

Name: Prof Philip Okinda Owuor, PhD, FAAS, FKNAS

Qualifications:- BSc (Hons) (Chemistry), University of Nairobi, MSc and PhD (Chemistry) Case Western Reserve University, PG Diploma (Chemicals Sciences and Education) University of East Anglia, FAAS, FKNAS

Picture:-



Department: Department of Chemistry, Maseno University

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Postal Address: P.O. Box 3301 – 40100, Kisumu, Kenya or Department of Chemistry, Maseno University, P.O. Box 333 – 40105, Maseno Kenya.

Education: Studied at Onjiko Primary and Secondary School, Homa Hay High School, University of Nairobi, Case Western Reserve and University of East Anglia.

Work: Worked as lecturer in the University of Nairobi, Research Scientist (From of Head of Chemistry, progressing to Deputy Director/Senior Principal Research Officer). Professor of Chemistry, Maseno University

Scientific Awards & Recognitions:

- 2012 Fellow, Kenya National Academy of Sciences
- 2011. 2014 Member Board of Management, Kenya Agricultural Research Institute
- 2009 Fellow, Africa Academy of Sciences
- 2004 Professor of Physical Organic/Agricultural Chemistry, Maseno University.
- 2000 Japan Science and Technology Corporation (JST) and Japan International Science and Technology Exchange Centre (JISTEC) “Science and Technology Agency (STA) Fellowship” Award, Japan
- 1998 2004 Member of the Scientific Advisory Panel of the Board of Directors of the Tea Research Institute of Tanzania.
- 1996 Winner of the 1995 Tea Research Foundation of Kenya Merit Award.
- 1989 The Commonwealth Science Council and British Council Fellowship Awards, Natural Resources Institute, United Kingdom.
- 1985 Member, Kenya National Academy of Sciences.
- 1986 *The Matsumae International Foundation Fellowship Award*, Japan.
- 1986 Winner of the *Third World Academy of Science Award in Chemistry*, Administered by the Kenya National Academy of Sciences.
- 1982 *British Council Fellowship Award*, University of East Anglia, UK.
- 1976 - 1980 - *Graduate Fellowship Award*, Case Western Reserve University, USA.

Membership to Professional Societies:

1. Executive Committee Member, International Society of Tea Science
2. Fellow, African Academy of Science
3. Fellow, Kenya National Academy of Science.
4. Member, Natural Products Research Network for Eastern and Central Africa.
5. Member, Chemical Society of Kenya.
6. Member, The New York Academy of Sciences.

7. Member, Kenya Institute of Food Science and Technology.
8. Member, The American Chemical Society.
9. Affiliate member of International Union of Pure and Applied Chemistry.

Service to Professional Societies and Science:

- 1) Editor-in-Chief, International Journal of Tea Science, (2016 – now)
- 2) Member, Board of Directors, Kenya Agricultural Research Institute (2011 to 2014)
- 3) Chairman, Maseno University Ethical Review Committee (2011 to date)
- 4) Editor in Chief, Maseno University Journal (2006 to 2014)
- 5) Editor, *Tea*. Kericho, Kenya. (1994 – 2004)
- 6) Member of Editorial Board, *Journal of Food and Agriculture*, Lagos, Nigeria (1985-1990)
- 7) Member of Editorial Board, *International Journal of Tea Science*, New Delhi. India (2000 to 2012)
- 8) Vice President (Africa): International Society of Tea Science (2012-2015)
- 9) Executive Committee Member: International Society of Tea Science (2015-2018)
- 10) Member of International Editorial Board, *Journal of Plantation Crops*, Kerala, India.
- 11) Member of the Scientific Advisory Panel of the Board of Directors of the Tea Research Institute of Tanzania. (1998-2004)

Research Grants:

