

Name: Gloria Ladjeh Essilfie, Ph.D.

Title: Senior Lecturer in the Department of Crop Science

Expertise: Agro-Processing Innovations, Cold Chain Systems, Postharvest Food Safety

Management, Postharvest Technology, and Quality Assurance Systems.

Institution: University of Ghana in Accra, Ghana.

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Bio. Dr. Gloria Essilfie (née Tetteh) is a respected Food Scientist and Postharvest Technology Specialist with over two decades of experience spanning research, academia, and development. Currently a Senior Lecturer in the Department of Crop Science at the University of Ghana, she leads academic and applied programs focused on postharvest technology, value addition, food safety, and quality assurance systems in agri-food value chains. Her work centres on advancing postharvest innovations to reduce losses, improve shelf life, and ensure food safety across Ghana and the wider sub-Saharan African region. She has led and contributed to numerous initiatives at both national and regional levels, addressing systemic inefficiencies in the handling, storage, and processing of fresh produce. Dr. Essilfie brings technical expertise in identifying postharvest challenges and designing scalable, low-cost, adaptable interventions to address them.

Her research portfolio includes extensive work on drying technologies, value addition, agro-processing innovations, cold chain systems, and postharvest food safety management. Notably, she was a core team member in the Government of Ghana's national assessment of postharvest losses across nine key commodities and led the analysis of value chains for seven commodities in Ghana and Mali through a Feed the Future Innovation Lab for Horticulture-funded project. Until March 2025, Dr. Essilfie served as Principal Investigator for a Feed the Future Innovation Lab for Horticulture project aimed at increasing the production, processing, and consumption of African Indigenous Fruits and Vegetables (AIFVs). The project emphasized the role of value addition and postharvest preservation in improving diet diversity and nutrition outcomes in Ghana and Mali.

Dr. Gloria Essilfie is the founder of the Postharvest Innovation Hub housed within the Department of Crop Science at the University of Ghana. Established under her leadership, the Hub serves as a hub for applied research, capacity building, and stakeholder engagement in postharvest technology, value addition, and food safety. It brings together academia, industry, and development partners to co-create practical solutions for reducing postharvest losses and enhancing the marketability and nutritional value of agricultural produce, particularly indigenous crops. Through the Hub, Dr. Essilfie has spearheaded training programs for youth and women in agro-processing, coordinated technology trials on improved drying systems, and supported the

development of value addition protocols for small-scale processors. Her vision for the Hub is to drive innovation that bridges research and practice, reduces food loss and waste, strengthens local food systems, and contributes to national and regional food security goals.

She holds a PhD in Food Science from the University of Georgia, Athens, USA, an MPhil in Food Science, and a BSc in Food Science and Nutrition from the University of Ghana. Her postdoctoral research at the University of California, Davis focused on postharvest food safety in vegetable crops. Dr. Essilfie is an active member of several professional bodies, including the Institute of Food Technologists (IFT), the International Society for Horticultural Science (ISHS), and the Africa Continental Association of Food Protection (ACAFP).

With her deep commitment to reducing postharvest losses, enhancing food safety, and supporting value-added processing of indigenous crops, Dr. Essilfie continues to shape research, innovation, and policy toward more sustainable and nutrition-focused food systems in Africa.