ACTIVITIES REPORT 2024

CITAB

Centre for the Research and Technology of Agro-Environmental and Biological Sciences

Compiled and edited by:
CITAB Management Team

INDEX

743
PUBLICATIONS
330 JCR/Scopus papers
12 PhD Theses
25 Books / Book chapters
376 Communications

60
ONGOING PROJECTS
30 International
15 National
15 Research contract

252
105 Full Members
75 Collaborators
72 Fellows

48% Men
52% Women

3.9M€
FUNDING
with stakeholders **1.50M€**
fundamental science **2.40M€**

12
CONFERENCES

2
SPECIALIZED LABORATORY

EXECUTIVE SUMMARY

The CITAB Activity Report for 2024 summarises our main achievements, not only in our research activities but also in their dissemination, communication, and exploitation. This year, **CITAB underwent a rigorous multi-stage FCT evaluation process**, focusing on the period from 2018 to 2023. An international panel of 14 world-leading scientists in the fields of Agrarian, Biological, and Environmental Sciences was at the core of this evaluation, which included a series of remote meetings with CITAB researchers (Plenary Session with all members, including collaborators, and separate meetings with senior researchers, early career researchers, PhD students, and scholarship recipients), formal interactions, and a site visit to CITAB and UTAD Ecocampus. During this site visit, **several CITAB laboratories had the opportunity to showcase their human and material resources, as well as some of their main research activities and outcomes**. An **animation** was produced to explain our goals, mission and vision (https://youtu.be/OCVZ6vFHZm4), and a **video** was created to illustrate some of our facilities (https://youtu.be/NTbWVHN_N7A). The entire unit was deeply engaged in all these interactions, which required significant and prolonged efforts in their organisation and implementation. Despite all these time-consuming tasks, **the unit has made a significant effort to maintain, or even improve, our key performance indicators in 2024, illustrating our commitment to achieving excellence**.

Following the new CITAB General Regulation, approved by the Scientific Council in 2023, the unit's team comprised **254 members** by the end of 2024: **101 Integrated PhD members, 83 Collaborators (PhD and non-PhD), and 70 Scholarship members, with the vast majority of the latter being PhD students**. Although most of these researchers are from UTAD, CITAB also accommodates members with key complementary skills from nine other institutions spread throughout Portugal. In terms of gender balance, 52% are women.

CITAB secured approximately €4.0 million in funding in 2024, slightly less than in 2023, which can be largely explained by the end of several FCT R&D projects and the delay in the opening and/or communication of results from new FCT calls. In 2024, it is worthwhile noting that **26% of the total funding was obtained from European Commission grants, an unparalleled amount that highlights the success of CITAB's internationalisation strategy, international merit recognition and enhanced attractiveness**. The recently approved Horizon Europe LivingSoiLL project, coordinated by CITAB, with 42 partners throughout Europe and 5 living labs, and a total funding of ca. 12 M€ over 54 months, is an emblematic example. On the other hand, the FCT Programmatic Funding represented only 12% of the total funding, thus demonstrating the **unit's proactivity in capturing funding from different sources and, very importantly, with our stakeholders and industry partners (17% of direct private sector funding), providing interdisciplinary, holistic and pragmatic solutions to foster the sustainability, resiliency and valorisation of the agrarian value chains**. A noteworthy example is the CITAB engagement in PRR innovation agenda projects, such as PT Vine&Wine. **Overall, in 2024, CITAB researchers participated in 18**

international projects and 21 national projects, whereas 3 new European patents were approved.

In 2024, the CITAB scientific productivity reached **3.2 SCOPUS-indexed publications per Integrated Member**, the highest ratio on record, with **94% of these articles in high-impact journals** (Q1 and Q2), thereby consolidating the international recognition of CITAB's research. Nevertheless, our strategy does not end here, as **scientific communication, dissemination, and exploitation of our research outcomes continue to play a central role in the unit's daily life**. More than 200 scientific communications were presented in international meetings, and more than 100 in national meetings, reinforcing our communication within the scientific community and strengthening our networks and partnerships. Furthermore, many actions were carried out in 2024 to exchange knowledge within academia (researchers, teachers and students), with stakeholders and decision-makers, but also extending to the general society (outreach activities) and promoting capacity-building, with **27 events organised/co-organised by CITAB and nearly 120 outreach activities**. The **conclusion of 12 PhDs** supervised by integrated members of CITAB is also a very important outcome, contributing to the necessary renovation of researchers and the creation of new early career opportunities.

Several activities were carried out in 2024 under the framework of the **Inov4Agro Associate Laboratory** (Institute for Innovation, Capacity Building and Sustainability of Agri-food Production), a solid strategic partnership between CITAB and GreenUPorto (University of Porto). The Inov4Agro Scholarship Day, or the second edition of the Cycle of Seminars for PhD students, with awards for the best communications, have contributed to steering collaboration between both units. A successful application to the FCT Institutional Scientific Employment Stimulus Call **will allow hiring five researchers in the short term, four of them with permanent contracts**, which is another important example of the synergies being created within Inov4Agro.

CITAB's activities in 2024 up-scaled our research level, placing CITAB more and more as a key national and international player in the valorisation of agrarian value chains, predominantly those thriving in Mediterranean conditions, but not disregarding their long-term sustainability and resiliency under climate and other environmental challenges.

We are confident that 2025 will eventually bring us the recognition of CITAB's excellence!

