

CURRICULUM VITAE

James Wanjohi Muthomi
BSc. (Agriculture), MSc. (Plant Pathology), PhD (Crop Protection)

Professor

Department of Plant Science and Crop Protection
Faculty of Agriculture
College of Agriculture and Veterinary Sciences
University of Nairobi

P. O. Box 29053-00625,
Nairobi, Kenya.
Tel. +254-0202055129;
E-mail: james_wanjohi@yahoo.com,
james.muthomi@uonbi.ac.ke;
Cell phone +254722-984179

April 2021

Table of Contents

Executive Summary	- 3 -
2. Professional Qualifications	- 5 -
3. Employment Record	- 5 -
4. Academic Publications	- 6 -
4.1 Book Authorship.....	- 6 -
4.2 Scientific Publications in Refereed Journals	- 6 -
4.3 Scientific Publications in Accepted Refereed Journals	- 14 -
4.4 Papers presented in conferences, seminars and workshops	- 14 -
4.5 Curriculum content documents.....	- 23 -
4.6 Key conferences attended since 2015	- 23 -
5. Supervision of postgraduate students	- 24 -
5.1 PhD. Students (Graduated).....	- 24 -
5.2 PhD. Students (On-going)	- 25 -
5.3 Masters students (Completed).....	- 25 -
5.4 Masters students (On-going thesis Research).....	- 31 -
6. Work Experience and Professional Responsibilities	- 32 -
6.1 Teaching Responsibilities	- 32 -
6.2 Leadership in University, College Faculty and Departmental Committees	- 33 -
6.3 Development and Review of Academic Curricula.....	- 35 -
6.4 External Examination of Postgraduate theses	- 35 -
6.5 External Examiner – University Examinations.....	- 38 -
6.6 Review of scientific manuscripts	- 38 -
6.7 Other Professional Assignments.....	- 40 -
7. Research Projects.....	- 41 -
8. Professional Courses and trainings attended.....	- 43 -
9. Awards	- 44 -
10. Membership to Professional Associations	- 44 -
11. Service to the Community	- 44 -
12. Referees.....	- 45 -

Executive Summary

Current Position: Professor of Plant Pathology and Chairman of the Department of Plant Science and Crop Protection, Faculty of Agriculture, University of Nairobi.

Academic Qualifications: BSc Agriculture (Nairobi), MSc Plant Pathology (Nairobi), Ph.D. Crop Protection (Nairobi).

Employment record: 27 years research and teaching experience at the University of Nairobi starting as an Assistant Research Fellow (1993-2002), Lecturer (2002-2008), Senior Lecturer (2008-2013), Associate Professor (2013-2019) and Professor (April 2019 to date); previously worked as a Crop Protection Officer, Kitui District, Ministry of Agriculture (January – August 1993).

Publications: Published authored/co-authored 122 peer reviewed papers in international peer reviewed journals. In addition, over 85 papers have been published in conference proceedings. This translates to over 120 publication points as an Associate Professor, of which 80 points are from refereed scholarly journals. Among the top 10 highly published in the College of Agriculture and Veterinary Sciences, with 2437 Google Scholar Citations

Supervision of Postgraduate Research: Has supervised 72 Masters and 11 Ph.D students to completion while 5 PhD students are currently undertaking research; 11 MSc students are undertaking research.

Research Interests and Grants: Research interests include management of mycotoxins in cereals, legume diseases and plant disease management. I have attracted funding and successfully managed 21 research projects, 4 of which were secured after promotion to Associate Professor. The research projects have supported training of numerous postgraduate students. Currently, I am managing 3 capacity building projects funded by the Alliance for a Green Revolution in Africa (AGRA) and the McKnight Foundation. The 3 projects are supporting a total of 29 postgraduate students, including 14 international students from D. R. Congo and South Sudan.

Leadership in University Committees: Has been offering leadership to various Departmental, Faculty and University committees, including Board Member of Graduate School, Chairman of Faculty of Agriculture Postgraduate Studies Committee, Head of Crop Protection Section in the Department of Plant Science and Crop Protection, Chairman of Faculty of Agriculture Time Tabling Committee, member of Field Station Advisory Committee, coordinator of three (3) postgraduate programmes and pioneered development of Open and Distance Learning (ODL) mode of delivery of postgraduate programmes. I have also served as an acting Associate Dean, Faculty of Agriculture and acting Chairman of the Department of Plant Science and Crop Protection on various occasions. Spearheaded development of 9 new academic curricula and actively participated in review of all curricula in the Department of Plant Science and Crop Protection. Currently I am chairing the Faculty of Agriculture sub-committee on the development of PhD curricula by course work in the Faculty of Agriculture.

Teaching Responsibilities: Have been teaching undergraduate and postgraduate students at the University of Nairobi for the last 24 years. Courses taught include Microbiology, Plant Pathology, Plant Disease Epidemiology and Seed Health, Bacteriology and Phytosanitary Measures. This is in addition to supervision and mentoring undergraduate and postgraduate students in projects.

Outreach Activities and Community Service: Have been a lead facilitator for trainings at KEPHIS, external examination for various universities, a peer reviewer for the Commission of University Education, peer reviewer for various scientific journals and Chairman of Board of Management in Secondary school. I have been an external examiner for Moi University, Masinde Muliro University of Science and Technology, Kenyatta University and Mount Kenya University. Have externally examined over 29 MSc and PhD theses and was a lead facilitator for development of curriculum for short in-service phytosanitary systems training courses, development of model curricula on Agricultural Value Chain and Scientific Writing Training.

Professional Courses and Trainings Attended: Basic German language, Molecular characterization of *Fusarium* species, Proposal Writing for International Research Projects, Pedagogy, Application of Phytosanitary Measures, Advanced Course on the Quality and Safety of Horticultural Crops, Seed Quality Assurance, Curriculum Development, Professionalism and Ethics in Agricultural Sciences, Sanitary/ Phytosanitary Systems and Mycotoxins in Foods, Improving agricultural productivity through increasing the impact of agricultural research in Africa

Membership to Professional Associations: Full member of the University of Nairobi Alumni Association (UONAA); Member of Horticultural Association of Kenya (HAK).

Awards: Australia Awards Fellowship, University of Sydney, Australia, 2015; United States Department of Agriculture Foreign Agricultural Service (USDA- FAS) Faculty Exchange Programme fellowship, University of Missouri-Columbia, USA, 2012; Best scientific paper presentation in Crop Protection, 10th KARI Biennial Scientific Conference, 2006; German Academic Exchange (DAAD) scholarship to undertake PhD. studies at the University of Bonn, Germany, 1997-2000.

1. Personal Details

1.1 Date of Birth: 6th July 1965

1.2 Marital status: Married

1.3 Current Position: Associate Professor

1.4 Address: Department of Plant Science and Crop Protection, Faculty of Agriculture, College of Agriculture and Veterinary Sciences, University of Nairobi.

P. O. Box 29053-00625, Nairobi, Kenya. Tel. +254-0202055129;

E-mail: james_wanjohi@yahoo.com, james.muthomi@uonbi.ac.ke;

Cell phone +254722-984179

2. Professional Qualifications

Degree	Time	Thesis title	University
Ph.D in Crop Protection	1997 - 2001	Comparative studies on virulence, genetic variability and mycotoxin production among isolates of <i>Fusarium</i> species infecting wheat	University of Nairobi/ University of Bonn, Germany
M.Sc in Plant Pathology	1990 - 1993	Isolation and screening for antibiotics from soil actinomycetes and their control of <i>Fusarium</i> wilt of carnation	University of Nairobi
BSc Agriculture	1987 - 1990	N/A	University of Nairobi

3. Employment Record

Employer	Time	Position	Responsibilities
Department of Plant Science and Crop Protection, University of Nairobi	From April 2019	Professor	Teaching undergraduate and postgraduates, leadership in development of academic programmes, crop protection research, supervision and examination of MSc and PhD research, leadership in Faculty committees, College representation in Graduate School, coordination of postgraduate training
Department of Plant Science and Crop Protection, University of Nairobi	December 2013- April 2019	Associate Professor	Teaching undergraduate and postgraduate degree programmes, development of academic programmes, leadership in crop protection research, thesis supervision, examination of MSc and PhD theses, leadership of Faculty and Departmental Committees, coordination of postgraduate training at Department
Department of Plant Science and Crop Protection, University of Nairobi	July 2008 – December 2013	Senior Lecturer	Teaching undergraduate and postgraduate degree programmes, crop protection research, thesis supervision, examination of MSc and PhD theses, leadership of Faculty and Departmental Committees, coordination of postgraduate training at Department
Department of Crop Protection, University of Nairobi	2002 - 2008	Lecturer	Teaching undergraduate and postgraduate degree programmes, crop protection research, thesis supervision, examination of

			MSc, participation in Faculty and Departmental Committees,
Department of Crop Protection, University of Nairobi	1995 - 2002	Assistant Research Fellow	Teaching and supervision of undergraduate students
Department of Crop Science, University of Nairobi	1993 - 1995	Assistant Research Fellow	Attached to Kibwezi Irrigation Project of the Dry Land Field Station as a resident plant pathologist – in-charge of pest and disease management in vegetable production; assisting in management of irrigation project
Ministry of Agriculture, Livestock Development and Marketing	1993	Agricultural Officer II	Crop Protection Officer, Kitui District – subject matter specialist in-charge of crop protection activities, reporting to District Agricultural officer.

4. Academic Publications

Authored and co-authored one book, 107 scientific publications in refereed journals. In addition, over 85 conference proceeding papers have been presented in international scientific conferences.

4.1 Book Authorship

Bigirimana, Joseph, Kiarie Njoroge and **James W. Muthomi**. 2014. Characterization of resistance to coffee rust and coffee berry disease. LAP Lambert Academic Publishing, OmniScriptum GmbH & Co. KG, Saarbrücken, Germany, 99 pp.

4.2 Scientific Publications in Refereed Journals

1. Jane Jerono Cheserek¹, Kahi Ngugi, **James Wanjohi Muthomi**, Chrispine O Omondi, Njoroge Kihara Ezekiel. 2021. Green bean biochemical attributes of Arabusta coffee hybrids from Kenya using HPLC and soxhlet extraction methods. Australian Journal of Crop Science 15(02):201-208 (2021). doi: 10.21475/ajcs.21.15.02.p2581
2. Alex M. Fulano, Geraldine M. W. Lengai and **James W. Muthomi**. 2021. Phytosanitary and Technical Quality Challenges in Export Fresh Vegetables and Strategies to Compliance with Market Requirements: Case of Smallholder Snap Beans in Kenya. Sustainability, MDPI 2021, 13, 1546. <https://doi.org/10.3390/su13031546>
3. Anthony Juma Wangila, Charles Karuku Gachuiiri, **James Wanjohi Muthomi** and John Okeyo Ojiem. 2021. Biomass yield and quality of fodder from selected varieties of lablab (*lablab purpureus* L) in Nandi South sub-county of Kenya. Online journal of Animal and Feed Research Vol 11, Issue 1: 28-35
4. Samuel A. Were, Rama Narla, E. W. Mutitu, **J.W. Muthomi**, Liza M. Munyua, Dries Roobroeck, Bernard Vanlauwe and Janice E. 2021. Biochar and vermicompost soil amendments reduce root rot disease of common bean (*Phaseolus Vulgaris* L.). African Journal of Biological sciences, Vol3, No 1, pp 176-196
5. Nancy Karimi Njeru, Charles Aura Odhiambo Midega, **James Wanjohi Muthomi**, John Maina Wagacha, Zeyaur Rahman Khan. 2020. In vitro antifungal activity of *Desmodium intortum* and *D. uncinatum* root extracts against growth of toxigenic *Fusarium verticillioides* and *Aspergillus flavus*. Australian Journal of Crop Science 14(12):1942-1948. doi: 10.21475/ajcs.20.14.12.2792
6. Nancy Njeru, Charles Midega, **James Muthomi**, John Wagacha, Zeyaur Khan. 2020. Impact of push-pull cropping system on pest management and occurrence of ear rots and mycotoxin contamination of maize in western Kenya. Plant Pathology 69(9): 1644-1654.

7. Teresa Nyambura Kinyungu, **James Wanjohi Muthomi**, Sevgan Subramanian , Douglas Watuku Miano & Florence Mmogi Olubayo. 2020. Transmission of viruses causing maize lethal necrosis disease through seed in commercial hybrids and effect on growth in the subsequent crop. Archives of Phytopathology and Plant Protection. DOI:10.1080/03235408.2020.1826720
8. Bellancile U., Mupenzi M., **Muthomi J.** , Mwang'ombe A. and Ghimire S. 2020. Disease surveillance and farmers' knowledge of Brachiaria (Syn. Urochloa) grass diseases in Rwanda. African Journal of Range & Forage Science. <https://doi.org/10.2989/10220119.2020.1810774>
9. Jane Jerono Cheserek, Kahiu Ngugi, **James Wanjohi Muthomi** and Chrispine Ogutu Omondi. 2020. Assessment of Arabusta coffee hybrids [*Coffea arabica* L. X Tetraploid Robusta (*Coffea canephora*)] for green bean physical properties and cup quality. African Journal of Food Science. 14(5): 119-127.
10. Jane Jerono Cheserek, Kahiu Ngugi, **James Wanjohi Muthomi** and Chrispine Ogutu Omondi. 2020. Genetic variability, heritability and correlation of quantitative traits for Arabusta coffee (*C. arabica* L. X Tetraploid *C. canephora* Pierre). Journal of Plant Breeding and Crop Science, 12(1): 50-57.
11. Geraldin M.W. Lengai, **James W. Muthomi**, Ernest R. Mbega. 2020. Phytochemical activity and role of botanical pesticides in pest management for sustainable agricultural crop production. Scientific African. <https://doi.org/10.1016/j.sciaf.2019.e00239>
12. Mary W. Njonjo, **James W. Muthomi**, and Agnes W. Mwang'ombe. 2019. Production Practices, Postharvest Handling, and Quality of Cowpea Seed Used by Farmers in Makueni and Taita Taveta Counties in Kenya. International Journal of Agronomy. <https://doi.org/10.1155/2019/1607535>
13. Dambolachepa, H.B., **Muthomi, J.W.**, Mutitu, E.W., Njoroge, S.M. 2019. Effects of postharvest handling practices on quality of groundnuts and aflatoxin Contamination. Novel Research in Microbiology Journal, 3(3): 396-414.
14. Ogecha, J.O., W. Warren. **J.W. Muthomi**, V. Aritua and J.N. Obanyi. 2019. Incidence and Severity of Common Bean (*Phaseolus vulgaris* L.) Pests in Agro-Ecological Zones and Farming Systems of Western Kenya. East African Agricultural and Forestry Journal. <https://doi.org/10.1080/00128325.2019.1599151>.
15. Peninah W. Gitau, Catherine N. Kunyanga, George O. Abong', John O. Ojiem and **James W. Muthomi**. 2019. Assessing Sensory Characteristics and Consumer Preference of Legume-Cereal-Root Based Porridges in Nandi County. Journal of Food Quality, <https://doi.org/10.1155/2019/3035418>
16. Nancy Karimi Njeru, Charles Aura Odhiambo Midega, **James Wanjohi Muthomi**, John Maina Wagacha and Zeyaur Rahman Khan. 2019. Influence of socio-economic and agronomic factors on aflatoxin and fumonisin contamination of maize in western Kenya. *Food Science and Nutrition*, 00:1-11
17. Oliver Otieno Okumu, **James Wanjohi Muthomi**, John Ojiem, Rama Narla, and John Huria Nderitu. 2019. Effect of Legume Extracts on Germination, Seedling Health of Beans (*Phaseolus vulgaris* L.) and Soil Microorganisms. *International Journal of Plant & Soil Science*, 28(1): 1-13,
18. Teresa Nyambura Kinyungu, **James Wanjohi Muthomi**, Sevgan Subramanian, Douglas Watuku Miano, Florence M'mogi Olubayo, Michael Angwenyi Maobe. 2019. Role of maize residues in transmission of maize chlorotic mottle virus and effect on yield. International Journal of Biosciences, 14(4): 338-349.
19. Malith David Maluk, Kahiu, Ngugi, Florence Olubayo Eric, Manyasa, **James Muthomi**, Felister Nzuve, Newton Ochanda 2019. Combining ability for earliness and yield among south sudanese F1 sorghum genotypes. Journal of Agriculture, 6(3): 1-13.
20. Alfred N. Mutundi, **James W. Muthomi**, Florence M. Olubayo, Philip K. Leley, Felista M. Nzuve. 2019. Effect of Farm Saved Maize (*Zea mays* L.) Seed on Intensity of Foliage Diseases. Journal of Agricultural Science, 11(8): 45-57.
21. Richard Katembo Kataliko, Paul M. Kimani, **James W. Muthomi**, Susan W. Wanderi, Florence M. Olubayo and Felister M. Nzuve. 2018. Combining ability of resistance to pod shattering and

