Frank Kwekucher Ackah

Senior Lecturer · Crop Science
University of Cape Coast

ORCID 0000-0001-9188-7476 · Google Scholar scholar.google.com/citations?user=f9QdT4oAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/20662615-f473-4db9-beda-30370c10c6fe

RESEARCH

Interests	Plant Protection (plant pathology · mycology · IPM) · Crop Improvement · Home and Urban Agriculture
Areas	Plant Science · Complementary and alternative medicine · Molecular Biology · Soil Science · Cell Biology · Pharmacology

RESEARCH SUMMARY

19	491	6	4	2.13	25%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 19 publications listed below, 2015–2026. Field-weighted impact is the mean over the 16 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 16 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer (Plant Protection (Plant Pathology/Mycology) 2010–present
Crop Science, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 16

1. Andrews Danso Ofori, Zohreh Nasimi, **Frank Kwekucher Ackah**, Muhammad Irfan Ahmed, Yaoting Yan, Wang Li, Abdul Ghani Kandro, Kazunori Okada, Keiichi Mochida, Yoshiteru Noutoshi, Aiping Zheng (2026). Genomic Basis of Lifestyle Divergence in Rice-Associated Burkholderia: From Pathogenesis to Plant Growth Promotion. *International Journal of Molecular Sciences*. https://doi.org/10.3390/ijms27114730
2. Jianbin Li, Michael Ackah, Frank Kwarteng Amoako, Meina Zhu, Frank Kumi, **Frank Kwekucher Ackah**, Qiang Lin, Carlos Tettey, Changyu Qiu, Xueying Jin, Mengdi Zhao, Weiguo Zhao (2026). Jasmonic Acid-Induced Vacuolar Cation/Proton Exchanger 3 (CAX3) Expression Drives Tolerance to Manganese Toxicity in Mulberry (Morus alba L.). *Plant Cell & Environment*. https://doi.org/10.1111/pce.70832
3. Rurou Long, Xueying Jin, Michael Ackah, Frank Kwarteng Amoako, **Frank Kwekucher Ackah**, Frank Kumi, Jianbin Li, Hao Wei, John Nelson Buah, Mengdi Zhao, Weiguo Zhao (2026). Transcriptomics and functional characterization identify CYP73A16 as a key regulator of flavonoid biosynthesis in mulberry leaves. *BMC Plant Biology*. https://doi.org/10.1186/s12870-026-08804-3
4. **Frank Ackah**, Elijah Eduful, Emmanuel Afutu, Josiah Tachie-Menson, Ransford Darko (2026). Water stress and its synergistic effects on pest and disease dynamics in smallholder irrigated agriculture: Evidence from central region of Ghana. *Poljoprivredna tehnika*. https://doi.org/10.5937/poljteh2601074k
5. Josiah Wilson Tachie-Menson, Catherine Owusu, Frederick Kwame Yeboah, Flavio Odoi-Yorke, Agnes Abeley Abbey, **Frank Kwekucher Ackah**, Ransford Opoku Darko (2025). Environmental impact of pesticide runoff in irrigated agriculture: evidence from Gomoa West field, Ghana. *Discover Environment*. https://doi.org/10.1007/s44274-025-00268-w
6. Emmanuellah Lekete-Lawson, Grace C. van der Puije, Enoch A. Osekre, **Frank K. Ackah** (2025). First

Report of Ganoderma ryvardenii causing Basal Stem Rot (BSR) disease on oil palm (Elaeis guineensis Jacq.) in Ghana. *F1000Research*. https://doi.org/10.12688/f1000research.161972.1