CITAB has kept its way towards excellence. Its activities have been focused on both the R&D and T&I pillars, aiming at more resilient, efficient, sustainable and competitive agricultural and forestry production chains

The widely multidisciplinary approach of CITAB warrants a holistic viewpoint of the natural and anthropogenic systems This concept enables integrated responses and the implementation of decision-support systems for stakeholders and policy-makers, envisioning the fulfilment of the United Nation's sustainable development goals and responding to the emerging societal transitions. All these research lines are complemented by cutting-edge technological support, always seeking innovative solutions. Knowledge transfer, capacity building, dissemination and outreach are also central to CITAB.

Tecniferti is pleased to provide this testimonial regarding our successful collaboration with CITAB in the field of the effect of some products on plant physiology research. Our partnership has been instrumental in advancing the development and application of innovative agricultural solutions. Our collaboration began with a research initiative aimed at evaluating the potential of a silicon-based product to enhance plant resilience to summer stress. This partnership contributed to a master's thesis, providing valuable scientific insights and reinforcing the importance of silicon in plant stress tolerance. More recently, our joint efforts have continued through the MiKS4Vine project, which is ongoing. This project focuses on testing different formulations of kaolin and silicon mixtures, developed by Tecniferti, to identify the optimal MiKS formulation. These products are being field-tested by the CITAB research team, assessing both plant physiological responses and their impact on productivity and crop quality. Our collaboration with CITAB has been marked by scientific rigor, innovation, and a shared commitment to improving agricultural practices through research-driven solutions. We highly value this partnership and look forward to continued joint efforts in developing sustainable and effective agricultural technologies.

João Pedro Brasil Teixeira Rocha Lourenço, TECNIFERTI, S.A.

MISSION

CITAB is fully committed to collaborating and consulting stakeholders to understand their actual needs, problems or constraints. We follow multidisciplinary and integrated approaches towards the identification of solutions, creating new opportunities in the agri-food and forestry production chains. We are strongly committed to improving the competitiveness and sustainability of agrarian value chains, whilst developing holistic approaches to protect, improve and maintain ecosystems, and the services they provide, and promoting sustainable management of natural resources.

VISION

CITAB envisions contributing to the socioeconomic development of the Portuguese and European agrarian value chains through strong collaboration with stakeholders, exchanging knowledge and addressing their needs by incorporating innovative scientific and technological solutions.

Concerning its organizational structure, CITAB applies a "bottom-up" management approach. The **Directorate**, composed by one Director and two Vice-Directors, is supported by an **Executive Committee**, consisting of seven members from the different research tasks, which forms a dynamic two-way link between members and the Directorate for strategy development, progress checking and decision-making. All strategic issues are discussed and voted on by the **Scientific Council** (members with PhD and meeting regulations concerning publishing criteria), which meets a minimum of 4 times a year.

A dedicated **Communication & Management Office** handles the financial and administrative issues of the Centre, as well as the AgriChains FCT funded international doctoral programme, and supports the organization of national and international scientific events and outreach activities, liaises with UTAD administrative sections and assists the Board, Thematic Line coordinators, Tasks and the Executive Committee.

CITAB also has an **External Advisory Committee**, comprising four internationally recognized experts that make objective critical analyses of the unit's R&D activities and performance to provide recommendations. Additionally, the Centre relies on the advice of a **Stakeholders** Committee, which includes key stakeholders from the private and public sector and meets with CITAB members, the Directorate and Executive Committee periodically, to assess overall results and activities and lay down guidelines for the future.

THEMATIC RESEARCH LINES & TASKS

CITAB research activity is characterised by a streamlined approach, focused into two thematic lines that contribute to resolving societal and private sector issues in agriculture and forestry production chains and their impact on the natural environment: "Sustainability of Agri-food and Forestry Ecosystems in a Changing Environment"; and "Technology & innovation in Agri-food and Forestry Chains for a More Competitive Bioeconomy". This structure aims to balance scientific excellence with benefits and consequences across multiple dimensions that embrace environmental sciences and socioeconomic needs.

ORGANIZATIONAL STRUCTURE (DECEMBER 2024)

CITAB

Executive Committee

Berta Gonçalves
(President)
Ana Coimbra
Ana Paula Silva
Emília Silva
Fábio Pereira
Isaura Castro
João Paulo Moura

Management Office

Daniel Faiões
Lídia Nóbrega
Lígia Pinto
Sandra Matos

BOARD

Director: João Santos

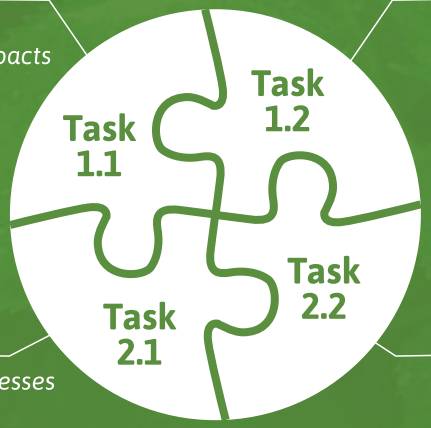
Vice-Director: Amélia Silva Vice-Director: Henrique Trindade

Research Lines & Tasks

1 - Sustainability of Agri-food and Forestry Ecosystems in a Changing Environment **(coord: Mário Santos)**

Integrated monitoring of climate and environmental impacts
Eunice Bacelar

Sustainability in agri-food and forestry ecosystems
Sandra Monteiro



Innovative technologies and processes
Pedro Couto

Valorisation of bio-based products and co-products
Ana Sampaio

2 - Technology & Innovation in Agri-food and Forestry Chains for a More Competitive Bioeconomy **(coord: Raul Morais)**

External Advisory Committee

David Lindsay
(EUROFEDA-UK)
Isabel Pardo Gamundi
(Univ. Vigo-SP)
Marco Bindi
(Univ.Florence -IT)
Uta Berger
(Univ.Dresden - DE)

