



PORTUGAL: naturally fit for Medicinal & Aromatic Plants

A Mediterranean origin for quality,
sustainability and cooperation

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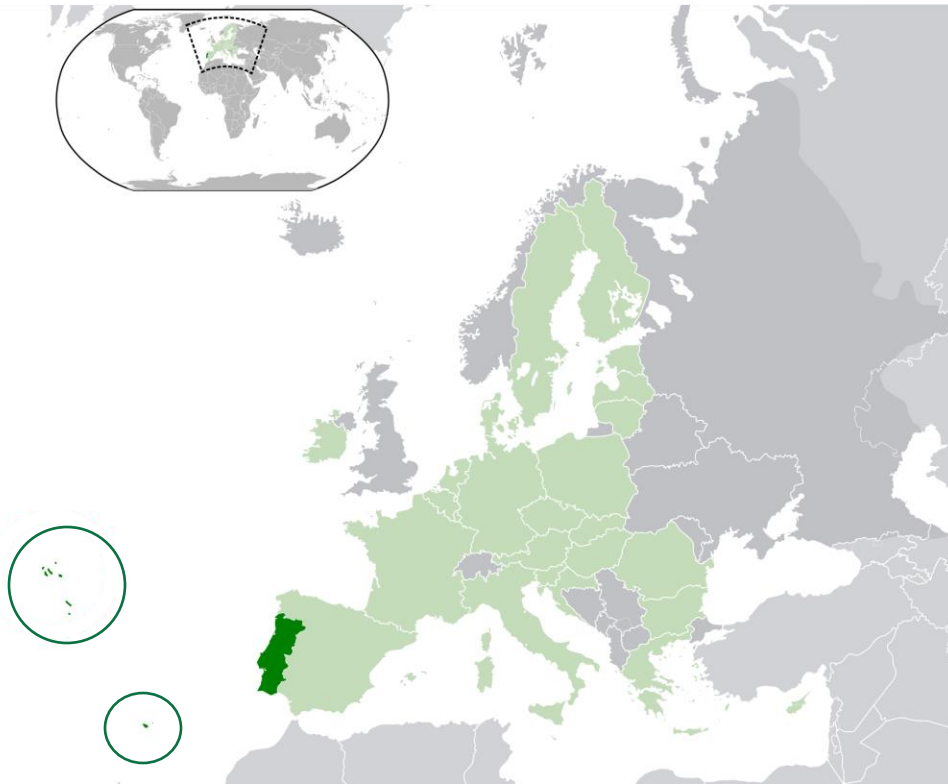


This catalogue is presented by

ASSOCIAÇÃO CCPAM – CENTRO DE COMPETÊNCIAS
DAS PLANTAS AROMÁTICAS, MEDICINAIS E
CONDIMENTARES.

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Geographic and climate conditions



Natural foundations of quality, sustainability and authenticity

Portugal combines privileged Mediterranean conditions, rich biodiversity and a strong agricultural culture, creating a unique natural setting for the

production of high-quality aromatic, medicinal and culinary plants.

These elements form the basis of a sector that is increasingly recognised across Europe and internationally for its quality, sustainability, and innovation.

Mediterranean Climate: intensity, balance and consistency

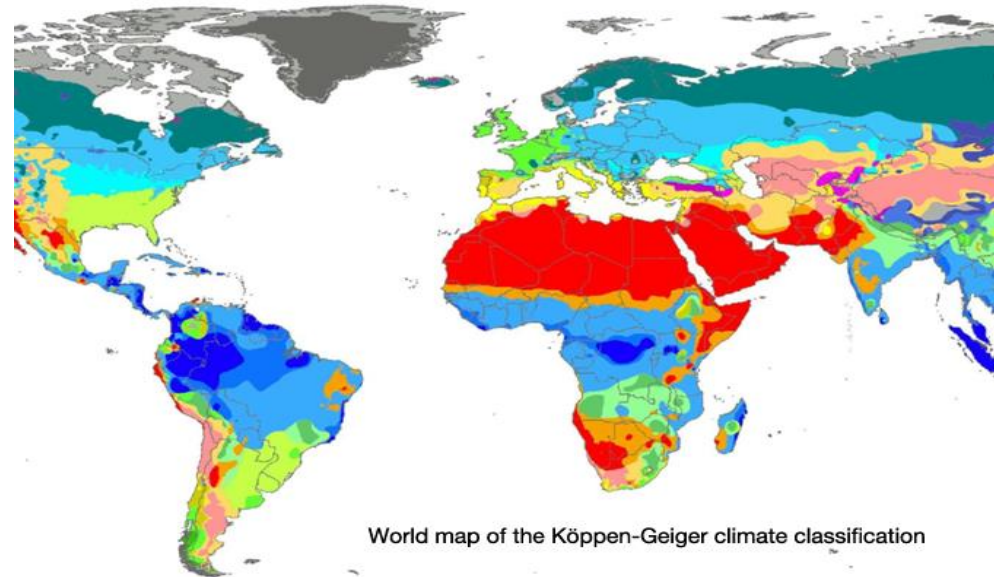
Portugal benefits from a Mediterranean climate characterised by high levels of sunshine, mild winters and dry, hot summers, which is particularly well-suited to aromatic and medicinal species.

This climatic balance favours:

- the development of intense aromas and flavours

- high concentrations of bioactive compounds
- healthy plant growth with reduced disease pressure
- favourable conditions for natural and energy-efficient drying processes.

These characteristics contribute decisively to the consistency, stability and quality of Portuguese MAP.



World map of the Köppen-Geiger climate classification

High biodiversity hotspot

Biodiversity and plant heritage

Located within one of the world's most important biodiversity hotspots, Portugal hosts a wide range of native and adapted medicinal and aromatic plants, shaped by centuries of interaction between nature and traditional land use.

This biodiversity:

- supports genetic richness and resilience
- provides a strong ecological base for sustainable cultivation
- allows the production of MAP with distinctive Mediterranean profiles.

The close link between cultivated plants, surrounding ecosystems and traditional knowledge reinforces the authenticity and identity of Portuguese PAM.



