

EDUCATION

2004	Ph.D., Soil Science	University of Missouri, Columbia, Missouri, USA
1995	Master of Science, Soil Science	Sokoine University of Agriculture, Morogoro, Tanzania.
1992	B.Sc. Agriculture	University of Nairobi, Nairobi, Kenya

FIELD OF SPECIALIZATION

Soil microbiology –enzymology & rhizobiology, soil C and N cycling,

WORK EXPERIENCE

Jan 2011 - present	Director, Board of Undergraduate Studies, Egerton University
Apr 2013 - present	Associate Professor, Soil Science, CHS Department
Oct 2007–Mar 2013	Senior Lecturer, Department of Crops, Horticulture and Soils, Egerton University
Nov 2005-Dec 2010	Course Coordinator and Examination Officer, Soils Section, CHS
Sep 2004- Sept 2007	Lecturer, Department of Crops, Horticulture and Soils (CHS), Egerton University.
Jul 1997-Aug 2004	Assistant lecturer, Egerton University
Jun – Aug, 2004	Post doctoral fellow, University of Missouri
Sep 2000 – May, 2004	Graduate Research Assistant, University of Missouri, Columbia MO USA
Mar - Jun 2000	International Agricultural Ambassador at Walt Disney World, Florida, USA.
Aug 1996 - June 1997	Technical/training Assistant with Crop Management Research and Training (CMRT)
Oct 1994 - Jan 1996	Research Assistant with Tropical Soil Biology and Fertility Programme (TSBF)
Jun-Oct 1992	Trainer, Kenya Institute of Organic Farming (KIOF)

KEY RESEARCH PROJECTS

December 2014 to date	Mungai W. Nancy , Arnold Opiyo, Oscar I. Ayuya, Tom Wambua, Justus Ombati, Mary Ambula and Bockline Bebe. Innovative Engagement of Rural Communities through Student Internship Program. Funded through RUFORUM
June 2012-to date	IITA (Nigeria), Mungai NW (Egerton), KEPHIS, collaborators from Uganda, Ethiopia, Tanzania and Ghana. Institutionalization of Quality Assurance Mechanism and Dissemination of Top Quality Commercial Products to Increase Crop Yields and Improve Food Security of Smallholder Farmers in Sub-Saharan Africa-COMPRO II. Funded by Bill & Melinda Gates Foundation through IITA.
August 2010 to date	Lelo FK, Chiuri W, Mungai NW , Kariuki ST, Bebe BO, Ngigi M, and Kamuru SM. Building adaptation capacities for climate change in Kenya through participatory research, training and outreach. Funded by Rockefeller Foundation US \$ 483,900
August 2013 to June 2014	McKenzie Blair (UK), Ebanyat Peter (Uganda), Gessese W. Yitbarek (Ethiopia) and Mungai W. Nancy (Kenya). Strengthening Capacity for Soil Health Assessment in Eastern Africa. Funded through Royal Society-DFID Capacity Building Initiative Network Grant
June 2012 - 2014	Birech R, Mungai NW , Lelo FK, Bebe BO, Nyaanga DM, Kitaka N, African Center for Technology Studies (ACTS as lead Institution) and Others. East Africa Climate Change Innovation Network. Funded by World Bank US \$ 1.3 M.

2009-2012	Mungai NW and Ngigi M. Incorporation of <i>Lablab purpureus</i> as a soil fertility amendment for improved maize production on degraded land parcels in Nakuru, Kenya. Funds by International Foundation For Science US \$ 12,000.
2007-2012	Mungai, NW , Abaya SG, Vuai SAH (Tanzanian) and Ibembe JD (Ugandan). Socio-economic and ecological impacts of periodic sedimentation on the livelihoods of flood plain communities of Lake Victoria basin. Funds by VicRes US \$ 48,000 annually (for 3 years)
2006-2009	Mungai, NW Sustainable Bean Production Using Rhizobia Inoculants (~US \$ 2000, Funded by Egerton University, Research and Extension Division)
2006-2009	Mugendi D, Karega GMR, Mungai NW , Cheruiyot EK, Wanyera R. Linking farmers to value markets through participatory scaling -up of soil management techniques in the Kenyan highlands. Funded by IDRC (US \$ 17,000 annually for three years.