- 2011 Lake Victoria Basin Commission; US\$ 74,700; Studies on Integrated water resources management and human health in the Lake Victoria Basin.
2009. National Council for Science and Technology, Science, Ministry of Higher Education, Science and Technology, Technology and Innovation Grant: KShs 1,010,000: Tissue nutrients analysis for enhancement of yields and quality of popular tea clones in different tea growing areas in Kenya.
2007. Inter University Council of East Africa under The Lake Victoria Research (VicRes) Initiative US\$ 150,000: Evaluation of the response of different tea cultivars to growing environments and agronomic inputs in East African countries.
2004. School of Graduate Studies, Maseno University Grant: KShs 100,000: Indoor Levels of polynuclear aromatic hydrocarbon from wood burning in rural households in Western Kenya.
- 1999 Africa Technology Policy Studies Network: KShs 660,000: Assessment of technological adoption and policy factors impeding the production of green leaf in the smallholder tea farms of the Kenya tea industry
- 1985 Overseas Development Agency (ODA) (now Department of International and Foreign Development (DFID)) (British Government): Funds to study withering process in tea manufacture.
- 1984 Overseas Development Agency (ODA) (now Department of International and Foreign Development (DFID)) (British Government): Funds to build laboratory and initiate research on the biochemistry of tea.

Students Supervised to Completion:

PhD Students

1. David M. Kamau. (2003-2008). Productivity and Resource Use in Ageing Tea Plantations. Wageningen University, Wageningen, The Netherlands.
2. Sylvia Opiyo (2007-2010). Development of a Multiplex PCR Technique for Simultaneous Detection of Sweet Potato Viruses and Evaluation of Medicinal Plant Extracts for Activity Against the Crop Fungi, Maseno University, Kenya
3. Charles Otieno Ochieng' (2009-2012) Phytochemical Analysis of Antiplasmodial, Antinociptive, Antidyslipidemic and Antioxidative Principles from Some Kenyan Medicinal Plants, Maseno University, Kenya
4. Bowa Otieno Kwach (2009-2013). Variations in *Camellia sinensis* (L) Leaf Nutrients and Polyphenols Levels with Genotypes, Nitrogenous Fertilizer Rates, Season and Plucking Intervals in Eastern Africa Tea Growing Regions. Maseno University, Kenya.
5. Fidelis N. Samita (2011–2014) Evaluation of Antiplasmodial, Larvicidal and Antimicrobial Compounds from Three Plants in the Family Menispermaceae Maseno University, Kenya.
6. Peter O. Otieno (2011-2015). Evaluation and Use of ELISA Kit to Assess the Influence of Climate-Induced Changes on the Spatial Distribution and Temporal Trend of Selected Organophosphate and Carbamates Pesticides Contaminants in Aquatic Ecosystem: Case Study of Lake Naivasha. Maseno University, Kenya.
7. Jacob Omondi Omollo (2011-2016). Evaluation Of Lime in Ameliorating Soil Acidity for Improved Yields of Intercropped Sugarcane and Soybean in Western Kenya, Sokoine University of Agriculture (SUA), Tanzania.
8. Jenifer Akinyi Odak (2011–2016). Mites Infestations and Overhead Volatile Composition of Kenyan Tea in Relation to Varieties, Seasons, Region of Production and Some Agronomic Inputs, Maseno University, Kenya
9. Joanne Atieno Ogunah (2012-2016). Adsorption, Desorption and Mobility of Chlorsulfuron in Wheat Growing Soils within the Mara River Basin, Kenya, Maseno University, Kenya
10. Angeline Atieno Ochung' (2011-2016). Phytochemical Investigations of Three Plants in the Family

Fabaceae for Antimalarial, Antifungal and Antibacterial Agents, Maseno University, Kenya

11. Karl Wilson Nyabundi (2010-2017). Tea (*Camellia sinensis* (L). O Kuntze) Variations in Yields, Yield Components and Leaf Nutrients Responses to Geographical Location and Nitrogen Fertiliser Rates in Kenya, Maseno University, Kenya