PAM production: organic and future-oriented



A sustainable and high-quality production hub

According to the CCPAM sector study (2021), Portugal has consolidated a production model that is predominantly organic, with close to 90% of producers operating under certified organic systems. This strong positioning places Portugal among the leading European countries in terms of alignment with global demand for clean, traceable, sustainable and environmentally responsible raw materials.

The Portuguese MAP sector is characterised by small and medium-scale farms, allowing close control over production practices and product quality. This structure enables:

- careful crop management
- preservation of aromatic and medicinal properties
- strong alignment with premium, niche and differentiated markets.

Production is mainly oriented towards dried plants of high quality, which remain the backbone of the sector and are widely used in the food, herbal, cosmetic and wellness industries. At the same time, the sector has developed strong know-how in post-harvest handling, drying, storage and quality assurance, ensuring consistency and compliance with international standards.

A new generation of skilled and innovative producers

One of the most striking strengths of the Portuguese sector is its human capital. The CCPAM study highlights the emergence of a new generation of producers who combine traditional Mediterranean knowledge with modern, environmentally responsible practices, contributing to a dynamic, adaptable and forward-looking sector that is strongly committed to R&D&I projects within the CCPAM network.

Aligned with international trends and highest quality standards

Strong alignment with international market trends

The Portuguese organic PAM sector is particularly well positioned to respond to current and emerging global trends, including:

- growing demand for natural and plant-based ingredients
- expansion of the organic, wellness, cosmetic and nutraceutical markets
- preference for European-origin products with certified quality and traceability
- interest in supply chains with strong environmental and social credentials.

Portugal offers international buyers and partners a reliable source of organic aromatic and medicinal plants, produced under controlled conditions, with high environmental value and strong market credibility.



Aligned with international trends and highest quality standards



Growing potential for value-added products and international cooperation

Portugal is progressively strengthening its capacity in:

- processing and transformation
- essential oils and extracts
- natural cosmetics and wellness products
- territorial and organic branding.

There is increasing interest in cooperation, clustering and value-chain integration, opening opportunities for international partnerships in production, processing, research, innovation and market development.



A trusted European origin for organic aromatic and medicinal plants

Overall, Portugal presents itself as a competitive and trustworthy European origin for organic aromatic and medicinal plants, combining:

- natural Mediterranean advantages
- certified organic production
- skilled and innovative producers
- strong sustainability credentials
- and growing integration into international value chains.

The Portuguese MAP sector is well positioned to contribute to global markets seeking quality, authenticity, sustainability and innovation.

Some of the members of
Associação CCPAM - Centro de
Competências das Plantas
Aromáticas, Medicinais e
Condimentares



Growing the Medicinal and Aromatic Plants
sector together in Portugal

Associação CCPAM - Centro de Competências das Plantas Aromáticas, Medicinais e Condimentares



The CCPAM Association aims to develop the aromatic, medicinal, and culinary plants sector in Portugal as an innovative, competitive sector committed to the values of sustainability and the quality of processes and products, with the following objectives:

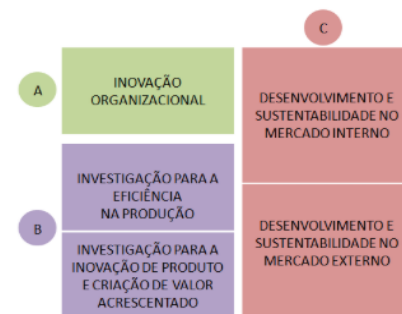
- A) Bringing together agents related to the MAP sector, promoting the sharing of knowledge and resources and strategic cooperation;
- B) Studying, proposing, and acting to resolve the constraints and needs of economic agents and exploit opportunities, namely through the preparation and monitoring of multi-annual agendas;
- C) Stimulating and participating in the development of research, experimentation, demonstration, and innovation, and ensuring the transfer of knowledge and technologies to companies in the sector;
- D) Contributing to the study, conservation, and responsible use of endogenous resources;
- E) Provide value-added services, namely in terms of promotion, marketing, skills enhancement, and the search for innovative solutions that strengthen the competitiveness and sustainability of the sector;
- F) Promote consumption and boost internal and external sectors and markets for the sector's products and services;

G) Support the internationalization of the sector and its agents;

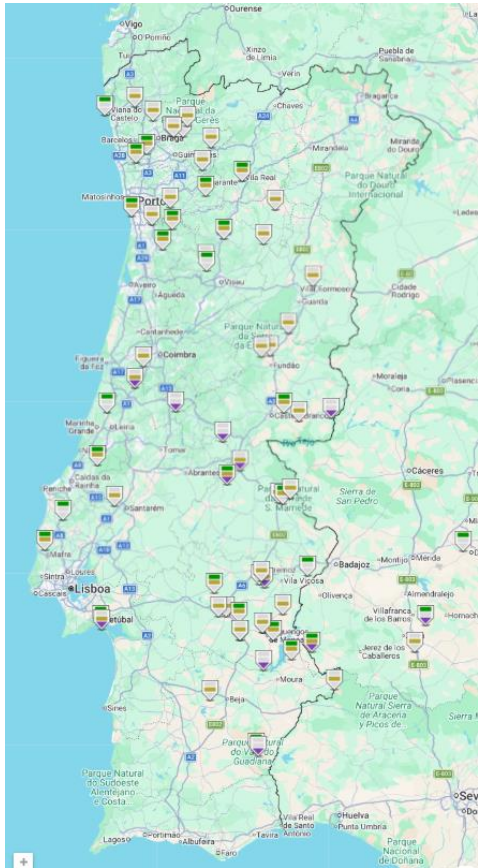
H) Represent, defend, and promote the common interests of its members among their peers and national and international institutions.

The CCPAM Association is an institutional extension of the cooperation protocol approved by the Secretary of State for Agriculture and Food, on behalf of the Ministry of Agriculture, Forestry, and Rural Development, on February 25, 2017, which created the Center of Competence for Aromatic, Medicinal, and Culinary Plants, bringing together economic agents and their organizations, as well as agents in the areas of research, dissemination, and knowledge transfer, associations, municipalities, and other relevant public administration bodies.

