DR. MARY GORETTI O. KARIAGA CURRICULUM VITAE

EDUCATION B. Ed Science Hons. Nairobi University 1978

M.Sc.Agronomy (Plant Pathology) Nairobi University 1992

P. HD (Disaster and sustainable development) Masinde Muliro University

of Science and Technology 2017

JOB Lecturer Masinde Muliro University of Science & TechnologyFaculty of

Agriculture Veterinary Science & Technology.

RECENT & RELEVANT Published Papers & Books

Nematodes associated with sugarcane in Nyanza Sugar belt of Western Kenya ISBN NO. 978-3-659-36980-3. By Mary Goretti Kariaga LAP LAMBERT PUBLISHERS, GERMAN. {Book}.

Kariaga P. Kariaga M .K. and V. Ogema Mainstreaming Environment and Sustainability in African Universities: Stories of Change: (2015). Chapter 13: Education For Sustainable Development: The Case of Masinde Muliro University Of Science And Technology (MMUST), pp.166-177. Publisher: Rhodes University Environmental Learning Research Centre, Grahams town, Editors: Heila Lotz-Sisitka, Gitile Naituli, Amanda Hlengwa, Mike Ward, Ayobami Salami, Akpezi Ogbuigwe, Mahesh Pradhan, Marie Neeser, Sanne Lauriks, (Book Chapter)

. Manyasi N. Anna, Wakhungu W. J., **Kariaga O.M. G.** (2019). The Impact of studying agriculture at Secondary Schools level to Agricultural productivity among Women Farmers in Navakholo Sub-county of Kakamega County, Kenya. *IOSR Journal of research and Method in Education. Vol 9 Issue 5 series 2, Sept-Oct 2019 pp 81-86.*

Kariaga, M.G., Onamu, R. Wakhungu, J. & Were, H.K. (2018). Reaction of Rice Blast *Pyricularia oryzae CAV*. isolates on a set of improved rice varieties in Western Kenya indicator to presence of pathogenic strains. RUFORUM Working Document Series (ISSN 1607-9345), 2018, No. 17 (1): 811-820

Watila, W. B., Muyekho, F. N., Kariaga, M.K. (2021) factors affecting production of finger millet and sorghum in

Bungoma central sub county, Bungoma county and Teso north sub county, Busia county Kenya. The strategic journal of business and change management. Vol. 7 issue 3 article 073

Situation Analysis of the family in Kenya: An annotated Bibliography. Eds. Kaendi Munguti and Eunice Kamaara. Compiled by **Mary Goretti Kariaga**, Catherine Ndungu, Christine Ombaka, Florence Owili and Zipoporah Sisungo. Publi.AAWORD1999. ISBN 9966-9677-0-2. (Book).

Kariaga, Wakhungu, Were, Muoma, Onamu and Wekesa (2017). Rice Blast *Pyricularia oryzae* CAV. Isolates in Kenya Characterized Sequenced and Registered. *International Journal of Life Sciences Research Vol. 5, Issue 3, pp: (23-30).*

Kariaga, Wakhungu and Were (2016). Identification of Rice Blast (*Pyricularia Oryzae* Cav.) Races from Kenyan Rice Growing Regions Using Culture and Classical Charaterization. *Journal of Research in Agriculture and Animal Science Volume 4 Issue 4 pp: 16-24.*

Kariaga, Ooko Ganda and Onamu (2017) Yorghut flavored with oyster mushroom essence: MMUST YOGO. *ICWES 17 International conference held in New Delhi 5-7th October 2017. Book of Extracts pp34.*

Kariaga, P., Kariaga, M. G., Ogemah, V. and V. Nyando, (2013). Education for Sustainable Development The Case of Masinde Muliro University of Science and Technology (MMUST). Southern African Journal of Environmental Education, Vol. 29, pp 244-260.

Kariaga, M. G. H. W. Nyongesa, N. C. O. Keya and H. M. Tsingalia. (2012) Compost Physico-Chemical factors that impact on yield in Button Mushrooms, *Agaricus bisporus* (Lge) and *Agaricus bitorquis* (Quel) *Saccardo. J Agri Sci*, 3(1): 49-54 (2012).

Kariaga M. G. (2014). Assessment of local materials, sawdust, filter cake, cotton cake, soya bean cake, .bagasse and various soils as casing material and their effectiveness compared to that of peat. Paper presented at the *Fourth ASEMM conference at Masinde Muliro University, Kakamega 27th-30th May 2014*.

Kariaga M. G. (2013). Identification of rice blast (*Pyricularia oryzae* Cav) races from Kenyan rice growing regions; using

laboratory culture and classical characterization. Paper presented in Nairobi at the *INWES regional conference* 17th-19thNov 2013.

Kariaga M. G. and Were H. (2012). Rice blast disease *Pyricularia* oryzae CAV): the disaster associated with rice growing on planet earth. Paper presented at the *Kenya Rice Researchers Forum in 28th June,2012 KARI HQ Nairobi*

Kariaga M. G., A. Y Mswaka and H. Nyongesa. (2011). Bacteria and bacteria metabolites casing supplements boost the yield of white button mushroom *Agaricus bisporus* (lge) Sing. Proceedings of the food security International conference 20-23rd February 2011; Cape Peninsula University and Bondo University, Kenya.

