James Seutra Kaba

Lecturer · Department of Agroforestry
Kwame Nkrumah University of Science and Technology

ORCID 0000-0001-6432-3464 · Email jskaba@knust.edu.gh · Email seutra@yahoo.com · Homepage webapps.knust.edu.gh/staff/dirsearch/profile/awards-and-honours/9002979ad769.html · Google Scholar scholar.google.com/citations?user=71YxoxgAAAAJ&hl=en · Profile knust.peerford.com/staff/508ba920-64d2-4cf7-a46b-7dd080c0add6

RESEARCH

Interests	Agronomy · Agroforestry · soil science · climate change
Areas	Horticulture · Plant Science · Agronomy and Crop Science · Soil Science · General Agricultural and Biological Sciences · Ecology

RESEARCH SUMMARY

39	555	14	20	2.73	42%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 39 publications listed below, 2014–2025. Field-weighted impact is the mean over the 31 works scored for it; 1.00 is the world average for works of the same field, type and year. 13 of the 31 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer 2022–present
Agroforestry, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Kwame Nkrumah University of Science and Technology
Kumasi, Ghana

Crop officer (Upper East Region) 2013–2014
Crops, Canadian Hunger foundation-ACDEP., Upper East, Ghana

Credit Officer (Operations) 2008–2010
Credit Officer, World Vision Ghana, Accra, Ghana

Agronomist and Research assistant. 2007–2008
Agronomy, University for Development Studies, Tamale, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2014–2017
Faculty of Science and Technology, Libera Università di Bolzano, Bolzano, Italy

M.Phil 2009–2011
Crop Science, University of Ghana, Legon, Ghana

BSc. Agric Technology 2003–2007
Agronomy, University for Development Studies, Tamale, Ghana

