

## **Professor Peter A. Opala**



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### **EDUCATION**

PhD in Soil Science (Moi University)  
MPhil. Soil Science (Moi University)  
BSc. Agricultural Education and Extension (Egerton University)

### **RESEARCH EXPERIENCE**

1. Co-investigator in Adaptive research on sorghum value chains in West Pokot County, 2020.
2. Integrated soil fertility management: Use of vermicompost and vermitea on vegetable production.
3. Co-investigator, on impacts of tobacco growing on food security and the environment in southern Nyanza by National Council of Science and Technology, Kenya.
4. Co-investigator, to conduct research on impacts of tobacco growing on food security and the environment in southern Nyanza by National Council of Science and Technology, Kenya
5. Research on response of maize to organic and inorganic sources of nutrients in Kericho, 2012
6. Investigated effects of organic and inorganic sources of phosphorus on maize in acid soils of western Kenya.
7. Has participated in several studies on management of acid soils in Kenya.

### **TEACHING EXPERIENCE**

1. Principal Lecturer, Bukura Agricultural College (1993-2010)
2. Lecturer, Kabianga University College (2010 to 2012)
3. Senior Lecturer, Maseno University (2012 to 2017)
4. Associate Professor, Maseno University (2017 to date)

### **PROFESSIONAL MEMBERSHIP**

1. Member of Soil Science Society of East Africa
2. Member of the African Network on soil biology and fertility (AFNET).

### **SKILLS AND TRAINING**

1. Proficient in pedagogic skills after being trained as a Trainer of trainer (TOT).
2. Well versed with common computer packages including statistical software such as Genstat.
3. Has received training in Economics of Land Degradation.

## LEADERSHIP EXPERIENCE

1. Head of Department: Horticulture, Kabianga University College, September 2010 August 2012.
2. Convener, Equipment committee, Kabianga University College, August 2011 to August 2012.
3. In-Charge, Science, Technology and innovation Desk, Kabianga University College, June 2011 to August 2012.
4. Chairman of Postgraduate committee of School of Agriculture, Maseno University, 2014.
5. Head of Agronomy and Director of Studies at Bukura Agricultural College.

## CONFERENCES AND WORKSHOPS

1. Economic of Land Degradation (ELD) Workshop on “Reversing Land Degradation in Africa by Scaling-Up Ever Green Agriculture”. at the World Agroforestry Centre (ICRAF) on 3<sup>rd</sup> May 2018 by GIZ
2. Integrated soil fertility management in western Kenya: A workshop held at Busia ATC in December 2017.
3. The African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE) training workshop on “Effective Communication with Users of Knowledge” from 13<sup>th</sup> to 16<sup>th</sup> October, 2015 in Nairobi, Kenya.
4. 21<sup>st</sup> August to 22<sup>nd</sup> August 2014. Doctoral Supervision workshop, Makerere University, Kampala, Uganda.
5. 6<sup>th</sup> March 2014, Customer Complaints Handling Workshop at Maseno University
6. June 26<sup>th</sup> to 28<sup>th</sup> 2013, Research grants writing workshop facilitated by Maseno University and Masinde Muliro University of Science and Technology at Maseno University.
7. August 5<sup>th</sup> to 7<sup>th</sup> 2013, facilitated workshop on Integrated soil fertility management for Extension workers from Siaya County at Ugunja Resort, Siaya County.
8. 5<sup>th</sup> March 2012, Workshop by the National council for science and technology on management of Science, Technology and Innovation activities at the Universities, Laico Regency Hotel, Nairobi.
9. 22<sup>nd</sup> to 23<sup>rd</sup> March 2012, Intellectual Property Rights workshop, Facilitated by KIPI, KEPHIS AND KECOBO at Kabianga University College, Kericho, Kenya.
10. 12<sup>th</sup> June 2010, Workshop on university Administrative and Examination procedures at NSPSI, Kericho.
11. 3<sup>rd</sup> to 6<sup>th</sup> May 2011, participated as a presenter during the 4<sup>th</sup> National Conference on Dissemination of Research Results and Exhibition of Innovations held at KICC, Nairobi, Kenya.
12. 6<sup>th</sup> to 10<sup>th</sup> August 2006. 23<sup>rd</sup> Soil Science Society of East Africa, Conference, Masaka, Uganda.
13. 10<sup>th</sup> to 13<sup>th</sup> September 2010, Moi University annual conference, , Eldoret, Kenya
14. 20<sup>th</sup> to 24<sup>th</sup> August 2007. 24<sup>th</sup> Soil Science Society of East Africa, Embu, Kenya.
15. 20<sup>th</sup> to 24<sup>th</sup> October 20014, 27<sup>th</sup> SSSEA and 6<sup>th</sup> ASSS conference proceedings, Nakuru, Kenya.

