Robert Agbemafle

Associate Professor · Laboratory Technology
University of Cape Coast

ORCID 0000-0003-3716-5637 · Homepage blog.ucc.edu.gh/ragbemafle · Google Scholar scholar.google.com/citations?user=F8C_pjcAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/a242cfb8-1eb3-47d4-8613-117bbac8ec40

RESEARCH

Interests: Senior Lecturer · Food Science and Technology

Areas: Analytical Chemistry · Food Science · Animal Science and Zoology · General Agricultural and Biological Sciences · Plant Science · Forestry

RESEARCH SUMMARY

29	425	14	15	1.76	30%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 29 publications listed below, 1992–2026. Field-weighted impact is the mean over the 10 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 10 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer/Dr 2007–present
Department of Laboratory Technology, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

PhD (Postharvest Technology 2010–2015
Department of Laboratory Technology, University of Cape Coast, Cape Coast, Ghana

PhD (Postharvest Technology) 2010–2015
Department of Agricultural Engineering, University of Cape Coast, Cape Coast, Ghana

MSc (Food Science and Technology) 1998–2000
Biochemistry, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

BSc Hons (Chemistry) 1987–1991
Department of Chemistry, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 27

1. Juliana Opoku Yeboah, Roseline Love MacArthur, Francis Padi Lamptey, Jerry Opoku-Ansah, Charles Lloyd Yeboah Amuah, **Robert Agbemafle**, Caleb Mawuli Agbale, Ernest Teye (2026). Exploring deep learning potential to authenticate vegetable oils and detect fraud using a micro-spectroscopic technique and chemometrics. *Analytical Methods*. https://doi.org/10.1039/d6ay00555a
2. Elliot K. Anyidoho, Ernest Teye, **Robert Agbemafle**, Charles L. Y. Amuah, Vida Gyimah Boadu (2021). Application of portable near infrared spectroscopy for classifying and quantifying cocoa bean quality parameters. *Journal of Food Processing and Preservation*. https://doi.org/10.1111/jfpp.15445
3. Elliot K. Anyidoho, Ernest Teye, **Robert Agbemafle** (2021). Differentiation of Organic Cocoa Beans and Conventional Ones by Using Handheld NIR Spectroscopy and Multivariate Classification Techniques. *International Journal of Food Science*. https://doi.org/10.1155/2021/1844675
4. **Robert Agbemafle** (2020). EFFECTS OF SHADE AND SUN DRYING ON NUTRIENT COMPOSITION OF

HIBISCUS CANNABINUS. *UDS International Journal of Development*. https://ir.ucc.edu.gh/server/api/core/bitstreams/fb861502-38da-4347-a8ab-c1c7f17bc034/content

5. **Robert Agbemafle** (2020). Effects of turmeric rhizome powder on growth, carcass and meat quality of Japanese quails fed sorghumsoybean-based diets. *Journal of Livestock Science*. https://www.researchgate.net/profile/Oluwatosin-Kennedy/publication/338293232_Effects_of_turmeric_rhizome_powder_on_growth_carcass_and_meat_quality_of_Japanese_quails_fed_sorghum-soybean-based_diets/links/5e0c24694585159aa4a90b50/Effects-of-turmeric-rhizome-powder-on-growth-carcass-and-meat-quality-of-Japanese-quails-fed-sorghum-soybean-based-diets.pdf
6. **Robert Agbemafle** (2020). Growth performance, nutrient digestibility and cost of production of weaned rabbits fed processed unripe plantain peel meal based-diets. *Pakistan Journal of Nutrition*. https://pjnonline.org/pjn/article/view/2863
7. Elliot K. Anyidoho, Ernest Teye, **Robert Agbemafle** (2020). Nondestructive authentication of the regional and geographical origin of cocoa beans by using a handheld NIR spectrometer and multivariate algorithm. *Analytical Methods*. https://doi.org/10.1039/d0ay00901f
8. **R Agbemafle** (2019). Assessment of heavy metals [As, Cu, Zn] from boreholes in the Western Region of Ghana. *African Journal of Environmental Science and Technology*. https://academicjournals.org/journal/AJEST/article-full-text/8B54A3360952
9. Ernest Teye, Elliot Anyidoho, **Robert Agbemafle**, Livingstone K. Sam-Amoah, Chris Elliott (2019). Cocoa bean and cocoa bean products quality evaluation by NIR spectroscopy and chemometrics: A review. *Infrared Physics & Technology*. https://doi.org/10.1016/j.infrared.2019.103127
10. **Robert Agbemafle**, SE Aggor-Woananu, Olivia Akutey, John Kwesi Bentum (2019). Heavy Metal Concentrations in Leachates and Crops Grown Around Waste Dumpsites in Sekondi-Takoradi in the Western Region of Ghana. *Research Journal of Environmental Toxicology*. https://doi.org/10.3923/rjet.2020.16.25
11. **Agbemafle** (2019). Physicochemical Properties and Fatty Acid Composition of Shea Butter from Tamale, Northern Ghana. *UDS International Journal of Development*.
12. **R Agbemafle** (2019). Proximate, Starch, Sugar compositions and functional properties of cassava flour. *Journal of Food Security*. https://www.academia.edu/download/80182414/JFS-7-2-3.pdf
13. Ernest Teye, **Robert Agbemafle**, Francis Lamptey (2018). Development and Examination of Sweet Potato Flour Fortified with Indigenous Underutilized Seasonal Vegetables. *Beverages*. https://doi.org/10.3390/beverages4010005
14. **R Agbemafle** (2018). EFFECTS OF SHADE AND SUN DRYING ON NUTRIENT COMPOSITION OF HIBISCUS CANNABINUS. *UDS International Journal of Development*. https://udsijd.org/index.php/udsijd/article/view/298
15. **Robert Agbemafle** (2018). Nutritional Evaluation of Digitaria iburua (Black Acha) grains as feed resource in the diet of Broiler Chickens. *Nigerian Journal of Animal Science*. https://www.ajol.info/index.php/tjas/article/view/181253
16. John Bentum, EJ Koranteng-Addo, **Agbemafle** (2017). Assessment Of Ecological And Human Health Risks Of Cu, Zn And Pb Accumulation In Agricultural Soils And Okra. *Researchjournali's Journal of Ecology*. https://ir.ucc.edu.gh/items/e7fc0658-b739-4314-864e-0ca2e64f54ac
17. **Robert Agbemafle** (2017). Effect of Cooking Methods and Ripening Stages on the Nutritional Compositions of Plantain (Musa paradisiaca). *International Journal of Food Science and Biotechnology*. https://www.academia.edu/download/116922747/10.11648.j.ijfsb.20170204.17.pdf
18. **R Agbemafle**, J. D. Owusu-Sekyere, Ato Bart-Plange (2015). Effect of deficit irrigation and storage on the nutritional composition of tomato (Lycopersicon esculentum Mill. cv. Pectomech). *Hrvatski časopis za prehrambenu tehnologiju biotehnologiju i nutricionizam*.
19. **Robert Agbemafle**, Joshua D. Owusu-Sekyere, Ato Bart-Plange, John K. Otchere (2014). Effect of Deficit Irrigation and Storage on Physicochemical Quality of Tomato (Lycopersicon esculentum Mill. Var. Pechtomech). *Food science and quality management*.
20. **Robert Agbemafle**, JK Otchere (2014). Effect of Different Storage Methods on Proximate Composition