M.Sc. Students

1. John W. Muritu (1987-1989): Lipids in Tea Leaves. University of Nairobi
2. Charles Ochieng' (2005-2008) Phytochemical Analysis of the Aerial Exudates and Internal Tissues of *Gardenia ternifolia* for Malarial Control Principals. Maseno University
3. John Ochieng' Mumbo (2006-2009) Ahero Irrigation Scheme Water Quality Survey: Status and Environmental Impacts, Maseno University, Kenya.
4. Eric Omolo Jondiko (2007-2010) Response Of Clonal Black Tea Quality to Different Tea Growing Environments, Nitrogenous Fertiliser Rates and Plucking Intervals in Kenya, Maseno University, Kenya.
5. Amos Were Okal (2008-2011). Effects of Geographical Area of Production Rates of Nitrogen and Plucking Intervals on Fatty Acids Levels in Young Tea Leaves, Maseno University, Kenya.
6. Lisouza Fred Ayodi (2006-2011) Indoor Levels of Polycyclic Aromatic Hydrocarbons from Wood Burning in Households in Rural Kenya, Maseno University, Kenya.
7. Wesley N. Omwoyo (2009–2011). Assessment of the Levels of Some Essential Elements in Black Tea from Different Regions of East Africa and Changes in Their Levels Due to Some Agronomic Practices, Maseno University, Kenya
8. Albert Mulianga Mackenzie (2010–2012). Antiplasmodial Evaluation of Compounds from *Warburgia stuhlmannii* Species of Kenya, Maseno University, Kenya.
9. George Mwochi Luvaha (2009-2012). Phytochemical Investigation of *Ajuoga remota* (Labiatae) for Anti-plasmodial, Larvicidal and Anti-oxidant activities, Maseno University, Kenya.
10. Grace Makokha (2008-2013). Levels of Essential Minerals in African Indigenous Vegetable Leaves at Different Ages and Geographical Locations of Western Kenya, Maseno University, Kenya.
11. Wilfrida Nyanduko Nyairo (2011-2013). Contribution of Human Settlements in the Mara Basin to Nutrients Load and Quality of Water along Rivers Amala and Nyangores, Maseno University, Kenya.
12. Peris Ochola (2007-2014). Potassium and Nitrogen Use Efficiency in the Increased Production of Sugarcane (*Saccharum officinarum* L.) from New Varieties under Rain Fed and Irrigation Practices, Maseno University, Kenya.
13. James Jerome Owuor (2011-2014). Effects of Human Settlement on Seasonal Variation of Some Water Quality Parameters in Spring Water and Sediments along Amala and Nyangores Rivers of the Mara River Basin, Maseno University, Kenya.
14. Martin Wafula (2011-2014). Assessment of Some Land Use Practices on water Physicochemical Parameters, Nutrients Loads and Heavy Metals Concentrations in Water and Sediments along the Mara River, Maseno University, Kenya.
15. George Oindo Achieng' (2011-2015). Effects of Nitrogen Fertiliser Rates and Split Applications on Yield and Quality Parameters of Ratoon Crop of Selected Ratoon Sugar Cane Varieties, Maseno University, Kenya
16. Francis Kiema (2012–2015). Heavy Metal Loads in Aquatic Samples and Limnological Parameters of Water from the Stretch Between River Kisat and River Kisian along Lake Victoria Shoreline, Maseno University, Kenya
17. Samuel Oginga Nyandere (2011-2016). Impacts of Nitrogen and Potash Doses on Quality and Optimal Harvesting Time of Early and Late Maturing Ratoon-Sugarcane Varieties, Maseno University, Kenya,
18. Bether A. Odhiambo (2012-2017). Variations in the Volatile Flavour Compounds Composition of Selected Nerica Rice Varieties Grown in Different Agro-Ecological Zones in Lake Victoria Basin, Maseno University, Kenya
19. Theodora Achieng' (2013-2018). A survey of Selected Drivers of Greenhouse Gas Fluxes from Smallholder Sugarcane Farming in Lower Nyando – Western Kenya, Maseno University, Kenya
20. Bernadete Nangira Otiato (2012-2018). A Survey of Greenhouse Gas Fluxes from Different Vegetations, Landscape Units and Seasons in Smallholder Farming Systems in Lower Nyando – Kenya, Maseno University, Kenya.
21. Robert Ondieki Ombori (2014–2018). Effects of Nitrogenous Fertilizer Application Rates and Harvesting Intervals on Soil Organic Carbon, pH, Nutrients Levels and Yield in Tea (*Camellia sinensis*) in Eastern Africa Tea Growing Regions, Maseno University, Kenya
22. Grace Olando (2016-2018). Seasonal Variations of Heavy Metal Concentration and Speciation in Sediments and Levels in Benthic Macro-Invertebrates in Lake Naivasha, Kenya, Maseno University, Kenya.
23. Peter Ogola Ogondi (2010–2019). Influence of Location of Production and Cultivars on Yields and Non-Volatile Quality Parameters of Black Tea in the Lake Victoria Basin of Kenya, Maseno University, Kenya

