta University.

14th March 2010 to 20th March 2010: Participated in a SUCAPRI (Strengthening University Capacity for Promoting, facilitating and teaching Rural Innovation Processes) Activity 3 University-based learning cycle workshop at Jomo Kenyatta University of Agriculture and Technology.

26th January 2009 to 31st January 2009: Participated in a SUCAPRI (Strengthening University Capacity for Promoting, facilitating and teaching Rural Innovation Processes) Activity 2 University-based learning cycle workshop at Egerton University, Njoro.

4th - 8th October, 2004: Attended a workshop on use of molecular techniques in identification and quantification of non-culturable bacteria. Organized by the Kenya Society of Microbiology and the Department of Biochemistry and Biotechnology, Kenyatta University and instructed by Prof. Jerry Johnson from Wyoming University, USA between

RESEARCH GRANT AWARDS

YEAR	SOURCE	COLLABOLATORS	PROJECT TITLE
2011-2013	VICRES Grant NO: 7/NR-3-2010/015	Dr. Alice Amoding, Makerere University Dr. John Muoma, Masinde Muliro University Ms. Dative Mukaminega, Kigali Institute of Science & Technology Dr. Omwoyo Ombori, Department of Plant Sciences, Kenyatta University	Production of organic fertilizer from water hyacinth (*Eichhornia crassipes* [Mart.] Solms) for organic farming and conservation of ecosystem in Lake Victoria basin
2013	NACOSTI	Dr. Evans Changamu, Chemistry Department, Kenyatta University	Synthesis, Characterization, DFT and Antitubercular studies on Organometallic complexes of Pyrazine-2-carboxamide and Isonicotinohydrazide
2014	RUFORUM Grant No. RU 2014 GRG-102).	Dr. Omwoyo Ombori, Department of Plant Sciences, Kenyatta University, Dr. Ezekiel Mugendi, Department of Microbiology, Kenyatta University and Dr.	Increasing Soybeans and Climbing Beans production in smallholders` farms in Eastern Kenya"

		Jacinta Malia Kimiti, School of Environment and Natural Resource Management, South Eastern Kenya University	

PUBLICATIONS

1. Ernest Wandera Ouma, Anne Mercy Asango, **John Maingi,** and **Ezekiel Mugendi Njeru** (2016): Elucidating the Potential of Native Rhizobial Isolates to Improve Biological Nitrogen Fixation and Growth of Common Bean and Soybean in Smallholder Farming Systems of Kenya. *International Journal of Agronomy***, 2016**, Article ID 4569241, 7 pages

2. Kariko Elizabeth Kago, Murimi Zacharia Kinyua, **Owuor Paul Okemo , Maingi John Muthini** (2016): Bacterial Wilt, A Challenge in Solanaceous Crops Production At Kenyan Highlands and Lowlands. *World Journal of Research and Review*, 3(1), 6-11.
3. Maryanne Betsy Usagi M. B, Odilla G.A., **Maingi J.M**. and **Kebira A.** (2016): Isolation, Identification and Determination of the Prevalence of *Mycobacterium tuberculosis* Complex among People Living with HIV in Kisumu County, Kenya. *Science Journal of Public Health* **4**(4), 359-365.

4. Naluyange V., Ochieno D.M.W, Wandahwa P., Odendo M., **Maingi J.M**., Amoding A., Ombori O., Mukaminega D. and Muoma J (2016): Belowground Influence of *Rhizobium* Inoculant and Water Hyacinth Composts on Yellow Bean Infested by *Aphis fabae* and *Colletotrichum lindemuthianum* under Field Conditions. *Journal of Plant Studies* **5** (2), 32-46.

5. Simon Wambui Mburu, Gilbert Koskey, Jacinta Malia Kimiti, Omwoyo Ombori, **John M. Maingi** and **Ezekiel Mugendi Njeru** (2016): Agrobiodiversity conservation enhances food security in subsistence-based farming systems of Eastern Kenya**.** *Agriculture & Food Security* (2016) **5**:19, 1-10

6. Moto J. N., **Maingi J.M**. and Nyamache A. K. (2015). Prevalence of Tinea capitis in school going children from Mathare, informal settlement in Nairobi, Kenya. *BMC Research Notes* **8**: 274-279

7. P.N. Waithaka, J.M. Maingi, A.K. Nyamache (2014): Isolation of microorganisms and screening of heavy metals from Municipal Council's treated sewage from Nakuru sewage treatment plant in Nakuru County, Kenya. Scientific Journal of Microbiology 3(12), 118-125.

