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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=FkIcJmV1yn&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