Agric 2000–2002
Agric, Ghana Secondary School, Tamale, Tamale, Ghana

PUBLICATIONS

Journal articles 37

1. Ammal Abukari, **James Seutra Kaba**, Akwasi Adutwum Abunyewa (2025). Agricultural Utilization of Biochar: A Review of Production Technologies. *Turkish Journal of Agriculture - Food Science and Technology*. https://doi.org/10.24925/turjaf.v13i3.802-813.7357
2. Henrietta Andoh, **James S. Kaba** (2025). Assessment and projection of climate change impact on Ghana's agricultural crops: evidence from cassava (Manihot esculenta) production in the coastal Savannah agroecological zone. *Theoretical and Applied Climatology*. https://doi.org/10.1007/s00704-025-05428-9
3. Joseph Anokye, Akwasi Adutwum Abunyewa, Uffe Jørgensen, **James Seutra Kaba**, Kwame Twum-Ampofo, Evans Dawoe, Victor Rex Barnes, Finn Plauborg, John Tennyson Afele, Stephen Yaw Opoku, Richard Asante, Jacob Ulzen (2025). Augmentation of mineral fertilizer with organic nutrient sources to improve soil quality and nutrient use efficiency in cocoa landscape in Ghana. *Journal of Plant Nutrition*. https://doi.org/10.1080/01904167.2025.2481132
4. Ammal Abukari, Ishmael Hashmiu, **James Kaba Seutra**, Akwasi Adutwum Abunyewa, Olivia Agbenyega (2025). Farmers' perceptions and acceptability of Biochar as a soil amendment in the Tolon district of Ghana. *Environment Development and Sustainability*. https://doi.org/10.1007/s10668-025-06656-9
5. Hajara Muhammed, **James S. Kaba**, Akwasi A. Abunyewa, K. S. Kwashie Godswill, Zippora Appiah-Kubi, Alberta Y. Asare, Ernest K. Agyei, Fred A. Yamoah, Ibrahim Issahaku, Priscilla Ntiamoah (2025). Nurturing with nature: the efficacy of arbuscular mycorrhizal fungi microbe for cocoa sector environmental management. *Journal of Plant Nutrition*. https://doi.org/10.1080/01904167.2025.2461276
6. Mohammed H. Ziblila, **James S. Kaba**, Fred A. Yamoah, Adolf A. Acquaye, Ishmael Hashmiu (2025). Sacred groves for enhanced climate mitigation: Towards a framework for managing unintended externalities of environmental systems. *Environmental Development*. https://doi.org/10.1016/j.envdev.2025.101351
7. **James S. Kaba**, Boateng K. Frimpong, Addo E. Boahene, Priscilla Ntiamoah, Emmanuella O. Quansah, Patrick Opoku (2025). Towards equitable access to land for cocoa farming: the role of customary land tenure system in Migrant and Female cocoa farmers decision to adopt good agronomic practices in Ghana. *Trees Forests and People*. https://doi.org/10.1016/j.tfp.2025.100987
8. **James S. Kaba**, Frimpomaa F. Adusei, Birago Ahenkorah, Otchie I. Ohui, Priscilla Ntiamoah, Emmanuella O. Quansah, Kwadwo Boakye Boadu, Daniel Dompreh (2025). Variations in soil biological and physicochemical properties of reclaimed artisanal mining sites under cocoa cultivation in Ghana across different reclamation ages. *Sustainable Environment*. https://doi.org/10.1080/27658511.2025.2508543
9. **James S. Kaba**, Ernest K. Agyei, Mohan Krishna Chowdry Avilineni, Fred A. Yamoah, Ibrahim Issahaku, Priscilla Ntiamoah, Emmanuel Acquah, Mustapha Mas-Ud (2024). Agroforestry as an old approach to a new challenge of combating climate change: a critical analysis of the cocoa sector. *Discover Agriculture*. https://doi.org/10.1007/s44279-024-00120-4
10. **JS Kaba** (2024). Integrating climate-smart agri-innovative technology adoption and agribusiness management skills to improve the livelihoods of smallholder female cocoa farmers in Ghana. *Climate and Development*.
11. Joseph Anokye, Akwasi Adutwum Abunyewa, Uffe Jørgensen, **James Seutra Kaba**, Kwame Twum-Ampofo, Evans Dawoe, Victor Rex Barnes, Finn Plauborg, Søren Marcus Pedersen, Torsten Rødel Berg, Olivia Agbenyega, Steve Amisah, John Tennyson Afele, Stephen Yaw Opoku, Richard Asante, Jacob Ulzen (2024). Mitigation of greenhouse gas emissions through shade systems and climate-smart soil fertility interventions in cocoa landscapes in the Semi-deciduous ecological zone of Ghana. *Soil Advances*. https://doi.org/10.1016/j.soilad.2024.100001
12. Kwadwo Boakye Boadu, Charlesworth Osei Soadwa, Olivia Adamu, Michael Ansong, **James Seutra Kaba**, Rogerson Anokye (2024). The Impact of Varying Biochar Rate and Particle Size Derived from Bamboo Culm Residue and Coconut Husk Mixture on Lettuce (Lactuca sativa cv. 'Tiberius') Seed Germination and Leaf Morphology. *Journal of Sustainability Research*. https://doi.org/10.20900/jsr20240054

13. Godswill K. S. Kwashie, **James S. Kaba**, Zippora Appiah-Kubi, Akwasi A. Abunyewa, Alberta Y. Asare, Ernest K. Agyei, Hajara Muhammed (2023). Synergic effect of Arbuscular mycorrhizal fungi and potassium fertilizer improves biomass-related characteristics of cocoa seedlings to enhance their drought resilience and field survival. *Open Agriculture*. https://doi.org/10.1515/opag-2022-0239

14. GKS Kwashie, **JS Kaba**, AA Abunyewa (2023). Synergic effect of Arbuscular mycorrhizal fungi and potassium fertilizer improves biomass-related characteristics of cocoa seedlings to enhance their drought resilience and …. *Open Agriculture*.

15. Ammal Abukari, **James Seutra Kaba**, Evans Dawoe, Akwasi Adutwum Abunyewa (2022). A comprehensive review of the effects of biochar on soil physicochemical properties and crop productivity. *Waste Disposal & Sustainable Energy*. https://doi.org/10.1007/s42768-022-00114-2

16. David Ofoe Gorleku, Gloria Pearl Ami BADU, John Tennyson AFELE, **James Seutra KABA**, Akwasi Adutwum ABUNYEWA (2022). ASSESSING THE EFFICIENCY OF MORINGA OLEIFERA LEAF MEAL ON THE GROWTH PERFORMANCE OF BROILER CHICKEN. *Journal of Applied Life Sciences and Environment*. https://doi.org/10.46909/journalalse-2021-032