- selected agronomic traits of soybean. *International Journal of Agricultural Policy and Research*, 6 (10): 176-188.
22. Teresa Nyambura Kinyungu, **James Wanjohi Muthomi**, Sevgan Subramanian, Douglas Watuku Miano, Florence Mmogi Olubayo, Joseph Wagura. 2018. Efficiency of aphid and thrips vectors in transmission of viruses causing maize lethal necrosis disease. *World Journal of Agricultural Research*, 6(4): 144-152.
 23. Alfred N. Mutundi, **James W. Muthomi**, Florence M. Olubayo, Philip K. Leley and Felista M. Nzuve. 2018. Quality of farm saved maize (*zea mays l.*) Seeds and its effect on field establishment. *International Journal of Research in Agricultural Sciences*, 5(6): 2348 – 3997.
 24. Oliver Otieno Okumu, **James Muthomi**, John Ojiem, Rama Narla, John Nderitu. 2018. Effect of lablab green manure on population of soil microorganisms and establishment of common bean (*Phaseolus vulgaris L.*). *American Journal of Agricultural Science*, 5(3):44-54.
 25. Oliver Okumu, **James Muthomi**, John Ojiem, Rama Narla, John Nderitu. 2018. Effect of time after incorporation of lablab green manure on root rot pathogens and establishment of common bean (*Phaseolus vulgaris L.*). *World Journal of Agricultural Research*, 6(4): 113-121.
 26. Eric Mpongolo Musungayi, Kahi Ngugi, **James Wanjohi Muthomi**, Vincent Woyengo Were, Florence Mmogi Olubayo and Felister Mbutu Nzuve. 2018. Evaluation of resistance of cassava half-sib progenies to cassava mosaic disease and their agronomic performances in Western Kenya. *Journal of Agricultural Science* 10(12): 78-91.
 27. Yuga, M. E., J. M. Kimani, P. M. Kimani, M. F. Olubayo, **J. W. Muthomi** & F. M. Nzuve. 2018. Combining Ability and Heterosis for Agronomic and Yield Traits in Indica and Japonica Rice Crosses. *Journal of Agricultural Science* 10(12): 92-103.
 28. Mbusa, H., **J. Muthomi**, F. Olubayo, K. Ngugi, B. Kivuva and F. Nzuve. 2018. Magnitude of G x E interaction on root yield of 25 orange and white-fleshed sweetpotato varieties in Kenya. *African Journal of Rural Development*, 3 (3): 843-848.
 29. Heritier Kambale Mbusa, Kahi Ngugi, Florence M. Olubayo, Benjamin Musembi Kivuva, **James W. Muthomi** & Felister M. Nzuve. 2018. Agronomic Performance of Kenyan Orange Fleshed Sweet Potato Varieties. *Journal of Plant Studies*, 7(2): 11-19.
 30. Kambura, C., C.M. Tanga, D. Kilalo, **J. Muthomi**, D. Salifu, I. Rwomushana, S.A. Mohamed and S. Ekesi. 2018. Composition, Host Range and Host Suitability of Vegetable-Infesting Tephritids on Cucurbits Cultivated in Kenya. *African Entomology*, 26(2): 379 – 397.
 31. Birithia, R. K., Sevgan Subramanian, **J.W. Muthomi**, Rama Devi Narla. 2018. Seasonal dynamics and alternate hosts of thrips transmitted Iris yellow spot virus in Kenya. *African Crop Science Journal* 26(3): 365 – 376.
 32. Yuga M.E. P.M. Kimani, J.M. Kimani, **J.W. Muthomi**. 2018. Screening Upland Rice Genotypes for Grain Yield and Grain Quality in Kenya. *Research journal's Journal of Agriculture*, 5(7): 1-15.
 33. Geraldine M. W. Lengai and **James W. Muthomi**. 2018. Biopesticides and Their Role in Sustainable Agricultural Production. *Journal of Biosciences and Medicines*, 6: 7-41.
 34. Sheila Rono, Felister Nzuve, **James Muthomi** and John Kimani. 2018. Combining Ability of Agronomic and Yield Traits in Rice Genotypes. *Journal of Plant Physiology & Pathology*, 6:2.
 35. **James Wanjohi Muthomi**, Geoffrey Ongoya Wafula, John Huria Nderitu, George Ndiema Chemining'wa. 2018. Integration of Seed Dressing, Bio-pesticides and Intercropping to Reduce Pesticide Use in Snap Bean Production. *International Journal of Agricultural Sciences and Natural Resources*, 5(1): 12-20.
 36. Pacifica Bosibori Ochichi, **James Wanjohi Muthomi**, John Maina Wagacha. 2018. Contribution of Seed Quality to the Occurrence of Fungal and Bacterial Diseases of Farmer Produced Common Bean in Varied Agro-Climatic Zones of Western Kenya. *American Journal of Agricultural Science*, 5(2): 19-27.
 37. Heritier Kambale Mbusa, Kahi Ngugi, Florence M. Olubayo, Benjamin Musembi Kivuva, **James W. Muthomi** & Felister M. Nzuve. 2018. The Inheritance of Yield Components and Beta Carotene Content in Sweet Potato. *Journal of Agricultural Science*, 10(2): 71-81.
 38. Habineza M. Jean Pierre, Josiah M. Kinama, Florence M. Olubayo, Susan W. Wanderi, **James W. Muthomi**, Felister M. Nzuve. 2018. Effect of intercropping maize and soybean on soil fertility. *International Journal of Agronomy and Agricultural Research (IJAAR)*, 12(2): 87-100.

39. Habineza M. Jean Pierre, Josiah M. Kinama, Florence M. Olubayo, Susan W. Wanderi, **James W. Muthomi** and Felister M. Nzuve. 2017. Effect of Intercropping Maize and Promiscuous Soybean on Growth and Yield. *Journal of Experimental Agriculture International*, 18(6): 1-21.
40. Sharon Natecho Buyela, **James Wanjohi Muthomi**, Agnes Wakesho Mwang'ombe, Peter Njau, Florence Olubayo. 2018. Effect of Seed Treatment on Wheat Seed Viability and Vigour. *American Journal of Agricultural Science*, 5(1): 1-9.
41. Bornventure I. Mumia, **James W. Muthomi**, Rama D. Narla, Moses W. Nyongesa, Florence M. Olubayo. 2018. Seed Potato Production Practices and Quality of Farm Saved Seed Potato in Kiambu and Nyandarua Counties in Kenya. *World Journal of Agricultural Research*, 6(1): 20-30.
42. Baraka Barnabas Mdenye, Josiah Mwivandi Kinama, Florence M'mogi Olubayo, Benjamin Musembi Kivuva, **James Wanjohi Muthomi**. 2018. Effect of storage methods of cassava planting materials on establishment and early growth vigour. *International Journal of Agronomy and Agricultural Research (IJAAR)*, 12(1): 1-10.
43. Habineza M. Jean Pierre, Josiah M. Kinama, Florence M. Olubayo, Susan W. Wanderi, **James W. Muthomi** & Felister M. Nzuve. 2018. Effect of Intercropping Maize-Soybean on Grain Quality Traits in Kenya. *Journal of Agricultural Science*, 10(2); 341-351.
44. Geoffrey Ongoya Wafula, **James W. Muthomi**, John H. Nderitu and George N. Chemining'wa. 2017. Efficacy of Potassium Salts of Fatty Acids in the Management of Thrips and Whitefly on Snap Beans. *Sustainable Agriculture Research*, 6: 45-54.
45. Sitta, J., Nzuve, F. M., Olubayo, F. M., Mutinda, C., Muiru, W. M., Miano, D. W., **Muthomi, J. W.** & Leley, P. K. 2017. Response of Assorted Maize Germplasm to the Maize Lethal Necrosis Disease in Kenya. *Journal of Plant Studies*, 6 (2): 65-76.
46. Jimmy, M.L., F. Nzuve, O. Florence, E. Manyasa, **J. Muthomi**. 2017. Genetic variability, heritability, genetic advance and trait correlations in selected sorghum (*Sorghum bicolor* L. Moench) varieties. *International Journal of Agronomy and Agricultural Research (IJAAR)*, 11(5): 47-56.
47. Peter Lorroki, **James Muthomi**, Jane Ininda, Lilian Gichuru, Stephen Githiri and Maina Wagacha. 2017. Mode of Gene Action to Maize Streak Virus in Mid Altitude Inbred Lines CML202 and Osu23i. *International Journal of Applied Science and Technology*, 7(3): 9-18.
48. Geraldin M. W. Lengai, **James W. Muthomi**, Rama D. Narla and Maina Wagacha. 2017. Efficacy of Plant Extracts and Antagonistic Fungi in Managing Tomato Pests and Diseases under Field Conditions. *Journal of Agriculture and Life Sciences*, 4(2): 20-27.
49. Beatrice O. Achieng, Felister M. Nzuve, **James W. Muthomi**, Florence M. Olubayo. 2017. Evaluation of maize (*Zea mays* L.) genotypes for resistance to *Aspergillus flavus* infection. *International Journal of Agronomy and Agricultural Research*, 10(6): 85-94.
50. Bornventure I. Mumia, **James W. Muthomi**, Rama D. Narla, Moses Nyongesa, and Florence M. Olubayo. 2017. Effect of Seed Potato Tuber Storage Methods on Occurrence of Potato Diseases, *International Journal of Research in Agricultural Sciences* 4 (4):2348 – 3997.
51. Mildred Millidee Morris, **James W. Muthomi**, John M. Wagacha. 2017. Effect of Soil Fertility and Intercropping on the Incidence and Severity of Root Rot Diseases of Common Bean (*Phaseolus vulgaris* L.). *World Journal of Agricultural Research*, 5(4): 189-199.
52. **James W. Muthomi**, Geraldin M. W. Lengai, Maina J. Wagacha, Rama D. Narla. 2017. In vitro activity of plant extracts against some important plant pathogenic fungi of tomato. *Australian Journal of Crop Science*, 11(6):6 83- 689.
53. **J. W. Muthomi**, A. M. Fulano, J. M. Wagacha, and A. W. Mwang'ombe. 2017. Management of Snap Bean Insect Pests and Diseases by Use of Antagonistic Fungi and Plant Extracts. *Sustainable Agriculture Research*, 6(3): 52-63.
54. Yvonne A. Mutinda, **James W. Muthomi**, John M. Kimani, George N. Cheming'wa and Florence M. Olubayo. 2017. Viability and Dormancy of Rice Seeds after Storage and Pre-treatment with Dry Heat and Chemical Agents. *Journal of Agricultural Science*, 9(7):175-185.

55. Robert Kiptabut Leitich, W. Arinaitwe, B. Mukoye, D. O. Omayio, A. K. Osogo, H. K. Were, **J. W. Muthomi**, R. M. Otsyula, M. M. Abang. 2016. Mapping of Angular Leaf Spot Disease Hotspot Areas in Western Kenya Towards Its Management. *American Journal of Applied Scientific Research*. 2(6): 75-81.
56. G. M. Malemba, F. M. Nzuve, J. M. Kimani, M. F. Olubayo and **J. W. Muthomi**. 2017. Combining Ability for Drought Tolerance in Upland Rice Varieties at Reproductive Stage. *Journal of Agricultural Science*, 9(3): 138-150.
57. Matthew J. Stasiewicz, Titilayo D.O. Falade, Murithi Mutuma, Samuel K. Mutiga, Jagger J.W. Harvey, Glen Fox, Tom C. Pearson, **James W. Muthomi** and Rebecca J. Nelson. 2017. Multi-spectral kernel sorting to reduce aflatoxins and fumonisins in Kenyan maize. *Food Control*, 78: 203–214.
58. Angeline W. Maina, John M. Wagacha, F.B. Mwaura, **James W. Muthomi** and Charles P. Woloshuk. 2017. Assessment of Farmers Maize Production Practices and Effect of Triple-Layer Hermetic Storage on the Population of *Fusarium* Spp. and Fumonisin Contamination. *World Journal of Agricultural Research*, 5(1): 21-30.
59. Molly O. Akello, Felister Nzuve, Florence Olubayo, Godwin Macharia and **James Muthomi**. 2017. Identification of Resistance Sources to Wheat Stem Rust from Introduced Genotypes in Kenya. *Journal of Agricultural Science*, 9(2):73-87.
60. Alex M. Fulano, **James W. Muthomi**, John M. Wagacha and Agnes W. Mwang'ombe. 2016. Antifungal Activity of Local Microbial Isolates against Snap Bean Pathogens. *International Journal of Current Microbiology and Applied Sciences*, 5(12): 112-122.
61. F.P. Langa, W.M. Muiru, D. Mbuge, L.R.M. Ragwa, F.M. Olubayo and **J.W. Muthomi**. 2016. Influence of Endosperm Types, Seed Moisture Content and Threshing Methods on Germination and Seedling Vigour of Sorghum. *World Journal of Agricultural Sciences* 12 (5): 378-383.
62. Angeline W Maina, John M Wagacha, Francis B Mwaura, **James W Muthomi** and Charles P Woloshuk. 2016. Postharvest Practices of Maize Farmers in Kaiti District, Kenya and the Impact of Hermetic Storage on Populations of *Aspergillus* Spp. and Aflatoxin Contamination. *Journal of Food Research*, 5(6): 53-66.
63. Idah Mugambi, Frances Williams, **James Muthomi**, Florence Chege and MaryLucy Oronje. 2016. Diagnostic support to plantwise plant doctors in Kenya. *Journal of Agricultural Extension and Rural Development*, 8(11): 232-239.
64. Baraka B. Mdenye, Josiah M. Kinama, Florence M. Olubayo, Benjamin M. Kivuva and **James W. Muthomi**. 2016. Effect of Storage Methods on Carbohydrate and Moisture of Cassava Planting Materials. *Journal of Agricultural Science* 8 (12):100-111.
65. John Maina Wagacha, Nancy Karimi Njeru, Oliver Otieno Okumu, **James Wanjohi Muthomi**, and Charity Kawira Mutegi. 2016. Occurrence of *Fusarium* Head Blight of Wheat and Associated Mycotoxins in Narok and Nakuru Counties, Kenya. *World Journal of Agricultural Research*, 4(4): 119-127. doi: 10.12691/wjar-4-4-4.
66. Oliver O. Okumu, **James W. Muthomi**, Charity K. Mutegi, John M. Wagacha. 2016. Resistance of Kenyan wheat germplasm to *Fusarium* head blight and deoxynivalenol contamination. *International Journal of Agronomy and Agricultural Research (IJAAR)*, 9(2): 22-35.
67. N.K. Njeru, **J.W. Muthomi**, C.K. Mutegi and J.M. Wagacha, 2016. Effect of cropping systems on accumulation of *Fusarium* head blight of wheat inocula in crop residues and soils. *Journal of Plant Sciences* 11: 12-21.
68. Julius P Sserumaga, Dan Makumbi, Lee Simyung, Kiarie Njoroge, **James Wanjohi Muthomi**, George N. Chemining'wa, Godfrey Asea, Moses Waswa and Daniel K. Bomet. 2015. Incidence and severity of potentially toxigenic *Aspergillus flavus* in maize (*Zea mays* L.) from different major maize growing regions of Uganda. *African Journal of Agricultural Research* 10 (11): 1244-1250.

