Emmanuel Afutu

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RESEARCH

Interests	Seed Science · Plant Breeding and Biotechnology
Areas	Plant Science · Ecology · Parasitology · Food Science · Public Health, Environmental and Occupational Health · Infectious Diseases

RESEARCH SUMMARY

63	650	16	21	1.35	17%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 63 publications listed below, 2012–2026. Field-weighted impact is the mean over the 53 works scored for it; 1.00 is the world average for works of the same field, type and year. 9 of the 53 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer 2007–present
Crop Science, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 60

1. Gilbert Ansah, Harry M. Amoatey, Vivian Oduro, Godwin Amenorpe, Elvis Asare-Bediako, **Emmanuel Afutu**, Alfred A. Darkwa, Doris A. Dzimega, Rosemary Kusi-Adjei, Emmanuel K. Quartey, Joseph Nunoo, Kwadwo Owusu Ayeh, Nusrat Tsemah Afful, Samuel Amiteye (2026). Combining ability, maternal and reciprocal effects for growth traits, total carotenoids and beta carotene in yellow maize (Zea mays L.). *Australian Journal of Crop Science*. https://doi.org/10.21475/ajcs.26.20.02.p161x
2. Prosper Deo-Donne Lumorh, Innocent Kwaku Dorvlo, Godwin Amenorpe, Paul Agu Asare, Michael Osei Adu, **Emmanuel Afutu**, Mishael Amoah Nyarko, Michael Odenkey Quaye, Edward Bariam, Benjamin Kwasi Offei, Patrick Twumasi, Samuel Amiteye (2026). Early-maturing, high-yielding M5 mutant lines of cowpea (Vigna unguiculata) derived from gamma irradiation exhibit enhanced seed protein and mineral composition: implications for nutritional biofortification. *International Journal of Radiation Biology*. https://doi.org/10.1080/09553002.2026.2708815
3. 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
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. Patience B. Tetteh-Quarcoo, Joana Twasam, John Ahenkorah, Bismarck Afedo Hottor, Nicholas T. K. D. Dayie, Stephen Opoku-Nyarko, Peter Ofori Appiah, **Emmanuel Afutu**, Fleischer C. N. Kotey, Eric S. Donkor, Emilia Asuquo Udofia, Nii Koney-Kwaku Koney, Benjamin Arko-Boham, Kevin Kofi Adutwum-Ofosu (2025). Exposure to Treponema pallidum Alters Villous Histomorphology of Human Placentae. *Acta Microbiologica Hellenica*. https://doi.org/10.3390/amh70030031

6. A Yusif, NT Afful, R Kusi-Adjei, C Annor, EA Obeng, RM Yeboah, FCK Ocloo, E Asare-Bediako, AA Darkwa, **E Afutu**, KO Ayeh, AS Appiah, G Amenorpe, S Amiteye (2025). Farmer Knowledge and Incidence of Taro Leaf Blight Disease in Major Taro-growing Regions of Ghana. *African Journal of Food Agriculture Nutrition and Development*. https://doi.org/10.18697/ajfand.144.25130

7. Patrick Twumasi, Paul Agu Asare, Sylvester NTT Addy, Godwin Amenorpe, Frank Kumi, Michael O Adu, Prosper D Lumorh, **Emmanuel Afutu** (2025). Harnessing Induced Mutations to Develop Superior Tiger Nut Varieties Using Ethyl Methanesulfonate (EMS) and Colchicine. *Acta Scientific Agriculture*. https://doi.org/10.31080/asag.2025.09.1474

8. 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

9. Isaac Anim-Baidoo, Ruth Afful, Akua Forson, Enid Owusu, Michael Olu-Taiwo, **Emmanuel Afutu**, Eric Sampene-Donkor (2025). Intestinal Parasitic Infection and Associated Risk Factors Among Pre-school Children in a Deprived Community in Amasaman, Accra-Ghana. *International Journal of Microbiology and Biotechnology*. https://doi.org/10.11648/j.ijmb.20251001.11

10. **Emmanuel Afutu**, Frank Kumi, Paul A Asare, Michael O Adu (2025). Investigating the Genetics of Scab Resistance and Yield Components in Cowpea (Vigna unguiculata). *International Journal of Plant & Soil Science*. https://hal.science/hal-05068356/