Stakeholders Committee

António Graça
(ADVID)
Braz Costa
(CITEVE)
Carlos Ribeiro
(PODES)
Francisco Pavão
(APPITAD)
Gonçalo Andrade
(Portugal Fresh)
Luís Rocharte Álvares
(WBCSD)
Nuno Calado
(Sonae Arauco)
Tiago Silva Pinto
(CNCACSA)

1-Sustainability of Agri-food and Forestry Ecosystems in a Changing Environment

Thematic Line "Sustainability of Agri-food and Forestry Ecosystems in a Changing Environment" (TL1) aims to monitor and assess how different types and scales of impacts affect agri-food and forestry chain systems, biodiversity and ecosystem services. It applies multidisciplinary research to develop integrated tools and methodologies to monitor how multiple scale impacts affect ecosystems and biodiversity. Activities in TL1 are focused into two Tasks: Task 1.1. Integrated monitoring of climate and environmental impacts and Task 1.2. Sustainability in agri-food and forestry ecosystems.

Task 1.1 *is highly interdisciplinary, using field, laboratory and computational techniques, advanced analysis, scaling and modelling tools and testing novel potential indicators of change. This task aims to (i) develop and apply new analytical technologies to (ii) understand climatic and environmental forcing on target ecosystems under current conditions; (iii) assess current and future scenarios of climate and environmental change to develop, test and implement suitable mitigation and adaptation measures, such as riparian restoration or bioclimatic cultivar adaptation.*

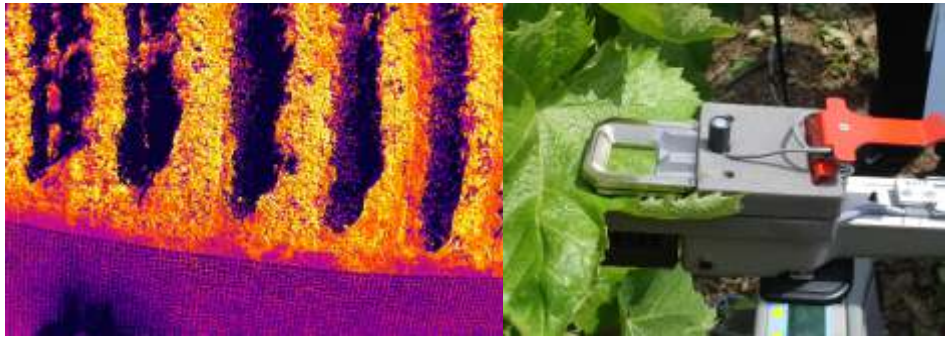
Task 1.2 *gathers multidisciplinary researchers in multivariate analysis and modelling of impacts of habitat and land use change on terrestrial and aquatic environments, ecosystem services and characterization of agri-food and forestry systems.*

2-Technology & Innovation in Agri-food and Forestry Chains for a More Competitive Bioeconomy

Thematic Line "Technology & innovation in Agri-food and Forestry Chains for a More Competitive Bioeconomy " (TL2) aims to use innovation to strengthen sector competitiveness by improving and expanding the potential range of agri-food and forestry products on offer. By promoting recycling, reuse and recovery of raw materials, TL2 brings added-value to agri-forestry ecosystems, agri-food and forestry products and co-products, by boosting both regional and national economic growth. TL2 directly involves sector stakeholders throughout the two vertically structured Tasks applying multidisciplinary research: Task 2.1. Innovative technologies and processes and Task 2.2. Valorisation of bio-based products and co-products.

Task 2.1 *promotes the optimization and development of innovative technology to the agri-food and forestry production chains, boosting competitiveness and income by improving food and forestry crop productivity, reducing management costs and increasing profit.*

Task 2.2 *research aims to uncover the potential of agri-food and forestry products and residues, including native flora and aromatic and medicinal plants to develop new high bio-based value products.*



Thematic Strand 1- Sustainability of Agri-Food and Forestry Ecosystems in a Changing Environment

Task 1.1 - Integrated monitoring of climate and environmental impacts: adaptation and mitigation strategies

Task 1.1 made significant progress in assessing climate change effects on crops, plant species, and ecosystems, contributing to long-term sustainable agricultural and forestry practices. The task utilized remote sensing technologies for monitoring system changes, developed adaptation and mitigation strategies, and studied invasive species, pollutants, and their effects on ecosystems.

List of main achievements in task 1.1

Viticulture sustainability under changing environmental conditions
Created a digital atlas on the exposure of Portuguese viticulture to climate extremes, analysed shifts in grapevine bioclimatic niches, and optimized phenology models.

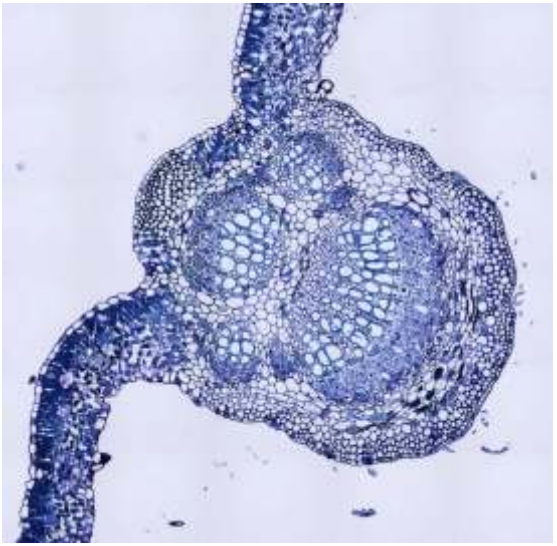
Permanent crop resilience and adaptation
Developed adaptation strategies for almond trees, established a chestnut ecosystem warning network, and explored treatments for hazelnuts under climate stress.