SELECTED PUBLICATIONS

1	Mhango JK, Mungai NW and Nalivata (Submitted) Evaluation of the Symbiotic Efficiency and Competitiveness of Indigenous Rhizobia on Soybean (<i>Glycine Max</i> (L.) Merr.) in Malawi. <i>Journal of Plant Nutrition and Soil Science</i>
2	Ouma KO, Mungai NW and Kitaka N (submitted) Temporal dynamics of nitrogen and phosphorus loads in surface runoff in Sondu-Miriu Basin, Kenya. <i>International Journal of Environmental Science and Technology</i>
4	Okoth JO, Mungai NW , Ouma JP, and Baijukya FP (2015) Mitigating mid-season drought effect in soybean (<i>Glycine max</i> L. Merrill) in Western Kenya. <i>Legume Research</i> , 38(4): 477-483
5	Okoth JO, Mungai NW , Ouma JP, and Baijukya FP (2014) Effect of tillage on biological nitrogen fixation and yield of soybean (<i>Glycine max</i> L. Merrill) varieties. <i>Australian Journal of Crop Science</i> 8(8):1140-1146
6	Kamuru SM, Kariuki ST, Mungai NW , Bebe BO, Chiuri, LW, Ngigi MW and Lelo FK (2014) Food Management Strategies for Coping with Food Insecurity in a Changing and Variable Climate by Smallholder Farmers in Kenya. <i>International Journal of Innovation and Applied Studies</i> 9(2):797-807
7	Ouma KO, Mungai NW and Kitaka N (2013) Temporal Variation of Sedimentation from Surface Runoff from Agricultural Land Uses in Sondu-Miriu Basin, Kenya. <i>Research Journal of Environmental and Earth Sciences</i>
8	Vuai Said AH, Ibembe John D and Mungai NW (2012) Spatial variation of Nutrients in Sondu-Miriu and Simiyu-Duma Rivers: Implication on sources and factors influencing their transportation into the Lake Victoria <i>Journal of Earth Science & Climate Change Vol 3 (2)</i>
9	Wasike VW, Vanlauwe B, Mungai NW , Hermann L, Wachira FN, Mumera LM, Sanginga N, Wagner M, Mburu HN, Malala P, Wasilwa L and Lesueur D (2012) The competitiveness of Bradyrhizobium spp strains on promiscuous and specific soybean varieties in Kenyan soils. <i>Kenya Science Technical and Innovation Journal Vol 2:14-29</i>
10	Bakibinga-Ibembe J.D., Vuai S. A and Mungai, NW . 2011. Environmental laws and policies related to periodic flooding and sedimentation in the Lake Victoria Basin (LVB) of East Africa. <i>African Journal of Environmental Science and Technology Vol. 5(5): 367-380.</i>
11	Mungai NW (2011) Agrobiodiversity and Soil Quality, p 63-74 In: <i>Mungai NW (Ed.) Agrobiodiversity Conservation and Sustainable Use in Enhancing Food Security: A Training Manual. Tonaz Printers, Nairobi, Kenya.</i>

12	Mungai NW , Mwangi M, Ouma JP, Nakhone LW and Mutai M. 2010. Research and Management Skills for Women in Agricultural and Natural Sciences. Published proceedings of a workshop sponsored by UNU-INRA, IFS and Egerton University
13	Mungai NW and Karubui N (2010) Effectiveness of <i>Rhizobia</i> isolates from Njoro soils (Kenya) and commercial inoculants in nodulating common beans (<i>phaseolus vulgaris</i>). <i>Journal of Agriculture, Science and Technology Vol 12 (1): 47-59.</i>
14	Mungai NW , Bationo A and Waswa B (2009) Soil properties as influenced by soil fertility management in small scale maize farms in Njoro, Kenya. <i>Journal of Agronomy 8(4): 131-136.</i>
15	Wasike VW, Mburu HN, Vanlauwe B, Wachira FN, Mungai NW , Mumera LM, Sanginga N, Owuoché JO and Lesueur D (2009) Environmental influence on the genetic diversity of indigenous Bradyrhizobia nodulating promiscuous soyabean in Kenya. <i>East Africa Agriculture Forestry Journal 75(2): 109-119.</i>
16	Wasike VW, Lesueur D, Wachira FN, Mungai NW , Mumera LM, Sanginga N, Mburu HN, Mugadi D, Wango P and Vanlauwe B (2009). Genetic diversity of indigenous Bradyrhizobium nodulating promiscuous soybean [<i>Glycine max (L) Merr.</i>] varieties in Kenya: Impact of phosphorus and lime fertilization in two contrasting sites. <i>Plant and Soil 322: 151-163.</i>
17	Mungai NW , Njue AM, Abaya Samuel G, Vuai Said AH and Ibembe John D (2011) Periodic Flooding and Land Use Effects on Soil Biochemical Properties in the Lake Victoria Basin. <i>African Journal of Agricultural Research Vol. 6(19) 4613-4623.</i>
18	Mungai NW , Motavalli PP and Kremer RJ (2006) Soil organic C and N fractions in long-term temperate alley cropping practices. <i>Communications in Soil Science and Plant Analysis 37(7-8):1-16.</i>
	Mungai NW and Motavalli PP (2006) Litter quality effects on C and N dynamics in temperate alley cropping systems. <i>Applied Soil Ecology 31(1-2):32-42.</i>
	Mungai NW , Motavalli PP, Nelson KA and Kremer RJ (2005) Differences in yields, residue composition and N mineralization dynamics of Bt and non-Bt maize. <i>Nutrient Cycling in Agroecosystems 73:101-109.</i>
	Mungai NW , Motavalli PP Kremer RJ and Nelson KA (2005) Spatial variation of soil enzyme activities and microbial functional diversity in temperate alley cropping practices. <i>Biology and Fertility of Soils 42(2): 129-136.</i>