Research Interests: Reaction mechanisms involving carbocation intermediates, tea chemistry, environmental chemistry, natural products chemistry.

Publications:

Books and Book Chapters

1. Owuor, P.O. (2018). The effect of cultivation techniques on tea quality. In *Global Tea Science: Current Status and Future Needs* Sharma, V.S.; Kumudini Gunasekare, M.T. Eds. Burleigh Dodds Science Publishing, Cambridge, UK, Chapter 5, pp 85-112, (ISBN: ISBN: 978 1 78676 160 6; www.bdspublishing.com), <http://dx.doi.org/10.19103/AS.2017.0036.23>
2. Owuor, P.O. (2014). Black tea: Biochemical changes during processing. In *The Oxford Handbook of Food Fermentations*. Bamforth, C.W.; Ward, R.E. Eds, Oxford University Press, New York. Chapter 16, pp 659-694, ISBN 978-0-19-974270-7.
3. Lisouza, F.A.; Owuor, P.O.; Lalah, J.O. (2013). Environmental Fate of Polycyclic Aromatic Hydrocarbons Emitted from Indoor Burning of Fuel Biomass in Poorly Ventilated Households: A Case Study in the Traditional Rural Households in Western Kenya. In *Handbook of Polycyclic Aromatic Hydrocarbons: Chemistry, Occurrence and Health Issues*. Bandeira, G.C. and Menese, H.E. Eds, Nova Science Publishers, Inc., New York, USA, ISBN: 978-1-62257-503-9
4. Owuor, P.O.; Banadda, E.N.; Obua, J.; Okoth, S. (2011). Proceedings of Natural Resources and Land Use Cluster Workshop. Inter-University Council for East Africa, Lake Victoria Research Initiative. ISBN: 78-9970-452-02-6.
5. Owuor, P.O.; Kamau, D.M.; Kamunya, S.M.; Msomba, S.W.; Uwimana, M.A.; Okal, A. W.; Kwach, B.O. (2011). Effects of genotype, environment and management on yields and quality of black tea. In E. Lichtfouse (ed.), *Genetics, Biofuels and Local Farming Systems: Sustainable Agriculture Reviews*, 7, pp 277-307, DOI: 10.1007/978-94-007-1521-9_10 (Springer, Heidelberg)
6. Owuor, P.O.; Kavoi, M.M.; Siele, D.K. (2008). Assessment of constraints in technology transfer system and policies which limit the realisation of high green leaf production in the smallholder tea sector of the Kenya tea industry: I. An examination of the role and efficiency of extension services. *Final research report to African Technology Policy Studies Networks (ATPS), Nairobi, Kenya*.
7. Owuor, P.O.; Kavoi, M.M.; Siele, D.K. (2008). Assessment of constraints in technology transfer system and policies which limit the realisation of high green leaf production in the smallholder tea sector of the Kenya tea industry: III. An empirical analysis of economic efficiency and supply of tea. *Final research report to African Technology Policy Studies Networks (ATPS), Nairobi, Kenya*
8. Owuor, P.O.; Kavoi, M.M.; Siele, D.K. (2005). Assessment of constraints in technology transfer system and policies which limit the realisation of high green leaf production in the smallholder tea sector of the Kenya tea industry: An empirical analysis of economic efficiency and supply of tea. Part II. *Africa Technology Policy Studies, Research Paper Networks No.3, Nairobi, Kenya*, pp 1-69.