8. Paul Njenga Waithaka, **J. Maingi**, A. K Nyamache (2014): Microbial contamination ofenvironmental, food and treated water samples in Nakuru North Sub-county, Kenya International Journal of Microbiology and Allied Sciences, 1(2):78-9

9. Paul Njenga Waithaka, **John Muthini Maingi**, A. K. Nyamache (2014): Physico-chemical and Salmonella isolates in community taps and river Kandutura in Nakuru North

Sub-county, Kenya. International Journal of Microbiology and Epidemiological Research, 2(4), 29-37,

10. Kago E.K, Kinyua Z.M., Okemo P.O. and **Maingi J.M. (2014)**: Effects of Cabbage Tissue and Calcium Hypochlorite on Soil Fertility and Yields of Selected Solanaceous Crops. *Annual Research and Review in Biology*, **4**(3) 547-559.

11. Muthini M., **Maingi J.M.,** Muoma J.O., Amoding A., Mukaminega D., Osoro N., Mgutu A. And Ombori O. **(2014)**: Morphological Assessment and Effectiveness of Indigenous Rhizobia Isolates that Nodulate *P. vulgaris* in Water Hyacinth Compost Testing Field in Lake Victoria Basin. *British Journal of Applied Science & Technology,* **4**(5) 718-738.

12. Osoro N., Muoma J.O, Amoding A., Mukaminega D., Muthini M., Ombori O. and **Maingi J.M. (2014**): Effects of Water Hyacinth (Eichhornia crassipes [mart.] solms) Compost on Growth and Yield Parameters of Maize (*Zea mays*). *British Journal of Applied Science and Technology,* **4**(4): 617-633.

13. Naluyange V., Ochieno D.M.W, **Maingi J.M**., Ombori O., Mukaminega D., Amoding A., Odendo M., Okoth S.A, Shivoga W.A. and Muoma J.V.O **(2014)**. Compatibility of *Rhizobium* inoculant and water hyacinth compost formulations in Rosé coco bean and consequences on *Aphis fabae* and *Colletotrichum lindemuthianum* infestations. *Applied Soil Ecology* **76**, 68– 77

14. Musyoki A.M, Suleiman M.A, Mbithi J.N., and **Maingi J.M. (2013).** Diurnal and seasonal variations of pathogenic bacteria in Dandora Sewage Treatment Plant wastewater, Nairobi, Kenya. *Journal of Research in Environmental Science and Toxicology* **2**(2), 36-41.

15. Musyoki A.M, Suleiman M.A, Mbithi J.N., and **Maingi J.M. (2013).** Water-borne bacterial pathogens in surface waters of Nairobi River and health implication to communities downstream Athi River. *International Journal of Life Science and Pharma Research* **3**(1), 4-9.

16. Kago E.K, Kinyua Z.M, Okemo P.O and **Maingi J.M. (2013)**. Efficacy of *Brassica* Tissue and ChalimTM on Control of Plant Parasitic Nematodes. *Journal of Biology* **, 01**, (01) 25-32.

17. Njeru E.M, **Maingi J.M**, Cheruiyot R., Gitonga N.M **(2013).** Managing Soybean for Enhanced Food Production and Soil Bio-Fertility in Smallholder Systems through Maximized Fertilizer Use Efficiency**.** *International Journal of Agriculture and Forestry*, **3**(5) 191-197.

18. Gicharu G. K., Gitonga N.M., Boga H., Cheruiyot R.C. and **Maingi J.M (2013**): Variation in Nitrogen Fixation among Three Bush Bean Cultivars Grown in Kenya when Inoculated with Three Rhizobia Strains. *Greener Journal of Agricultural Sciences,* **3** (11) 748-754.

19. Gicharu, G.K., Gitonga, N.M, Boga H, Cheruiyot R.C., and **Maingi (2013):** Effect of inoculating selected climbing bean cultivars with different rhizobia strains on

nitrogen fixation. *Online International Journal of Microbiology Research* **1**(2), 25-31.