11. Paul A. Asare, Adeyinka S. Adewumi, Patrick Twumasi, **Emmanuel Afutu**, Michael O. Adu (2025). Multitrait Selection for Higher Agronomic and Tuber Yield–Related Traits in Tiger Nut (Cyperus esculentus L.) Genotypes. *Scientifica*. https://doi.org/10.1155/sci5/9458568

12. Isaac Anim-Baidoo, Akua Obeng Forson, E Owusu, **Emmanuel Afutu** (2025). Prevalence of Trichomonas vaginalis in Pregnant Women in the Ghanaian Capital City. *South Asian journal of parasitology*. https://www.researchgate.net/profile/Akua-Forson-2/publication/391500361_Prevalence_of_Trichomonas_vaginalis_in_Pregnant_Women_in_the_Ghanaian_Capital_City/links/68d07000f3032e2b4be2795c/Prevalence-of-Trichomonas-vaginalis-in-Pregnant-Women-in-the-Ghanaian-Capital-City.pdf

13. Prosper D Lumorh, Frank Kumi, Paul Agu Asare, Godwin Amenorpe, Michael O Adu, Sylvester N T T Addy, **Emmanuel Afutu** (2025). Response of some cowpea genotypes to radiosensitivity using 60Co gamma radiation. *International Journal of Agricultural Research Innovation and Technology*. https://doi.org/10.3329/ijarit.v15i1.82798

14. Patience B. Tetteh-Quarcoo, Joana Twasam, Kevin Kofi Adutwum-Ofosu, John Ahenkorah, Bismarck Afedo Hottor, Nicholas T. K. D. Dayie, Peter Ofori Appiah, **Emmanuel Afutu**, Fleischer C. N. Kotey, Emilia Asuquo Udofia, Nii Koney-Kwaku Koney, Benjamin Arko-Boham, Eric S. Donkor (2025). Salmonella Typhi-Exposed Placentae: Chorionic Villi Histomorphology and Neonatal Birthweight. *Diseases*. https://doi.org/10.3390/diseases13070205

15. Ransford Opoku Darko, Flavio Odoi-Yorke, Agnes Abeley Abbey, **Emmanuel Afutu**, Joshua Danso Owusu-Sekyere, Livingstone Kobina Sam-Amoah, Lawerence Acheampong (2024). A Review of Climate Change Impacts on Irrigation Water Demand and Supply - A Detailed Analysis of Trends, Evolution, and Future Research Directions. *Water Resources Management*. https://doi.org/10.1007/s11269-024-03964-z

16. Adeyinka S. Adewumi, Idris I. Adejumobi, Vincent A. Opoku, Paul A. Asare, Michael O. Adu, Kingsley J. Taah, Adekemi E. Stanley, Temitope E. Olatunde, **Emmanuel Afutu**, Selorm Akaba, Hapson Mushoriwa, Paterne A. Agre (2024). Exploring quantitative trait nucleotides associated with response to yam mosaic virus severity and tuber yield traits in Dioscorea praehensilis Benth. germplasm via genome-wide association scanning. *Frontiers in Horticulture*. https://doi.org/10.3389/fhort.2024.1459476

17. P. Twumasi, P. A. Asare, **E. Afutu**, G. Amenorpe, S. N. T. T. Addy, R. N. A. Prempeh, E. F. Donkor (2024). Genetic Diversity of Tiger Nuts (Cyperus esculentus L.) Grown in Ghana Based on Morpho-Descriptors and SSR Markers. *Journal of Agricultural Sciences – Sri Lanka*. https://doi.org/10.4038/jas.v19i2.10091

18. Adeyinka S. Adewumi, Paul A. Asare, Oluyemi Titilola Akintayo, Idris I. Adejumobi, Michael O. Adu, Kingsley J. Taah, **Emmanuel Afutu**, Vincent A. Opoku, Adekemi E. Stanley, Selorm Akaba, Jean M. Mondo,