## PUBLICATIONS

### Journals

1. Rioba N.B, **P. A. Opala**, J. K. Bore, S. O. Ochanda & K. Sitienei (2020) . Effect of vermicompost, urea and tithonia green manure on quality of Swiss Chard (*Beta vulgaris*) in Kenya, Sustainable Agriculture Research; 9:55-66.

2. Kisinyo, P. O., **P. A. Opala** and S. O. Gudu (2019). Response of Sorghum (*Sorghum bicolor* (L.) Munch) and Chemical Characteristics of Soil to Organic and Inorganic Fertilizers on Kenyan Lower Midlands Acid Soil. *International Journal of Plant & Soil Science* 28(1): 1-8, 2019; Article no.IJPSS.48622.
3. Musuya D., P.A. Opala and H. Ogindo (2019). Nitrogen sources and their effects on nitrous oxide emission and maize yield in western Kenya. *Ethiopian Journal of Environmental studies and management*, 12 (4): 410-419.
4. **Opala P.A**, Martins Odendo and Francis N. Muyekho (2018). Effects of lime and fertilizer on soil properties and maize yields in acid soils of Western Kenya. *African Journal of Agricultural Research* 13: 657-663.
5. Fanuel Kawaka, Mathews Dida, **Peter Opala**, Omwoyo Ombori, John Maingi, Alice Amoding & John Muoma (2018): Effect of nitrogen sources on the yield of common bean (*Phaseolus vulgaris*) in western Kenya, *Journal of Plant Nutrition*, DOI:10.1080/01904167.2018.1458870
6. **Opala P.A. (2017)**. Influence of Lime and Phosphorus Application Rates on Growth of Maize in an Acid Soil. *Advances in Agriculture* Volume 2017, pp 1-5. doi.org/10.1155/2017/7083206.
7. Millicent Adhiambo Otiendea, Julius Omondi Nyabundi, Kamau Ngamau, **Peter Opala** (2017). Effects of cutting position of rose rootstock cultivars on rooting and its relationship with mineral nutrient content and endogenous carbohydrates. *Scientia Horticulturae* 225: 204–212
8. **Opala P.A. (2015)**. Effect of Sources of Phosphorus on Phosphorus Sorption Characteristics in Cambisols and Ferralsols of Western Kenya. *International Journal of Plant and Soil Science*. 6:64-72.
9. **Opala P.A.,** P.O. Kisinyo and R.O. Nyambati (2015). .Effects of *Tithonia diversifolia*, farmyard manure and urea, and phosphate fertilizer application methods on maize yields in western Kenya. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 116: 1–9
10. P. O. Kisinyo, **P. A. Opala** , V. Palapala , S. O. Gudu , C. O. Othieno & E. Ouma (2015). Micro-Dosing of Lime, Phosphorus and Nitrogen Fertilizers Effect on Maize Performance on an Acid Soil in Kenya. *Sustainable Agriculture Research*; 4: 21-30.
11. P. O. Kisinyo, **P. A. Opala**, S. O. Gudu , C. O. Othieno (2015). Micro-Dosing of Inorganic Inputs on Maize Production on an Acid Soil in Kenya: An Agronomic and Economic Evaluation. *American journal of Experimental Agriculture*. 9: 1-9.
12. **Opala P.A.,** R.O. Nyambati and P.O. Kisinyo (2014). Response of Maize to organic and inorganic sources of nutrients in acid soils of Kericho County, Kenya (2014). *American journal of Experimental Agriculture*. 4: 713-723.
13. Fanuel Kawaka, Mathews M. Dida, **Peter A. Opala** , Omwoyo Ombori, John Maingi, Newton Osoro, Morris Muthini, Alice Amoding, Dative Mukaminega, and John Muoma (2014). Symbiotic Efficiency of Native Rhizobia Nodulating Common Bean (*Phaseolus vulgaris* L.) in Soils of Western Kenya. *International Scholarly Research Notices*, Volume 2014, Article ID 258497, 8 pages. <http://dx.doi.org/10.1155/2014/258497>
14. Kisinyo P.O, **P.A. Opala**, S.O. Gudu, C.O. Othieno, J.R. Okalebo, V. PalaPala and A.N Otinga (2014). Recent Advances towards understanding and managing Kenyan acid soils for improved crop production. *African Journal of Agricultural Research*: 9:2397-2408.
15. R.O. Nyambati and **P.A. Opala** (2014). An Agronomic and Economic Evaluation of Integrated use of *Calliandra calothyrsus* and Maize Stover with Urea in Western Kenya. *American journal of Experimental Agriculture*. 4: 80-89.