9. Owuor, P.O. (2003). Tea: Analysis and tasting. In "*Encyclopaedia of Food Science, Food Technology and Nutrition*". 2nd Edition (Caballero, B.; Trugo, L. and Finglas P. Eds.), Elsevier Science Ltd, pp 5757-5762.
10. Owuor, P.O. (2003). Tea: Chemistry. In "*Encyclopaedia of Food Science, Food Technology and Nutrition*". 2nd Edition (Caballero, B.; Trugo, L. and Finglas P. Eds.), Elsevier Science Ltd, pp 5743-5752.
11. Owuor, P.O. (2003). Tea: Processing. In "*Encyclopaedia of Food Science, Food Technology and Nutrition*". 2nd Edition, (Caballero, B.; Trugo, L. and Finglas P. Eds.), Elsevier Science Ltd, pp 5752-5757.
12. Anaya, A.L.; Waller, G.R.; Owuor, P.O.; Friedman, J.; Chou, C.H.; Suzuki, T.; Arroyo-Estrada, F.; Cruz-Ortega, R. (2002). The role of caffeine in the production decline due to auto toxicity in coffee and tea plantations. In: *Allelopathic: From Molecules to Ecosystems*. (Reigosa, M.J. and Pedrol, N. Eds,) Science Publishers, Enfield, USA, pp 71-91.
13. Owuor, P.O. (1999). Tea in East Africa (Kenya, Uganda, Tanzania). In "Global Advances in Tea Science", (Jain, N.K. Ed) New Age International Ltd, New Delhi, India, pp 171-188.
14. Owuor, P.O. (1997). Review of Kenyan Agricultural Research. **Vol. 26**. *Tea and Beverage Crops*. (Smith P.D.; Tyler, R.A.; Young E.M, Eds) KARI, Nairobi.
15. Owuor, P.O.; Robinson, J.M. (1993). Tea: Processing. In "*Encyclopaedia of Food Science, Food Technology and Nutrition*". 1st Edition, (MacRea, R.; Robinson, R. and Sadler, M. Eds.) Academic Press, **Vol.7**. pp 4533-4537.
16. Robinson, J.M.; Owuor, P.O. (1993). Tea: Analysis and tasting. In "*Encyclopaedia of Food Science, Food Technology and Nutrition*". 1st Edition, (MacRea, R.; Robinson, R. and Sadler, M. Eds.) Academic Press, **Vol. 7**. pp 4537-4542.
17. Robinson, J.M.; Owuor, P.O. (1992). Tea aroma. In "*Tea: Cultivation to Consumption*" (Willson, K.C. and Clifford, M.N. Eds.) Chapman and Hall, London, 1st Edition, Chapter 18, pp. 603-647.
18. Owuor, P.O. (1989). Further investigations into the effects of some agronomic and manufacturing practices on the chemical composition and quality of black Tea. *The Commonwealth Science Council Fellowship Report, London*, pp. 1-62.

19. Owuor, P.O. (1986). Some manufacturing, agronomic and ecological effects on the chemical composition and quality of black tea. *The Matsumae International Fellowship Research Report*, Tokyo, pp 125-166.
20. Owuor, P.O. (1980). Mechanistic studies of addition, substitution and elimination reactions via carbenium ions. PhD thesis, Case Western Reserve University, Cleveland, Ohio.