Hapson Mushoriwa, Paterne A. Agre (2024). Genetic architecture of post-harvest tuber quality traits in bush yam (Dioscorea praehensilis Benth.) germplasm through association mapping. *Frontiers in Horticulture*. https://doi.org/10.3389/fhort.2024.1373327

19. John Ahenkorah, Stephen Opoku-Nyarko, Kevin Kofi Adutwum-Ofosu, Bismarck Hottor, Joana Twasam, **Emmanuel Afutu**, Clement Nyadroh, Fleischer C. N. Kotey, Eric S. Donkor, Nicholas T. K. D. Dayie, Edem M. A. Tette, Patience B. Tetteh-Quarcoo (2024). Histomorphology of Chorionic Villi of Term Placentae of Mothers Exposed to Retroviral and Hepatitis B Viruses. *Acta Microbiologica Hellenica*. https://doi.org/10.3390/amh69010005
20. Christopher Yaw Dumevi, Victoria Dumevi, Fleischer C. N. Kotey, **Emmanuel Afutu**, Robert Aryee, Charles Yao Agede, Nicholas T.K.D Dayie, Irene Ayi, Patience B. Tetteh-Quarcoo, Patrick F. Ayeh-Kumi (2024). Prevalence and Associated Risk Factors of Intestinal Amoebiasis among Asymptomatic School Children in the Ho Municipality, South-eastern Ghana. *International Journal of TROPICAL DISEASE & Health*. https://doi.org/10.9734/ijtdh/2024/v45i71575
21. Patrick Twumasi, Pual Agu Asare, **Emmanuel Afutu**, Godwin Amenorpe, Sylvester N.T.T. Addy (2023). Chemosensitivity analysis of tiger nuts (Cyperus esculentus L.) using ethyl methanesulfonate (EMS) and colchicine mutagens. *Heliyon*. https://doi.org/10.1016/j.heliyon.2023.e22619
22. 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
23. 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
24. Enid Owusu, Benjamin T. Amartey, **Emmanuel Afutu**, Neal Boafo (2022). Aminoglycoside Therapy for Tuberculosis: Evidence for Ototoxicity among Tuberculosis Patients in Ghana. *Diseases*. https://doi.org/10.3390/diseases10010010
25. Enid Owusu, Francis W. Asane, Antoinette A. Bediako-Bowan, **Emmanuel Afutu** (2022). Bacterial Contamination of Surgical Instruments Used at the Surgery Department of a Major Teaching Hospital in a Resource-Limited Country: An Observational Study. *Diseases*. https://doi.org/10.3390/diseases10040081
26. Patience B. Tetteh-Quarcoo, **Emmanuel Afutu**, Madonna Wiafe-Ansong, Fleischer C. N. Kotey, Nicholas T. K. D. Dayie, Eric S. Donkor, John Ahenkorah, Emilia Asuquo Udofia, Patrick F. Ayeh-Kumi, Bartholomew Dzudzor, Isaac Julius Asiedu-Gyekye (2022). Contrasting Hygiene-Related Gastrointestinal Infections and Stress-Related Diseases at a Primary Health Care Facility within a Sub-Saharan African City: Before and during the COVID-19 Pandemic. *Diseases*. https://doi.org/10.3390/diseases11010002
27. Patience B. Tetteh-Quarcoo, Asamoah Ampong, Nicholas T. K. D. Dayie, John Ahenkorah, Emilia A. Udofia, **Emmanuel Afutu**, Robert Aryee, Benjamin P. Niriwa, Fleischer C. N. Kotey, Eric S. Donkor, Patrick F. Ayeh-Kumi (2022). Dynamics in Morbidity Markers and Cytological Observations Made in Urine of Schistosoma haematobium-Infected Children: Pre- and Post-Praziquantel Treatment in an Endemic Setting. *Medical Sciences*. https://doi.org/10.3390/medsci10010014
28. 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
29. Innocent Kwaku Dorvlo, Godwin Amenorpe, Harry Mensah Amoatey, Samuel Amiteye, Jacob Teye Kutufam, **Emmanuel Afutu**, Elvis Asare-Bediako, Alfred Anthony Darkwa (2022). Improvement in cowpea variety Videza for traits of extra earliness and higher seed yield. *Heliyon*. https://doi.org/10.1016/j.heliyon.2022.e12059
30. Innocent Kwaku Dorvlo, Stanley Akwesi Acquah, Jonathan Okai Armah, Jacob Teye Kutufam, **Emmanuel Afutu**, Alfred Anthony Darkwa, Godwin Amenorpe, Harry Mensah Amoatey, Samuel Amiteye (2022). Induction of Genetic Variability in Cowpea Variety Videza for Extra Earliness and High Seed Yield using Gamma Irradiation Mutagenesis. *Legume Research - An International Journal*. https://doi.org/10.18805/