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ADCMoura / EPAM



ADCMoura – Associação para o Desenvolvimento do Concelho de Moura is a non-governmental, non-profit organisation founded in 1993, inspired by the principles of local development, the social and solidarity economy, and equal opportunities. Its main objectives are: to contribute to the economic competitiveness and innovation of rural and vulnerable areas; to preserve and enhance natural and cultural assets; to raise environmental awareness through education; to advocate for equal access for all to social, educational, health and cultural services; and to promote social cohesion and citizen participation.

Through national and international cooperation projects, it contributes to the development of territories in multiple areas, notably the sector of aromatic and medicinal plants, particularly through the management of the EPAM network.



EPAM is a methodology and a set of tools developed by ADCMoura in 2011 (which have since been extended to Spain and adopted by other emerging sectors in Portugal) to foster collaboration and innovation in the aromatic and medicinal plants sector in Portugal.

It combines an online platform (including a map of producers) with participatory sessions for sector stakeholders, based on the facilitation of a multi-network ecosystem (multi-scale, multi-institutional), with the objectives of promoting strategic collaborative innovation, knowledge transfer, capacity building for stakeholders, and policy proposals.

Currently, ADCMoura chairs the CCPAM Association – Centre of Competence for Aromatic, Medicinal and Culinary Plants.

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Aloe Portugal

A aCourela do Alentejo is a farm located in the parish of Varche, in the municipality of Elvas, born out of its founders' passion for the border landscape and the region's agricultural potential. The project is dedicated to the organic production of aloe vera, promoting sustainable agricultural practices and respect for the ecosystem. The farm currently has 1 hectare of aloe vera, establishing itself as a pioneering project in Portugal in the promotion of this medicinal plant. It also owns the registered trademark "Aloe Portugal", through which it develops a diverse range of natural food and cosmetic products, 100% Portuguese.

Committed to sustainability and environmental preservation, aCourela

do Alentejo is certified as an organic farm, adopting practices that promote soil fertility, biodiversity and the farm's natural balance. In the surrounding area, there are several beehives that contribute to natural pollination and the enhancement of local biodiversity.

Aloe vera (*Aloe barbadensis* Miller) is a medicinal plant widely recognised for its many benefits. Its growing demand stems from the increasing appreciation of natural products and the numerous scientific studies confirming properties already known through folk wisdom. Used in both cosmetics and food, it stands out for its richness in vitamins, minerals, amino acids and bioactive compounds, contributing to skin care and the body's general well-being.



aCourela do Alentejo

www.acoureladoalentejo.com

info@acoureladoalentejo.com

Anima Botanica



Anima Botanica is a project rooted in a lifelong relationship with medicinal and aromatic plants, founded by the biologist Maria Mota. Driven by a deep passion for nature, her journey began in 2001 in the Natural Park of Cevennes (South of France), where she worked as a medicinal plant harvester for 5 years, engaging in the production of essential oils and traditional plant-based preparations.

In 2005, she trained in Ayurvedic phytotherapy in France, further developing her knowledge of plant medicine. This path led to the creation of her own herbal laboratory, where she elaborates herbal Ayurvedic formulas.

In 2013, she became one of the founding members of an Environmental Education Centre in Portugal, where she continues to work as a consultant and trainer, sharing knowledge and fostering a deeper connection between people and nature.

Established in 2017, Anima Botanica brings together her work in plant cultivation, herbal practice and environmental education. The company produces aromatic plants for herbal infusions and develops small-scale, handcrafted formulations for Ayurvedic Phytotherapy.

Beyond production, Anima Botanica is strongly dedicated to education and community engagement. Through workshops, training programmes and collaborative projects, it promotes knowledge of medicinal and aromatic plants, particularly in low-density rural territories, contributing to connect local communities and landscape conservation.

Anima Botanica reflects a holistic approach, where plants are not only products, but bridges between health, culture and the regeneration of both land and community.



www.animabotanica.pt

Info@animabotanica.pt

Aroma do Vale



AROMA DO VALE

Aroma do Vale is a Portuguese producer of premium aromatic plants, established in 2011 in the country's northern coastal region. Specialised in the cultivation and bulk supply of dried aromatic plants, the company combines traditional know-how with a forward-looking approach to quality, scale, and consistency—rooted in organic production practices and a deep respect for the land and surrounding ecosystems. Its production began with two flagship crops: Lemon Verbena (*Aloysia triphylla*) and Lemon Thyme (*Thymus citriodorus*). Alongside these, a diverse portfolio has been carefully developed through trials and small-scale production, including Spearmint (*Mentha spicata*), Peppermint (*Mentha piperita*), Marjoram (*Origanum majorana*), Calendula (*Calendula officinalis*), Globe Amaranth (*Gomphrena globosa*), Portuguese Thyme (*Thymus mastichina*), and Hart's Pennyroyal (*Mentha cervina*).

For nearly a decade, production was carried out entirely by hand—from planting to harvesting and weed control—ensuring a deep

understanding of each crop and a strong foundation in quality-driven practices.

In 2021, Aroma do Vale initiated a new phase of growth, expanding its operations into the central inland region of Portugal. This strategic move is focused on scaling production through mechanisation, meeting increasing market demand, and benefiting from distinct soil and climatic conditions. Positioned at the heart of the triangle formed by Porto, Lisbon, and Madrid, and in close proximity to Portugal's main land freight corridor, the company is ideally located to support efficient and reliable export operations.

This expansion also enables the development of additional crops at a commercial scale, including Lemon Balm (*Melissa officinalis*), Common Thyme (*Thymus vulgaris*), Peppermint (*Mentha piperita*), and Stevia (*Stevia rebaudiana*).

Aroma do Vale offers a versatile range of formats, including whole plant cuts, leaves, and, in the case of Lemon Verbena, carefully hand-separated whole leaves—meeting the highest standards required by international markets.

luispedrosaemelo@aromadovale.pt



Aromalheio



Aromalheio is situated on a mountainous plateau at an altitude of 700 metres, nestled against the slopes of the mountains in the parish of Infesta, in the municipality of Celorico de Basto.