Aquatic ecosystem´s biodiversity and integrity
Studied pollutants like microplastics, pharmaceuticals and pesticides on aquatic life, particularly fish, and conducted long-term research on freshwater mussel decline.

Forest Ecology
Examined drought-induced mortality and forest regeneration using various methods to enhance resilience.

Task 1.2 – Sustainability in agri-food and forestry ecosystems

Task 1.2 focused on applying innovative techniques to assess habitat and land-use changes' effects on ecosystems. The team developed tools for sustainable land management and agricultural intensification while ensuring compatibility with biodiversity conservation.



List of main achievements in task 1.2

Sustainable Agriculture Practices
Identified resilient crop genotypes, utilized drones to monitor crop growth, and studied the impact of herbicides on soil microbial communities.

Agroecological Transition and Sustainable Farming
Developed agroforestry guidelines and analysed soil management practices to enhance biodiversity and production quality.

Ecosystem Modelling, Biodiversity Conservation, and Management
Developed frameworks for endangered species conservation using remote sensing and UAV technology to monitor invasive species and post-fire severity.

Environmental Impact of Large Infrastructures
Assessed groundwater sustainability, studied flood control and water security, and proposed innovative solutions like payments for water services.

Thematic Strand 2 -Technology in Agro-food and Forestry chains for a more competitive bioeconomy

Task 2.1 – Innovative technologies and processes

The collection of achievements represents a remarkable stride in agricultural research and innovation, with each accomplishment contributing significantly to the enhancement of sustainable practices and understanding across diverse sectors. These achievements collectively represent our commitment to pushing the frontiers of agricultural knowledge and technology, fostering sustainability, resilience, and efficiency in the face of contemporary challenges. The impact of these innovations extends beyond the laboratory, influencing the practices and decisions that shape the future of agriculture. Our integrated innovations in crop management encompass advancements in grapevine cultivation, strategic adaptation strategies, revolutionary orchard net cover technology, and the development of environmentally conscious pesticide solutions. These achievements underscore our dedication to addressing the challenges of modern agriculture while promoting sustainability, efficiency, and the well- eing of both crops and the environment.

List of main achievements in task 2.1

Advancements in Agricultural Innovation

Developed innovative strategies to enhance crop productivity and sustainability. It includes improving fruit quality and stress tolerance through biostimulants, fertilization, and foliar applications. Climate change impacts on crops were assessed, with adaptive strategies proposed. Eco-friendly practices like biochar use, microbial treatments, and organic extracts showed promise. Genetic studies and conservation efforts also supported resilient, sustainable agriculture.

Integrated Innovations in Crop Management

Showcased the use of advanced remote sensing and AI technologies in agriculture. UAVs, deep learning, and hyperspectral imaging were applied for crop monitoring, yield estimation, and disease detection. Precision viticulture and orchard management were enhanced through image-based analysis and machine learning. The research also improved land-use monitoring and vineyard sustainability using innovative classification methods.

Task 2.2 - Valorisation of bio-based products and co-products

Task 2.2 focuses on unlocking the untapped potential of agricultural and forestry residues (AFR), native flora, and aromatic and medicinal plants (AMP) to develop innovative, high-value bio-based products. This task aims to design advanced processes for generating biologically significant products with industrial applications.

Comprehensive studies on the application of AFR and AMP are supported by meticulous extraction, purification, and isolation of highly bioactive compounds. Tailored protocols are implemented to assess the biochemical and biological activities of these compounds, along with in-depth evaluations of their toxicological and phytotherapeutic properties.

The ultimate goal is to ensure the safety of extracts and fractions while validating their pharmacological and nutraceutical properties. Task 2.2 represents a forward-thinking initiative that harnesses the vast potential of natural resources to develop valuable bio-based products with diverse applications.

List of main achievements in task 2.2

Investigations into Phytochemical Profiles and Bioactivities

Explored the valorization of natural products and by-products for health, nutrition, and sustainability. It includes studies on storage effects on apple quality, the bioactivity of plant and algae extracts, and the development of functional food and cosmetic applications. Innovations like nanocarriers and encapsulated compounds show potential in disease prevention and wellness. Additionally, compositional analyses support the reuse of agricultural residues and underutilized natural resources.

Addressed food safety, environmental sustainability, and health-related innovations. It highlights concerns like aflatoxin contamination and heavy metal exposure, while exploring natural solutions such as honey for antimicrobial use and cherry by-products for wastewater treatment. Studies also examined livestock emissions, meat proteomics, and detoxification of plant by-products for animal feed, contributing to safer and more sustainable food systems.