69. **Muthomi, J. W.**, Mugambi, I. K., Ojiem, J., Chemining'wa, G. N. and Nderitu, J. H. 2014. Effect of incorporating lablab biomass in soils on root rot disease complex and yield of beans intercropped with maize. *International Journal of AgriScience* 4(12): 515-524.
70. Julius P Sserumaga, Dan Makumbi, Hyeonso Ji, Kiarie Njoroge, **James Wanjohi Muthomi**, George N Chemining'wa, Lee Si-myung, Godfrey Asea Hakbum Kim. 2014. Molecular characterization of tropical maize inbred lines using microsatellite DNA markers. *Maydica* 59: 267-274.
71. Martin Njogu, Esther Muindi, **James Muthomi**, Richard Nyankanga and Peter Muchiri 2014. Studies on the effects of stinging nettle extract, phosphoric acid and conventional fungicide combinations on the management of potato late blight and tuber yield in the Highlands of Kenya. *Direct Research Journal of Agriculture and Food Science (DRJAFS)* 2 (8): 119-127.
72. Martin Njogu, Esther Muindi, **James Muthomi**, Richard Nyankanga and Peter Muchiri 2014. *Phytophthora infestans* responses to stinging nettle nextract, phosphoric acid and fungicides combination, in Kenya. *Direct Research Journal of Agriculture and Food Science (DRJAFS)* 2(9): 128-134.
73. R.K. BIRTHIA, S. Subramanian, **J.W. Muthomi** and R.D. Narla. 2014. Resistance to Iris yellow spot virus and onion thrips among onion varieties grown in Kenya. *International Journal of Tropical Insect Science* 34(2): 73-79,
74. Bernard Ouma, **James Muthomi**, John Nderitu and Faith Toroitich. 2014. Management of thrips in French bean by integrating biological and synthetic pesticides in conventional spray regimes. *Journal of Renewable Agriculture*, 2(2): 27-37
75. Kubiriba Jerome, **Muthomi James**, Ndungo Vigheri, Kwach Johnson, Erima Rockefeller, Rwomushana Ivan, Tushemereirwe Wilberforce and Opio Fina. 2014. Strategies for rehabilitation of banana fields infested with *Xanthomonas campestris pv. musacrearum*. *Journal of Crop Protection*, 3 (1): 21-29
76. Muriungi, S J, Mutitu, EW and **Muthomi JW**. 2014. Efficacy of cultural methods in the control of *Rhizoctonia solani* strains causing tomato damping off in Kenya. *African Journal of Food, Agriculture, Nutrition and Development (AJFAND)* 14(2): 8776-8790.
77. L.W. Karanja, P.M. Wachira, **J.W. Muthomi**, N.A. Phiri, C.K. Mutegi, H.S. Nzioki, A .K. Gikaru, F. Kanampiu and J.M.Wagacha. 2013. Use of geographical information system to determine incidence of *Aspergillus* section *flavi* in different soils in Kaiti, Kenya. Accepted: *East African Agricultural and Forestry Journal* 78
78. F. K. Tom, **J. W. Muthomi**, F. M. Olubayo, and G. N. Chemining'wa. 2013. Resistance of locally grown maize genotypes to infestation by maize weevil (*Sitophilus zeamais* Motsch.). *East African Agricultural and Forestry Journal* 78 (4): 257-265.
79. S.W. Wahome, P.M. Kimani, **J.W. Muthomi**, and R.D. Narla. 2013. Quality and yield of snap bean lines locally developed in Kenya. *International Journal of Agronomy and Agricultural Research (IJAAR)*, 3(7): 1-10.
80. **J. W. Muthomi**, R. W. Weru, G. N. Chemining'wa and E. W. Mutitu. 2013. Tolerance of maize varieties to infection by *Aspergillus flavus* and aflatoxin accumulation. *East African Agricultural and Forestry Journal* 78 (1): 113-118
81. Mureithi, B. K., **Muthomi, J. W.**, Chemining'wa, G. N. and Mutitu, E. W. 2013. Identification of predisposing factors to aflatoxin contamination of maize value chain in eastern Kenya. *East African Agricultural and Forestry Journal* 78(4): 217-226.
82. Bigirimana, J, Kiarie Njoroge, **J.W. Muthomi**, D. Gahakwa, N.A. Phiri, E.K., Gichuru and D.J. Walyaro. 2013. Genetic Diversity among Disease Resistant Coffee Varieties and Cultivars in Rwanda Based On RAPD and SSR Markers. *Journal of Renewable Agriculture* 1(6): 106-112.

83. BIRTHIA, R., S. Subramanian, H. R. Pappu, **J. Muthomi** and R. D. Narla. 2013. Analysis of *Iris yellow spot virus* (IYSV, genus *Tospovirus*) replication in vector and non-vector thrips species. *Plant Pathology* 62 (6): 1407-1414. DOI: 10.1111/ppa.12057
84. Kitonyo, OM, Chemining'wa GN, **Muthomi JW**. 2013. Productivity of farmer-preferred maize varieties intercropped with beans in semi-arid Kenya. *International Journal of Agronomy and Agricultural Research (IJAAR)*. 3(1):6-16.
85. BIRTHIA, R., Subramanian, S., Villinger, J., **Muthomi, J.**, Narla, R.D. and Pappu, H.R. 2012. First report of tomato yellow ring virus (*Tospovirus*, *Bunyaviridae*) Infecting tomatoes in Kenya. *Plant Disease* 96, 1384.
86. Chemining'wa George N., Ngeno J., **Muthomi J.W** and Shibairo S.I. 2012. Effectiveness of indigenous pea rhizobia (*Rhizobium leguminosarum* bv. *viciae*) in cultivated soils of central Kenya. *Journal of Applied Biosciences* 57: 4177-4185
87. R. Nyankanga, M. Njogu, **J. Muthomi** and M. Olanya: 2012. Efficacy of fungicide combinations, phosphoric acid and plant extract from stinging nettle on potato late blight management and tuber yield. *Archives of Phytopathology and Plant Protection*, 45 (12): 1449-1463.
88. Ngeno Jonah, Chemining'wa George N., **Muthomi James W**. and Shibairo Solomon I. 2012. Effect of Rhizobium inoculation and nitrogen fertilizer application on growth, nodulation and yield of two garden pea genotypes. *Journal of Animal & plant Sciences* 15: 2147-2156.
89. Scholastica Leah Musyimi, **James Wanjohi Muthomi**, Rama Devi Narla, John Maina Wagacha. 2012. Efficacy of Biological Control and Cultivar Resistance on Fusarium Head Blight and T-2 Toxin Contamination in Wheat. *American Journal of Plant Sciences*, 3: 599-607
90. Gachu S.M., **Muthomi J.W.**, Narla R.D., Nderitu J.H., Olubayo F.M., Wagacha J.M. 2012. Management of thrips (*Thrips tabaci*) in bulb onion by use of vegetable intercrops. *International Journal of AgriScience* 2(5): 393-402.
91. **James W. Muthomi**, Scholastica L. Musyimi, John M. Wagacha, Rama D. Narla. 2012. Occurrence of *Fusarium* species and associated T2-toxin in Kenyan wheat. *Agricultural Sciences* 3(1): 24-34.
92. **Muthomi J. W.**, Mureithi B. K., Chemining'wa G. N., Gathumbi J. K., Mutit E. W. 2012. Aspergillus species and Aflatoxin B₁ in soil, maize grain and flour samples from semi-arid and humid regions of Kenya. *International Journal of AgriScience* 2(1): 22-34.
93. **Muthomi JW**, Kinyungu TN, Nderitu JH and Olubayo FM. 2011. Incidence of aphid-transmitted viruses in farmer-produced seed potato tubers in Kenya. *African Journal of Horticultural Science* 5:18-25.
94. Chemining'wa GN, Theuri SWM and **Muthomi JW**. 2011. Abundance of indigenous rhizobia nodulating cowpea and common bean in central Kenyan soils. *African Journal of Horticultural Science* 5: 92-97.
95. **Muthomi, J. W.**, K. K. Muimui and P. M. Kimani. 2011. Inheritance of resistance to angular leaf spot in yellow beans. *African Crop Science Journal* 19(4): 267 – 275.
96. Mumui, K. K., P. M. Kimani and **J. W. Muthomi**. 2011. Resistance and inheritance of common bacterial blight in yellow bean. *African Crop Science Journal* 19 (4): 277 – 287.
97. Wahome, S. W., P. M. Kimani, **J. W. Muthomi**, R. D. Narla and R. Buruchara. 2011. Multiple disease resistance in snap bean genotypes in Kenya. *African Crop Science Journal* 19 (4): 289 – 302
98. BIRTHIA, R., Subramanian, S., Pappu, H. R., Sseruwagi, P., **Muthomi, J. W.** and Narla, R. D. 2011. First Report of Iris yellow spot virus Infecting Onion in Kenya and Uganda. *Plant Disease* 95 (9): 1195

99. Narla, R. D., **J. W. Muthomi**, S. M. Gachu, J. H. Nderitu and F. M. Olubayo. 2011. Effect of Intercropping Bulb Onion and Vegetables on Purple Blotch and Downy Mildew. *Journal of Biological Sciences* 11(1): 52-57.
100. **J. W. Muthomi**, T. N. Kinyungu, J. H. Nderitu and F. M. Olubayo. 2010. Spatial arrangement of maize as border crop to manage aphids and aphid-transmitted viruses in potato. *East Africa Agricultural and Forestry Journal* 76: 21-29.
101. Wagacha, J. M., Steiner, U, Dehne, H-W., Zuehlke, S., Spiteller, M., **Muthomi, J. W.**, and Oerke, E-C. 2010. Diversity in Mycotoxins and Fungal Species Infecting Wheat in Nakuru District, Kenya. *Journal of Phytopathology* 158:527–535
102. **Muthomi, J. W.**, Njenga, L. N., Gathumbi, J. K. and Chemining'wa, G. N. 2009. The occurrence of aflatoxins in maize and distribution of mycotoxin-producing fungi in eastern Kenya. *Plant Pathology Journal* 8 (3): 113-119.
103. **Muthomi, J. W.**, Nyaga, J. N., Olubayo, F. M., Nderitu, J. H., Kabira, J. N., Kiretai, S. M., Aura, J. A. and Wakahiu, M. 2009. Incidence of aphid-transmitted viruses in farmer-based seed potato production in Kenya. *Asian Journal of Plant Sciences* 8(2): 166-171.
104. Muindi, E. M., **Muthomi, J. W.**, Nderitu, J. H., Olubayo, F. M., Kabira, J. N., Chemining'wa, G. N., Kiretai, S. M. and Aura, J. A. 2009. Use of cereal border crops in management of aphid-transmitted viral diseases during seed potato production. *African Journal of Horticultural Science*, 2: 69-78.
105. Otieno, P. E., **Muthomi, J. W.**, Chemining'wa, G. N. and Nderitu, J. H. 2009. Effect of rhizobia inoculation, farm yard manure and nitrogen fertilizer on nodulation and yield of food grain legumes. *Journal of Biological Sciences* 9 (4): 326-332.
106. **Muthomi, J. W.**, Ndung'u, J. K., Gathumbi, J. K., Mutitu, E. W. and Wagacha, J. M. 2008. The occurrence of *Fusarium* species and mycotoxins in Kenyan wheat. *Crop Protection* 27(8): 1215-1219.
107. **Muthomi, J. W.**, G. M. Riungu, J. K. Ndung'u, R. D. Narla, J. K. Gathumbi and J. M. Wagacha. 2008. Head blight of wheat in Kenya and contamination of grain with mycotoxin producing *Fusarium* species. *Journal of Plant Sciences* 3 (1): 52-60.
108. **Muthomi J. W.**, P. E. Otieno, G. N. Chemining'wa, J. H. Nderitu, and J. M. Wagacha. 2008. Effect of chemical spray on insect pests and yield quality of food grain legumes. *Journal of Entomology*, 5(3): 156-163.
109. Wagacha J. M. and **J. W. Muthomi**. 2008. Mycotoxin problem in Africa: Current status, implications to food safety and health and possible management strategies. *International Journal of Food Microbiology* 124: 1-12.
110. Riungu G. M., **J. W. Muthomi**, R. D. Narla, J. M. Wagacha, and J. K. Gathumbi. 2008. Management of *Fusarium* head blight of wheat and deoxynivalenol accumulation using antagonistic microorganisms. *Plant Pathology Journal* 7 (1): 13-19.
111. Mutitu, E. W, Wagacha, J. M, **Muthomi, J. W.**, and Mwaura, F. B. 2008. Control of bean rust on snap beans (*Phaseolus vulgaris* L.) using antibiotic metabolites produced by *Bacillus* and *Streptomyces* species. *Botswana Journal of Agriculture and Applied Sciences* 4 (1): 62-69.
112. Chemining'wa, G. N., **J. W. Muthomi** and S. W. M. Theuri. 2007. Effect of Rhizobia inoculation and starter-N on nodulation, shoot biomass and yield of grain legumes. *Asian Journal of Plant Sciences*, 6(7):1113-1118.
113. Wagacha, J. M., **Muthomi, J. W.**, Mutitu, E. W. and Mwaura, F. B. 2007. Control of Bean Rust using Antibiotics Produced by *Bacillus* and *Streptomyces* species - Translocation and Persistence in Snap Beans. *Journal of Applied Sciences and Environmental Management* 11 (2) 165 – 168.

114. **Muthomi, J. W.**, P. E. Otieno, G. N. Chemining'wa, J. H. Nderitu and J. M. Wagacha. 2007. Effect of legume root rot pathogens and fungicide seed treatment on nodulation and biomass accumulation. *Journal of Biological Sciences* 7: 1163-1170.
115. **Muthomi, J. W.**, Ndung'u, J. K., Chemining'wa, G. N. and Wagacha, J. M. 2007. Reaction of some Kenyan wheat cultivars to head blight after inoculation with *Fusarium graminearum*. *Asian Journal of Plant Sciences* 6 (4): 585-591.
116. Chemining'wa, G. N., **J. W. Muthomi**, J. G. Mureithi and C. K. Gachene. 2007. Response of green manure legumes to Rhizobia inoculation and starter-N fertilizer application. *Botswana Journal of Agriculture and Applied Sciences* 3 (2): 164-169.
117. Wagacha, J. M, and **Muthomi, J. W.** 2007. *Fusarium culmorum*: Infection process, mechanisms of mycotoxin production and their role in pathogenesis in wheat. *Crop Protection* 26: 877-885.
118. Oerke, E. C, Meier, A., Lienemann, G., and **Muthomi, J.** 2002. Incidence and control of *Fusarium* species causing head blight in the Rhineland, Germany. Pages 32-44 in: Wissenschaftlichen Fachtagung: *Fusarium*-befall and Mykotoxinbelastung von Getreide Schadverdichtungen in Ackerböden, 2001. Landwirtschaftliche Fakultät der Rheinischen Friedrich-Wilhelms-Universität Bonn, Germany.
119. **Muthomi, J. W.**, E.-C. Oerke, E. W. Mutitu, A. Schade-Schütze and H.-W. Dehne. 2002. Variation among *Fusarium* species and isolates infecting wheat ears based on aggressiveness, mycotoxin production and RAPD-PCR analysis. *Journal of Plant Disease and Protection*, 109 (5): 462 - 477.
120. **Muthomi, J. W.**, E.-C. Oerke, H.-W. Dehne and E. W. Mutitu. 2002. Susceptibility of Kenyan wheat varieties to head blight, fungal invasion and deoxynivalenol accumulation inoculated with *Fusarium graminearum*. *Journal of Phytopathology* 150: 30 – 36.
121. **Muthomi, J. W.**, Anja Schütze, H.-W. Dehne, E. W. Mutitu and E.-C. Oerke. 2000. Characterisation of *Fusarium culmorum* isolates by mycotoxin production and aggressiveness to winter wheat. *Journal of Plant Disease and Protection*, 107 (2): 113 - 123.
122. Mutitu, E. W. and **J. W. Muthomi**. 1994. Control of carnation *Fusarium* wilt using antibiotic culture filtrates from *Streptomyces* spp. *African Crop Science Journal*, 2 (1): 111-116.