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31. Patrick F. Ayeh-Kumi, Irene A. Owusu, Patience B. Tetteh-Quarcoo, Nicholas T. K. D. Dayie, Kevin Kofi Adutwum-Ofosu, Seth K. Amponsah, Emilia A. Udofia, **Emmanuel Afutu**, Simon K. Attah, Robert Armah, Robert Aryee, Fleischer C. N. Kotey, Benjamin P. Niriwa, Japheth A. Opintan, Eric S. Donkor, John Ahenkorah (2022). Preliminary Investigation into Plasmodium-like Piroplasms (Babesia/Theileria) among Cattle, Dogs and Humans in A Malaria-Endemic, Resource-Limited Sub-Saharan African City. *Medical Sciences*. https://doi.org/10.3390/medsci10010010

32. Enid Owusu, Henrietta Adjei, **Emmanuel Afutu** (2022). Similarities in Bacterial Uropathogens and Their Antimicrobial Susceptibility Profile in Diabetics and Their Non-Diabetic Caregivers at a National Diabetes Management and Research Centre, Accra-Ghana. *Diseases*. https://doi.org/10.3390/diseases10040124

33. Enid Owusu, Martin Mensah Ahorlu, **Emmanuel Afutu**, Amos Akumwena, George Awuku Asare (2021). Antimicrobial Activity of Selected Medicinal Plants from a Sub-Saharan African Country against Bacterial Pathogens from Post-Operative Wound Infections. *Medical Sciences*. https://doi.org/10.3390/medsci9020023

34. 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

35. J.W. Tachie-Menson, J.N. Buah, M.O. Adu, **E. Afutu** (2021). Morphological diversity in purple nutsedge from four agro-ecological zones in Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2021.e07661

36. 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

37. Patience B. Tetteh-Quarcoo, Nicholas T. K. D. Dayie, Kevin Kofi Adutwum-Ofosu, John Ahenkorah, **Emmanuel Afutu**, Seth K. Amponsah, Mubarak Abdul-Rahman, James-Paul Kretchy, Janet Y. Ocloo, Nicholas I. Nii-Trebi, Akua K. Yalley, Oheneba C. K. Hagan, Benjamin P. Niriwa, Chukwuemeka C. Aghasili, Fleischer C. N. Kotey, Eric S. Donkor, Patrick F. Ayeh-Kumi, Emilia Asuquo Udofia (2021). Unravelling the Perspectives of Day and Night Traders in Selected Markets within a Sub-Saharan African City with a Malaria Knowledge, Attitude and Practice Survey. *International Journal of Environmental Research and Public Health*. https://doi.org/10.3390/ijerph18073468

38. Sylvester N. T. T. Addy, Karen A. Cichy, Hans Adu-Dapaah, Isaac K. Asante, **Afutu Emmanuel**, Samuel K. Offei (2020). Genetic Studies on the Inheritance of Storage-Induced Cooking Time in Cowpeas [Vigna unguiculata (L.) Walp]. *Frontiers in Plant Science*. https://doi.org/10.3389/fpls.2020.00444

39. Patience B. Tetteh-Quarcoo, Peter O. Forson, Seth K. Amponsah, John Ahenkorah, Japheth A. Opintan, Janet E. Y. Ocloo, Esther N. Okine, Robert Aryee, **Emmanuel Afutu**, Abraham K. Anang, Patrick F. Ayeh-Kumi (2020). Persistent Urogenital Schistosomiasis and Its Associated Morbidity in Endemic Communities within Southern Ghana: Suspected Praziquantel Resistance or Reinfection? *Medical Sciences*. https://doi.org/10.3390/medsci8010010