17. R.O. Nyambati and P.A. **Opala** (2014). R.O. Nyambati and P.A. Opala (2014). The Effect of Minjingu Phosphate Rock and Triple Superphosphate on Soil Phosphorus Fractions and Maize Yield in Western Kenya. *ISRN Soil Science* .<http://dx.doi.org/10.1155/2014/920541>
18. Kisinyo P.O. , C. O. Othieno, S. O. Gudu, J. R. Okalebo, **P. A. Opala**, J. K. Maghanga, W. K. Ng'etich, J.J. Agalo, R. W. Opile, J. A. Kisinyo& B. O. Ogola. (2013). Phosphorus Sorption and Lime Requirements of Maize Growing Acid Soils of Kenya. *Sustainable Agriculture Research*; 2: 1927-0518.
19. **Opala,P.A.** J. R. Okalebo & C. Othieno (2012): Comparison of effects of phosphorus sources on soil acidity, available phosphorus and maize yields at two sites in western Kenya, *Archives of Agronomy and Soil Science*, 59:327-339.
20. **Opala,P.A.(2011)**.Comparative effects of lime and organic materials on selected soil chemical properties and nutrient uptake by maize in an acid soil. *Archives of Applied Science Research*, 3 (1):96-107.
21. **Opala,P.A.(2011)**.Management of organic inputs in East Africa: A review of current knowledge and future challenges. *Archives of Applied Science Research*, 3 (1): 65-76.
22. **Opala,P.A.,C.O.** Othieno, J.R. Okalebo and P. Kisinyo (2010). Effects of combining organic materials with inorganic phosphorus sources on maize yield and financial benefits in western Kenya. *Experimental Agriculture*. 46:23-34.
23. **Opala,P.A.,** J.R. Okalebo, C.O. Othienoand P. Kisinyo (2010). Effect of organic and inorganic phosphorus sources on maize yields in acid soils in western Kenya. *Nutrient. Cycling in Agroecosystems*. 86:317–329.
24. **Opala, P.A.,** B.J. Jama, C.O. Othieno and J.R. Okalebo (2007). Effect of phosphate fertilizer application methods and nitrogen on maize yields in western Kenya. An agronomic and economic evaluation. *Experimental. Agriculture*. 43: 477-487.
25. **Opala,P.A.** J. R. Okalebo & C. Othieno (2012). Effects of organic and inorganic materials on soil acidity and phosphorus availability in a soil incubation study. *ISRN Agronomy Volume 2012*, doi:10.542/2012/597216. Pg 1-8.
26. Kisinyo P.O., C.O. Othieno, J.R. Okalebo, Ngetich J. **P.A. Opala**, R.J. Osiyo (2009) Residual effects of lime and phosphorus applications on soil and maize (*Zea mays* L.) performance in a Kenyan highlands acid soil. *Journal of Agriculture, Pure and Applied Science and Technology*. 3: 1-10.
27. Nyongesa H.W. R.K. Obura, B.K. Kitur, P. Ouma, **P.A. Opala** and J.B. Miima (2009). Agronomic and economic evaluation of pymarc on maize yield in the Rift Province of Kenya. *International Journal of Disaster Management and Risk Reduction*, 2:6-11.
28. P. O. Kisinyo, S. O. Gudu1, C. O. Othieno, J. R. Okalebo, **P. A. Opala**, J. K. Maghanga, J. J. Agalo, W. K. Ng'etich, (2012). Effects of lime, phosphorus and rhizobia on *Sesbaniasesban* performance in a Western Kenyan acid soil. *African Journal of Agricultural Research*. 7: 2800-2809.
29. C. Tuwei, **P.A. Opala**, E. N. Omami and W. R. Opile (2013). Response of the African nightshade to phosphate fertilizer application in Western Kenya. *Archives of Applied Science Research*. 5:195-201.
30. P. O. Kisinyo, C. O. Othieno, S. O. Gudu, J. R. Okalebo, **P. A. Opala**, W. K. Ng'etich, R. O. Nyambati, E. O. Ouma, J. J. Agalo, S. J. Kebeney, E. J. Too, J. A. Kisinyo and W. R. Opile(2014).

Immediate and residual effects of lime and phosphorus fertilizer on soil acidity and maize production in western Kenya. *Experimental agriculture* 50:128-143.

#### **Selected Publications in Conference proceeding**

1. Kisinyo P.O. Palapala V.A. and Opala P.A. (2016) Effects of micro dosce inorganic farm inputs on maize performance on western Kenya maize performance. In proceedings of University of Eldoret international conference.
2. P,A, Opala, J.R. Okalebo (2013). Comparative effects of organic and inorganic phosphorus sources on maize yields at two acidic sites in western Kenya. In proceedings of Soil Science Society of East Africa, pp 407 to 412. Nakuru Kenya.
3. P.A. Opala (2013). Can organic materials substitute for lime to ameliorate phosphorus-deficient acid soils? In proceedings of the first National science, technology, May 2012, KICC.

#### **Book Chapter**

4. Ahamadou, B, P.O. Kisinyo, **P.A. Opala**, G.A. Danot, I.I. Mudita and D. Nyadanu (2017). Managing Risks Associated with Soil Degradation for Sustainable Crop Production in Africa. In: Agricultural Risk Management in Africa. Chapter 4, Pp 69-93.