ASSOCIATE LABORATORY

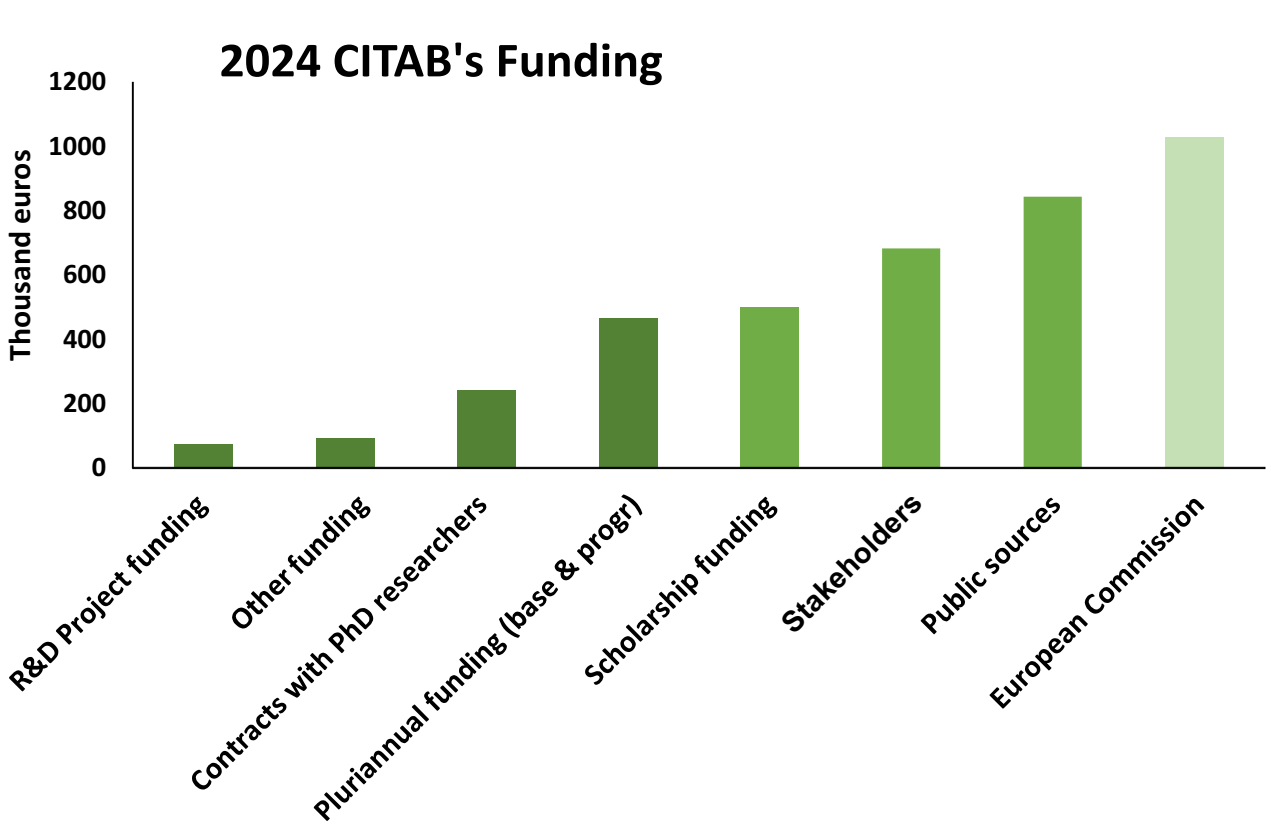
Inov4Agro - Institute for innovation, capacity building, and sustainability of agri-food production

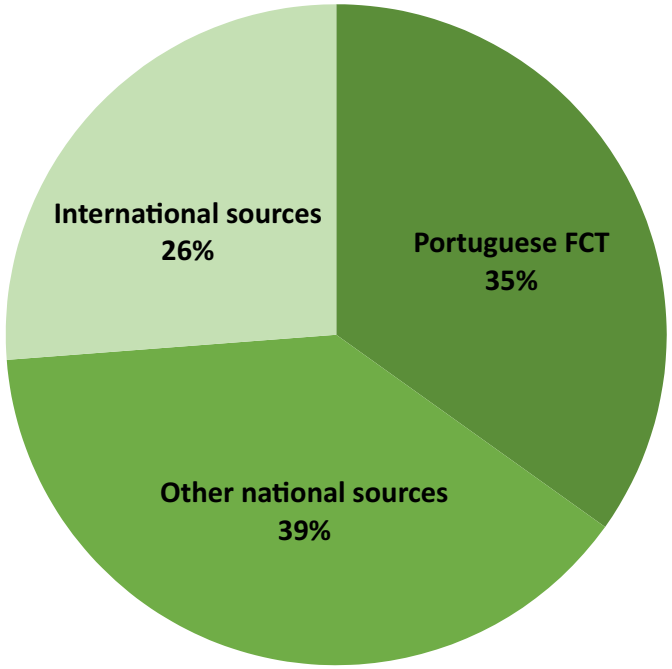
The Inov4Agro “Institute for innovation, capacity building and sustainability of agri-food production” Associated Laboratory (AL) is a strategic consortium of two R&D units, CITAB and GreenUPorto, which have a track record of a successful long-lasting cooperation and represent the highest scientific productivity in agriculture within the Northern of Portugal. A 10-year strategic plan has been developed, focused on four intervention areas: 1) Resources use efficiency and product quality; 2) Water resources, soil health & food; 3) Leverage local food systems; 4) Technological development & innovation.

Inov4Agro succeeded in the FCT call for Institutional Scientific Employment for Associated Laboratories (CEECInst-LA), to hire three permanent positions for PhD Assistant Researchers, one PhD Science Manager, along a 6-year PhD Junior Researcher. On July 17th 2024, the “Sustainable Agrifood Production – Edition 2023-2024” came to an end. This edition featured eight sessions, during which 16 PhD students (eight from CITAB and eight from GreenUPorto) presented their thesis work. In the final session at UTAD, the four winners were announced by the directors of CITAB and GreenUPorto. The second edition of the "Inov4Agro Scholarship Researchers' Day", an event that allows the scholars from CITAB and GreenUPorto to share their research activities, was held at CIBIO (Vairão, 7th October 2024) and received a total of 54 abstract submissions, which were organized into 13 oral presentations and 12 posters, covering the four thematic lines of Inov4Agro.

COMPETITIVE FUNDING & RESEARCH PROJECTS

In 2024, CITAB's total funding achieved 3.9 M€. FCT direct public funding globally represented 35% of this value, continuing its decreasing tendency. While the stronger connection with our stakeholders still warranted a large share, with 39% of our funding coming from partnerships with the private sector. The remaining funding, 26%, came from European Commission through international projects. From the public founding it is highlighted the Human Resources investment representing the highest value and indicating CITAB investment in promoting young researchers.