The context and location in which it is situated make the organic production methods we practise even purer.

We grow, dry, process and sell various herbs organically on a 3.5-hectare plot of land (outdoors).

We have several varieties in production, with six being the most common in our planted area: Lemon Verbena, Peppermint, Lemon Balm, Echinacea, Lemon Thyme, Common Thyme.

We grow the finest herbs where the Minho changes colour...

aromalheio@gmail.com



Aroma
Alheio
ervas aromáticas



Aromáticas de Malta



<https://www.aromaticasdemalta.pt>
geral@aromaticasdemalta.pt

Aromáticas de Malta is located in Malta, Vila do Conde. Our project was founded in 2012 out of a commitment to the land and well-being. What began as a 1-hectare family farm has grown, through investment in precision technology, to its current 2.5 hectares, combining professional efficiency with our artisanal spirit.

We work exclusively using organic farming methods, respecting natural cycles to ensure infusions of superior purity and intensity. We specialise in three varieties: the freshness of lemon thyme (*Thymus x*

citriodorus), the serenity of lemon verbena (*Aloysia citrodora*) and the energy of peppermint (*Mentha x piperita*). Today, our story expands into rural tourism.

We have opened the doors of our farm to offer an authentic wellness experience, where guests can wake to the scent of the fields and follow the entire process, from cultivation to drying.

At Malta, we blend agricultural tradition with modern comfort, inviting you to discover the perfect balance between nature and relaxation.



Associação CBPBI – Centro de Biotecnologia de Plantas da Beira Interior

The Beira Interior Plant Biotechnology Centre (CBPBI) is part of the National Scientific and Technological System and acts as a Centre for Knowledge Enhancement and Transfer.

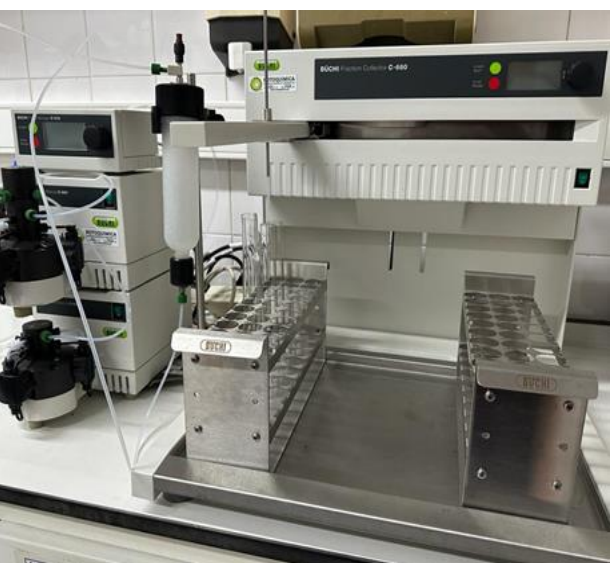
Its mission is to create knowledge and promote research in the field of plant biotechnology associated with the agricultural, forestry, and aromatic and medicinal plant sectors. Its main objectives are to develop knowledge related to plant biotechnology and use it as a factor in promoting economic activity; to establish partnerships and provide products and services that enable the creation and growth of companies linked to the productive sectors of agriculture, forestry and aromatic and medicinal plants; to provide infrastructure, technology and support to start-up companies; to collaborate with national and international R&D institutions in the development of national and international projects.

To carry out these activities, in addition to specialised human resources, the CBPBI has laboratory spaces for plant micropropagation, bioclimatic chambers, phytochemistry, molecular biology, chromatography and spectroscopy laboratories, as well as a field greenhouse support structure.

<https://cbpbi.ipcb.pt/>
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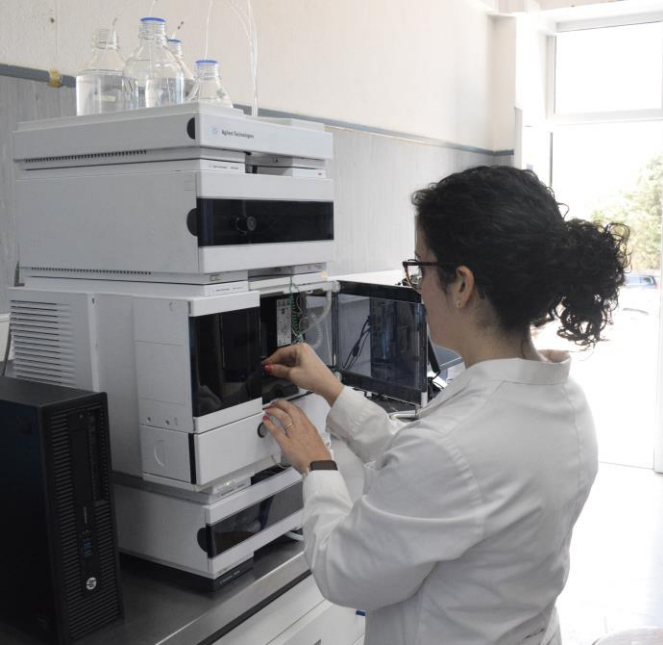


CBIOS – Centro de Investigação em Biociências e Tecnologias da Saúde



<https://cbios.ulusofona.pt/research/natural-bioactives-circular-economy>

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Bio.Natural Lab (Natural Bioactives & Circular Economy), part of CBIOS – Lusófona University, conducts research into bioactive compounds from aromatic and medicinal plants, such as Plectranthus and lemongrass (*Cymbopogon* spp.), exploring their potential for pharmaceutical, cosmetic and nutraceutical applications, with a focus on environmentally sustainable practices. The laboratory carries out the isolation, purification and chemical characterisation of natural products, whilst also developing semi-synthetic derivatives and studying their structure-activity relationships. Biological properties such as antimicrobial, antioxidant, anti-inflammatory and anticancer activity are evaluated. We have technology for chemical and phytochemical analyses (HPLC-DAD, GC-FID, FTIR) and computational modelling tools to support the discovery of new bioactive molecules. We seek to integrate principles of the circular economy, promoting the valorisation of by-products and reducing the environmental impact of the production of aromatic and medicinal plants, whilst studying and enhancing their medicinal and bioactive properties. This multidisciplinary approach contributes to the scientific, technological and sustainable valorisation of aromatic, medicinal and culinary plants, fostering high value-added products.