4.3 Scientific Publications in Accepted Refereed Journals

1. **James W. Muthomi**, Maina J. Wagacha and Beatrice W. Mbugua. 2019. Management of root rot complex of common beans by intercropping with maize and legume diversification. *Journal of Applied Sciences*

4.4 Papers presented in conferences, seminars and workshops

1. Bellancile Uzayisenga, Mupenzi Mutimura, James W. Muthomi, Agnes W. Mwang'ombe, Sita R. Ghimire. 2019. Emerging disease challenges to sustainable production of *Brachiaria* grass in Rwanda. Grassland Society of Southern Africa (GSSA), 54th Annual Congress. 30 June to 4 July 2019, Upington, Northern Cape, South Africa.
2. Momanyi, K.M., Muthomi, J. M., and Kimenju, J.W. 2019. Effectiveness of organic and inorganic soil amendments in the management of fusarium wilt of banana. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
3. Jane Jerono Cheserek, Kahi Ngugi, James Wanjohi Muthomi, Chrispine Ogutu Omondi. 2019. Yield and sensory performance of Arabusta coffee hybrids (*C.arabica* L.

- X C.canephora* Pierre). AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
4. Wamani, A., Muthomi, J., Mutitu, E., & Waceke, J. W. 2019. Antifungal and antibacterial activity of local microbial antagonists against major tomato pathogens *in vitro*. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
 5. Wachira R. W., Muthomi J.W., Nderitu J.H., Ojiem J.O. 2019. Effect of Biochar, Lime and Compost in the Management of Common Bean Root rot. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
 6. Wamani, A., Muthomi, J., Mutitu, E.¹, & Waceke, J. W. 2019. Efficacy of microbial antagonists and plant extracts in management of bacterial wilt *in vivo*. Kenyatta University 2019 Biannual Conference
 7. Bol Mou Bol, Florence Olubayo, Dora Kilalo, Eric Manyasa, James W. Muthomi, and Felister Nzube. 2019. Efficacy of Seed Dressers and Resistance of Sorghum Varieties in the Management of Fall Armyworm. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
 8. Karama O. Ali, George N. Chemining'wa, James W. Muthomi and Suzan W. 2019. Effect of Lime, Manure and Inorganic Fertilizers on Growth, Nodulation and Yield of Dry Bean. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
 9. Oteng T.J. Francis, Felister M. Nzube, Muthomi J.W. Wanderi S. 2019. Evaluation of *Phaseolus vulgaris* in multi-locations to determine genotype by environment effect on yield. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya
 10. Njeru, N. K., C. A. O. Midega, J. W. Muthomi, J. M. Wagacha, Z. R. Khan. 2019. 'Push-pull' cropping system reduces occurrence of ear rots and mycotoxin contamination of maize in western Kenya. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya
 11. Carolyne W. Ngure, Francis M. Ngure, Grace A. Ochieng', James W. Muthomi, Rebecca J. Nelson. 2019. Effectiveness of Density Sorting in Reducing Aflatoxin B1 and Fumonisin in Maize Grain. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
 12. Wangila. A. J, Gachuri.K.C, Muthomi. J. W, Ojiem.O.J. 2019. Evaluation of biomass production of selected varieties of lablab as animal fodder in nandi south sub-county Kenya. AGRO 2019 Conference & Exhibition, 22nd to 24th October 2019, College of Agriculture and Veterinary Sciences, University of Nairobi, Kenya.
 13. **James Muthomi**. 2018. Technologies and innovations in Phytosanitary Systems. The 2nd Phytosanitary Conference "Phytosanitary Systems for Safe Trade and food Security". 4th to 8th June, 2018, KEPHIS Headquarter, Nairobi, Kenya
 14. Geraldine M. W. Lengai, **James W. Muthomi**, Ernest R. Mbega. 2018. Botanical Fungicide for Sustainable Production of Vegetables. The Sixth African Higher Education Week and RUFORUM Biennial Conference, 22-26 October, 2018, Kenyatta International Conference Centre (KICC), Nairobi, Kenya.

15. Oliver, O, **Muthomi, J**, Narla, R, Ojiem, J, Nderitu, J. 2018. Effect of time after incorporation of lablab green manure on establishment of common beans. The 2nd Phytosanitary Conference, 4th to 8th June, 2018, KEPHIS Headquarter, Nairobi, Kenya
16. Ochrans, M. K., **Muthomi J. W.**, Narla, R. D., and Ochuodho J. O. 2018. Influence of Seed Source and Production Practices on Quality of Soybean (*Glycine max*) Seed. The 2nd Phytosanitary Conference, 4th to 8th June, 2018, KEPHIS Headquarter, Nairobi, Kenya
17. Njonjo M.W, **Muthomi J.W.** and Mwang'ombe A.W. 2018. Effect of quality of farm saved cowpea seed on bacterial blight and dry grain yield. The 2nd Phytosanitary Conference, 4th to 8th June, 2018, KEPHIS Headquarter, Nairobi, Kenya
18. Esther S. Philip, **James W. Muthomi**, R. D. Narla and G. M. Riungu. 2018. Effect of Hot Water Treatment on Sugarcane Ratoon Stunting Disease, Cane Yield and Quality. The 2nd Phytosanitary Conference, 4th to 8th June, 2018, KEPHIS Headquarter, Nairobi, Kenya.
19. **Muthomi, J. W.**, Mwang'ombe, A. W., and Olubayo, F. M. 2016. Improving access to postgraduate training in Crop Protection for agricultural practitioners through distance learning at the University of Nairobi, Kenya. 8th Pan Commonwealth Forum on Open Learning (PCF8), 27-30 November 2016, Open University of Malaysia, Kuala Lumpur, Malaysia. Available at <http://oasis.col.org/handle/11599/2579?show=full>.
20. **James Muthomi**. 2016. Pest diagnostics in phytosanitary systems. International Phytosanitary Conference, KEPHIS Headquarters, Karen, Nairobi, Kenya.
21. Kwach, J. K., **J. W. Muthomi**, J. H. Nderitu, M. Odongo, and N. Okoko. 2016. Single stem rouging options for rehabilitation of Banana *Xanthomonas* Wilt affected plantations. 3rd International Interdisciplinary Conference, 7th Sept 2016, University of Eldoret, Eldoret, Kenya.
22. G. M. W. Lengai, **J. W. Muthomi**, J. M. Wagacha, R. D. Narla. 2016. Plant extracts and antagonistic fungi as alternatives to synthetic pesticides in management of fungal diseases of tomato. 5th Biennial RUFORUM Conference, 17-21 October 2016, Cape Town, South Africa.
23. G. M. W. Lengai and **J. W. Muthomi**. 2016. Sustainable agricultural productivity by use of natural products in crop disease management. 3rd Chuka University International Research Conference, 26-28th October 2016, Chuka University, Chuka, Kenya.
24. A. M. Fulano, **J. W. Muthomi**, J. M. Wagacha, and A. W. Mwang'ombe. 2016. Efficacy of Antagonistic Fungal Isolates in Management of Diseases in Snap Beans. 5th Biennial RUFORUM Conference, 17-21 October 2016, Cape Town, South Africa.
25. **Muthomi, J. W.**, Lengai, G. M. W., Fulano, A. M., Wagacha, J. M., Narla, R. D. and Mwang'ombe, A. W. 2016. Biopesticide-based IPM systems to reduce synthetic pesticide residues in vegetables for niche market access by small holder growers. 5th Biennial RUFORUM Conference, 17-21 October 2016, Cape Town, South Africa.
26. A. M. Fulano, **J. W. Muthomi**, J. M. Wagacha, and A. W. Mwang'ombe. 2016. Efficacy of Seed Dressers and Botanicals in Management of French Bean Pests. 3rd Chuka University International Research Conference, 26-28th October 2016, Chuka University, Chuka, Kenya.
27. Yvonne. A. Mutinda, **James W. Muthomi**, George N. Cheminig'wa, John M. Kimani and Florence Olubayo. Rice production practices and their effect on seed quality in Mwea Irrigation Scheme. 3rd Chuka University International Research Conference, 26-28th October 2016, Chuka University, Chuka, Kenya.

28. Sharon N. Buyela, **James W. Muthomi**, Agnes W. Mwang'o'mbe, Peter N. Njau and Florence Olubayo. 2016. Impact of wheat seed production practises on seed quality. 3rd Chuka University International Research Conference, 26-28th October 2016, Chuka University, Chuka, Kenya.
29. A. M. Fulano, **J. W. Muthomi**, J. M. Wagacha, and A. W. Mwang'ombe. 2016. Use of Antagonistic Fungi and Plant Extracts to Manage Diseases in Snap Beans. Nairobi Innovation Week 2016, 1st – 5th August 2016, University of Nairobi, Kenya
30. Mumia Isaya Bornventure, Rama D.Narla, **James W. Muthomi** and Moses Nyongesa. 2016. Seed potato production practices in major potato growing areas in Kenya. 3rd Chuka University International Research Conference, 26-28th October 2016, Chuka University, Chuka, Kenya.
31. G. M. W. Lengai, **J. W. Muthomi**, J. M. Wagacha, R. D. Narla. 2016. Plant extracts and antagonistic fungi as alternatives to synthetic pesticides in management of fungal diseases of tomato. Nairobi Innovation Week 2016, 1st – 5th August 2016, University of Nairobi, Kenya
32. Murithi Mutuma, **James W. Muthomi**, Matthew Stasiewicz. 2016. Low-cost Optical Sorting to Remove Mycotoxins from Maize in Local Kenyan Mills. Nairobi Innovation Week 2016, 1st – 5th August 2016, University of Nairobi, Kenya
33. Asha Bakari Mohamed, Charity Mutegi, Maina Wagacha, **James Muthomi**, Ranajit Bandyopadhyay, Peter J. Cotty. 2016. Managing sanitary barriers to trade: Controlling aflatoxin producing *Aspergillus flavus* S-strain in lower Eastern Kenya using atoxigenic *A. flavus* L-strain (Aflasafe KE01). International Phytosanitary Conference, 12th to 16th September 2016, KEPHIS Headquarters, Karen, Nairobi, Kenya.
34. Mumia I. Bornventure, Rama D. Narla, **James W. Muthomi** and Moses Nyongesa. 2016. Status of seed potato supply systems and phytosanitary issues in Kenya. International Phytosanitary Conference, 12th to 16th September 2016, KEPHIS Headquarters, Karen, Nairobi, Kenya.
35. A. M. Fulano, **J. W. Muthomi**, J. M. Wagacha, and A. W. Mwang'ombe. 2016. Enhancing competitiveness of French beans in the export market by overcoming phytosanitary and quality challenges. International Phytosanitary Conference, 12th to 16th September 2016, KEPHIS Headquarters, Karen, Nairobi, Kenya.
36. G. M. W. Lengai, **J. W. Muthomi**, J. M. Wagacha, R. D. Narla. 2016. Improving access to niche European market for fresh vegetables through reduction of phytosanitary and pesticide residue constraints. International Phytosanitary Conference, 12th to 16th September 2016, KEPHIS Headquarters, Karen, Nairobi, Kenya
37. Yvonne. A. Mutinda, **James W. Muthomi**, George N. Cheminig'wa, John M. Kimani and Florence Olubayo. 2016. Promoting better rice yields through improvement of rice seed system in Kenya. International Phytosanitary Conference, 12th to 16th September 2016, KEPHIS Headquarters, Karen, Nairobi, Kenya.
38. Karanja, LW, Wachira PM, Muthomi JW, Phiri NA, Mutegi CK, Kanampiu F, J.M.Wagacha, Nzioka HS, Gikaru AK, Mahuku G, Karanja DK, Otieno W. 2015. Influence of weather on the incidence of aflatoxigenic fungi at pre-harvest stage of maize value chain in Makueni, Kenya, 27th May. African Symposium on Mycotoxicology, Livingstone, Zambia

39. **Muthomi, J. W.** 2014. Aflatoxin Research in Kenya. Australia Awards – Africa Fellowships Short Course in Post-harvest Management of Maize, Rice and Legumes. Royal Palm Room, Southern Sun Mayfair, Parklands Rd, Parklands, Nairobi, 10th to 14th November 2014.
40. G. O. Wafula, **J. W. Muthomi**, J. H. Nderitu and G. N. Chemining'wa. 2014. Efficacy of potassium salts of fatty acids in the management of thrips and whiteflies on snap beans. 14th Workshop on Sustainable Horticultural Production in the Tropics. 1st to 5th December 2014, Kenyatta University, Nairobi.
41. G. O. Wafula, **J. W. Muthomi**, J. H. Nderitu and G. N. Chemining'wa. 2014. Management of snap bean pests by integrating seed dressing, foliar sprays and intercropping with maize. 14th Workshop on Sustainable Horticultural Production in the Tropics. 1st to 5th December 2014, Kenyatta University, Nairobi.
42. Ouma, B. O., **Muthomi, J. W.**, Nderitu, J. H. and Toroitich, F. 2014. Pest management practices and compliance to market standards among French bean farmers. 14th Workshop on Sustainable Horticultural Production in the Tropics. 1st to 5th December 2014, Kenyatta University, Nairobi.
43. Kivisi, A. K. and **Muthomi, J. W.** 2014. Levels of seed and soil borne inoculum in Nandi south and bean root rot management by seed dressing. McKnight Foundation - Collaborative Crop Research Program (CCRP) Sixth Meeting of East & Horn Africa Community of Practice (E/HAf CoP 4). 5 – 9th May, 2014, KCB Leadership Centre, Karen - Nairobi, Kenya.
44. **Muthomi, J. W.**, Wanja Njoroge, Kimenju, J. W. 2013. Efficacy of botanical and biological fungicides in management of fusarium wilt and root knot nematode in tomato. 13th Workshop On Sustainable Horticultural Production in the Tropics. Meru University of Science & Technology, 3rd-6th December, 2013.
45. Wanderi, S.W. S.M. Githiri, J. Sibiya and **J. Muthomi**. Assessment of genetic variability of kenyan soybean accessions and other introductions. In conference proceeding of 27th Soil Science Society of East Africa and the 6th African Soil Science Society Conference held in Nakuru, Kenya on 20th -25th October, 2013. pg. 1026-1033
46. Wanderi, S.W., S.M. Githiri, J.Sibiya, **J.Muthomi** and B.Rono. 2013. Farmers' preferred soybean varieties and selection criteria in Kenya. Paper presented in the 11th African Crop Science Society Conference held on 14 - 17 October 2013, Entebbe Uganda.
47. J. N. Onduso, **J. W. Muthomi** and E. W. Mutitu. 2013. Occurrence of bacterial wilt of tomato in Kenya and its management by use of resistant rootstock. 13th Workshop On Sustainable Horticultural Production in the Tropics. Meru University Of Science & Technology, 3rd-6th December, 2013.
48. Bernard Ouma, John H. Nderitu and **James Muthomi**. 2013. Pest management practices and compliance to market standards among French bean farmers in Mwea and Embu. 13th Workshop on Sustainable Horticultural Production in the Tropics. Meru University Of Science & Technology, 3rd-6th December, 2013.
49. G. O. Wafula, **J. W. Muthomi**, J. H. Nderitu and G. N. Chemining'wa. 2013. Management snap bean pests by integrating seed dressing, foliar sprays and intercropping with maize. 13th Workshop On Sustainable Horticultural Production in the Tropics. Meru University Of Science & Technology, 3rd-6th December, 2013.