ORGANIZATION OF CONFERENCES

CITAB Stakeholders Day

The "CITAB Stakeholders Day" was an opportunity for businesses, associations, and other strategic partners to share their expectations regarding the science and research produced at CITAB. This year, it was possible to attend two CITAB stakeholder presentations: "CITAB e ADVID - Uma cadeia de Conhecimento, Valor e Sustentabilidade" by António Graça (ADVID) and "Laboratório da Paisagem - Ciência, Educação e Inovação ao serviço da Ação Climática" by Carlos Ribeiro (Laboratório da Paisagem).

Seminar "A Água no Futuro. Investigação em Ambiente Empresarial"

The seminar "A Água no Futuro. Investigação em Ambiente Empresarial", organized by CITAB, UTAD, and Águas do Norte, took place on March 5th in UTAD. During this event, the projects REGADOURO, I-ReWater, GreenValue, and PRR Vine & Wine Portugal were presented by their coordinators. Additionally, the CITAB Director made a presentation on the impact of climate change in Trás-os-Montes e Alto Douro.

Seminar "Segurança Hídrica, Agricultura e Degradação Ambiental num Contexto de Alterações Climáticas"

CITAB and the Associação Portuguesa dos Recursos Hídricos organized the seminar "Segurança Hídrica, Agricultura e Degradação Ambiental num Contexto de Alterações Climáticas", which took place at UTAD on April 9th. This seminar featured multidisciplinary lectures addressing the current challenges of the water resource management in face of climate change challenge and environmental degradation, with a particular emphasis on agriculture and the rural world.

UTAD's International Seminar on Air Quality

CITAB was part of the organization of the International Seminar on Air Quality, which took place at UTAD. On April 12th, the participants had the opportunity to conduct different measurements in the monitoring station in Parque Natural do Alvão. On April 18th, the seminar continued with several oral communications about environment, sustainable buildings, human health, and consequently air quality.

International Seminars

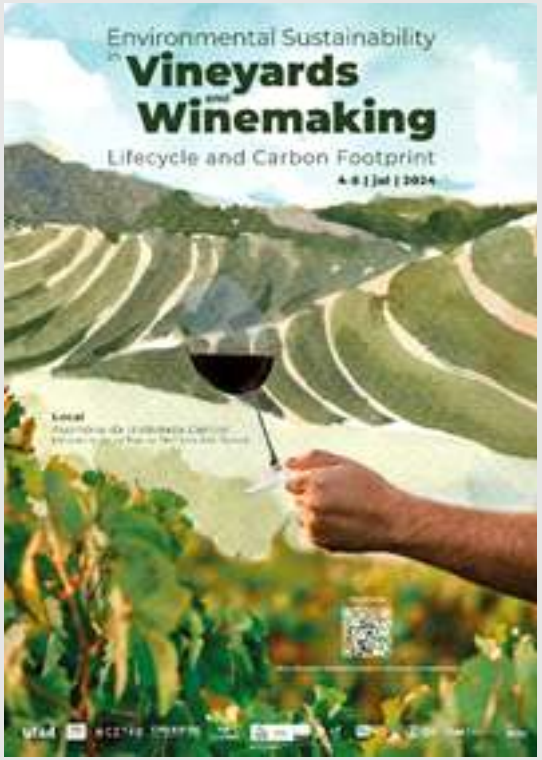
CITAB organized three International SeminarS during 2024 with high level researchers. The seminar “Prospects for Improving Legumes Using Traditional and Multi-Omics Approaches” presented by Esteban Ríos (University of Florida, USA) on May 3rd, focused on legume breeding strategies. On October 2nd, two seminars took place: “Synergizing Remote Sensing Technologies for Geohazards, Glacier and Snow Monitoring” presented by Jinghui Fan (AGRS, China), and “Resilient crops production grown under the Mediterranean climate conditions of Morocco for water scarcity: R&D approach” presented by Kamal Aberkani (Faculté Pluridisciplinaire de Nador, Morocco). Both focused on innovation for resilient ecosystems, from agriculture to environmental hazards. The seminar “Advanced Wine Analysis Technique” presented Margherita Modesti on October 23rd, explored new approaches to wine analysis.

IV Ibero American Seminar of Food History and Culture

On June 18th took place the IV Ibero American Seminar of Food History and Culture. This event organization joint the CITAB, Universidade do Estado do Rio de Janeiro (UERJ) and Instituto Politécnico de Viana do Castelo (IPVC). In this fourth edition, the focus was the “Breakfast”, the first meal of the day for Portuguese and Brazilians and the participants also features culinary workshops.

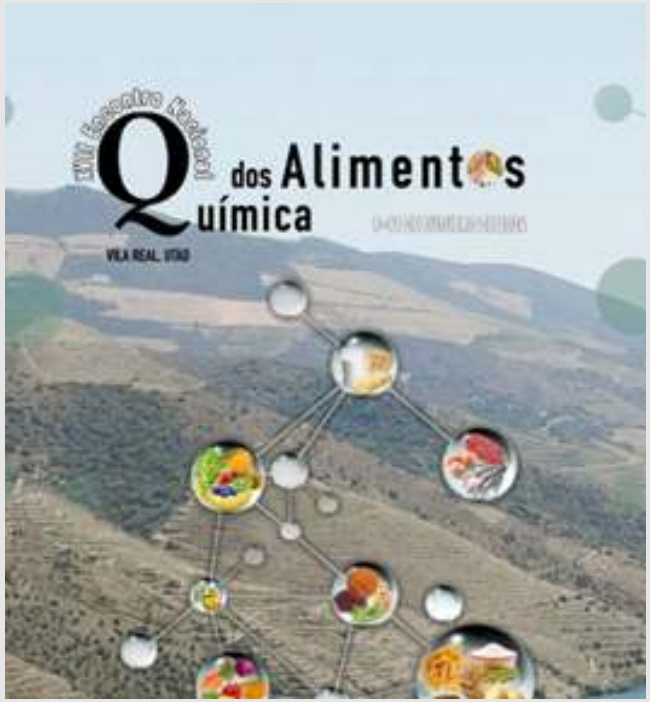
International Seminar "Environmental Sustainability in Vineyards and Winemaking - Lifecycle and Carbon Footprint"

