

Research Topic Title: Consumer behaviour and market trends of fresh and processed stone and citrus fruits

No. of Openings: One (1)

Description: Access to consumption data for specific fruit categories, is often limited and unreliable. This issue is particularly pronounced for processed fruit. Based on this fact, the PhD research will be structured along the following key "building blocks" of knowledge:

- Gather available data from diverse sources to develop a robust model of reliably estimating consumption trends for both fresh and processed, citrus and stone fruits in the U.S.A. and Germany for the last 10-15 years. The model will utilise production data (for fresh) and trade data (for fresh and processed. Consumption of processed fruits will be calculated both as final products (i.e. canned peaches) and as fresh fruit equivalent (fresh fruits used for their production). Conversion formulas for fresh fruit equivalent of processed products will be developed in collaboration with industry stakeholders to enable meaningful comparisons.
- Analyse and compare consumption trends across i) stone (e.g. peaches and nectarines) and citrus (e.g. oranges), ii) fresh and processed, iii) USA and Germany, and identify patterns.
- Conduct a comprehensive literature review and met-analysis of consumer behaviour related to fruit consumption. The findings will be cross-referenced with the consumption patterns identified in the data analysis to explore behavioural drivers and validate observed trends.

Required Qualifications: BSc and MSc degree in Agricultural or Economic Sciences or related disciplines.

Funding: The PhD candidate can be potentially funded through (a) participation in research projects, (b) participation as supporting teaching staff in lab exercises and (c) research funding of the Scientific Supervisor.

Research Advisor:

Name/Surname: George Manganaris

Position: Professor

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Research Topic Title: Greenhouse crops and intensive cultivation systems (i.e. Hydroponics) for the vegetables and Aromatic Plant production

No. of Openings: Two (2)

Description: The positions refer to the study of vegetables and/or aromatic and medicinal plants in intensive growth systems, e.g. Hydroponics in greenhouse crops. Emphasis is placed on endemic plants of Cyprus or plants of increased nutritional value and properties, with the aim of studying them and their response to abiotic stress. Biofortification and bioaccumulation are also research fields of our interest.

More information on the studies carried out from the group, on the website http://www.cut.ac.cy/hydro-aromatic-plants

Funding: No funding is foreseen for the positions at this stage. Chosen candidate may be hired as teaching assistant, or upon his/her performance acquire internal scholarships. The candidate may be funded through external funding sources (research or services).

Required Qualifications: Bachelor and Master from an accredited University in Agricultural Sciences or Biology or related disciplines. Applicants should be fluent in English. Previous relevant research experience will be considered.

Candidates will have to support interview for the current position.

Research Advisor:

Name/Surname: Dr. Nikolaos Tzortzakis

Position: Associate Professor

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Research Topic Title: Postharvest Physiology and Technology of Fresh Produce/ Alternative processing methods and their effects on quality and safety

No. of Openings: One (1)

Description: The position refers to the post-harvest physiology and technology of fresh products with an emphasis on the preservation of vegetables and/or aromatic and medicinal plants both with a combination of physical/chemical methods but mainly with the use and evaluation of natural products/components e.g. essential oils and plant extracts.

Emphasis is placed on evaluation of antioxidant, antimicrobial and other biocidal properties of plant products, but also to enhance nutritive value of the final commodity.

More information on the studies carried out on the website http://www.cut.ac.cy/hydro-aromatic-plants

Funding: No funding is foreseen for this position at this stage. Chosen candidate may be hired as teaching assistant, or upon his/her performance acquire internal scholarships. The candidate may be funded through external funding sources (research or services).

Required Qualifications: Bachelor and Master of Science degree in Agricultural Sciences, Food Science/Technology or Food Chemistry or other relevant degree in the area.

Applicants should be fluent in English. Previous relevant research experience will be considered.

Candidates will have to support interview for the current position.

Research Advisor:

Name/Surname: Dr. Nikolaos Tzortzakis

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Research Topic Title: Understanding Technology Adoption in the Potato, Vegetables and Horticultural Products Sector of Cyprus.

No. of Openings: One (1)

Description: According to the most updated data published by Eurostat (DG Agriculture and Rural Development, 2021), the Potato, Vegetables and Horticultural products sector of Cyprus account for a total of € 62,456 million representing 32.1% of the total Agricultural Economic output. However, the sector is at a critical juncture. Climate variability, market competition, and evolving EU sustainability directives, add pressures to farmers who are increasingly encouraged to adopt innovative technologies that promise improved productivity, resource efficiency, and traceability (Konstantinou et al., 2025; Stylianou et al., 2020).

Despite the availability of such technologies—including precision irrigation systems, disease monitoring applications, and blockchain-based supply chain tools—the rate of adoption among Cypriot potato and vegetables and horticultural product farmers remains inconsistent (Moysiadis et al., 2021). This gap between technological availability and actual use raises important questions about the behavioural, social, and infrastructural factors influencing adoption decisions. By applying the Unified Theory of Acceptance and Use of Technology (UTAUT), this study seeks to systematically explore these dynamics and provide actionable insights for stakeholders in Cyprus's agricultural ecosystem.

The research will employ a quantitative cross-sectional design, utilizing a structured questionnaire based on validated UTAUT items targeting potato, vegetables and horticultural products farmers in major farming regions in Cyprus. Data will be collected via local cooperatives and analysed using Structural Equation Modelling to explore UTAUT relationships and demographic effects. Ethical approval and informed consent ensure participant confidentiality and research integrity.

