

Kwadwo Kusi Amoah

Lecturer · Crop Science
University of Cape Coast

ORCID [0000-0002-2122-624X](https://orcid.org/0000-0002-2122-624X) · Google Scholar scholar.google.com/citations?user=k3qbOx4AAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/c848acfe-3efc-4913-a52c-db06d56a8db9

RESEARCH

Interests Agronomy · Olericulture · Postharvest technology · Plant physiology · Food safety
Areas Plant Science · Agronomy and Crop Science · Mechanical Engineering · Soil Science · Analytical Chemistry · Artificial Intelligence

RESEARCH SUMMARY

18	213	7	6	1.63	29%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 18 publications listed below, 2011–2026. Field-weighted impact is the mean over the 14 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 14 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 15

1. Michael O Adu, Emmanuel Afutu, Paul Agu Asare, Kwadwo K Amoah, Mishael Amoah Nyarko, Kwabena A Sanleri (2026). Meta-analysis of corm yield responses to chemical and biological approaches for managing taro leaf blight disease. *Pest Management Science*. <https://doi.org/10.1002/ps.70878>
2. Michael O. Adu, Francis Kumi, Peter B. Obour, Emmanuel Arthur, Eric Oppong Danso, Samuel Banafo, Kofi Atiah, Kwadwo K. Amoah, Paul A. Asare, Joel Asiedu, Donatus B. Angnuureng, Stephen E. Moore (2026). Root system architecture and shoot canopy effects drive erosion control in Napier and Vetiver grasses. *Ecological Engineering*. <https://doi.org/10.1016/j.ecoleng.2026.108126>
3. Kwabena A. Sanleri, Francis Kumi, Kwadwo K. Amoah, Solomon Amamu, Igor Luketina, Michael O. Adu (2025). Identifying and Evaluating Salt-Tolerant Halophytes Along a Tropical Coastal Zone: Growth Response and Desalination Potential. *Plant-Environment Interactions*. <https://doi.org/10.1002/pei3.70072>
4. Godfred Okyere-Prah, Paul A. Asare, Kwadwo K. Amoah, Kofi Atiah, Moses Teye, Alfred A. Darkwa, Roseline L. Macarthur, Michael O. Adu (2025). Optimizing Agronomic Zinc Biofortification in Carrots. *Plant-Environment Interactions*. <https://doi.org/10.1002/pei3.70086>
5. Michael O. Adu, Peter B. Obour, Francis Kumi, Emmanuel Arthur, Paul A. Asare, Eric Oppong Danso, Samuel A. Banafo, Kwabena A. Sanleri, Hygienus Godswill, Kofi Atiah, Kwadwo K. Amoah, Joel B.K. Asiedu, Stephen E. Moore, Donatus B. Angnuureng (2025). Soil reinforcement potential of multifunctional crop plants on arable and non-arable tropical soils. *Geoderma*. <https://doi.org/10.1016/j.geoderma.2025.117470>
6. Martin Bosompem, Patrick Arhin, Jacob Nunoo, Kwadwo Kusi Amoah (2024). Smallholder farmers' participation in Cassava value addition practices: What drivers matter in Ghana? *Journal of Agriculture and Food Research*. <https://doi.org/10.1016/j.jafr.2024.101120>
7. Michael O. Adu, Nathaniel Zigah, David O. Yawson, Kwadwo K. Amoah, Emmanuel Afutu, Kofi Atiah, Alfred A. Darkwa, Paul A. Asare (2023). Plasticity of root hair and rhizosheath traits and their relationship to phosphorus uptake in sorghum. *Plant Direct*. <https://doi.org/10.1002/pld3.521>
8. Francis Kumi, Peter B. Obour, Emmanuel Arthur, Stephen E. Moore, Paul A. Asare, Joel Asiedu, Donatus B. Angnuureng, Kofi Atiah, Kwadwo K. Amoah, Shadrack K. Amponsah, Selorm Y. Dorvlo, Samuel Banafo,

Michael O. Adu (2023). Quantifying root-induced soil strength, measured as soil penetration resistance, from different crop plants and soil types. *Soil and Tillage Research*. <https://doi.org/10.1016/j.still.2023.105811>