GRADUATE STUDENT SUPERVISION

1	ANNETTE M. NJUE, MSC. ENVIRONMENTAL SCIENCES. THESIS TITLE "EFFECTS OF PERIODIC SEDIMENTATION ON SOIL BIOCHEMICAL PROPERTIES IN THE LAKE VICTORIA BASIN" ANNETTE GRADUATED IN NOVEMBER 2010
2	VICTOR W. WASIKE, PHD SOIL SCIENCE. THESIS TITLE "GENETIC DIVERSITY OF DUAL-PURPOSE SOYBEANS [<i>GLYCINE MAX (L.)</i>] <i>BRADYRHIZOBIUM</i> SPP. (TGX) ISOLATES AND THEIR POTENTIAL TO FIX NITROGEN IN KENYA" VICTOR GRADUATED IN MAY 2012
3	John Okoth Omondi, MSc Agronomy. Effect of tillage and varieties on mid-season drought, biological nitrogen fixation, growth and yield of soybean (<i>Glycine max (L.) Merrill</i>) in Western Kenya. John graduated in June 2013

4	Kennedy OchiengOuma. MSc Limnology. Spatial–Temporal Variation Of Nitrogen And Phosphorus, And Sedimentation On Upper And Middle Sondu–Miriu River, Kenya. <i>Kennedy has successfully defended his thesis and is scheduled to graduate in Nov-Dec 2015</i>
5	Ruth M. Mutie. MSc Agronomy. Community Level Adaptation to Climate Variability and Change:Participatory Evaluation of Agronomic Strategies in Mbeere District. <i>Ruth has successfully defended her thesis and is scheduled to graduate in Nov-Dec 2015</i>
6	Grace Kariuki. MSc Plant Pathology.Determination of the Effectiveness of Trianum-P®(<i>Trichoderma Harzianum</i>) and Trichotech® (<i>Trichoderma Asperellum</i>) in the Control of Late Blight of Tomatoes. <i>Grace is working on her thesis and is scheduled to graduate in June 2016</i>
7	Hezikiah Korir. MSc Soil Science. Effectiveness of Native Rhizobia Strains and Selected Commercial Inoculants on Soybean (<i>Glycine Max</i>) and Common Bean (<i>Phaseolus Vulgaris</i>) Yields. <i>Hezikiah is working on his thesis and is scheduled to graduate in June 2016</i>
8	Kevin Nakitare. MSc Soil Science. Evaluation of biosolids as soil amendment for potato (<i>solanumtuberosum</i> L.) production in Nakuru County Kenya. <i>Kevin is finalizing on his thesis proposal and preparing to embark on his research</i>
9	RukiaBakari. MSc Soil Science. Optimal Soil Ph Range For Effective Nodulation And Biological Nitrogen Fixation In Soybean (<i>Glycine Max</i>). <i>Rukia is finalizing on her thesis proposal and preparing to embark on her research</i>
10	Nancy Chege. PhD in Agricultural and Rural Innovation Studies (ARIS). <i>Nancy is finalizing on her thesis proposal and preparing to embark on her research</i>

RESEARCH INTERESTS

Biological nitrogen fixation in grain legumes, C and N cycling, Biological agricultural inputs, Adaptation to climate change & mitigation