and Functional Properties of Cream-Skinned Sweet Potato (Ipomea batatas Lam). *Sch. J. Eng. and Tech.*. https://ir.ucc.edu.gh/items/98f01b5f-d362-4625-8293-42e106c206a1

21. **Robert Agbemafle**, GE Adukpo (2013). Assessment of functional properties and nutritional composition of some cowpea (Vigna unguiculata L.) genotypes in Ghana. *Asian Journal of Plant Science and Research*. https://www.academia.edu/download/78777771/jabs_0613_578.pdf
22. **Robert Agbemafle** (2013). Effect of storing cream- skinned sweetpotatoes in wood ash and saw dust on physico-chemical properties and shelf-life. *JBiol Food Sci Res*. https://scholar.google.com/scholar?cluster=12846772255860992521&hl=en&oi=scholarr
23. **Robert Agbemafle**, Genevieve E Adukpo, Aaron T Asare, Edward A Obodai (2013). Effects of pre-storage treatments (using brine and vinegar) and refrigerated storage on vitamin c, β carotene, microbial load and shelf-life of red pepper (Capsicum frutescens). *Asian Journal of Plant Science and Research*. https://ir.ucc.edu.gh/items/59fe2745-fae3-4003-b2d8-6745574ac998
24. **Robert Agbemafle** (2013). Evaluation of Some Breeding Lines of Cowpea for Nutritional and Functional Properties. *2nd African Regional Conference Technicl Proceedings*.
25. **R Agbemafle**, Edward A Obodai, GE Adukpo (2012). Effects of boiling time on the concentrations of vitamin C and beta-carotene in five selected green vegetables consumed in Ghana. *Applied Science Research*. https://doi.org/10.5555/20123377371
26. **Agbemafle, Robert**, E.Adukpo, Genevieve, T. Asare, Aaron, A. Obodai, Edward (2011). Effects of pre-storage treatments (using brine and vinegar) and refrigerated storage on vitamin c, ?Ž?²-carotene, microbial load and shelf-life of red pepper (Capsicum frutescens). *HAL (Le Centre pour la Communication Scientifique Directe)*.
27. **R Agbemafle**, K Nsiah (1998). Tomato paste production at the rural small-scale level. *Proceedings of a Workshop to Evaluate Outputs and Identify Further Vegetable Research Priorities in the Brong Ahafo Region of Ghana. 10-11 September*. https://scholar.google.com/scholar?cluster=369219351915260604 9&hl=en&oi=scholarr

Reports 1

1. **Robert Agbemafle** (1992). SIGNALS AND LINEAR SYSTEMS. *JOHN WILEY & SONS*. https://scholar.google.com/scholar?cluster=8859264093986208043&hl=en&oi=scholarr

Theses 1

1. **Robert Agbemafle** (2015). Effect of Deficit Irrigation on Growth, Yield, Quality and Storage of Tomato (Solanum lycopersicum; cv. Pectomech. *University of Cape Coast*. https://ir.ucc.edu.gh/items/ddbb832d-b8d8-49df-8bee-f4b9b5b0b526