50. Mugambi, I. K., **Muthomi, J. W.**, Ojiem, J., Chemining'wa, G. N. and Nderitu, J. H. 2013. Effect of Incorporating Lablab Residues On Bean Root Rot and Chafer Grub Incidence. McKnight Foundation - Collaborative Crop Research Program (CCRP) Fifth Meeting of East & Horn Africa Community of Practice (E/HAf CoP 4). 7th to 11th May 2013, ILRI Campus, Addis Ababa, Ethiopia.
51. Karanja L. W., Wachira P. M., **Muthomi J. W.**, Phiri N. A., Mutegi C. K., Nzioki H.S., Gikaru A. K., Kanampiu F. and Wagacha J. M. 2012. Use of geographical information system to determine incidence of *Aspergillus section flavi* in different soils in Kaiti, Kenya. 13th KARI Biennial Scientific Conference, KARI Headquarters, 22nd to 26th October 2012.
52. Tom F. K., **Muthomi J. W.**, Olubayo F. M. and Chemining'wa G. N. 2012. Susceptibility of locally grown maize varieties to infestation by maize weevil (*Sitophilus zeamais* Motsch.). 13th KARI Biennial Scientific Conference, KARI Headquarters, 22nd to 26th October 2012.
53. Mureithi B. K., **Muthomi J. W.**, Chemining'wa G. N. and Mutitu E. W. 2012. Identification of predisposing factors to aflatoxin contamination of maize value chain in eastern Kenya. 13th KARI Biennial Scientific Conference, KARI Headquarters, 22nd to 26th October 2012.
54. Weru R. W., **Muthomi J. W.**, Chemining'wa G. N. and Mutitu E. W. 2012. Resistance of maize varieties to infection by *Aspergillus flavus* and aflatoxin accumulation. 13th KARI Biennial Scientific Conference, KARI Headquarters, 22nd to 26th October 2012.
55. Kwach J. K., Onyango M. A., **Muthomi J. W.**, and Nderitu J. H. 2012. Baseline survey for status of Banana *Xanthomonas* Wilt in Kenya. 13th KARI Biennial Scientific Conference, KARI Headquarters, 22nd to 26th October 2012.
56. Subramanian, S., H.R. Pappu, R. BIRTHIA, O. Shem, **J. Muthomi**, P. Sseruwagi, R.D. Narla. 2012. Diversity and distribution of Iris yellow spot virus infecting onion in Eastern Africa. 4th Conference of the International Working Group on Legume and Vegetable Viruses (IWGLVV), May 17-20, 2011 - Antequera, Málaga, Spain
57. BIRTHIA, R. L., Subramanian, S., **Muthomi, J.**, and Narla, R. D. 2010. Distribution of the tospovirus Iris Yellow Spot Virus infecting onions in Kenya. Tenth Horticultural Association of Kenya (HAK) Workshop on Sustainable Horticultural Production in the Tropics: Analysis of Production Chains of Ornamentals for the Local Market and For Export. 8th - 11th December 2010, Jomo Kenyatta University of Agriculture and Technology (JKUAT).
58. **Muthomi, J. W.**, Mureithi, B. K., Chemining'wa, G. N., Gathumbi, J. K and Mutitu, E. W. 2010. *Aspergillus* and aflatoxin b₁ contamination of maize and maize products from eastern and north-rift regions of Kenya. 12th KARI Biennial Scientific Conference, 8-12th November 2010, KARI Headquarters, Nairobi, Kenya. <http://www.kari.org/biennialconference/conference12/docs/>
59. **J. W. Muthomi**, T. N. Kinyungu, J. H. Nderitu, F. M. Olubayo and J. N. Kabira. 2010. Effect of maize border crop placement distance on aphid population and aphid-transmitted virus diseases in potato. 12th KARI Biennial Scientific Conference, 8-12th November 2010, KARI Headquarters, Nairobi, Kenya. <http://www.kari.org/biennialconference/conference12/docs/>

60. Chege F., Day R., Rotteveel T., Sakala A., **Muthomi J.**, Otieno W., Kimani E., Ntoyai R., M’Ella J.G., Jones J., Olubayo F. and Mohamed, R. 2010. A new partnership in phytosanitary capacity development for protecting agriculture and supporting trade in Africa: The Centre of Phytosanitary Excellence (COPE). 12th KARI Biennial Scientific Conference, 8-12th November 2010, KARI Headquarters, Nairobi, Kenya. <http://www.kari.org/biennialconference/conference12/docs/>
61. **Muthomi, J. W.**, Njenga, L. N., Gathumbi, J. K. and Chemining’wa, G. N. 2008. Mycotoxin-producing fungi and aflatoxin incidence in maize from Machakos, Kenya. 11th KARI Biennial Scientific Conference, 10–14th November 2008, Nairobi, Kenya.
62. Muindi, E. M., **Muthomi, J. W.**, Nderitu, J. H., Olubayo, F. M., Kabira, J. N., Cheminin’wa, G. N., Kiretai, S. M. and Aura, J. A. 2008. Management of potato viruses in seed potato production using border crops. 11th KARI Biennial Scientific Conference, 10–14th November 2008, Nairobi, Kenya.
63. **Muthomi, J. W.**, Nyaga, J. N., Olubayo, F. M., Nderitu, J. H., Kabira, J. N., Kiretai, S. M., Aura, J. A. and Wakahiu, M. 2008. Incidence of aphids and aphid-transmitted viruses in farmer-based seed potato production. 13th KARI Biennial Scientific Conference, KARI Headquarters, 22nd to 26th October 2012..
64. Wahome, S.W., P. M. Kimani, **J. W. Muthomi** and R. D. Narla. 2011. Quality and yield of snap bean lines developed for multiple disease resistance. aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
65. Muriithi, B. K., **Muthomi, J. W.**, Chemining’wa, G. N., and Mutitu, E. W. 2011. Predisposing factors to aflatoxin contamination of maize in Estern Kenya. aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
66. Chemining’wa, G. N. Wahome, P. K., and **Muthomi, J. W.** 2011. Soil fertility status and nodulation of selected legumes in farmer’ fields in south-eastern Kenya. aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
67. Weru, R. W., **J. W. Muthomi**, G. N. Chemining’wa and E. W. Mutitu. 2011. Tolerance of maize varieties to infection by *Aspergillus* and aflatoxin accumulation. aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
68. Wagacha, J. M., U. Steiner, H.-W. Dehne, **J. W. Muthomi** and E.-C. Oerke. 2011. Variation in susceptibility of wheat parts to major *Fusarium* head blight pathogens. aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
69. **Muthomi, J. W.**, S. M. Gachu, R. D. Narla, J. H. Nderitu and F. M. Olubayo. Management of thrips in bulb onions using vegetable intercrops. aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
70. **Muthomi, J. W.** Muindi, E. M., Nderitu, J. H., Olubayo, F. M., Kabira, J. N. and Chemining’wa, G. N. 2011. Integrated management of aphid-transmitted viruses in potato (*Solanum tuberosum* L.). aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.

71. Kitonyo, O. M., G. N. Chemining'wa, and **J. W. Muthomi**. 2011. Performance of farmer-preferred maize varieties intercropped with beans in semi-arid Kenya. aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
72. Tom, F. K., F. M. Olubayo, **J. W. Muthomi** and G. N. Chemining'wa. 2011. Susceptibility of locally grown maize varieties to maize weevil (*Sitophilus zeamais* Motsch.). aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
73. Kimani, E., J. Kigamwa, F. Chege and **J. Muthomi**. 2011. Bridging phytosanitary capacity through the Centre of Phytosanitary Excellence (COPE). aGRO 2011 Inaugural Biennial Conference, Faculty of Agriculture, University of Nairobi, 26th – 28th September 2011, Nairobi, Kenya.
74. **Muthomi, J. W.**, G. M. Riungu, J. K. Ndung'u, R. D. Narla and J. K. Gathumbi. 2008. *Fusarium* head blight in Kenya and possible management strategies. 10th International *Fusarium* Workshop and the *Fusarium* Genomics Workshop, 30th August-2nd September 2008, Alghero (Sardinia), Italy.
75. **Muthomi, J. W.**, Nderitu, J. H., Olubayo, F. M., Muindi, E. M, Kabira, J. N., Kiretai, S. M. and Aura, J. A. 2008. Management of aphid-transmitted virus diseases in seed potato production by use of border crops and insecticides. 8th Horticultural Association of Kenya (HAK) workshop, Masinde Muliro University of Science and Technology, 8th-11th December 2008, Kakamega, Kenya.
76. **Muthomi, J. W.**, Nyaga, J. N., Olubayo, F. M., Nderitu, J. H., Kabira, J. N., Kiretai, S. M., Aura, J. A. and Wakahiu, M. 2008. Incidence of aphids and aphid-transmitted viruses in farmer-based seed potato production. 11th KARI Biennial Scientific Conference, 10–14th November 2008, Nairobi, Kenya.
77. Muindi, E. M., **Muthomi, J. W.**, Nderitu, J. H., Olubayo, F. M., Kabira, J. N., Chemining'wa, G. N., Kiretai, S. M. and Aura, J. A. 2008. Management of potato viruses in seed potato production using border crops. 11th KARI Biennial Scientific Conference, 10–14th November 2008, Nairobi, Kenya.
78. **Muthomi, J. W.**, Njenga, L. N., Gathumbi, J. K. and Chemining'wa, G. N. 2008. Mycotoxin-producing fungi and aflatoxin incidence in maize from Machakos, Kenya. 11th KARI Biennial Scientific Conference, 10–14th November 2008, Nairobi, Kenya.
79. **Muthomi, J. W.**, Otieno, P. E., Chemining'wa, G. N. and Nderitu, J. H. 2007. Effect of chemical pesticide spray on insect pests, foliar fungal diseases and yield of food grain legumes. African Crop Science Conference Proceedings 8: 981-986.
80. **Muthomi, J. W.**, Riungu, G. M., Ndung'u, J. K. and Narla, R. D. 2007. Occurrence of wheat head blight, grain contamination and pathogenicity of *Fusarium* species isolated from wheat. African Crop Science Conference Proceedings 8: 863-867.
81. Riungu, G. M., **Muthomi, J. W.** and Narla, R. D. 2007. Effect of antagonistic microorganisms on severity of *Fusarium* head blight of wheat and grain yield. African Crop Science Conference Proceedings 8: 827-832.
82. Otieno, P. E., **Muthomi, J. W.**, Chemining'wa, G. N. and Nderitu, J. H. 2007. Effect of rhizobia inoculation, farmyard manure and nitrogen fertilizer on growth, nodulation and yield of selected food grain legumes. African Crop Science Conference Proceedings 8: 305-312.

83. **Muthomi, J. W.**, G. N. Riungu and J. M. Wagacha. 2007. Management of *Fusarium* head blight of wheat using antagonistic microorganisms. Tropentag 2007, October 9-11, Witzhausen, Germany; Book of abstracts pp516. (Summary paper accessible at <http://www.tropentag.de/2007/abstracts/full/448.pdf>).
84. **Muthomi, J. W.**, J. K. Ndung'u, J. and K. Gathumbi. 2006. Occurrence of wheat head blight-causing *Fusarium* species and associated trichothecene mycotoxins in Kenyan wheat. 10th KARI Biennial Scientific Conference, 13-17 November 2006, Nairobi, Kenya.
85. **Muthomi, J. W.**, P. E. Otieno and G. N. Chemining'wa. 2006. Effect of root rot pathogens and fungicide seed treatment on nodulation in food grain legumes. 10th KARI Biennial Scientific Conference, 113-17 November 2006, Nairobi, Kenya.
86. Ndung'u, J. K., **J. W. Muthomi** and G. N. Chemining'wa. 2006. Reaction of some Kenyan wheat cultivars to head blight after inoculation with *Fusarium graminearum*. 10th KARI Biennial Scientific Conference, 113-17 November 2006, Nairobi, Kenya.
87. Theuri, S. W. M., G. N. Chemining'wa and **J. W. Muthomi**. 2006. The abundance of indigenous rhizobia nodulating cowpea and common bean in central Kenyan soils. 10th KARI Biennial Scientific Conference, 113-17 November 2006, Nairobi, Kenya.
88. Chemining'wa, G. N., S. W. M Theuri and **J. W. Muthomi**. 2006. Effect of rhizobia inoculation and starter-N on the performance of grain legumes. 10th KARI Biennial Scientific Conference, 113-17 November 2006, Nairobi, Kenya.
89. **Muthomi, J.** and H. Hindorf. 2006. Occurrence of *Fusarium* head blight-causing pathogens and mycotoxins in Kenyan wheat. 9th European *Fusarium* Seminar, 19 –22 September 2006, Wageningen, The Netherlands. Book of abstracts pp145.
90. **Muthomi, J. W.**, H. Hindorf, J. K. Ndung'u and J. K. Gathumbi. 2006. Occurrence of *Fusarium* head blight-causing pathogens and mycotoxins in Kenyan wheat. Tropentag 2006 October 11-13, University of Bonn, Germany (Summary paper accessible at <http://www.tropentag.de/2006/abstracts/full/608.pdf>).
91. **Muthomi, J. W.**, J. K. Ndung'u, J. K. Gathumbi and G. N. Chemining'wa. 2005. *Fusarium* and mycotoxin contamination in freshly harvested wheat grain in Kenya. African Crop Science Conference proceedings,7: 355-358.
92. Chemining'wa, G. N., **J. W. Muthomi**, J. G. Mureithi and C. K. Gachene. 2005. Effect of rhizobia inoculation and starter-N fertilizer on nodulation and shoot biomass of leguminous cover crops. 7th Biennial Conference of the African Crop Science Society, 5th –9th December 2005, Entebbe, Uganda.
93. **Muthomi, J. W.** and E. W. Mutitu. 2003. Occurrence of mycotoxin producing *Fusarium* species and other fungi on wheat kernels harvested in selected districts of Kenya. African Crop Science Conference proceedings,6: 335-339.
94. Wagacha, J. M., E. W. Mutitu, **J. W. Muthomi** and F. B. Mwaura. 2003. Translocation and persistence of antibiotics produced by *Bacillus* and *Streptomyces* spp. African Crop Science Conference proceedings,6: 81-84.
95. Muimui, K. K., P. M. Kimani, **J. W. Muthomi** and Chirwa, R. 2003. Breeding for resistance to angular leaf spot, common bacterial blight and rust in yellow, brown and tan bean types in southern, eastern and central Africa. 6th Biennial Conference of the African Crop Science Society, 12th – 17th October 2003, Nairobi, Kenya.

- 96. Muthomi, J. W.**, Dehne, H.-W., Oerke, E.-C., Mutitu, E. W., and Hindorf, H. 2000. Characterisation of *Fusarium graminearum* and *F. Culmorum* isolates by mycotoxin production and aggressiveness to wheat. *Mycotoxin Research*: 16A (1): 50 - 53. Proceedings of 22nd Mycotoxin Workshop, 5-7 June 2000, Bonn, Germany.
- 97. Schade-Schütze, A., Muthomi, J.**, Oerke, E.-C., and Dehne, H.-W. 2000. Yield reduction and mycotoxin contamination of wheat due to *Fusarium culmorum*. *Mycotoxin Research*, 16A (1): 30 - 37. Proceedings of 22nd Mycotoxin Workshop, 5-7 June 2000, Bonn, Germany.

4.5 Curriculum content documents

1. Roots and Tuber (R&TCs) crops curriculum. Ministry of Agriculture
2. Short in-service Phytosanitary Courses Training Content for Phytosanitary Systems. Centre of Phytosanitary Excellence, Kenya Plant Health Inspectorate Service
3. John H. Nderitu and James Muthomi. 2011. Curricula for Agricultural Value Chain Development for Universities and Colleges. Developed by the Gesellschaft Fuer Internationale Zusammenarbeit (Giz), Promotion of Private Sector Development in Agriculture (PSDA) and Kenyan Universities.

4.6 Key conferences attended since 2015

1. The Sixth African Higher Education Week and RUFORUM Biennial Conference, 22-26 October, 2018, Kenyatta International Conference Centre (KICC), Nairobi, Kenya.
2. The 2nd Phytosanitary Conference “Phytosanitary Systems for Safe Trade and food Security”. 4th to 8th June, 2018, KEPHIS Headquarter, Nairobi, Kenya
3. Combating Aflatoxins in the Maize Value Chains of Africa” on 4-5 December 2017 in Dar es Salaam, Tanzania. the Partnership for Aflatoxin Control in Africa (PACA)
4. Roots and Tuber (R&TCs) crops Curriculum Development Workshop 17th to 22nd April 2017 at DTI Naivasha. Ministry of Agriculture.
5. McKnight Foundation Collaborative Crop Research Program (CCRP) Ninth Meeting of Eastern Africa Community of Practice (EAfCoP9). May 1 - 5, 2017, The Vic Hotel, Kisumu, Kenya
6. The RUFORUM Biennial Conference And Fifth African Higher Education Week, 14-21 October 2016, Cape Town, South Africa.
7. The Eighth Pan-Commonwealth Forum (PCF8) at the Open University Malaysia (OUM), Kuala Lumpur, Malaysia, 27 - 30 November 2016.
8. The first International Phytosanitary Conference, 12th to 16th September 2016, KEPHIS Headquarters, Karen, Nairobi, Kenya.

9. SDG-Graduate School proposal writing workshop at Global South Studies Centre (GSSC), 17-20th May 2016 at the University of Cologne, Germany.
10. The 8th McKnight Foundation Collaborative Crop Research Program (CCRP) Eastern Africa Regional Community of Practice (EAfCoP8) annual conference. May 3 - 7, 2016, Addis Ababa, Ethiopia.