40. Paul Agu Asare, Roger Kpankpari, Michael Osei Adu, **Emmanuel Afutu**, Adeyinka Saburi Adewumi (2020). Phenotypic Characterization of Tiger Nuts (Cyperus esculentus L.) from Major Growing Areas in Ghana. *The Scientific World JOURNAL*. https://doi.org/10.1155/2020/7232591

41. 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

42. Peter O. Forson, Patience B. Tetteh-Quarcoo, John Ahenkorah, Robert Aryee, Esther N. Okine, **Emmanuel Afutu**, Georgina I. Djameh, Jeffrey Agyapong, Abraham K. Anang, Patrick F. Ayeh-Kumi (2019). Ability of Vital and Fluorescent Staining in the Differentiation of Schistosoma haematobium Live and Dead Eggs. *Medical Sciences*. https://doi.org/10.3390/medsci7040064

43. Patience B. Tetteh-Quarcoo, Benjamin K. Akuetteh, Irene A. Owusu, Solomon E. Quayson, Simon K.

Attah, Robert Armah, **Emmanuel Afutu**, Ama Afrah, Kantanka Addo-Osafo, Cecilia Smith, Richard K. Gyasi, Patrick F. Ayeh-Kumi (2019). Cytological and Wet Mount Microscopic Observations Made in Urine ofSchistosoma haematobium-Infected Children: Hint of the Implication in Bladder Cancer. *Canadian Journal of Infectious Diseases and Medical Microbiology*. https://doi.org/10.1155/2019/7912186

44. Khalid Elsiddig Mohammed, Nuwamanya Ephraim, **Afutu Emmanuel**, Enoch Wembabazi, Natasha Mwila, Eisa Idris Siddig, Patrick R. Rubaihayo (2019). Resistance mechanisms of late leaf spot and rosette diseases in drought tolerant groundnut genotypes. *GSC Biological and Pharmaceutical Sciences*. https://doi.org/10.30574/gscbps.2019.8.1.0105
45. Khalid Mohammed, **Emmanuel Afutu**, Thomas Odong, David Okello, Ephraim Nuwamanya, Olupot Grigon, Patrick Rubaihayo, Patrick Okori (2018). Assessment of Groundnut (Arachis hypogaea L.) Genotypes for Yield and Resistance to Late Leaf Spot and Rosette Diseases. *Journal of Experimental Agriculture International*. https://doi.org/10.9734/jeai/2018/39912
46. **E Afutu** (2018). Assessment of Groundnut (Arachis hypogaea) Genotypes for Yield and Resistance to Late Leaf Spot and Rosette Diseases. *Journal of Experimental Agriculture International*. https://nru.uncst.go.ug/items/b84ab1ff-66bf-4fed-8a7f-954628776e63
47. 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
48. A. Andrew Minamor, T. George Odamtten, **Emmanuel Afutu** (2018). Comparative growth of three Paecilomyces species on natural media and the possible pathological effects of their cultural metabolites on seed germination and radicle development of six economic crops in Ghana. *GSC Biological and Pharmaceutical Sciences*. https://doi.org/10.30574/gscbps.2018.4.1.0033
49. **E Afutu** (2018). Cowpea seed systems in Ghana: challenges and prospects. *RUFORUM Working Document Series*. https://repository.ruforum.org/system/tdf/Afutu_0.pdf?file=1&type=node&id=39712&force=
50. Michael O. Adu, Paul A. Asare, David O. Yawson, Daniel K. Dzidzienyo, Daniel Nyadanu, Elvis Asare-Bediako, **Emmanuel Afutu**, Josiah W. Tachie-Menson, Mishael N. Amoah (2018). Identifying key contributing root system traits to genetic diversity in field-grown cowpea (Vigna unguiculata L. Walp.) genotypes. *Field Crops Research*. https://doi.org/10.1016/j.fcr.2018.12.015
51. Anthony Basingnaa, Samuel Antwi-Baffour, Dinah Obenewaa Nkansah, **Emmanuel Afutu**, Enid Owusu (2018). Plasma Levels of Cytokines (IL-10, IFN-γ and TNF-α) in Multidrug Resistant Tuberculosis and Drug Responsive Tuberculosis Patients in Ghana. *Diseases*. https://doi.org/10.3390/diseases7010002
52. Andrew Minamor, Alberta Mensah, Emmanuel Laryea, **Emmanuel Afutu**, Patience Tetteh-Quarcoo (2017). Microbiological Quality of a Locally Brewed Alcoholic Beverage (PITO) Sold in Prampram within the Greater Accra Region, Ghana. *Microbiology Research Journal International*. https://doi.org/10.9734/mrji/2017/31623
53. Eric E. Agoyi, **Emmanuel Afutu**, Flora J. Chadare, John B. Tumuhairwe, Godfree Chigeza, Phinehas Tukamuhabwa (2017). Ureide essay to assess N2-fixation abilities of soybean (Glycine max) genotypes under different Bradyrhizobium strains. *Journal of Crop Science and Biotechnology*. https://doi.org/10.1007/s12892-016-0132-0
54. **Emmanuel Afutu**, Eric E. Agoyi, Robert Amayo, Moses Biruma, Patrick R. Rubaihayo (2016). Cowpea scab disease (Sphaceloma sp.) in Uganda. *Crop Protection*. https://doi.org/10.1016/j.cropro.2016.06.024
55. **E Afutu**, K Mohammed, T Odong, M Biruma, P Rubaihayo (2016). Evaluation of Ugandan Cowpea Germplasm for Yield and Resistance to Scab Disease. *Journal of Experimental Agriculture International*. https://doi.org/10.9734/ajea/2016/25138
56. **Emmanuel Afutu** (2016). Morphological characterization of Ugandan isolates of Sphaceloma sp. causing cowpea scab disease. *Journal of Agricultural Science*. https://www.academia.edu/download/84343716/d9a3b8cf80a911c0e3e29bfa251555966cc7.pdf
57. EE Agoyi, **E Afutu**, JB Tumuhairwe, TL Odong, P Tukamuhabwa (2016). Screening soybean genotypes for promiscuous symbiotic association with Bradyrhizobium strains. *African Crop Science Journal*. https://