This study is expected to yield a validated UTAUT-based model of technology adoption specific to the Cypriot potato, vegetables and horticulture products sector. It will identify key behavioural and contextual drivers of adoption, uncover demographic patterns in technology use, and highlight systemic barriers that hinder uptake. The findings will inform targeted interventions by policymakers, cooperatives, and technology developers aimed at enhancing the adoption of agricultural innovations

Required Qualifications: BSc and MSc degrees in Agricultural or Economic Sciences or related disciplines.

Funding: The PhD candidate can be potentially funded through (a) participation in research projects, (b) participation as supporting teaching staff in lab exercises and (c) research funding of the Scientific Supervisor.

Research Advisor:

Name/Surname: Yiorgos Gadanakis Position: Assistant Professor

Email: georgios.gadanakis@cut.ac.cy



References:

- DG Agriculture and Rural Development. (2021). *Agriculture and Rural Development*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Urban-rural typology
- Konstantinou, C., Giakoumi, M., & Panagiotou, C. F. (2025). A game-theoretic framework for sustainable water allocation in agriculture: Enhancing economic and water efficiency in Akrotiri district (Cyprus). *Science of The Total Environment*, *966*, 178691. https://doi.org/10.1016/J.SCITOTENV.2025.178691
- Moysiadis, T., Adamides, G., Stylianou, A., Zotos, N., Giannakopoulou, M., & Alexiou, G. (2021). Use of IoT technologies for irrigation and plant protection: the case for Cypriot fruits and vegetables. *Bio-Economy and Agri-Production: Concepts and Evidence*, 175–194. https://doi.org/10.1016/B978-0-12-819774-5.00010-2
- Stylianou, A., Sdrali, D., & Apostolopoulos, C. D. (2020). Capturing the diversity of Mediterranean farming systems prior to their sustainability assessment: The case of Cyprus. *Land Use Policy*, *96*, 104722. https://doi.org/10.1016/J.LANDUSEPOL.2020.104722



Research Topic Title: "Spectroscopic and Chromatographic Study of Bioactive/Anticancer Microcomponents of Olive Oil"

No. of Openings: One (1)

Description: Olive oil constitute the basis of the Mediterranean diet, and is intertwined with the history, development and culture of Cyprus. Although olive oil mostly consists of components such as triglycerides of fatty acids, it also contains notable amounts of microcomponents such as phenolic molecules which have antioxidant, chemotherapeutic and anticancer properties. Methodologies for their isolation will be developed while characterization studies will be conducted using mainly chromatographic and spectroscopic techniques.

Required Qualifications: Candidates for the above position must hold a Bachelor's and Master's Degree from an accredited University in one of the following fields: Chemistry, Food Chemistry, Food Science or other related discipline. Previous relevant research experience will be considered. In addition, candidates must have a very good command of the English language. The evaluation may also include a personal interview of the candidates.

Candidates must provide the names of three professors from academia who can provide recommendations for the candidate when asked

Funding: Currently, there is no scholarship for this position.

Partial financial support there may be offered for candidates qualified to (a) offer work as teaching assistants, (b) to receive internal scholarships awarded by the university on the basis of their excellence, and (c) participate in future research programs related to this field

Research Advisor:

Name/Surname: Dr. Chryssoula Drouza

Position: Associate Professor

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Research Topic Title: Agricultural Biotechnology - Utilization of plant genetic and microbial resources of endemic plants to strengthen the value chain and their commercial identity

No. of Openings: 1

Description: The doctoral thesis aims at the **holistic exploitation of the biodiversity of endemic plants** through the **mapping**, **molecular and biotechnological evaluation** of their plant genetic and microbial resources. The research will focus on:

- the investigation of **bioactive and biotechnological properties** of selected plants and their symbiotic microorganisms,
- the development of bioactive, biostimulant, bioprotective products of high added value,
- the formulation of **branding and agri-food entrepreneurship strategies** that will highlight the uniqueness of endemic resources,
- and the study of how an ecosystem of innovation and startups can be created, capable of translating scientific knowledge into sustainable, marketable products with a local and international footprint.

The duration of the PhD is 3–4 years with a maximum of 8.

The research will be carried out at the Laboratory of Agricultural Microbiology and Biotechnology of the Department of Agricultural Sciences, Biotechnology and Food Science of the Cyprus University of Technology, with possible collaborations with research institutions, businesses and bodies in the agri-food sector in Cyprus and abroad.

Required Qualifications: Bachelor's degree in one of the following fields: Agriculture, Plant Biology, Biotechnology, Microbiology or a related subject and a Master's degree in a related scientific field (as above) including MBAs, agricultural economics and entrepreneurship.

Very good knowledge of English. Relevant experience in the subject will be considered an advantage.

Other desirable qualifications:

- Research experience in microbial community analysis, molecular techniques or phytochemical analysis.
- Experience or interest in innovation, entrepreneurship or branding of agri-food products.
- Ability to work in **interdisciplinary teams** and participate in **research projects**.

Funding: The position may be supported through research programs, scholarships or university funding, depending on the availability and profile of the candidate.

Application: Interested candidates are invited to send:

- Detailed CV
- Copies of academic qualifications



- Letter of interest (1 page)
- Two letters of recommendation

Research Advisor: Dr Dimitris Tsaltas

Position: Professor

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