9. Ernest Teye, Charles L. Y. Amuah, Kofi Atiah, Ransford Opoku Darko, Thomas Abindaw, Kwadwo Kusi Amoah, Michael Miyittah, Emmanuel Afutu, Rebecca Owusu (2023). Quick Determination of Soil Quality Using Portable Spectroscopy and Efficient Multivariate Techniques. *Journal of Spectroscopy*. <https://doi.org/10.1155/2023/2024318>
10. Ernest Teye, Charles L. Y. Amuah, Kofi Atiah, Ransford Opoku Darko, Kwadwo Kusi Amoah, Emmanuel Afutu, Rebecca Owusu (2022). Feasibility Study on the Use of a Portable NIR Spectrometer and Multivariate Data Analysis to Discriminate and Quantify Adulteration in Fertilizer. *Journal of Spectroscopy*. <https://doi.org/10.1155/2022/1412526>
11. Michael O. Adu, Paul A. Asare, David O. Yawson, Kwadwo K. Amoah, Kofi Atiah, Matthew K. Duah, Alex Graham (2022). Root System Traits Contribute to Variability and Plasticity in Response to Phosphorus Fertilization in 2 Field-Grown Sorghum [*Sorghum bicolor* (L.) Moench] Cultivars. *Plant Phenomics*. <https://doi.org/10.34133/plantphenomics.0002>
12. Kwadwo Kusi Amoah, Paul Agu Asare, Emmanuel Afutu (2021). Crop Plants to Potassium (K) Deprivation. *Plant Roots*. https://books.google.com/books?hl=en&lr=&id=17ZaEAAAQBAJ&oi=fnd&pg=PA27&dq=info:RS7X7tFSlisJ:scholar.google.com&ots=FklcJmV1yn&sig=c-uSUX8nC7wr4N_8nNH8yBh4zsY
13. Vincent Agyemang Opoku, David Oscar Yawson, Paul Agu Asare, Emmanuel Afutu, Mohammed Clement Kotochi, Kwadwo Kusi Amoah, Michael Osei Adu (2021). Root hair and rhizosheath traits contribute to genetic variation and phosphorus use efficiency in cowpea (*Vigna unguiculata* (L.) Walp). *Rhizosphere*. <https://doi.org/10.1016/j.rhisph.2021.100463>
14. Michael O. Adu, Paul A. Asare, David O. Yawson, Frank K. Ackah, Kwadwo K. Amoah, Mishael A. Nyarko, Dick A. Andoh (2016). Quantifying variations in rhizosheath and root system phenotypes of landraces and improved varieties of juvenile maize. *Rhizosphere*. <https://doi.org/10.1016/j.rhisph.2016.12.004>
15. ABANO ERNEST EKOW, KK Amoah (2011). Asian Journal of. *Asian Journal of Agricultural Research*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/f415c875-fb3e-4874-865b-15372ab90389/content>

Book chapters 1

1. Kwabena Azure Sanleri, KK Amoah, PA Asare, E Afutu, K Atiah, Michael Osei Adu (2020). A meta-analysis of modifications of root system traits of crop plants to potassium (K) deprivation. *Plant Roots*. <https://www.intechopen.com/chapters/74284>

Conference papers 1

1. Mathias Neumann Andersen, Selorm Y. Dorvlo, Emmanuel Amoakwah, Joseph Osafo Eduah, Kwadwo Kusi Amoah, Eric Oppong Danso, Isaac Baidoo, Finn Plauborg, Edward Benjamin Sabi, Stephen Abenney-Mickson and 11 others (2017). Green Cohesive Agricultural Resource Management - The WEBSOC Project.

Theses 1

1. Kwadwo Kusi Amoah (2019). Influence of biochar and irrigation on crop production in the coastal savannah zone of Ghana. *Doctoral Dissertation, University of Cape Coast*. <https://ir.ucc.edu.gh/xmlui/handle/123456789/7173>. <https://ir.ucc.edu.gh/server/api/core/bitstreams/2fc056e1-9725-44b8-93a1-be9e2001c741/content>