doi.org/10.4314/acsj.v24i1.4

58. Patience B. Tetteh-Quarcoo, Eric S. Donkor, Simon K. Attah, Kwabena O. Duedu, **Emmanuel Afutu**, Isaac Boamah, Michael Olu-Taiwo, Isaac Anim-Baidoo, Patrick F. Ayeh-Kumi (2013). Microbial Carriage of Cockroaches at a Tertiary Care Hospital in Ghana. *Environmental Health Insights*. https://doi.org/10.4137/ehi.s12820

59. Patience B. Tetteh-Quarcoo, Simon K. Attah, Eric S. Donkor, Marian Nyako, Andrew A. Minamor, **Emmanuel Afutu**, Edward T. Hervie, Patrick F. Ayeh-Kumi (2013). Urinary Schistosomiasis in Children—Still a Concern in Part of the Ghanaian Capital City. *Open Journal of Medical Microbiology*. https://doi.org/10.4236/ojmm.2013.33023

60. **Emmanuel Afutu** (2012). Seed-borne fungi of chilli (capsicum frutescens) and studies on the seed transmission of colletotrichum dematium in the coastal savannah zone of Central Region of Ghana. *M. Sc. (Ag) Thesis. Univ. Cape Coast*. https://ir.ucc.edu.gh/server/api/core/bitstreams/f1dc0959-b237-46b9-8f16-53d8ae82e467/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

Theses 2

1. **EMMANUEL Afutu** (2017). Resistance of cowpea to scab disease and diversity of Sphaceloma sp. occurring in Uganda. *MAKERERE UNIVERSITY*. http://repository.ruforum.org/system/tdf/Emmanuel%20Afutu%20-%20PhD%20Thesis.pdf?file=1&type=node&id=36592&force=

2. **Emmanuel Afutu** (2015). Performance of dairy goats in selected regions of Botswana and the effect of improved management practices on milk yield and composition. *BOTSWANA COLLEGE OF AGRICULTURE*. http://repository.ruforum.org/sites/default/files/Dipheko%202015_Performance%20of%20dairy%20goats%20in%20Botswana.pdf