The International Seminar "Environmental Sustainability in Vineyards and Winemaking - Lifecycle and Carbon Footprint" was held on July 4th and 5th at UTAD. More than 50 researchers and professionals from the wine sector representing Portuguese and Spanish institutions and companies, participated in this event. The seminar focused on the need for decarbonization—not only to reduce environmental impacts but also to increase competitiveness and ensure the internationalization of wines.



XVII Encontro de Química dos Alimentos

The XVII Encontro de Química dos Alimentos, organized by several members of CITAB, took place at UTAD from October 9th to 11th and welcomed more than 250 participants. The event featured several lectures by renowned researchers in the field of Food Chemistry. Topics covered through oral and poster communications included Sustainability in the Food System; Food Analysis Methods; Chemistry and Nutrition; Food Safety and Quality Control; Development of New Food Products and Synergy between Chemistry and Food Processing Technology.



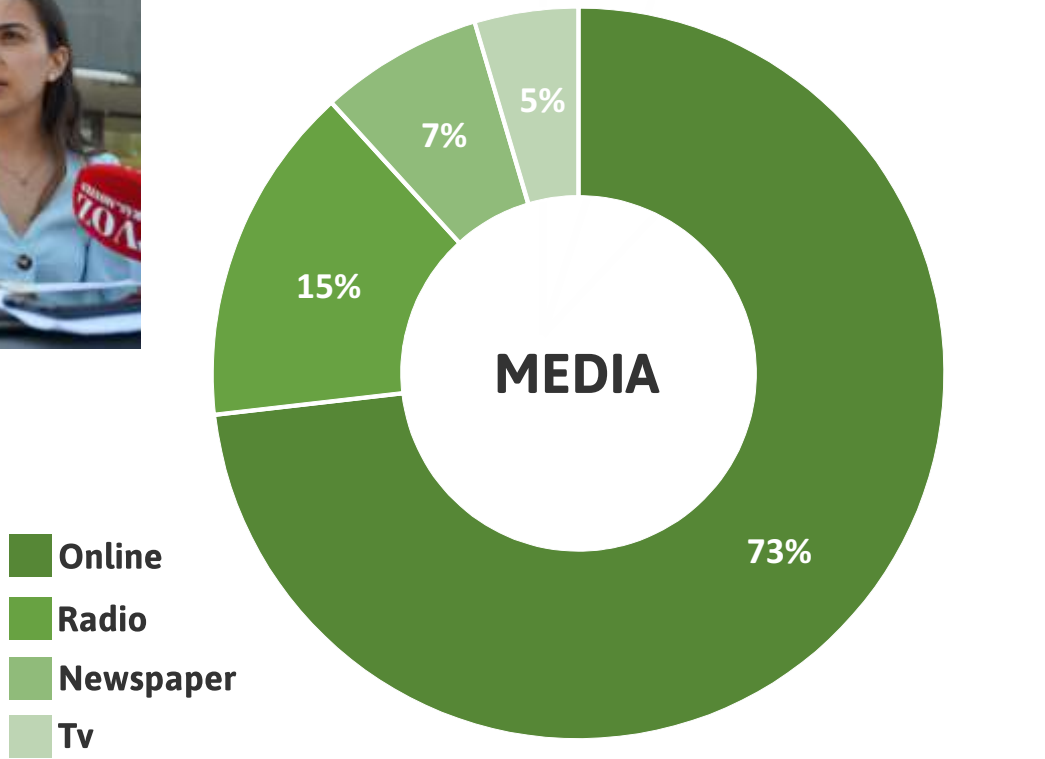
International Conference on Graphics and Interaction (ICGI)

On October 7th-8th, UTAD hosted the International Conference on Graphics and Interaction (ICGI). This conference was dedicated to the latest research work in the areas of computer graphics, image processing, computer vision, information visualization and human-computer interaction. Other key topics included virtual and augmented reality, modeling, rendering, Digital Arts and data visualization.

1º workshop de co-criação no âmbito do projeto LivingSoiLL

On 24th October, the Horizon project LivingSoiLL coordinated by CITAB organized its first co-creation workshop at UTAD. This event gathered over 50 participants from the Luso-Galician Living Lab, joining researchers with a vast number of representative stakeholders from the vine and olive sectors. This workshop had as objectives to define for the project purposes “Experimental site” and identify soil threats faced by the partners and which strategies are being implemented and aimed to be tested.

CLIPPING & OUTREACH



In 2024, CITAB had a total of 155 news articles highlighting its achievements and advancements. These were hosted in various media platforms, showcasing a diverse array of perspectives. Web news articles conquered the coverage landscape, with 73% of the total, emphasising the digital era's influence on information dissemination. Radio coverage, comprising 15% of the media sources, giving voice to CITAB's research. Print newspaper and television, with 7 and 5% respectively, contributed for a broader dissemination across diverse demographics.