CEBAL Centro de Biotecnologia Agrícola e Agro-Alimentar do Alentejo



The Alentejo Centre for Agricultural and Agri-Food Biotechnology (CEBAL) is a private, non-profit research and development organisation based in the city of Beja. CEBAL operates in close collaboration with the local economy, taking into account the characteristics and potential of the region in which it is situated.

CEBAL's activities are structured to prioritise applied research, seeking to identify issues with potential impact on the region's economy and to propose biotechnological solutions that enable problem-solving, production optimisation or product certification.

The centre's activities are also directed towards identifying and developing new opportunities that may be applicable to the region, particularly in the areas of crop production, livestock production, the processing and improvement of agricultural and food products, the implementation of processes that enable the creation of added value from by-products and waste, and research into ways of enhancing the value of traditional raw materials.

CEBAL develops separation and extraction processes, environmentally more sustainable, and further exploitation of bioactivities to potentiate extracts bio-based applications within two major areas: i) human health promotion (cancer and inflammatory responses); and ii) plants protection (biocide formulations for new bioherbicides, and new polymeric matrices)



Some of ongoing projects:

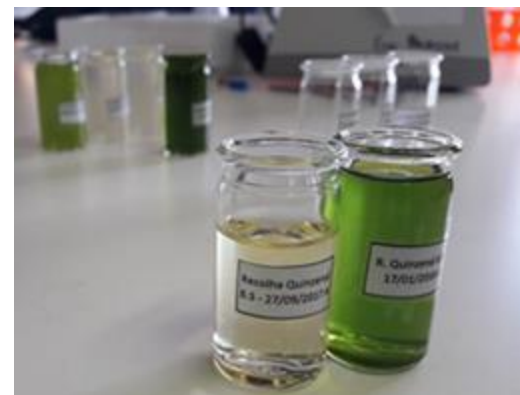
- "EssenceProRumen – Mediterranean essential oils as an integrated strategy to overcome the ruminant production challenges: methane emissions mitigation, improvement of edible products nutritional value and reduction the use of synthetic drugs, as antibiotics and antiparasitics.

<https://bit.ly/EssenceProRumen>

- Use of rockrose in ruminant feed to increase the competitiveness of the sheep production sector in the Alentejo, by reducing feed costs, improving animal health and welfare, and enhancing product quality, as well as contributing to the management, utilisation and valorisation of rockrose.
- Economic valorisation of the cardoon (*Cynara cardunculus*). Development of knowledge and technology aimed at high value-added solutions for the economic valorisation of the plant, commonly known as cardoon, particularly its leaves and flowers.

www.cebal.pt

fatima.duarte@cebal.pt



Ervital

Ervital was born in 1997 in the heart of the Montemuro Mountains and is dedicated to producing and commercializing organic herbal infusions and spices of exceptional quality.

The organic herbal infusions and spices that Ervital produces, are obtained in the special mountain ecology and environment that exists in the Montemuro ecosystem. Which, according to "Rede Natura 2000" has an elevated biodiversity and is free of any source of pollution. Ervital herbs are produced using the techniques, processes and rules of organic farming, and the fields are situated at about 1000 meters above sea level.

Over the years, the business has sustained a gradual evolution, contributed to regional development and improved quality of life for local people, namely through making use of and giving value to natural resources.

To achieve a high quality of products and services, and at the same time to satisfy the needs of clients, to respect nature and her history of caretakers, Ervital chose, from the very beginning, to employ the methods of organic farming.

<https://www.ervital.pt/bio@ervital.pt>



ervital
naturalmente.



Ervitas Catitas



Ervitas Catitas is a family-run adventure dedicated to organic farming in the heart of the Alentejo. For us, organic production is a way of life, not just an economic choice.

On the Alentejo plains, we grow aromatic and medicinal plants. Harvesting, drying and packaging are carried out on our premises, and to make the most of our plants' potential, we have set up an essential oil distillation unit. We also offer this distillation service to other producers. Also, we tend a traditional olive grove, from whose olives (organic) olive oil is produced by the Cooperativa dos Olivicultores de Borba (Olive Growers' Cooperative).

From our fruit, plants and olive oil, we make jams, biscuits and jellies.

We promote biodiversity in our fields by using sound agricultural practices, and recyclable materials in our packaging as much as possible.

Our headquarters are in Orada, Borba, and our farm is in Glória, Estremoz.

www.ervitascatitas.eu

ervitas.catitas@gmail.com



FCUL / Plantbiotech

The Plant Biotechnology Laboratory (PlantBiotech) is integrated into the Center for Ecology, Evolution and Environmental Changes (CE3C), a Research and Development (R&D) structure of the Faculty of Sciences of the University of Lisbon (CIÊNCIAS).

The main goal of PlantBiotech has been, using various tools and through extensive collaborative activity, both within and between national and international institutions, to contribute to addressing problems in plant biotechnology areas, in three main thematic areas due to their national socio-economic relevance: 1. Plant-environment relationship, 2. Quality control, and 3. Circular economy.