5. Supervision of postgraduate students

Supervised a total of 72 MSc. and 11 Ph.D students to completion, 5 PhD and 11 MSc students have ongoing research projects.

5.1 PhD. Students (Graduated)

	Student	Degree	Thesis title	Graduation year	University
1	Jane Jerono Cheserek	Plant Breeding & Biotechnology	Development of improved arabusta coffee selected from backcross derivatives of arabica and induced tetraploid robusta	2020	Nairobi
2	Nancy Karimi Njeru	Crop Protection	Potential role of push-pull cropping system in management of mycotoxins in maize in Kenya	2020	Nairobi
3	Samuel Aringo Were	Crop Protection	Occurrence of root rot fungal pathogens of common bean in western Kenya and elucidation of mechanisms in their management with biochar and vermicompost	2020	Nairobi
4	Oliver Otieno Okumu	Crop Protection	Effect of lablab (<i>Lablab purpureus</i> L.) green manure on population of soil microorganisms and bean (<i>Phaseolus vulgaris</i> L.) crop establishment	2018	Nairobi
5	Teresa N. Kinyungu	Crop Protection	Transmission of viruses causing maize lethal necrosis disease and the effect of co-infection of maize with <i>Maize chlorotic mottle virus</i> and <i>Sugarcane mosaic virus</i>	2018	Nairobi
6	Julius Pyton Sserumaga	Plant Breeding & Biotechnology	Genetics and Molecular Analysis of <i>Aspergillus</i> ear rot (Aflatoxin) resistance in tropical maize	2018	Nairobi
7	Johnson Kisera Kwach	Crop Protection	Occurrence of Banana <i>Xanthomonas</i> Wilt in Kenya and Potential Approaches to Rehabilitation of Infected Orchards	2014	Nairobi
8	Birithia Rael Kayume	Crop Protection	Diversity, characterization and management of Tosspoviruses in vegetable ecosystems in Kenya	2013	Nairobi
9	Susan Wanderi	Plant Breeding	Breeding for soybean rust (<i>Phakopsora pachyrhizi</i>) resistance	2013	KwaZulu – Natal,

			in Kenya		South Africa
10	Samson J. Muriungi.	Plant Pathology	Molecular characterization of <i>Rhizoctonia solani</i> strains causing damping off disease on tomato in Kenya and management of the disease by non-chemical methods.	2009	Nairobi
11	John Maina Wagacha	Plant Pathology	Development of <i>Fusarium</i> species differing in mycotoxin production and conidia formation on wheat plants	2008	Bonn, Germany

5.2 PhD. Students (On-going)

	Student	PhD Degree	Thesis title	Status	University
1	Bellancile Uzayisenga	Plant Pathology	Surveillance, identification and management of brachiaria grass diseases in Rwanda	Writing thesis	Nairobi
2	Geraldin M. W. Lengai	Life Sciences (Sustainable Agriculture)	Development of a botanical fungicide from turmeric and ginger rhizomes for management of fungal diseases of tomato	Submitted Thesis	Nelson Mandela African Institution of Science & Technology
3	Yona Masheti	Crop Protection	Prevalence, epidemiology and management of bean scab (<i>Elsinoë phaseoli</i>) of common beans (<i>Phaseolus vulgaris</i>) in Kenya	Research ongoing	Nairobi
4	Ginson M. Riungu	Crop Protection	Role of insects in aspergillus infection, aflatoxin contamination and their management in pre-harvest maize	Research ongoing	Nairobi
5	Asha Mohamed Bakari	Plant Pathology	Prevalence of Mycotoxigenic Fungi and Mycotoxins in Maize and their Management using Multi-Spectral Kernel Sorting and Irradiation Techniques	Research ongoing	Nairobi

5.3 Masters students (Completed)

	Student	Degree	Thesis title	Year	University
1	Wamani Arthur Ochieng'	MSc Crop Protection	Efficacy of microbial antagonists and plant extracts in management of bacterial wilt of potatoes and tomatoes	2020	Nairobi
2	Rachael Wambui	MSc Plant Pathology	The effect of biochar, lime and compost in the management of	2020	Nairobi

	Wachira		soil acidity and root rot of common bean (<i>Phaseolus vulgaris</i> L.)		
3	Ngure Carolyn Wambui	MSc Plant Pathology	Effectiveness of density sorting in reducing aflatoxin b1 and fumonisins in maize grain	2020	Nairobi
4	Masheti O. Yona	MSc Crop Protection	Evaluation of bean genotypes for disease reaction over different planting times in multiple environments	2019	Nairobi
5	Matilda Mdyetseni	MSc Crop Protection	Effectiveness of crossborder phytosanitary measures in control of maize pests in Malawi	2019	Nairobi
6	Haswell Blair Dambolach epa	MSc Crop Protection	Management of aflatoxin contamination in groundnuts through host plant resistance and post-harvest handling practices	2019	Nairobi
7	Kennedy Moseti Momanyi	MSc Crop Protection	Status of Fusarium wilt of banana in Kisii county and its management by organic and inorganic soil amendments	2019	Nairobi
8	Ochran Mutai	MSc Seed Technology & Business Management	Effect of seed source and post-harvest handling techniques on seed quality and yield of soybean	2018	Nairobi
9	Chemutai Sheila Rono	MSc Plant Breeding & Biotechnology	Performance and combining ability of agronomic and yield related traits of rice genotypes	2018	Nairobi
10	Lilian Kaku Angelo Lado	MSc Plant Breeding & Biotechnology	Resistance of half-sib cassava progenies to cassava mosaic disease and combining ability among elite cassava parents	2018	Nairobi
11	Mutundi N'Seleka Alfred	MSc Seed Technology & Business Management	Quality of farm saved maize (<i>zea mays</i> L.) Seeds in busia county and its effect on intensity of foliage diseases	2018	Nairobi
12	Batumike Nshobole Ruphine	MSc Plant Breeding & Biotechnology	Resistance of common bean genotypes to foliar fungal and Bacterial diseases	2018	Nairobi
13	Musungayi Mpongolo Eric	MSc Plant Breeding & Biotechnology	Agronomic performance of cassava half-sib progenies and the inheritance of resistance to casava diseases and pests	2018	Nairobi
14	Katambo Kataliko Richard	MSc Plant Breeding & Biotechnology	Genetic analyses of pod shattering and agronomic traits of soybean (<i>Glycine max</i> (L.) Merr.) genotypes	2018	Nairobi

15	Mary Wanjiku Njonjo	MSc Seed Technology & Business Management	Quality of cowpea seed used by farmers in makueni and taita taveta counties and its effect on crop performance	2018	Nairobi
16	Liza Nelson Micheal Taban	MSc Seed Technology & Business Management	Quality bean seed produced under informal system and effect on crop performance in western Kenya	2017	Nairobi
17	Mildred Millidee Morris	MSc Crop Protection	Evaluation of soil nutrients and different cropping systems on soil borne diseases and seed quality in improving the productivity of common beans	2017	Nairobi
18	Beatrice Achieng Odindo	MSc Plant Breeding & Biotechnology	Genetic analysis of resistance to <i>Aspergillus</i> ear rot and aflatoxin accumulation in temperate x mid-altitude maize (<i>Zea Mays</i> L.) inbred lines	2017	Nairobi
19	Mumia Isaya Bornventur e	MSc Seed Technology & Business Management	Quality status of farm saved seed potato and effect of methods of storage on seed quality and crop performance	2017	Nairobi
20	Buyela Sharon Natecho	MSc Seed Technology & Business Management	Quality of farm-saved wheat seed in Nakuru county and the effect of seed treatment on viability and vigour	2017	Nairobi
21	Stephen Muruga Kiretai	MSc Crop Protection	Effectiveness of integrating bio-pesticides and intercropping to manage pests in french bean	2017	Nairobi
22	Yvonne Agnes Mutinda	MSc Seed Technology & Business Management	Quality of farm saved rice seed in mwea irrigation scheme, effect of packaging materials and seed treatment on viability and vigour	2017	Nairobi
23	Benadatte Jerotich Kosgei	MSc Crop Protection	Effects of seed quality and soil borne pathogen inoculum on disease pressure in common bean	2016	Nairobi
24	Alex Muremi Fulano	MSc Crop Protection	Management of pests and diseases in snap beans by use of microbial antagonists and plant extracts	2016	Nairobi
25	Geraldin M. W. Lengai	MSc Crop Protection	Efficacy of plant extracts and antagonistic fungi as alternatives to synthetic pesticides in management of tomato pests and diseases	2016	Nairobi
26	Beatrice Wambui Mbugua	MSc Microbiology & Biotechnology	Effect of intercropping and legume diversification on intensity of fungal and bacterial diseases of common bean	2016	Nairobi
27	Carolyn W.	MSc Crop Protection	Diversity and host preference of Tephritid fruit fly species	2016	Nairobi

	Kambura		infesting cucurbit and major horticultural crops in coastal Kenya		
28	Maina Wanjiku Angeline	MSc Microbiology & Biotechnology	Effect of hermetic storage practices on fungal population and associated mycotoxins in maize in Makeni County, Kenya	2016	Nairobi
29	Felicien Ndaruhutse	MSc Plant Breeding & Biotechnology	Generation mean and stability analyses of maize hybrids resistance to <i>Diplodia</i> ear rot	2016	Nairobi
30	Mohamed Asha Bakari	MSc Microbiology	Population of <i>Aspergillus</i> section <i>flavi</i> and aflatoxin contamination in maize from fields treated with atoxigenic <i>Aspergillus flavus</i> (aflasafe Ke01) in lower eastern Kenya	2016	Nairobi
31	Esther Sheila Philip	MSc Crop Protection	Occurrence of sugarcane ratoon stunting disease in Nyando sugar belt and its management by hot water treatment	2016	Nairobi
32	Anne Kadaari Kivisi	MSc Crop Protection	Bean disease inoculum in soil and seeds in Nandi County and management of bean root rot by seed dressing	2015	Nairobi
33	Pacifica Bosibori Ochichi	MSc Microbiology	Effect of cropping systems on the occurrence of fungal and bacterial diseases of legumes in western Kenya	2015	Nairobi
34	Jared Nyakundi Onduso	MSc Crop Protection	Occurrence of bacterial wilt of tomato and its management by use of resistant rootstocks	2014	Nairobi
35	Thomas Muthii Kariuki	MSc Crop Protection	Quality and health status of farm saved bean seed (<i>Phaseolus vulgaris</i> L.) and management of seed-borne diseases	2014	Nairobi
36	Ann Wanja Njoroje	MSc Crop Protection	Management of root knot nematodes and <i>Fusarium</i> wilt of tomato by pre-treatment of seedlings with biological and chemical agents	2014	Nairobi
37	Esther Kihoro	MSc Crop Protection	Management of spider mites and whiteflies in tomatoes by use of mulches	2014	Nairobi
38	Daphne Gatwiri Muchai	MSc Agricultural Resource Management	Improving the TC banana supply chain: A case of South Imenti, Meru County	2014	Nairobi
39	Wilfred	MSc	Population of <i>Aspergillus</i> species	2014	Nairobi

	Ayugi Osao	Microbiology	and aflatoxin in pre- and post-harvest peanuts in Baringo, Keiyo and Meru Counties, Kenya		
40	Oliver Otieno	MSc Crop Protection	Occurrence of <i>Fusarium</i> head blight associated mycotoxins in Nakuru County and resistance of germplasm	2014	Nairobi
41	Nancy Njeru	MSc Microbiology	Occurrence of <i>Fusarium</i> head blight of wheat and associated mycotoxins in Narok county	2014	Nairobi
42	Geoffrey Ongoya	MSc Crop Protection	Evaluation of the efficacy of potassium salts of fatty acids in management of whiteflies in French beans	2014	Nairobi
43	Murithi Mutuma	MSc Crop Protection	Management of aflatoxin and fumonisin mycotoxins in maize by use of near infra-red and ultra violet light grain sorting	2014	Nairobi
44	Mary Wamata Wambugu	Plant Breeding	Evaluation of maize hybrids for resistance to Diplodia ear rot (<i>Stenocarpella maydis</i>)	2013	Nairobi
45	Lucy Wangari Karanja	Microbiology	Seasonal changes in aflatoxin prevalence and occurrence of <i>Aspergillus</i> section <i>flavi</i> in maize from Makueni, Kenya	2013	Nairobi
46	Maureen Nandwa Kuboka	Crop Protection	Effect of temperature on the efficacy of <i>Metarhizium anisopliae</i> in management of western flower thrips in French beans	2013	Nairobi
47	Samson Kihara Njoro	Crop Protection	Occurrence of <i>Fusarium</i> species and fumonisins in maize from Makueni and Makindu districts, Kenya	2013	Nairobi
48	Bernard Otieno Ouma	Crop Protection	Thrips management practices in French bean production and efficacy of integrated pesticide application regimes in Embu East	2013	Nairobi
49	Ida Karambu Mugambi	Agricultural Resource Management	The effect of lablab residues on bean root rot disease and performance of a maize-bean intercrop	2013	Nairobi
50	Rose Wamaita Weru	Crop protection	Tolerance of maize varieties to infection by <i>Aspergillus flavus</i> and its management by use of antagonistic micro-organisms	2012	Nairobi
51	Joseph Bigirimana	Plant Breeding	Characterization of resistance to coffee leaf rust and coffee berry disease among Rwandese and associated coffee germplasm	2012	Nairobi

52	Samuel Wanjohi Wahome	Plant Breeding	Selection for multiple disease resistance and marketable pod characteristics in snap bean genotypes	2012	Nairobi
53	Florence Kalunde Tom	Crop Protection	Diversity of storage insect pests in maize and susceptibility of maize varieties to maize weevil (<i>Sitophilus zeamais</i>)	2011	Nairobi
54	Onesmus Musembi Kitonyo	Agronomy	Performance of farmer-preferred maize varieties intercropped with beans in the semi-arid regions of Kenya	2010	Nairobi
55	Martin K. Njogu	Horticulture	Efficacy of phosphoric acid and stinging nettle extract in the management of late blight of potato	2010	Nairobi
56	Mureithi, Benson Kamau	Crop Protection	Effect of production practices, storage materials and moisture content on fungal and aflatoxin contamination of maize and maize products	2010	Nairobi
57	Peter Lorroki	Plant Breeding	Genetic analysis of resistance to maize streak virus (MSV) among mid-altitude maize inbred lines	2009	Nairobi
58	Kinyungu, Teresa Nyambura	Crop protection	Incidence of potato (<i>solanum tuberosum</i> l.) Viruses and effect of maize border crop placement on aphids and virus diseases	2009	Nairobi
59	Musyimi, Scholastica Leah	Agricultural Resource Management	Management of <i>Fusarium</i> head blight of wheat through host resistance and microbial agents	2009	Nairobi
60	Lusweti, Francisca	Agricultural Resource Management	Effects of phosphate fertilizers and seed priming on root rot and bean fly damage on beans and lablab in Nandi South district	2009	Nairobi
61	Gachu, Sarah Muthoni	Crop Protection	Management of onion (<i>Allium cepa</i> l.) foliar diseases (<i>Peronospora destructor</i> and <i>Alternaria porri</i>) and thrips (<i>Thrips tabaci</i>) by use of vegetable intercrops.	2009	Nairobi
62	Patrick Kinguru Wahome	Agricultural Resource Management	Importance of food grain legumes among the smallholder farmers in Machakos district	2008	Nairobi
63	Nyaga, John Ndwiga	Crop Protection	Management of aphids and aphid-transmitted viruses in seed potato production among small scale farmers in Kiambu and Nyandarua districts	2008	Nairobi
64	Muindi, Esther	Agronomy	Management of potato aphids and aphid-transmitted virus diseases	2008	Nairobi