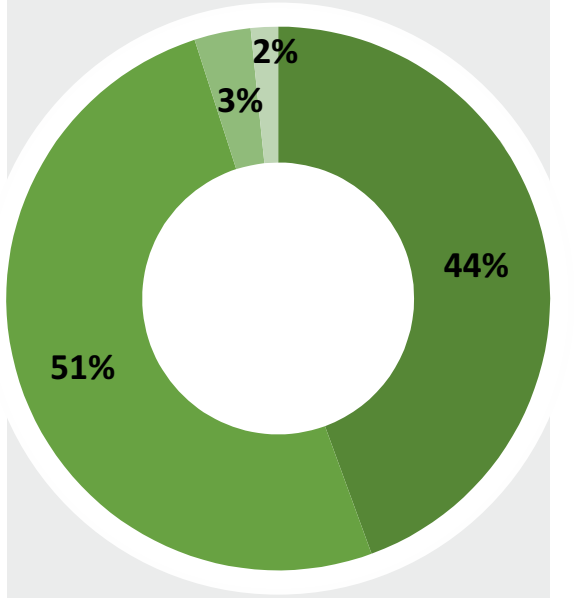
These diverse media outlets reflect the broad interest and recognition of CITAB's contributions to the scientific community, emphasizing its key role in advancing research and innovation.

OUTREACH

Researchers from CITAB actively engage with communities and promote scientific awareness through a wide range of initiatives. For instance, several activities were conducted at Schools presenting to young students CITAB research on environment preservation, sensitizing them for their participation through action to construct a better future. CITAB researchers held also several visits to UTAD laboratories including hosting “OCJF-Ciência Viva” activities during the Summer. As usually, CITAB was represented at the European Researchers' Night, this year in Foz Côa and Armamar, by several research groups.

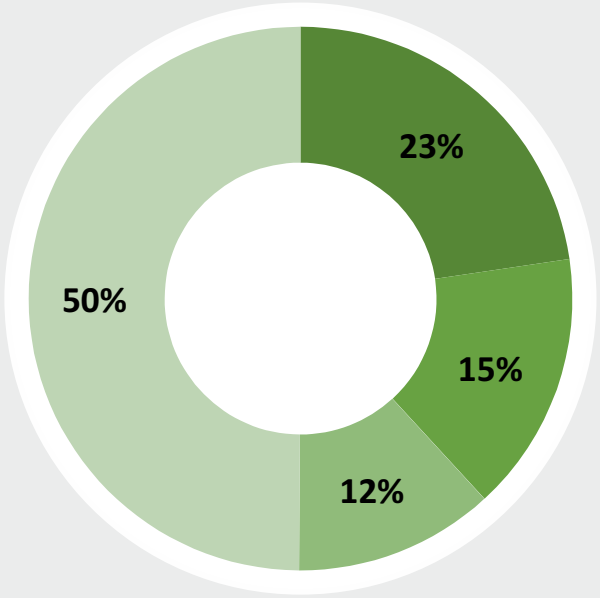
PRODUCTIVITY METRICS

SCIENTIFIC PUBLICATIONS

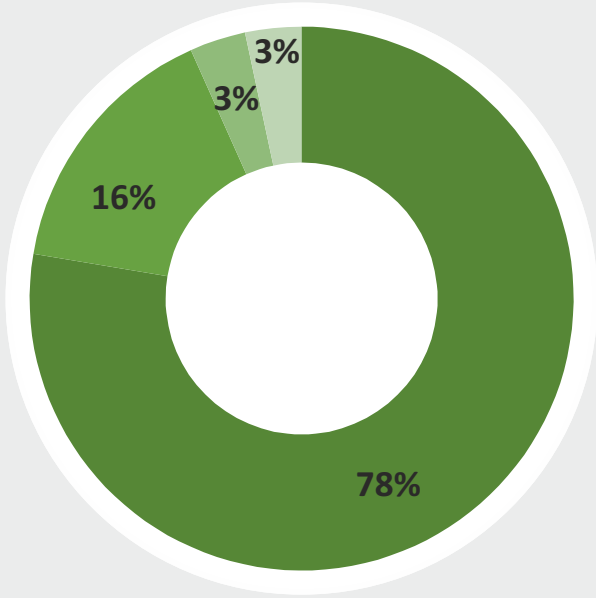


PUBLICATIONS IN PEER REVIEWED JOURNALS

SUBJECT AREAS DISTRIBUTION



QUARTILE DISTRIBUTION



In 2024, CITAB continued to experience a significant growth in its scientific output. A total of 743 scientific publications were produced, including 330 SCOPUS-indexed articles. This means 3.3 SCOPUS-indexed articles per Integrated Member—the highest ratio since CITAB's inception. According to SCOPUS classification, the top scientific domains of these indexed articles remained: 1) Agricultural and Biological Sciences, 2) Environmental Science, and 3) Biochemistry, Genetics, and Molecular Biology. This highlights the alignment of CITAB's research with its strategic priorities. Together, these three areas account for half of all publications. Notably, CITAB increased to 78% of articles published in first-quartile journals, underscoring a strong upward trend and marking a major milestone. When both first- and second-quartile journals are considered, the figure rises up to 94%, reflecting the high scientific quality and international reach of CITAB.

VISIT US

CITAB - Centre for the Research and Technology of Agro-Environmental and Biological Sciences

Universidade de Trás-os-Montes e Alto Douro
Quinta de Prados, Reitoria building,
Room D2.30
5000-801 Vila Real - Portugal

Phone: +351 259 350 151
email: citab@utad.pt
website: www.citab.utad.pt

www.facebook.com/CITAB.UTAD

www.linkedin.com/company/CITAB/

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