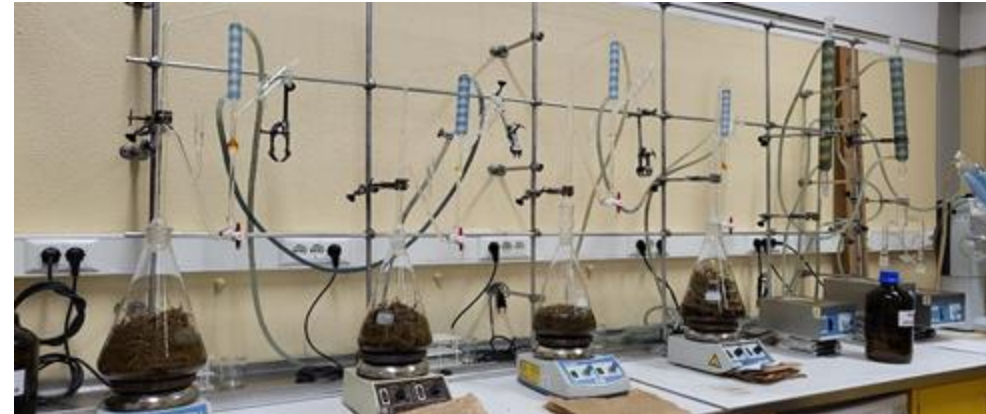
PlantBiotech's research activity has focused on:

- The valorization of resources obtained from medicinal and aromatic plants (MAP), fruit and vegetables, and underutilized forest biomass with pharmacological, cosmetic, nutraceutical and/or biopesticide properties, contributing to the zero-waste objective
- Host-insect vector interactions in pine wilt disease
- Characterization of volatile compounds from olive cultivars, to be tested in protection strategies against the olive fly
- Quality control, chemical characterization and determination of the biological potential of non-timber forest products, such as honey
- The use of phytochemicals in combating pests and diseases in agroforestry systems
- In vitro culture as an agroforestry experimental model for the study of plant pathologies.



<https://www.ce3c.pt/research/research-groups/towards-sustainable-and-resilient-ecosystems/plant-biotechnology>

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Fonte Penedo



In the heart of the Algarve, we cultivate around one hectare of land and grow a variety of organically certified herbs. From these herbs, we distill essential oils and floral waters in our copper still. In addition to our own production, we also harvest wild plants in the surrounding area, mainly Green Lavender (*Lavandula viridis*) and Bela Luz Thyme (*Thymus mastichina*) for the distillation of essential oils, and White Rockrose (*Cistus albidus*) for sale as tea. Due to the scale of our operation, we sell our products mainly to private customers via our online shop or through on-site sales.

www.fontepenedo.com

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Herbiotech Portugal

Herbiotech Portugal is part of the Herbiotech Group, which has over 15 years of experience in the organic production, processing, and marketing of aromatic and medicinal plants. With an approach based on an integrated value chain, the group operates across the entire spectrum from agricultural production to industrial processing and B2B supply for the organic food, animal nutrition, and dietary supplement sectors, with a presence in international markets. In Portugal, Herbiotech has been consolidating its operations through sourcing, developing local production, establishing partnerships with producers, and progressively strengthening its presence in the sector. The company aims to contribute to the promotion of aromatic and medicinal plants in Portugal by fostering a more structured, sustainable industry focused on both domestic and international markets.



HERBIOTECH
PORTUGAL

<https://www.herbiotech-aroma.com/>
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INIAV / BPGV – Banco Português de Germoplasma Vegetal

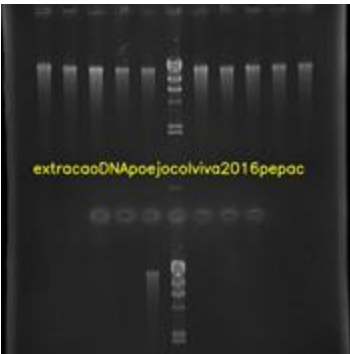


The Portuguese Gene Bank (BPGV), located in Braga and part of INIAV, is one of the world's largest infrastructures dedicated to the conservation of agricultural biodiversity. Created in 1977, it follows international FAO guidelines and currently preserves more than 47,000 samples representing around 150 species, including cereals, vegetables, fibers and an exceptional collection of Aromatic and Medicinal Plants (MAP).

Within the BPGV, MAP play a strategic role. They are studied, characterized and preserved to ensure their potential for agriculture, food, cosmetics, well-being, and emerging bio-based industries. Research programs include morphological, agronomic, chemical and biomolecular characterization, enabling a deep understanding of plant diversity and identification of high value accessions with agronomic or commercial interest. This work is carried out in collaboration with leading Portuguese scientific institutions, strengthening the innovation and competitiveness of the sector.

The BPGV MAP collection represents a unique Mediterranean genetic reservoir, supporting producers, companies and researchers searching for authenticity, quality and sustainability. In a rapidly growing global market, these species create opportunities for differentiated value chains while contributing to food security, rural development and the international recognition of Portugal as a territory of excellence in plant biodiversity.

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Instituto Politécnico de Castelo Branco (IPCB) Escola Superior Agrária

Polytechnic University of Castelo Branco (IPCB) is recognized for excellence in teaching and research, with a strong commitment to international collaboration through partnerships and research projects worldwide.



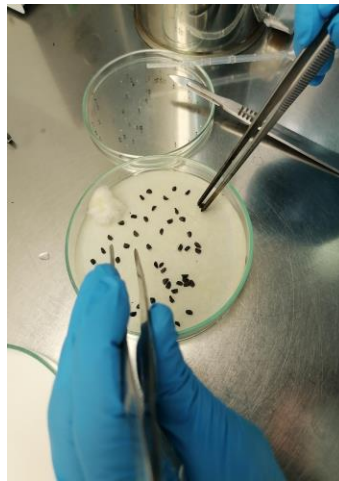
**Politécnico
Castelo Branco**
Escola Superior Agrária

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ipcb@ipcb.pt

Through its School of Agriculture (ESACB), IPCB integrates education with applied research and experimentation, working closely with national and local producers. A key focus is the valorization of plant biodiversity—particularly aromatic and medicinal species such as *Lavandula* (e.g., *L. stoechas* subsp. *luisieri*, *L. pedunculata*), *Cistus ladanifer* (rockrose), and *Thymus mastichina*.

Since 1988, ESACB has led national and international projects in this field, specializing in sustainable practices, agronomic characterization, and the promotion of traditional mountain culture. Activities include field trials, productivity studies, bioactive compound analysis, and the development of best practices for cultivation, harvesting, and post-harvest processes.