17. Samuel Owusu Yeboah, Isaac K. Amponsah, **James S. Kaba**, Akwasi A. Abunyewa (2022). Abundance, richness and use of medicinal plants under different land uses in the Guinea Savanna zone of Northern Ghana. *All Earth*. https://doi.org/10.1080/27669645.2022.2105485

18. Konadu Jennifer Ama Saah, **James S. Kaba**, Akwasi A. Abunyewa (2022). Inorganic nitrogen fertilizer, biochar particle size and rate of application on lettuce (Lactuca sativa L.) nitrogen use and yield. *All Life*. https://doi.org/10.1080/26895293.2022.2080282

19. Fred A. Yamoah, **James S. Kaba** (2022). Integrating climate-smart agri-innovative technology adoption and agribusiness management skills to improve the livelihoods of smallholder female cocoa farmers in Ghana. *Climate and Development*. https://doi.org/10.1080/17565529.2021.2024125

20. **James S. Kaba**, Alberta Y. Asare, Henrietta Andoh, Godswill K.S Kwashie, Akwasi A. Abunyewa (2022). Toward Sustainable Cocoa (Theobroma Cacao L) Production: The Role of Potassium Fertilizer in Cocoa Seedlings Drought Recovery and Survival. *International Journal of Fruit Science*. https://doi.org/10.1080/15538362.2022.2092932

21. Samuel Owusu Yeboah, Isaac K. Amponsah, **James S. Kaba**, Akwasi A. Abunyewa (2022). Variability of soil physicochemical properties under different land use types in the Guinea savanna zone of northern Ghana. *Cogent Food & Agriculture*. https://doi.org/10.1080/23311932.2022.2105906

22. **James Seutra Kaba**, Akwasi A. Abunyewa, Joseph Kugbe, Godswill K.S Kwashie, Emmanuella Owusu Ansah, Henrietta Andoh (2021). Arbuscular mycorrhizal fungi and potassium fertilizer as plant biostimulants and alternative research for enhancing plants adaptation to drought stress: Opportunities for enhancing drought tolerance in cocoa (Theobroma cacao L.). *Sustainable Environment*. https://doi.org/10.1080/27658511.2021.1963927

23. Mustapha Mas-Ud, Fuseini Dokurugu, **James Seutra Kaba** (2021). Effectiveness of cowpea (Vigna unguiculata L.) living mulch on weed suppression and yield of maize (Zea mays L.). *Open Agriculture*. https://doi.org/10.1515/opag-2021-0031

24. **JS Kaba**, AA Abunyewa (2021). New aboveground biomass and nitrogen yield in different ages of gliricidia (Gliricidia sepium Jacq.) trees under different pruning intensities in moist semi …. *Agroforestry Systems*.

25. **James S. Kaba**, Fred A. Yamoah, Adolf Acquaye (2021). Towards sustainable agroforestry management: Harnessing the nutritional soil value through cocoa mix waste. *Waste Management*. https://doi.org/10.1016/j.wasman.2021.02.021

26. Fred A. Yamoah, **James S. Kaba**, David Botchie, Joseph Amankwah-Amoah (2021). Working towards Sustainable Innovation for Green Waste Benefits: The Role of Awareness of Consequences in the Adoption of Shaded Cocoa Agroforestry in Ghana. *Sustainability*. https://doi.org/10.3390/su13031453

27. Kwame Ochire-Boadu, Akwasi A. Abunyewa, **James Seutra Kaba**, Kwame Twum-Ampofo, Evans L. K. Dawoe, Olivia Agbenyega, Rex V. Barnes (2020). Improved legume fallows: Influence on nitrogen and microbial dynamics, and maize (Zea maysL) grain yield in sub-humid zone of West Africa. *Cogent Food & Agriculture*. https://doi.org/10.1080/23311932.2020.1785778

28. Fred A. Yamoah, **James S. Kaba**, Joseph Amankwah-Amoah, Adolf Acquaye (2020). Stakeholder Collaboration in Climate-Smart Agricultural Production Innovations: Insights from the Cocoa Industry in Ghana. *Environmental Management*. https://doi.org/10.1007/s00267-020-01327-z