20. Luvanda M.K., **Maingi J**., Okemo P., and Yang E **(2013**). Analysis of the effects of di-electric heating on common food bacterial pathogens: Evaluation based on antibiotic susceptibility and infective doses. *Greener Journal of Biological Sciences* **3**(6), 220-228.

21. Njeru, E.M., **Maingi, J.M.,** Gitonga, N.M. and Cheruiyot, R. Symbiotic N_2 Fixation in Promiscuous Soybeans (*Glycine max* L. Merr.) as Influenced by Phosphorus, Potassium and Sulphur Nutrition. Conference proceedings on 1st East African Regional Scientific Conference of Pure and Applied Sciences 10th-14th August, 2010 Kenyatta University, Nairobi Kenya.

22. Gitonga, M. N., Gatheri, G. W., Cheruiyot, R., Gitonga, N. M. and **Maingi, J.M (2010):** Nodulation and nitrogen fixation in promiscuous and non promiscuous soybean (*Glycine max* (L.) Merrill) varieties in Eastern Kenya. *Journal of Tropical Microbiology and Biotechnology* **6**: 3-8.

23. Mugendi, E., Gitonga, N., Cheruiyot, R. and Maingi**, J. (2010):** Biological Nitrogen Fixation by Promiscuous Soybean (Glycine max L. Merril) in the Central Highlands of Kenya: Response to Inorganic Fertilizer Soil Amendments. *World Journal of Agricultural Sciences* **6** (4): 381-387.

24. Njeru, E.M., Gitonga, N.M., Cheruiyot, R. and **Maingi, J.M.** (2010) Response of promiscuous soybean varieties to phosphorus, potassium and sulphur applications in Eastern Kenya (Book chapter - manuscript reviewed and accepted).

25. Muli, E.M., **Maingi, J.M.**and Macharia, J. **(2008):** Antimicrobial properties of propolis and honey from the Kenyan stingless bee, *Dactylutina schimidti. Apiacta* **43**: 49-61.

26. Muli, E.M. and **Maingi, J.M. (2007):** Antimicrobial activity of *Apis mellifera* L. propolis collected in three regions of Kenya. *J. Venom. Anim. Toxins incl. Trop. Dis*., **13**: 655-663.

27. Hornetz, B., Shisanya, C.A, Gitonga, N.M. and **Maingi, J.M. (2006):** Studies on the possibility of expanding soybean (*Glycine max* (L.) Merril) cultivation by smallholders in different agro-ecological zones of Kenya (with special reference to varieties with the ability of promiscuous nodulation and tempo-spatial patterns of chances and risks for cultivation). *Materialien zur Ostafrika-Forschung*, Heft **30**.

28. **Maingi, J.M.,** Gitonga, N.M., Shisanya, C.A., Hornetz, B. and Muluvi, G.M. **(2006):** Population Levels of Indigenous Bradyrhizobia Nodulating Promiscuous Soybean in two Kenyan Soils of the Semi-arid and Semi-humid Agroecological Zones. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, **107**: 149-159.

29. **Maingi, J.M**., Shisanya, C.A., Gitonga, N.M. and Hornetz, B. **(2001):** Nitrogen fixation by common bean (*Phaseolus vulgaris* L.) in pure and mixed stands in semi – arid – East Kenya. *European Journal of Agronomy*, **14**:1 –12)

30. **Maingi, J.M.**, Shisanya, C.A., Gitonga, N.M. and Hornetz, B. **(2001):** Population level of bean rhizobia in the soil of Semi – arid Southeast Kenya and assessment of symbiotic behavior. *East African Journal of Science* **3(1)**: 13 – 18.

31. **Maingi, J.M.,** Shisanya, C.A., Gitonga, N.M. and Hornetz, B**. (1999):** Biological Nitrogen Fixation in selected Legumes of the Semi – Arid Makueni District of South East Kenya. *Der Tropen – Landwirt (Journal of Agriculture in the Tropics and Sub – tropics).* **100:**205-213.

32. Gitonga N.M, Shisanya C.A, Hornetz B., and **Maingi J.M. (1999):** Nitogen Fixation by *Vigna radiata* L. Wilczek in pure and Mixed stands in SE- Kenya *Symbiosis,* **27:**239-250.

REFEREES

1. Prof. Nkanata M. Gitonga, ,
   Meru University of Science and Technology.

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