In 2021, IPCB_ESACB established a demonstration garden and arboretum of aromatic and medicinal plants, alongside a dedicated herbarium. These initiatives support the conservation of plant species relevant to Central Portugal and contribute to their economic valorization—fostering innovation, sustainability, and agricultural diversification in the Beira Interior region.



Instituto Politécnico de Portalegre (IPP)/ Escola Superior de Biociências de Elvas



The Polytechnic Institute of Portalegre (IPP) is a higher education institution (HEI) that includes four Schools, involved in teaching, training, research and other activities in their respective scientific, pedagogic, technical and artistic scope.

VALORIZA is a multidisciplinary Research Unit, whose scope of activity and strategic objectives converge towards the valorisation of endogenous resources, in compliance with the principles of circular economy, in low-density territories with a rural and cross-border matrix.

The Elvas Higher School of Biosciences (Plant Biology Laboratory) has been involved in research projects in the area of medicinal and aromatic plants (MAPs) since 2001 (Agro 34), focusing on morphological and agronomic characterization, ethnobotany, and the valorization of plant genetic resources in the Alentejo region. The main species studied are coriander, oregano, but also pennyroyal and others. Currently, two research projects in the MAPs topic are in course (<https://gii.ipportalegre.pt/projetos-em-curso/>): Distill'Inno (Erasmus+) and PEPAC ConMelhorPAM.

[https://ipportalegre.pt/pt/
esbe@ipportalegre.pt](https://ipportalegre.pt/pt/esbe@ipportalegre.pt)



Labfit & Pharmapoli

Labfit & Pharmapoli play an active role in promoting aromatic and medicinal plants in Portugal, contributing to the development of an increasingly innovative, competitive and sustainable sector. Labfit stands out for its ability to transform scientific knowledge into high-value solutions, combining advanced laboratory analysis, safety assessment and specialised R&D. An ISO 13485-certified brand recognised as GLP-compliant, it operates to high standards of quality and rigour.

As leader of the INOVEP project, ten species of aromatic and medicinal plants were studied, through which extracts with high potential were identified. As a result, an innovative wound-healing prototype was developed, currently undergoing the international patenting process, reinforcing Portugal's position in the field of differentiated natural ingredients.

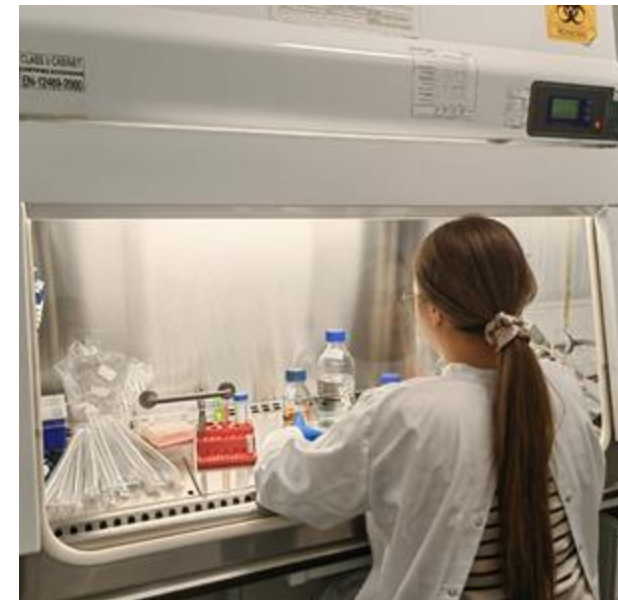
In parallel, the company has integrated new eco-safety laboratory methods, which enhance the reliability and competitiveness of the ingredients studied.

Pharmapoli complements this value chain as an industrial unit certified to ISO 13485 and ISO 22716 standards, transforming extracts and natural ingredients into high-quality end products, manufactured to exacting industrial standards and geared towards global markets.

Together, Labfit & Pharmapoli contribute to enhancing the potential of Portuguese aromatic plants, combining science, innovation and production capacity to serve a world-leading sector.



<https://www.labfit.pt/>
apo@labfit.pt



Monte do Milhano

At Monte do Milhano, we are dedicated to the organic production of aromatic plants, making the most of the unique characteristics of the Baixo Alentejo region. Among our main crops are lemon thyme and lavender (luisieri), species adapted to the Mediterranean climate and renowned for their intense aroma, rich phytochemical profile and versatility. We cultivate these plants using sustainable agricultural practices that promote soil health, ecosystem regeneration and the preservation of native flora, ensuring products of high quality and purity.

Our approach combines technical expertise, innovation and respect for biodiversity, ensuring responsible production in line with organic farming standards.

In addition, we also produce arbutus berries and honey, adhering to the same principles of sustainability and quality that define our project.



MONTE DO
MILHANO

www.montedomilhano.pt
contacto@montedomilhano.pt



Pássaro de Ervas



Sells organically grown aromatic and medicinal plants, spices and teas from various continents. It works with farmers to develop production and product quality. It investigates economic sustainability and value creation. It promotes lasting and supportive social relationships. It respects the environment. It participates in commercial partnerships and knowledge-sharing initiatives with other companies and institutions, both domestic and international.

www.passaro-de-ervas.pt
info@passaro-de-ervas.pt

Universidade de Coimbra / Faculdade de Farmácia

www.uc.pt
cavaleir@ff.uc.pt



The University of Coimbra, one of the oldest universities in Europe, aims the creation, critical analysis, transfer and dissemination of culture, science and technology. Through research, teaching and the provision of services to the community, it contributes to economic and social development, environmental protection, promotion of social justice, and consolidation of a knowledge-based sovereignty.

For centuries the study of aromatic and medicinal plants, as their products especially essential oils, has been subject of research through the Faculty of Pharmacy, integrating different fields of sciences, from the biology (botany, physiology), chemistry (phytochemistry, analytical), pharmacology, toxicology or regulatory sciences.