	Mwende		by integrating border crops, insecticides and mineral oil		
65	Njenga, Lucy W	Agricultural Resource Management	Fungal contamination and aflatoxin levels in maize in greater Machakos district and evaluation of possible management strategies	2008	Nairobi
66	Ng'eno. K. Jonah	Agronomy	The abundance and efficiency of garden pea nodulating rhizobia in Central Kenyan soils	2008	Nairobi
67	Jane Kahithe Ndung'u	Crop Protection	Fungal and mycotoxin contamination of wheat from Nakuru and Nyandarua districts of Kenya and pathogenicity of <i>Fusarium</i> species on wheat	2007	Nairobi
68	Patrick Evans Otieno	Agricultural Resource Management	Effect of chemical pesticides and nitrogen source on the performance of food grain legumes	2007	Nairobi
69	Riungu, Ginson Mwirigi	Crop Protection	Biological control of <i>Fusarium</i> head blight of wheat	2007	Nairobi
70	Shadrack Wang'ombe Mubea Theuri	Agricultural Resource Management	Effect of rhizobia inoculation and starter-nitrogen on nodulation, biomass and yield of grain legumes	2007	Nairobi
71	Kennedy Katazo Muimui	Plant Breeding	Inheritance and selection for resistance to angular leaf spot (<i>Phaeoisariopsis griseola</i> (Sacc) and common bacterial blight (<i>Xanthomonas axonopodis</i> pv <i>phaseoli</i>) in yellow beans	2006	Nairobi
72	John Maina Wagacha	Plant Pathology	Biological control of bean rust (<i>Uromyces appendiculatus</i> Unger.) on snap bean (<i>Phaseolus vulgaris</i> L.) using antibiotics produced by <i>Bacillus</i> and <i>Streptomyces</i> species.	2003	Nairobi

5.4 Masters students (On-going thesis Research)

	Student	Degree	Thesis title	Status	University
1	Anthony Juma Wangila	MSc Animal Nutrition & Feed science	Biomass production and nutritive value of selected lablab varieties as animal fodder in nandi county	Defended Thesis	Nairobi
2	Peninah N. Munyao	MSc Crop Protection	Occurrence, distribution of die back of passion fruit in Uasin-Gishu county and evaluation of resistant passion fruit varieties	Defended Thesis	Nairobi
3	Karama Oteaniel Akum	MSc Agronomy	Effect of liming, farmyard manure and inorganic fertilizers on growth, nodulation and yield of	Writing thesis	Nairobi

			dry bean (<i>Phaseolus vulgaris L.</i>)		
4	Taban James Francis Oteng	MSc Plant Breeding & Biotechnology	Breeding for grain yield, and micronutrient concentration in common bean (<i>Phaseolus vulgaris L</i>) varieties in Kenya	Writing thesis	Nairobi
5	Celestine Okinda	MSc Crop Protection	Application of different Trichoderma strains in management and suppression of bacterial wilt in tomatoes	Research in progress	Nairobi
6	Chiaga Timon Oluoch	MSc Crop Protection	Management of powdery mildew (<i>Sphaerotheca pannosa</i> var. <i>Rosae</i>) on greenhouse roses (<i>Rosa hybrida</i>) using <i>Bacillus</i> spp and nitrophenolate mixtures	Research in progress	Nairobi
7	Joe Habert Okoth	Plant Pathology	Distribution of causal agents of cassava bacterial blight (CBB) in Busia County and determination of resistance to CBB amongst the popularly grown cassava cultivars in Kenya	Research in progress	Nairobi
8	Stacey Odunga	Plant Pathology	Effect of temperature, rainfall and management practises on development of angular leaf spot and anthracnose disease on common beans (<i>Phaseolus vulgaris</i>) in western Kenya	Research in progress	Nairobi
9	Esther W. Ndirangu	MSc Crop Protection	<i>Fusarium</i> species and related mycotoxins in Aflasafe treated maize fields in Lower Eastern Kenya	Research in progress	Nairobi
10	Timon Chianga	MSc Crop Protection	Management of powdery mildew disease (<i>Sphaerotheca pannosa</i> var. <i>rosae</i>) in greenhouse roses (<i>Rosa hybrid</i>) using <i>Bacillus</i> spp and parasitic fungi and identification of variations in species in Kenya	Research in progress	Nairobi
11	Simon Vudiya	Plant Pathology	Management of rice blast, bacterial leaf blight and brown spot of rice through host resistance	Research in progress	Nairobi

6. Work Experience and Professional Responsibilities

6.1 Teaching Responsibilities

Course	Level	When Taught
--------	-------	-------------

ACP601: Plant Pathology 1-Mycology and Bacteriology	MSc. Crop Protection	2006 to date
ACP611: Phytosanitary legislation, regulations and standards	MSc. Crop Protection	2009 to date
ART514: Crop Protection	MSc. Agricultural Resource Management	2002 - 2008
ACP603: Crop disease epidemiology and management	MSc. Crop Protection	2002 to date
APP1: Principles of Plant Pathology	MSc. Plant Pathology	2002
ACP101/AEX108 (ACR102): Microbiology	BSc. Agriculture, BSc. Agricultural Extension & Education and BSc. Range Management, BSc Horticulture	2002 to Date
ACP302: Plant disease epidemiology and seed health	BSc. Agriculture – Crop Protection	2006 to Date
ACP404: Breeding for resistance to diseases and pests	BSc Agriculture – Crop Protection Option	1997 – 1997 & 2007
ACP201: Principles of Crop Protection	BSc. Range Management	2006
AEB302: Crop protection and Animal Health	BSc. Agribusiness Management	2005 - 2006
ACR203: Principles of plant pathology	BSc. Agriculture	2001 - 2005
AEX211: Crop Protection 1	BSc. Agricultural Education and Extension	2005
ACR303: Principles of plant disease control	BSc. Agriculture	1995 - 1997
ACP405: Plant mycology and bacteriology	BSc. Agriculture – Crop Protection	1995 - 1997
ACP411: Special Projects (Supervision of over 20 students)	BSc. Agriculture – Crop Protection	1995 to Date
ACP010: Introduction to Microbiology	Diploma in Crop Protection	2009 to Date
ACP017: Application of biotechnology in crop protection	Diploma in Crop Protection	2003 - 2009
ACP011: Bacteriology	Diploma in Crop Protection	2003 - 2004
ACP622: Special Projects (supervision of over 10 students)	Diploma in Crop Protection	2003 to Date

6.2 Leadership in University, College Faculty and Departmental Committees

Committee	Responsibility	Time
Department of Plant Science & Crop Protection	Chairman	December 2020 to Date
Strengthening Higher Agricultural Education in Africa (SHAEA) proposal development committee	Member	From September 2018
Graduate School Board Corruption Prevention Committee	Member	From 2017 to date
University of Nairobi Graduate School Board	College of Agriculture and Veterinary Sciences Representative	From 2017
Faculty of Agriculture PhD curriculum development committee	Convenor	2017 to 2021

Faculty of Agriculture Postgraduate Studies Committee (FPSC)	Chairman	March 2013 to January 2021
Field Station Advisory Committee	Member	2014 to Date
Department of Plant Science & Crop Protection	Acting Chairman	<ul style="list-style-type: none"> • June to December 2020 • July to August 2018 • December 2016 to February 2017 • December 2015 to February 2016 • December 2014 to February 2015 • December 2013 to February 2014
Crop Protection Section, Department of Plant Science & Crop Protection	Section Head	2011 to Date
Departmental Module programmes committee	Coordinator, MSc Crop Protection; Development and implementation of the ODL programme	2011 to Date
Master of Science in Agricultural Resource Management Committee	Faculty Coordinator & Member of Faculty Committee	2003 to Date
Faculty of Agriculture Time Tabling committee	Chairman and Faculty Representative to University Time Tabling Committee	2011 - 2013
Faculty of Agriculture Time Tabling committee	Departmental representative & Member of Faculty Committee	2003 - 2011
Departmental Module programmes committee	Assistant coordinator, MSc. Crop Protection and Diploma in Crop Protection	2002 - 2011
Departmental fourth Year students projects	Coordinator, BSc Agriculture, Crop Protection option	2008 - 2011
Plant Pathology Unit, Department of Plant Science & Crop Protection	Unit Head	2007 - 2011
Department of Plant Science and Crop Protection Planning Committee	Member	2007 - 2010
Faculty of Agriculture Shows and Exhibitions Committee	Departmental representative & Member of Faculty Committee	2003 - 2010
Field Station Advisory Committee, Faculty of Agriculture	Departmental representative and member of Vegetable Task Force	2003 -2008
Faculty of Agriculture Farm Practice Committee	Departmental representative & Member of Faculty Committee	2003 - 2006
Faculty of Agriculture Tree Planting committee	Departmental representative & Member of Faculty Committee	2003 - 2006

6.3 Development and Review of Academic Curricula

	Curriculum	Role Played	Time
1	MSc in Seed Technology and Business management	Team Leader/ Coordinator	2011 - 2012
2	Postgraduate Diploma in Phytosanitary Measures	Team Leader/ Coordinator	2008 - 2010
3	Postgraduate Diploma in Seed Technology and Business management	Team Leader/ Coordinator	2011 - 2012
4	Diploma in Seed Technology and Business management	Team Leader/ Coordinator	2011 - 2012
5	Diploma in Phytosanitary Measures	Team Leader/ Coordinator	2008 - 2010
6	Certificate in Seed Technology and Business management	Team Leader/ Coordinator	
7	Short in-service phytosanitary systems training courses for the Centre of Phytosanitary Excellence (COPE) – an initiative between University of Nairobi and Kenya Plant Health Inspectorate Service (KEPHIS)	Coordinator for the University of Nairobi	2008 - 2010
8	Review of existing curricula i. MSc in Agricultural Resource Management, ii. MSc. in Crop Protection, iii. MSc in Plant Pathology iv. BSc. in Agriculture v. Diploma in Crop Protection	Coordination/ development of specific course units	2008 - 2010

6.4 External Examination of Postgraduate theses

	University	Student	Thesis title	Degree	Year
1	University of Eldoret	Simon Kiarie	Prospects of fungal endophytes and fungal based biopesticides for management of maize lethal necrosis and its vectors	MSc	2018
2	Egerton University	Mwaniki Phoebe Kirigo	Status of potato bacterial wilt in Nakuru County and its management through crop rotation and soil amendments	PhD	2018
3	Masinde Muliro University of Science & Technology	Emily Nakhumicha Wamalwa	Molecular characterization of cowpea accessions and their response to Fusarium wilt pathogen in Kakamega County, Kenya	PhD	2018
4	University of Eldoret	Odero Presley Mostyn Ouma	Influence of Fungal Pathogens on Protein Content in Barley Grains	PhD	2018
5	Kenyatta University	Namikoye Everlyne Samita	Population Dynamics and Management of Vectors of Maize Lethal Necrosis Disease Causing	PhD	2018

			Viruses in Bomet County of Kenya		
6	University of Eldoret	Javan Omondi Were	Hormonal signaling and pathogenicity of <i>Pyrenophora teres</i> on barley under the influence of abiotic stress	PhD	2017
7	Kenyatta University	Lilian K. Muriuki	Management of bacterial wilt-root knot disease complex of tomato and pepper in the coastal region of Kenya	MSc	2017
8	Jomo Kenyatta University of Agriculture & Technology	Paul Kuria	Studies on Natural Resistance Mechanisms in Cassava Genotypes to Geminiviruses	PhD	2016
9	Jomo Kenyatta University of Agriculture & Technology	Chebon Samson	Characterization of aflatoxin producing fungi in high and mid-altitude agro-ecological zones of maize in Kenya	PhD	2016
10	Egerton University	Fatuma Sharamo Fora	Efficacy of Aflasafe KE01 on the Population of aflatoxigenic fungi and aflatoxin contamination of maize (<i>Zea mays</i> L.) in alternate seasons in lower Eastern Kenya	MSc	2016
11	University of Eldoret	Bernard Otukho	Reaction of Kenyan Barley (<i>Hordeum vulgare</i>) Cultivars to Scald (<i>Rhynchosporium secalis</i>) and its Effect on Yield and Seed Quality	MSc	2016
12	Kenyatta University	Pauline Marigu Kariuki	Evaluation of tomato cultivars for resistance to <i>Fusarium oxysporum</i> and <i>Meloidogyne</i> spp in the Coastal Region of Kenya	MSc	2016
13	Egerton University	Regina Cherop Mutai	Formulation of Trichoderma and its Comparative Storage Stability in Different Substrates for the Management of Armillaria Root Rot of Tea	MSc	2015
14	University of Eldoret	Kibiro Emma Mwihaki	Management of potato blight (<i>Phytophthora infestans</i>) using Arbuscular Mycorrhizal fungi	PhD	2014
15	University of Eldoret	Wilkister Gesare Mogita	Occurrence and management of anthracnose pathogen (<i>Colletotrichum lindemuthianum</i>) in farm-saved bean seed in western Kenya	PhD	2013
16	University of Eldoret	Mwaura Hellen Muringi	Determination of antimicrobial properties and phytochemical composition of <i>Solanum nigrum</i> Complex (black night shade)	MSc	2013
17	KwaZulu-Natal, South Africa	J. M. M. Chintu	Breeding groundnut for resistance to rosette disease and its aphid vector, <i>Aphis craccivora</i> Koch in Malawi	PhD	2013

18	Chepkoilel University College	Abigael Adhiambo Owino	Evaluation of barley genotypes for net blotch and determination of pathogen diversity	MSc	2013
19	Chepkoilel University College	Janet Cheruiyot Kosgey	Ethnobotanical study and antimicrobial activity of medicinal plants found in Endo and Checherebes villages of Elgeyo-Markwet County, Kenya	MSc	2013
20	Chepkoilel University College	Jared K. Mutai	Effect of grafting on bacterial wilt disease, Yield and quality of tomato (<i>Lycopersicon esculentum</i> Mill.) in Bureti District, Kenya	MSc	2012
21	Jomo Kenyatta University of Agriculture & Technology	Samuel Mathu Ndung'u	Genetic diversity of indigenous rhizobial strains and commercial inoculants and their potential to improve yields and nitrogen fixation in four legume species	MSc	2012
22	Egerton University	Jannet Nelima Nyukuri	Determination of Antifungal Activities of Essential Oils on Moulds Isolated from Selected areas of Western Kenya	MSc	2012
23	Kenyatta University	Njau Njeri.	Effectiveness of Macropropagation Technique in Production of healthy Banana Seedlings in Eastern and Central Regions of Kenya.	MSc	2012
24	Jomo Kenyatta University of Agriculture & Technology	Grace Wacheke Mungai	Evaluation of in vitro protocols for the elimination of banana streak virus in tissue culture produced banana plantlets	MSc	2012
25	Jomo Kenyatta University of Agriculture & Technology.	William Onsembe Nyakundi	Diversity and pesticide biodegradation potential of white rot fungi isolated from soil of selected horticultural farms in the great Rift Valley and Central Kenya	MSc	2012
26	Chepkoilel University College	Were J. Omondi	. Reactions of Advanced Sorghum Genotypes to Local <i>Colletotrichum</i> species and their Diversity	MSc	2011
27	Chepkoilel University College	Nicholas Kipkemboi Rop	Thesis,. Incidence of black rot of Brassica species caused by <i>Xanthomonas campestris</i> pv. <i>campestris</i> in Kenya, pathogen variability and host resistance	Ph.D	2011
28	Egerton University	Phoebe K. Mwaniki	Thesis. Characterization of <i>Fusarium</i> spp. Isolated from eggplant (<i>Solanum</i> spp.) In arumeru district, tanzania and identification of sources of wilt resistance.	MSc	2011
29	Jommo Kenyatta University of Agriculture &	Philip Mwenda Miriti	Isolation and Characterization of Soil Bacteria Capable of Degrading Selected Organic Pesticides Applied in Horticultural Farms in Kenya	MSc	2011

	Technology				
30	Egerton University	Salim G. Ismail	Physiological races of Wheat Stem Rust in Uasin Gishu Region and their control using Tebuconazole 250g/L + Triadimenol 135g/L (Silvacur 375 g/L).	MSc	2011
31	Jommo Kenyatta University of Agriculture & Technology	Felix Bii	Characterization of <i>Fusarium</i> species on maize (<i>Zea mays</i>) and determination of their mycotoxins in Eastern Province of Kenya	MSc	2009
32	Kenyatta University	Joseph Juma Mafurah	Incidence of <i>Fusarium</i> species and Levels of Fumonisin B ₁ in Sorghum and Finger Millet in Western Kenya	M.Sc	2009
33	Egerton University	Joseph Kinyoro Macharia	Yield losses of bread wheat (<i>Triticum aestivum</i> L.) cultivars resulting from a new race of stem rust Ug99 (TTKS) (<i>Puccinia graminis</i> Pers. f.sp. <i>tritici</i> Erics. & Henn.) in Kenya	MSc	2009
34	Egerton University	Daniel O. Pande	Studies on Virus Resistance in Transgenic Sweet Potato (<i>Ipomoea batatas</i> (L) Lam) Expressing the Coat Protein Gene of Sweet Potato Feathery Mottle Virus	MSc	2006