29. **James S. Kaba**, Alexander Otu-Nyanteh, Akwasi A. Abunyewa (2020). The role of shade trees in influencing farmers' adoption of cocoa agroforestry systems: Insight from semi-deciduous rain forest agroecological zone of Ghana. *NJAS - Wageningen Journal of Life Sciences*. https://doi.org/10.1016/j.njas.2020.100332

30. Eunice Badu, **James S. Kaba**, Akwasi A. Abunyewa, Evans K. Dawoe, O. Agbenyega, Rex V. Barnes (2019). Biochar and inorganic nitrogen fertilizer effects on maize (Zea mays L.) nitrogen use and yield in moist semi-deciduous forest zone of Ghana. *Journal of Plant Nutrition*. https://doi.org/10.1080/01904167.2019.1659347

31. **James Seutra Kaba**, Akwasi A. Abunyewa (2019). New aboveground biomass and nitrogen yield in different ages of gliricidia (Gliricidia sepium Jacq.) trees under different pruning intensities in moist semi-deciduous forest zone of Ghana. *Agroforestry Systems*. https://doi.org/10.1007/s10457-019-00414-3

32. **James Seutra Kaba**, Stefan Zerbe, Monica Agnolucci, Francesca Scandellari, Akwasi A. Abunyewa, Manuela Giovannetti, Massimo Tagliavini (2018). Atmospheric nitrogen fixation by gliricidia trees (Gliricidia sepium (Jacq.) Kunth ex Walp.) intercropped with cocoa (Theobroma cacao L.). *Plant and Soil*. https://doi.org/10.1007/s11104-018-3897-x

33. **JS Kaba**, AA Abunyewa (2017). Uptake of nitrogen by cocoa (Theobroma cocoa L.) trees derived from soil decomposition of gliricidia (Gliricidia sepium Jacq.) shoots. *VIII International Symposium on Mineral Nutrition of Fruit Crops 1217*. https://www.actahort.org/books/1217/1217_33.htm

34. Mustapha Mas-Ud, **James S. Kaba**, Kwadwo Ofori, Salifu Gumah (2016). Relative Planting Dates Effect on the Agronomic Performance of Maize (Zea Mays L.) and Groundnut (Arachis Hypogea L) in an Intercrop System. *American Scientific Research Journal for Engineering, Technology, and Sciences (Global Society of Scientific Research and Researchers)*.

35. **JS Kaba**, AA Abunyewa (2016). Tracing the nitrogen flow between Gliricidia and cocoa trees in intercropping system using the 15N natural abundant method. *III International Symposium on Horticulture in Europe-SHE2016 1242*. https://www.actahort.org/books/1242/1242_86.htm

36. **James Seutra Kaba**, F. K. Kumaga, Kwadwo Ofori (2014). Effect of flower production and time of flowering on pod yield of peanut (Arachis hypogaea L) genotypes. *IOSR Journal of Agriculture and Veterinary Science*. https://doi.org/10.9790/2380-07434449

37. **JS Kaba**, K Ofori (2014). Inter-relationships of yield and components of yield at different stages of maturity in three groundnuts (Arachis hypogaea L) varieties. *International J. of Life Science Research*. https://www.academia.edu/download/33941286/Paper_1.pdf

Reports 1

1. **James Seutra Kaba** (2024). Waste management for sustainable and restored agricultural soil. *Elsevier Science & Technology*. https://www.researchgate.net/profile/L-Devarishi-Sharma/publication/381670232_Opportunities_and_challenges_of_sewage_sludge_and_its_health_risk_assessment/links/667a7a9b1846ca33b84fc4e6/Opportunities-and-challenges-of-sewage-sludge-and-its-health-risk-assessment.pdf

Theses 1

1. **JS Kaba** (2017). Nitrogen nutrition of cocoa (Theobroma cacao L.) in intercropping systems with gliricidia (Gliricidia sepium (Jacq.) Kunth ex Walp.). *Free University of Bozen-Bolzano*. https://bia.unibz.it/esploro/outputs/doctoral/Nitrogen-nutrition-of-cocoa-Theobroma-cacao-L-in-intercropping-systems-with-gliricidia-Gliricidia-sepium-Jacq-Kunth-ex-Walp/991005773503901241