Peer Reviewed Journals

21. Lisouza, F.A.; Lalah, J.O.; Owuor, P.O. (2020). Sources, distribution, and risk assessment of organochlorine pesticides in Nairobi City, Kenya. *Journal of Environmental Sciences*, **96**, 178–185.
22. Ochung, A.A.; Owuor, P.O.; Manguro, L.A.; Ishiola, I. (2020). *Lonchocarpus ariocalyx* (harms) herb extract for use as painkillers. *Pharmaceutical Science and Technology*, **4**(1), 17-24.
23. Olando, G.; Olaka, L.A.; Okinda, P.O.; Abuom, P. (2020). Heavy metals in surface sediments of Lake Naivasha, Kenya: spatial distribution, source identification and ecological risk assessment. *SN Applied Sciences*, **2**(2), 279. doi:10.1007/s42452-020-2022-y
24. Kiema, F.M.; Owuor, P.O.; Kapiyo, R.J.A. (2019). Selected heavy metal levels in water and fish from Winam Gulf in Lake Victoria near Kisumu city, Kenya. *International Journal of Environmental and Ecology Research*, **1**(1), 1-10
25. Lisouza, F.A.; Lalah, J.O.; Owuor, P.O. (2019). Applications of active and passive sampling techniques in environmental monitoring of organochlorine pesticides (OCPs) in Kenya. *OIOSR Journal of Applied Chemistry*, **12**(6), 55-63.
26. Makenzi, A.; Manguro, L.O.A.; Owuor, P.O.; Opiyo, S.A. (2019). Flavonol glycosides with insecticidal activity from methanol extract of *Annona mucosa* leaves. *Trends in Phytochemical Research*, **3**(4), 287-296
27. Makenzi, A.M.; Manguro, L.O.A.; Owuor, P.O.; Opiyo, S.A. (2019). Chemical constituents of *Ocimum kilimandscharicum* Guerke acclimatized in Kakamega Forest, Kenya, *Bulletin of the Chemical Society of Ethiopia*, **33**(3), 527-539
28. Makokha, G.; Owuor, O.P.; Onger, D.M.K. (2019). Assessment of levels of nutrients in selected ALVs at different harvesting stages and locations of production in western Kenya. *International Journal of Biochemistry Research and Review*. **25**(3), 1-16.
29. Mose, M.T.; Ochanda, S.O.; Mose, K.O.; Wanyoko, J.K.; Owuor, P.O.; Kinyua, J.K.; Kariuki, D.; Magiri, E.N.; Obanda, M.A. (2019). Influence of geographical area of production on the caffeine and flavan-3-ol profiles of selected clonal green tea leaves from smallholder tea farms in Kenya. *International Journal of Tea Science*, **14**(1):44-48
30. Mose, M.T.; Ochanda, S.O.; Mose, K.O.; Wanyoko, J.K.; Owuor, P.O.; Kinyua, J.K.; Kariuki, D.; Magiri, E.N.; Obanda, M.A. (2019), Catechins and plain black tea parameters variations in selected tea growing agro-ecological zones in Kenya. *International Journal of Tea Science*, **14**(1):49-55
31. Nyabundi, K.W.; Owuor, P.O., Netondo, G.W.; Bore, J.K. (2019). Fertilizer response and environment interactions of yield and yield components of clonal tea (*Camellia sinensis*) in Kenya. *International Journal of Tea Science* **14**(1):6-13
32. Nyabundi, K.W.; Owuor, P.O., Netondo, G.W.; Bore, J.K. (2019). Radiation use efficiency and yield responses of clonal tea (*Camellia sinensis*) to locations of production. *International Journal of Tea Science*, **14**(1): 26-35
33. Owuor, P.O.; Ogola, P.O.; Kamunya, S.M. (2019). Response of plain black tea parameters, individual theaflavins and yields due to location of production and clones within Lake Victoria Basin. *International Journal of Tea Science*, **14**, 14-25
34. Dida, G.O.; Anyona, D.N.; Abuom, P.O.; Akoko, D.; Adoka, S.O.; Matano, A.S., Owuor, P.O.; Ouma, C. (2018). Spatial distribution and habitat characterization of mosquito species during the dry season along the Mara River and its tributaries, in Kenya and Tanzania. *Infectious Diseases of Poverty*, **7**(1), 2. DOI 10.1186/s40249-017-0385-0
35. Ochanda, S.O., Kingori, S.M. Owuor, P.O., Kiplangat, T. (2018). Effects of processing technologies on chlorogenic acid, gallic acid and theanine in selected Kenyan tea cultivars. *Tea* **39** (1&2), 3-11
36. Owuor, J.J.; Owuor, P.O.; Kengara, F.O.; Ofula, A.V.O.; Matano, A.S. (2018). Influence of anthropogenic activities on seasonal variations of heavy metals in spring water along Amala and Nyangores tributaries of the Mara River Basin. *African Journal of Environmental Science and Technology*, **12**(7), 222-234.
37. Wafula, M.S.M.; Owuor, P.O.; Kengara, F.O.; Ofula, A.V.O.; Matano, A.S. (2018). Influence of land uses practices on water physicochemical parameters and nutrients loading along the Mara River of East Africa. *African Journal of Environmental Science and Technology*, **12**(7), 222-234
38. Amolo, R.A.; Sigunga, D.O.; Owuor, P.O. (2017). Evaluation of soil properties of sugarcane zones and cropping systems for improved productivity in western Kenya. *International Journal of Agronomy and Agricultural Research*, **11**(3), 1-16
39. Kiema, F.M.; Owuor, P.O.; Kapiyo, R.J.A. (2017). Recent influences of anthropogenic activities and seasons on heavy metal distribution in shoreline sediments in Lake Victoria near Kisumu City, Kenya, *Journal of Environmental Analytical Chemistry*, **4**(2), 1-5.

