DAVIS FUNDI IRFRI

Research and Development manager - Insect feed

A versatile professional with extensive experience in research and development management, market development, sourcing, and nutrition, I am confident in my ability to bring exceptional value to any team. With a proven track record of driving innovation, expanding market presence, and ensuring the achievement of optimal product and process quality, I am always eager to contribute my skills and expertise to further advance any company's objectives.



EDUCATION

2015 2018 Jomo Kenyatta University of Agriculture & Technology, JKUAT, Kenya

Master of Science, Plant Health Science & Management

Nairobi, Kenya

2011 2014 Jomo Kenyatta University of Agriculture & Technology, JKUAT, Kenya

Bachelor of Science. Horticulture

Nairobi, Kenya

CONTACT INFO

in Linkedin

**** +254712730933/+60-

0197290933

PUBLICATIONS

Closing Nutrient Cycles: Up-Scaling of Black Soldier Fly Treatment in Nairobi Ireri Davis. Gold Moritz, Egan Tim, Zurbrügg Chris, Mathys Alexander, Chege Daniel, Mitugo Melody, Kidula Jessy. Link

Farmer Knowledge of Bacterial Wilt and Root-Knot Nematodes in High Tunnel Tomato **Production in the Tropics (2018)** Davis Fundi Ireri, Lucy Kananu Murungi, Daisy Chepkoech Ngeno & Jesca Mbaka, Link

Soil Chemical Properties Influence Abundance of Nematode Trophic Groups and Ralstonia Solanacearum in High **Tunnel Tomato Production (2019)** Daisy Chepkoech Ngeno, Lucy Kananu Murungi, Davis Ireri Fundi, Vitalis Wekesa, Solveigh Haukeland, Jesca Mbaka. Link

PROFESSIONAL EXPERIENCE

March, 2023 | Present

Research & Development Manager, Nutritionist, & Sourcing Lead

Nutrition Technologies

Malaysia, Singapore

A forward-thinking Research & Development Manager spearheading innovative projects in the fields of bioconversion, nutrition & Sourcing at Nutrition Technologies Sdn Bhd. I lead a dynamic team of scientists dedicated to creating cutting-edge solutions for sustainable animal feed ingredients production, contributing specialized knowledge in animal nutrition to develop innovative, sustainable, and high-quality insect meal, oil, and biofertilizers, and committed to ensuring the seamless acquisition of high-quality raw materials for our innovative insect-based technology. My responsibilities include:

- Communication with upper management and department heads to understand the business needs and priorities to best shape the R&D plan accordingly and provide the relevant R&D-related conclusions to CEOs and relevant HODs frequently to best shape company strategy.
- Directing and overseeing all phases of R&D initiatives aimed at enhancing our insect-based animal feed ingredients utilizing agricultural processing waste.
- Leading cross-functional teams to ideate, develop, and test novel BSFL feed formulations, ensuring compliance with industry regulations and quality standards.
- Collaborating with R&D teams to assess and optimize agro-waste ingredients for BSFL feed formulation with maximum nutritional benefits.
- Advising on nutritional requirements and contributing to the development of tailored feeding programs for Black soldier fly larvae.
- Collaborating with external partners, academia, and industry experts to drive innovation and foster strategic alliances.
- Developing and executing sourcing strategies aligned with company objectives, emphasizing sustainability, quality, and cost-efficiency.
- Collaborating closely with R&D and production teams to forecast material requirements and mitigate supply chain risks.
- Representing the company at industry events, conferences, stakeholder discussions, etc.

May, 2021 | Feb, 2023

Research & Development Manager - Bioconversion

Nutrition Technologies

Malaysia, Singapore

- Developed research programs, incorporating the current developments to improve existing bioconversion process and output, products and studied the potential of new processes.
- Delivered applied research outcomes, created innovations for the company and provided evidence-based advice and solutions to major bioconversion problems encountered.
- Investigated the effects that certain factors played on the efficiencies and life-history traits of the Black soldier fly larvae under industrial massrearing conditions.
- Feed formulations for BSFL diets based on learnings, focused on a highly efficient output, guided by major constraints like raw material availability, nutrient concentrations in every raw material, and integration of the formulated silage with the developed engineering processes.
- Developed SOPs for the various stages of the bioconversion process from feed preparation to larvae harvesting and processing.
- Stayed informed on what is happening in the research and development field at large to make sure the company was up-to-date and current with the most advanced BSF R&D developments.
- Established and maintained testing procedures for assessing raw materials, in both process and finished products.

Dec, 2019 | April, 2021

Market Development Manager, East Africa

The Sanergy Collaborative

Nairobi, Kenya

- Developed and executed a market penetration strategy for Evergrow organic fertilizer, a new organic fertilizer in the market, achieving 5x growth in sales of the same.
- Developed a market introduction strategy for KuzaPro, a high protein insect-based animal feed leading to multiple trials with feed millers, agrodealers and home users.
- Managed special projects that opened up sales of fertilizer and animal protein.
- · Lead the planning and execution of fertilizer corporate sales.
- Refined the products positioning for the two products, leading to more client appreciation and uptake.
- Enhanced systems to collect marketing and sales data efficiently and effectively.
- Lead the analysis of marketing data to generate insights that led to evidence-based targeted marketing initiatives.
- Coached the sales managers and representatives to adopt agreed standard practices for marketing events.

Nov, 2017 | Dec, 2019

Research & Development Specialist

The Sanergy Collaborative

Nairobi, Kenya

- Developed a tool for feedstocks formulations for BSF diets/recipes leading to optimal production which achieved target yields per square meter of production system.
- Developed and executed trials that led to the establishment of feeding regimes for optimal BSF production.
- Came up with innovative ideas for new products including a Europeancertified union-certified organic fertilizer and improving existing products to meet clients' demands.
- Led a team that was responsible for designing, performing, and overseeing scientific experiments relating to optimizing the conversion of waste to sustainable animal feed and fertilizer products.
- Led a team responsible for data analysis for projects, processes, or functions to anticipate potential problems and opportunities and develop solutions using a comprehensive evidence- based decision-making approach.
- Provided recommendations to the production team based on trials and data analysis.
- I overtime was tasked with report writing to communicate the results of experiments in clear, cohesive language understandable to all audiences including the management and leadership teams.
- Collaborated with the Quality, Health, Safety, and Environment departments to set quality standards and specs.

Oct, 2016 | Oct, 2017

Dissertation Research Fellow

ICIPE - International Centre of Insect Physiology and Ecology

Nairobi, Kenya

- Spent time working on my Masters project thesis in the behavioral and chemical ecology department, where I was trying to understand how root elucidates affect the interaction between the plant/crop and bacterial pathogens.
- Helped Ph.D. students in various research projects within the behavioral and chemical ecology field as well as insect for feed unit.