Kariaga M. G. (2011). Important medicinal fungi of Kakamega forest. *Proceedings of International conference on Tropical forest resources, at Masinde Muliro University of Science and Technology.*

Kariaga M. G. and Mswaka A. Y. (2007). The effect of incooperating hydrocarbons into casing material, on yield of mushroom *Agaricus bisporus* (Lge) Sing. **Presented at the research day of Biochemical and Molecular Biology Society of Zimbabwe 27th Oct. 2007.** University of Zimbabwe

Kariaga M. G. (2006). Acetate as a possible factor in triggering fruiting of button mushroom *Agaricus bisporus* (Lge) Sing. A poster presented at the 12th annual congress of the South African Society for Microbiology, Stellenbosch University, 2nd -5th April 2002.

Kariaga M. G. (2006). Important factors in composting for production of high yields in button mushrooms *Agaricus bisporus* (lge) and *Agaricus bitorquis* (Quel) *Saccardo.* Proceedings of the first African Edible and Medicinal Mushrooms in Kampala Uganda 25th_29th October 2006.

Kariaga M. G. (1979). Screening rice varieties for resistance to rice blast in Western Kenya. *African Crop Science conference Proceedings*, Vol. 3 pp. 957-960. ISSN 1023-070X.

Osoro, M O.,Ongoma G. I. B. MG (Kariaga) Odera. (1982) Major diseases transmitted by sugarcane planting material in Kenya. *The Kenya Sugar June 1982. Pp 32-35*.

Kariaga M. G, Osoro M. O. Nyangau A. M. (1986) Factors contributing to yield loss in sugarcane infected with sugarcane mosaic virus disease. *The Kenya sugar Vol. IX. No. 1pp 49-52*.

Kariaga M. G (1990). The effects of Nematodes on tillering of sugarcane *The Kenya sugar Vol V No.1pp 23-26*.

DESERTATIONS

Kariaga M. G. (2017) Biological and Molecular Characterization of Rice Blast Fungus Pyricularia oryzae Cav) in Kenya. Ph.D in Disaster and Sustainable Development. PhD thesis Masinde Muliro University of Science and Technology. Kariaga M. G. (1992) Nematodes associated with sugarcane in Nyanza Sugar belt of Western Kenya MSc. thesis Nairobi University.

Kariaga M. G. (2004). Effect of variation of substrates, casing materials, microflora and metabolic products on the yield of two mushroom varieties, *Agaricus bisporus* (Lge) Sing and *Agaricus birtoquis* (Quel) Saccardo 2004. M. Phil. University of Zimbabwe

STUDENT PROJECTS SUPERVISED

THE IMPACT OF STUDYING AGRICULTURE AT SECONDATY SCHOOL LEVEL TO AGRICULTURAL PRODUCTIVITY IN NAVAKHOLO SUB-COUNTY, KAKAMEGA COUNTY, KENYA. MSc. In Agriculture Education and Extension, 2019

INFLUENCE OF AGRICULTURE EXTENSION EDUCATIONON MARKETING OF POULTRYPRODUCTS IN BUTERESUB-COUNTY, KAKAMEGA, KENYA. MSc. In Agriculture Education and Extension, 2019

ASSESSING THE POTENTIAL OF FINGER MILLET AND SORGHUM ON FOOD SECURITY IN SELECTED SUB COUNTIES OF BUNGOMA AND BUSIA, KENYA Determination of the extent of spread of Brown spot disease *Pseudomonas syringae* pv. *Syringae* of sugar beans (*Phseolus vulgaris*) in Zimbabwe. University of Zimbabwe, Honours studentt Pamela C hikumira

Others in the same year, Floidy Wafawanaka and Chibage.2002

Evaluation of Growth and yield of Oyster mushroom *Pleurotus pulmonaria* on three plant waste materials supplemented with cotton seed hulls (CTH) by Francis Muthaura, Maseno University Student Graduated in 2006. Maseno University.

KEPAWAE The Kenya Professional of Women in Agriculture and Environment.

AAWARD Association of African in Research.

INWES/AWSE The international Women in Science, Engineering and Mathematics.

PROFESSIONAL MEMBERSHIPS

Member of the Kisumu East District Education Board.

Member of Kirembe School Governing Board ,Kirembe Secondary and St. Albert Angira Secondary Schools

Member of ST. Elizabeth Secondary School Governing Board,

Member of St. Francis Riwo Parish Council & Treasurer of Professional Caucus.

APPOINTMENTS

Outgoing Chair of KEPAWAE (Kenya Professional Women in Agriculture and Environment) Nyanza.

Various Committee in the University., Science Park, Careers week, School TVET program and The Farm committee.

AWARDS

- 1. ROCKEFELLER/ FORMAT National Award Innovator in organic farming (Oyster Mushroom prototype)
- 2. Upland Rice research Collaboration with Lake Basin/KARI by ADB
- 3. Eastern Africa agricultural Productivity Project (EAAPP). Awarded funds for

Research on a major Rice Blast disease Pyricularia oryzae, 2012

4. Co- Participant in ESD, SIDA/UNEP 2012 programme

CONSULTANCIES

1.Training Mushroom growing techniques: 28 farmer groups in Taita Taveta district sponsored by World Vision Kenya Humanitarian emergency affairs October to November 2007 Supply of Edible Oyster mushroom spawn Contract No.12/2008-2009

2. Training Mushroom growing techniques: 100 youths and 10 staff Members Maragua food security Recovery project November 2007

3. Training several individual farmer groups on mushroom growing and spawn bulking between 2006 to date.

SKILLS

Introduction to computing, Microsoft office programs and Publisher Molecular techniques and Participatory plant breeding (COB) techniques (Trained By CAPACITATE at ILRI (International Livestock research Institute) Baker Laboratories Nairobi).

Driving License

Certificate of good conduct

CAPACITY BUILDING KEPAWAE Training on strategic plan Development 1996 AWSE Leadership and entrepreneurship training 2004 ASARECA TOT Course on farming as a business 2010