40. Nyabundi, K.W.; Owuor, P.O.; Netondo, G.W.; Bore, J.K. (2017). Seasonal and environment variations of yields and yield components of tea (*Camellia sinensis*) cultivars in Kenya. *International Journal of Tea Science*, **13** (1&2), 10-24.
41. Nyabundi, K.W.; Owuor, P.O.; Netondo, G.W.; Bore, J.K. (2017). Yields and nitrogenous fertiliser use efficiency responses of clonal tea (*Camellia Sinensis*) to locations of production. *International Journal of Tea Science*, **13** (1&2), 32-40.
42. Ochanda, S.O.; Owuor, P.O.; Wanyoko, J.K. Kamau, D.M.; Faraj, A.K.; Onyango, C.A. (2017). Changes in the composition of elements in of non-aerated green tea processed from seedling tea (*Camellia sinensis*) due to nitrogenous fertilizer rates and seasons. *International Journal of Tea Science*, **13** (1&2), 80-93.
43. Ochieng, C.O.; Shrivastava, A.; Chaturvedi, U.; Khanna, A.K.; Owuor, P.O.; Manguro, L.A.O.; Asthana, R.K. (2017). Antioxidant activities of triacontanyl-E-cinnamoates metabolites from *Caesalpinia volkensii* root bark extracts. *Journal of the Kenya Chemical Society*, 10 (1), 3-9
44. Odak, J.A.; Owuor, P.O.; Mang'uro, L.O.A.; Wachira, F.N.; Cheramgoi, E. (2017). Influence of nitrogen fertilisation on red spider mites (*Oligonychus coffeae* Nietner) and overhead volatile organic compounds in tea (*Camellia sinensis*). *International Journal of Tea Science*, **13** (1&2), 52-59.
45. Omwoma, S.; Lagat, S.C.; Lalah, J.O.; Owuor, P.O.; Schramm, K.-W. (2017). Recent advances on mercury speciation in aquatic ecosystems, health effects and analytical techniques. *British Journal of Applied Science & Technology*, 19(1), 1-37.
46. Opiyo, S.A.; Mang'uro, L.O.A.; Owuor, P.O.; Ateka, E.M. (2017). Triterpenes from *Elaeodendron schweinfurthianum* and their antimicrobial activities against crop pathogens. *American Journal of Chemistry*, 7(3), 97-104.
47. Owuor, P.O.; Obanda, M. (2017). Clonal variations in the response of hard physically withered leaf to rehydration following long chemical wither durations. *International Journal of Tea Science*, **13** (1&2), 72-79.
48. Samita, F.; Ochieng, C.O.; Owuor, P.O.; Manguro, L.O.A.; Midiwo, J.O. (2017): Isolation of a new β -carboline alkaloid from aerial parts of *Triclisia sacleuxii* and its antibacterial and cytotoxicity effects. *Natural Product Research*, **31**(5), 529-536
49. Kwach, B.O.; Owuor, P.O.; Kamau, D.M.; Msomba, S.W.; Uwimana, M.A. (2016). Variations in the precursors of plain black tea quality parameters due to location of production and nitrogen fertilizer rates in Eastern African clonal tea leaves, *Experimental Agriculture*, **52** (2), 266–278