7. Ransford O. Darko, Prince C. Wadie, Emmanuel Afutu, Nana A. Kissi, **Frank K. Ackah**, Emmanuel Hanyabui (2025). Impact of deficit irrigation on sweet pepper (Capsicum annuum var. Simbard) performance: Assessing growth, yield, and water use efficiency under a four-day interval irrigation. *Egyptian Journal of Agricultural Research*. https://doi.org/10.21608/ejar.2025.360782.1642
8. Frank Yeboah Adusei, Yaw Asamoah Akowuah, **Frank Kwekucher Ackah**, Loy Van Crowder, Edmond Yeboah Nyamah, Mary Michael Lipford Zahed (2025). Leveraging social media for eco-education: home gardening for climate resilience and food security. *Academia Environmental Sciences and Sustainability*. https://doi.org/10.20935/acadenvsci7601
9. A. Muntala, S. Kwadwo Gyasi, P. Mawuenyegan Norshie, S. Larbi-Koranteng, **F. Kwekucher Ackah**, D. Afreh Ntiamoah, M. Atef Mohamed (2021). Diseases and Insect Pests associated with Cashew (Anacardium occidentale L.) Orchards in Ghana. *European Journal of Agriculture and Food Sciences*. https://doi.org/10.24018/ejfood.2021.3.5.357
10. Michael O. Adu, Paul A. Asare, David O. Yawson, Mishael A. Nyarko, Ahmed Abdul Razak, Amoah K. Kusi, Josiah W. Tachie-Menson, Emmanuel Afutu, Dick A. Andoh, **Frank K. Ackah**, Grace C. Vanderpuije, Kingsley J. Taah, Elvis Asare-Bediako, Godwin Amenorpe (2020). The search for yield predictors for mature field-grown plants from juvenile pot-grown cassava (Manihot esculenta Crantz). *PLoS ONE*. https://doi.org/10.1371/journal.pone.0232595
11. Rungtiwa Phookamsak, Kevin D. Hyde, Rajesh Jeewon, D. Jayarama Bhat, E. B. Gareth Jones, Sajeewa S. N. Maharachchikumbura, Olivier Raspé, Samantha C. Karunarathna, Dhanushka N. Wanasinghe, Sinang Hongsanan, … **Frank Kwekucher Ackah** and 89 others (2019). Fungal diversity notes 929–1035: taxonomic and phylogenetic contributions on genera and species of fungi. *Fungal Diversity*. https://doi.org/10.1007/s13225-019-00421-w
12. Michael Osei Adu, Paul Agu Asare, Elvis Asare-Bediako, Godwin Amenorpe, **Frank Kwekucher Ackah**, Emmanuel Afutu, Mishael Nyarko Amoah, David Oscar Yawson (2018). Characterising shoot and root system trait variability and contribution to genotypic variability in juvenile cassava (Manihot esculenta Crantz) plants. *Heliyon*. https://doi.org/10.1016/j.heliyon.2018.e00665
13. **FK Ackah** (2018). Morphotaxonomic and phylogenetic analysis of Saprolegnia ferax from India. *Studies in Fungi*. https://studiesinfungi.org/pdf/SIF_3_1_7.pdf
14. Ernest Teye, Philip Fiifi Owusu, Ransford Opoku Darko, **Frank K. Ackah** (2017). Evaluation of composite tea made from roselle (Hibiscus sabdarffa), ginger (Zingiber officinale) and turkey berry (Solanum torvum). https://doi.org/10.25218/ajfia.2017.01.001.06
15. 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
16. VAN DER PUIJE GRACE C., **FK Ackah** (2015). Prevalence of leaf blight disease caused by Phytophthora colocasiae in taro in the Aowin Suaman Districts of Ghana. *Hort Flora Research Spectrum*. https://www.researchgate.net/profile/Frank-Ackah/publication/301215740_Prevalence_of_Leaf_Blight_Disease_Caused_by_Phytophthora_colocasiae_in_Taro_in_the_Aowin_Suaman_District_of_Ghana/links/5991d577aca27289539baee4/Prevalence-of-Leaf-Blight-Disease-Caused-by-Phytophthora-colocasiae-in-Taro-in-the-Aowin-Suaman-District-of-Ghana.pdf

Book chapters 2

1. **Frank Kwekucher Ackah**, Carlos Kwesi Tettey (2025). Brief review of Ganoderma spp. occurring in Ghana and their bioactive compounds. *Elsevier eBooks*. https://doi.org/10.1016/b978-0-443-13856-0.00010-5
2. **Frank Kwekucher Ackah**, Grace Caselina van der Puije, Elvis Asare-Bediako, KingsleyTaah . (2025). Evaluation of Taro Germplasm for Resistance to Taro Leaf Blight disease caused by Phytophthora colocasiae and Corm Rot Disease caused by Sclerotium rolfsii in Ghana. *Agricultural Sciences: Techniques and Innovations Vol. 6*. https://doi.org/10.9734/bpi/asti/v6/6558

Theses 1

1. **Frank Kwekucher Ackah** (2019). Management of taro leaf blight disease caused by Phytophthora colocasiae in the eastern region of Ghana. *University of Cape Coast*. https://ir.ucc.edu.gh/items/624b94ae-769f-429a-81d6-7d8e9caa44df