6.5 External Examiner – University Examinations

	University	Type of examination	Time
1	Department of Agricultural Sciences and Technology, Kenyatta University	Agriculture (undergraduate and postgraduate)	From 2016
2	Department of Natural Science, Mount Kenya University	Agriculture (undergraduate and postgraduate)	2012 to Date
3	Department of Biological Sciences, Masinde Muliro University of Science and Technology	Microbiology and plant pathology (undergraduate and postgraduate)	2011 to Date
4	Department of Biological Sciences, Chepkoilel Campus, Moi University	Microbiology and plant pathology (undergraduate and postgraduate)	2009 - 2012

6.6 Review of scientific manuscripts

	Journal/ conference	Scientific Manuscripts reviewed
1	Crop Protection, Elsevier	Fungal species isolated from peanuts in major Kenyan markets: Emphasis on <i>Aspergillus</i> section <i>Flavi</i>
2	Letters in Applied Microbiology	Characterization and antagonistic properties of <i>Streptomyces</i> strains isolated from Saharan soils, and evaluation of their ability to control seedling blight of barley caused by <i>Fusarium culmorum</i>

3	American Journal of Experimental Agriculture	Effects of Macro Fertilizers on yield and yield Components of Flue-cured Tobacco Coker 347
4	African Journal of Agricultural Research	Integrated Management of Okra Powdery Mildew caused by <i>Erysiphe cichoracearum</i>
5	JOURNAL OF ENTOMOLOGY AND NEMATOLOGY	Diversity of aphids in the Central Rift Valley of Ethiopia and their potential as a vector for <i>Ethiopian Pepper Mottle Virus</i> (EPMV)
6	African Journal of Horticultural Science	Various manuscripts
7	Horticultural Association of Kenya (HAK) annual conferences	Reviewed various manuscripts and abstracts since 2007
8	9th African Potato Association Conference	Reviewed various abstracts for the 2013 annual conference
9	13th KARI Biennial Scientific Conference	Kenya Agricultural Research Institute
10	aGRO 2011 Biennial Conference, Faculty of Agriculture, University of Nairobi	Reviewed various abstracts for the 2011 biennial conference

6.7 Other Professional Assignments

	Institution	Assignment	Responsibility	Dates
1	Kenya Plant Health Inspectorate Service (KEPHIS)	Technical Committee preparing the 2 nd Phytosanitary conference	Committee member	2018
2	Ministry of Agriculture	Drafting of Root and Tuber Crops training-of-trainers short course curriculum	Lead facilitator and resource person	2017
3	Peer Reviewer for the Commission for University Education	Review of University Curriculum and inspection of facilities	Reviewing of undergraduate and postgraduate curriculum and training facilities	From 2015
4	International Plant Protection Convention (IPPC), Food and Agriculture Organization of the United Nations	Drafting of “Diagnostic protocol (DP 22): <i>Fusarium circinatum</i> (2006-021) as Annex 22 to ISPM 27 (<i>Diagnostic protocols for regulated pests</i>)”	Member of the diagnostic protocol drafting group	2016 - 2017
5	Kenya Standing Technical Committee for Imports and Exports (KSTCIE)	Committee Member and Reviewer of import requests	Evaluation of suitability of import requests	2010 to Date
6	Mount Kenya University	Training course in Professionalism and Ethics in Research	Lead facilitator and resource person	29 th April to 3 rd May 2013
7	Kenya Plant Health Inspectorate Service (KEPHIS)	Development of curriculum for short in-service phytosanitary systems training courses for the Centre of Phytosanitary Excellence	Lead facilitator and resource person	28 th November to 19 th December 2011
8	Promotion of Private Sector Development in Agriculture Programme (PSDA) and Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ).	Development of model curricula for agricultural value chain for universities and colleges	Curriculum development consultant/ Facilitator	April to July 2011
9	Mount Kenya University	Scientific Writing Training Course for University Lecturers and Researchers	Lead facilitator and resource person	26 th to 30 th April 2011

7. Research Projects

1. Capacity building in crop improvement and agronomy for improved food and nutritional security in D.R. Congo & South Sudan. Funded by the Alliance for a Green Revolution in Africa (AGRA). USD743,256 for five years (2015-2020). To enhance human capacity in plant breeding, agronomy and seed technology and business management by training of 16 MSc students for D. R. Congo and South Sudan.
2. Capacity building in plant breeding and seed technology for improved food and nutritional security in eastern Africa. Funded by the Alliance for a Green Revolution in Africa (AGRA) education for Africa's crop improvement (EACI). Grant USD 500,627 for 3 years (2014-2016). Objective is to enhance human capacity in plant breeding and seed technology and business management by training of 12 MSc students for South Sudan, Tanzania and Kenya.
3. Low-cost optical sorting to remove mycotoxins from maize in local Kenyan mills. Grant amount KES 6,156,480. Funded by US Agency for International Development Contract No.AID-623-C-12-00001 for Program titled Kenya Feed the Future Innovation Engine (KFI). August 2014 to August 2015
4. "Supporting investments in up scaling of grain legumes in western Kenya through assessing and modeling the threat of biotic stressors". Funded by the McKnight Foundation. Collaborating institutions are International Center for Tropical Agriculture (CIAT), KARI, University of Nairobi, ARDAP (NGO), Masinde Muliro University of Science and Technology. GRANT AMOUNT US\$504,000 for three years.
5. Development of biopesticide-based IPM systems to reduce synthetic pesticide residues in vegetables for niche market access by small holder growers. Funded by the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Grant amount US\$64,907.55 to support training of two MSc students.
6. "Multipurpose legumes and management strategies for reinvigorating and maintaining the health and productivity of smallholder mixed farming systems". Funded by the McKnight Foundation. Collaborating institutions are KARI-Kakamega, University of Nairobi, Egerton University, Cornell University, Avene (a community-based organization in western Kenya), Rural Energy Food Supply Organization (REFSO), Appropriate Rural Development Agricultural Programme (ARDAP). Full sponsorship for one PhD in Crop Protection.
7. Legume pest and disease survey project in western Kenya "Supporting investments in up scaling of grain legumes in western Kenya through assessing and modeling the threat of biotic stressors". Funded by the McKnight Foundation. Collaborating institutions are International Center for Tropical Agriculture (CIAT), KARI, University of Nairobi, ARDAP (NGO), Masinde Muliro University of Science and Technology. September 2012 to February 2014; .
8. Continuing training of Mr. Kwach Johnson whose training was initiated under the staple crops project on "Sustainable Management of Banana *Xanthomonas* Wilt (BXW) in Banana Cropping Systems in the ECA". Donor ASARECA. October 2012 to October 2013.
9. Integrated management of Banana *Xanthomonas* Wilt (*Xanthomonas campestris* pv. *musacearum*) in Kenya through cultural and host resistance. Funded by the National

- Council for Science and Technology (NCST) for PhD training of one PhD candidate. October 2011 to September 2014.
10. Collaborative research project on “Multipurpose legumes and management strategies for reinvigorating and maintaining the health and productivity of smallholder mixed farming systems”. Funded by the McKnight Foundation. Collaborating institutions are KARI-Kakamega, University of Nairobi, Egerton University, Cornell University, Avene (a community-based organization in western Kenya), Rural Energy Food Supply Organization (REFSO), Appropriate Rural Development Agricultural Programme (ARDAP). January 2011 to December 2014;
 11. Collaborative research project on “Sustainable management of Banana Xanthomonas Wilt in Banana Cropping Systems in East and Central Africa” funded by ASARECA. Collaborating institutions are NARO (Uganda), IITA (Uganda), Bioversity international, KARI (Kenya) and Catholic University of Graben, (DR Congo) and University of Nairobi. April 2009 to May 2011.
 12. Centre of Phytosanitary Excellence – Eastern Africa (COPE): A project for development of phytosanitary curriculum. A collaborative project with KEPHIS, CAB International, and International Plant Protection Convention (IPPC). Funded by CAB International. April 2008 to May 2010.
 13. Effect of border crop distance and seed potato degeneration on potato production. Funded by Deans Committee, University of Nairobi. July 2008 to June 2009 .
 14. Development of cultural strategies for management of *Thrips tabaci*, *Alternaria porri* and *Peronospora destructor* on onions in Kenya. Funded by Deans Committee, University of Nairobi. August 2008 to July 2009 .
 15. Using improved pulse crop productivity to reinvigorate smallholder mixed farming systems in Western Kenya. Funded by the Dry Grain Pulses CRSP, Michigan State University, USA. A collaborative project involving University of Cornell, Kenya Agricultural Research Institute (KARI), Egerton University, Moi University, CIAT and University of Nairobi. April 2008 to September 2010.
 16. Characterization and development of an integrated management of *Fusarium* head blight of wheat in Kenya. Funded by the International Foundation for Science (IFS). June 2008 to November 2009
 17. Mitigating Mycotoxin Hazards in Maize and Maize Products in Kenya. Funded by the Kenya Agricultural Productivity Programme (KAPP). A collaborative project involving Kenya Agricultural Research Institute (KARI), Ministry of Agriculture, Ministry of Health and Kenya Maize Development Programme and University of Nairobi. Start July 2008 to June 2010.
 18. Development of an integrated management of potato aphids and aphid transmitted viruses for seed production in Kenya. Funded by the Commission for Higher Education, Kenya. November 2006 to June 2008 .
 19. Performance of traditional food legumes in the maize-based cropping systems. Funded by Deans Committee, University of Nairobi. May 2005 to August 2007.
 20. The occurrence of head blight of wheat in Kenya and the associated fungi. Funded by the International Foundation for Science (IFS). August 2004 to April 2007.
 21. Improvement of grain legume production in dry lands using low input technologies. Funded by the African Institute for Capacity Development (AICAD). 2004 to 2005.

8. Professional Courses and trainings attended

1. Improving agricultural productivity through increasing the impact of agricultural research in Africa. Australia Awards Fellowships 2015. 29 April – 26 May 2015. The University of Sydney, Australia
2. Sanitary and phytosanitary systems and agricultural education training. 15th August to 6th December 2012 at the University of Missouri-Columbia, USA. Course funded and organized by the Foreign Agricultural Service of the United States Department of Agriculture.
3. Professionalism and Ethics in agricultural sciences. 20th August to 6th December 2012, University of Missouri-Columbia, USA.
4. Sanitary-phytosanitary and pest risk analysis training. 26th November to 1st December 2012 at the Centre for Regulatory Research LLC, USA.
5. Mycotoxins in foods. 7th September to 4th December 2012 at the University of Missouri-Columbia, USA.
6. Curriculum development. 28th September to 2nd December 2012 at the Centre for Collaboration and Development of Educational Innovations, University of Missouri-Columbia, USA
7. Training of Trainers' Workshop on Seed Enterprise Management. 24th April – 8th May 2010, The Seed Science Center, Iowa State University, USA.
8. Training course on the application of Phytosanitary measures. Centre Of Phytosanitary Excellence (COPE) and the International Plant Protection Convention. 14th-25th September 2009, Merica Hotel, Nakuru, Kenya
9. Training in Pedagogy – University of Nairobi. 4th to 6th February 2008.
10. The advanced course on the quality and safety of horticultural crops. 1 – 22 September 2006, Nanjing Agricultural University, China.
11. Proposal writing for international research projects, Part Two. Sponsored by the German Academic Exchange Service (DAAD). 26 – 30th June 2006. Silver Springs Hotel, Nairobi.
12. Proposal writing for international research projects - Part One. Sponsored by the German Academic Exchange Service (DAAD). 12th – 17th December 2005. Silver Springs Hotel, Nairobi.
13. Biosafety Training Course for Kenya's regulatory institutions. 29th November – 3rd December 2004. KEPHIS Headquarters, Karen, Nairobi
14. Rotational Advanced Studies Program – Phytomedicine and Plant Protection in International Agriculture. 20th – 26th September 1998. University of Bonn, Germany.
15. October 1997 to June 1998- High Performance Liquid Chromatographic (HPLC) mycotoxin analysis of *Fusarium* mycotoxins in grains. Institute for Plant Diseases, University of Bonn, Germany.
16. March 1998 to August 1998: Molecular characterization of *Fusarium* species by PCR-based techniques. Institute for Plant Diseases, University of Bonn, Germany.
17. October 1997 to March 1998: Identification of *Fusarium* species and mycotoxin analytical methods. Institute for Plant Diseases, University of Bonn, Germany.

18. 9th June to 25th September 1997 - Basic German language course at Goethe Institute, Bremen, Germany

9. Awards

1. 2015: Australia Awards Fellowship to undertake one-month course on “Improving agricultural productivity through increasing the impact of agricultural research in Africa” at The University of Sydney, Australia, 29 April – 26 May 2015.
2. **2012:** of the United States Department of Agriculture Foreign Agricultural Service (USDA- FAS) Faculty Exchange Programme fellowship at the University of Missouri-Columbia, USA (15th August to 6th December 2012).
3. **2006:** Best scientific paper presentation in Crop Protection. Title of paper: “Occurrence of wheat head blight-causing *Fusarium* species and associated trichothecene mycotoxins in Kenyan wheat” presented at the 10th KARI Biennial Scientific Conference, 13-17 November 2006, Nairobi, Kenya.
4. **1997:** German Academic Exchange (DAAD) scholarship to undertake PhD. studies at the University of Bonn, Germany and University of Nairobi, Kenya.
5. **1990:** University of Nairobi Scholarship to undertake Masters studies (MSc. Plant Pathology) at the Department of Crop Science, University of Nairobi.
6. **1987:** Government of Kenya Scholarship to undertake undergraduate studies (BSc. Agriculture) at the University of Nairobi.

10. Membership to Professional Associations

1. Full member of the University of Nairobi Alumni Association (UONAA)
2. Member and Secretary to executive committee, Horticultural Association of Kenya (HAK) – 2008 to 2010.
3. Member, African Crop Science Society
4. Member, Kenya DAAD scholars Association

11. Service to the Community

1. **2009 to Date:** Chairman and member of Board of Management (BOM), Rungiri Secondary School, Kiambu County.
2. **October 2013 to December 2016:** Congregation Chairman of PCEA Gaitumbi Church, Presbyterian Church of East Africa (PCEA) Rungiri Parish.
3. **December 2007 – December 2011:** Secretary and member of Executive Committee, Horticultural Association of Kenya (HAK)

4. **November 2003 to Date**: Church Elder, Presbyterian Church of East Africa (PCEA) Rungiri Parish.
5. **January 2009 to December 2012**: Chairman of Finance Committee, Presbyterian Church of East Africa (PCEA) Rungiri Parish.
6. **December 2006 and December 2007**: Farmer training on management aphids and aphid-transmitted potato viruses in Njabini and Limuru under the Commission for Higher Education funded project entitled: "Development of an integrated management of potato aphids and aphid transmitted viruses for seed production in Kenya".
7. **January 2011 to December 2012**: Treasurer, Presbyterian Church of East Africa (PCEA) Rungiri Presbytery.
8. **January 2009 to December 2011**: Chairman of Finance Committee, Presbyterian Church of East Africa (PCEA) Rungiri Presbytery.
9. **January 2005 to December 2007**: Treasurer, Presbyterian Church of East Africa (PCEA) Rungiri Parish.
10. **January 2000 to November 2003**: Deacon and Treasurer, Presbyterian Church of East Africa (PCEA), Gaitumbi Church, Rungiri Parish.

12. Referees

1. Prof. John W. Kimenju, Department of Plant Science and Crop Protection, Faculty of Agriculture, University of Nairobi
2. Prof. Solomon I. Shibairo, Deputy Vice Chancellor (Academics, Research & Extension), Kibabii University College.
3. Prof. Eunice W. Mutitu, Department of Plant Science and Crop Protection, Faculty of Agriculture, University of Nairobi, Kenya

.....
i

ⁱ Prof. James W. Muthomi (BSc. Agric., MSc., Ph.D)

Dated: April 2021