50. Nyabundi, K.W.; Owuor, P.O.; Netondo, G.W.; Bore, J.K. (2016). Genotype and environment interactions of yields and yield components of tea (*Camellia sinensis*) cultivars in Kenya. *American Journal of Plant Sciences*, **7**, 855-869
51. Odak, J.A.; Cheramgoi, E.; Owuor, P.O.; Mang'uro, L.O.A.; Wachira, F.N. (2016). Evaluation of tea clones for resistance to mites infestations and the influence of weather parameters on mites dynamics in Kenyan tea farms. *International Journal of Tea Science*, **12**(1&2), 6-15
52. Odak, J.A.; Owuor, P.O.; Mang'uro, L.O.A.; Wachira, F.N.; Cheramgoi, E. (2016). Variability of overhead volatile organic compounds in clonal tea (*Camellia sinensis*) and their influence on red crevice mite (*Brevipalpus phoenicis* geijskes) infestations. *International Journal of Tea Science*, **12**(1&2), 16-29
53. Ofulla, A.V.O., Gichere, S.K., Olado, G.O., Abuom, P.O., Anyona, D.N., Othero, D.M., Matano, A-S., Gelder, F.B., Dida, G.O., Ouma, C., Owuor, P.O., Amayi, J.B. and Kanangire, C.K. (2016). Effects of regional climate variability on the prevalence of diseases and their economic impacts on households in the Lake Victoria Basin of Western Kenya, *International Journal of Global Warming*, **10** (1-3), 332-353.
54. Ogunah, J.A.; Owuor, P.O.; Kowenje, C.O.; Lalah, J.O. (2016). Adsorption and desorption of chlorsulfuron in agricultural soils of Mara River Basin, Kenya. *American Journal of Experimental Agriculture*, 12(6), 1-10.
55. Ogunah, J.A.; Owuor, P.O.; Kowenje, C.O.; Lalah, J.O. (2016). Effect of copper (II) on the sorption/desorption of chlorsulfuron in five wheat growing regions of the Mara River Basin, Kenya. *American Journal of Experimental Agriculture*, **10**(5), 1-9
56. Omollo, J.O.; Semu, E.; Msaky, J.; Owuor, P. (2016). Effects of cropping systems and agricultural lime on soil properties and nutrient content of sugarcane on acidified soils of Kisumu County, Kenya. *American Journal of Agriculture and Forestry*. **4**(4), 97-111
57. Omollo, J.O.; Semu, E.; Msaky, J.; Owuor, P. (2016). Effects of cropping systems, lime placement methods and rates on sugarcane yields and quality under acidified soils of Kibos, Kenya. *International Journal of Plant and Soil Science*. **12**(3) 1-13.
58. Omollo, J.O.; Semu, E.; Msaky, J.; Owuor, P. (2016). Effects of lime and nitrogen on properties of an acidic soil and nutrient content of sugarcane under sugarcane – soybean intercropping in Kenya. *American Journal of Experimental Agriculture*, **13**(6), 1-15.
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