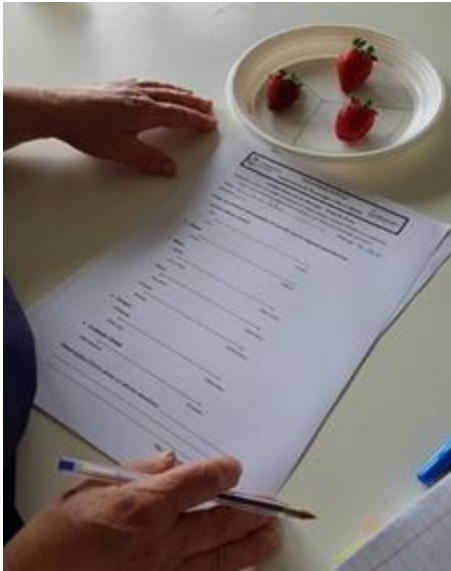
Detailed studies on the compositions of essential oils and extracts as well on their significance (chemosystematics, drug discovery, practices of medicine, safe use, etc.), are published in the leading scientific journals in the field.

Besides the educational mission in the context of the Pharmaceutical Sciences, the Faculty of Pharmacy is also strongly committed to the education on Aromatic and Medicinal Plants topics. It offers specialized training at different levels (PhD in Pharmacognosy, MSc in Herbal Medicines and Supplements, specialization (e-learning) on Aromatic Plants and Essential Oils. The laboratories are also open to the community for the establishment of research partnerships, or to provide specialized services (normalization, quality assessment)



PLANTAS
AROMÁTICAS E
ÓLEOS ESSENCIAIS

Univ Évora / MED Instituto Mediterrâneo Agricultura, Ambiente e Desenvolvimento



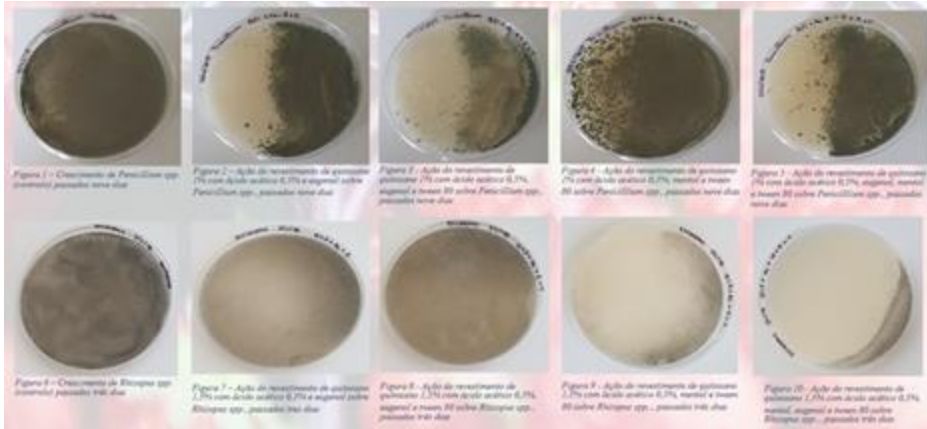
MED – Mediterranean Institute for Agriculture, Environment and Development is a multi & transdisciplinary R&D Unit located in Southern Portugal.

As Portugal's largest research centre dedicated to agriculture, environment, and sustainable development in Mediterranean regions, MED is headquartered at the University of Évora, with research poles in Beja (CEBAL) and Faro (University of Algarve).

Bringing together over 400 researchers from diverse scientific fields, MED is driven by a shared mission: to promote ecosystem sustainability, food safety, and territorial cohesion.

Recognised as Excellent by the Portuguese National Foundation for Science and Technology, MED works closely with farmers, local communities, and policymakers to co-create knowledge and develop innovative, science-based solutions to Mediterranean challenges— from agricultural production and animal health to biodiversity conservation, Mediterranean diet, and climate change adaptation.

<https://med.uevora.pt>
med@uevora.pt



AlBread – Aromatic plants from Alentejo, probiotics and acorn flower for the development of functional bread

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Motivation: Bread is one of the most popular and ancient foods in the world, with a strong presence in the daily lives of populations due to easy access to the food. The consumer's concentration of the need to maintain high health standards, has led to the development of the so-called "functional bread". In this sense, the use of essential oils and probiotic microorganisms is seen as essential, because of their good biological activities and beneficial impact on human health. On the other hand, the use of gluten-free flour has gained increasing attention. In the last years, the acorn flower is an excellent alternative to conventional flours, yet little explored. The integration of these good ingredients from the Alentejo region, essential oils extracted from aromatic and medicinal plants and acorn, intends to contribute to the development of an innovative proposal of functional bread with significant positive results in human health, economic valorisation of resources, environmental and social impact, due to the maintaining of Alentejo, from where it obtained the acorn and the aromatic and medicinal plants.

Contrast:

- Substrate for people with food intolerances
- Promote food digestibility
- Enhanced creaminess
- Have value-added product with social/economic impact
- Gluten free
- Valorisation of a natural resource

Objectives:

- The objectives of this project are to develop an innovative concept of functional bread integrating essential oils, probiotic microorganisms, and acorn flour as key ingredients. This aims to:
 - Enhance the nutritional and health benefits of bread through the inclusion of bioactive compounds from essential oils and probiotics.
 - Promote the use of acorn flour as a gluten-free and underutilized alternative, contributing to the economic valorisation of endogenous resources from the Alentejo region.
 - Optimize the functional properties of the bread, ensuring the stability, release, and efficacy of encapsulated essential oils and probiotics during production and consumption.
 - Enhance sustainable practices by utilizing resources from the territory ecosystem, with positive environmental, social, and economic impacts.

Work Plan:

- Isolation and characterization of new varieties
- Genotype development
- Production of functional bread and its characterization
- Production of results
- Technical project management

TEAM:

- University of Coimbra
- CERES and ICBIR
- University of Algarve
- University of Évora
- ICAD

Financial Support:

- ERDF
- Fundo de "CoCo"
- ZCT

Thanks to Lita Caires' funding, we can bring this innovative concept of functional bread closer to reality, combining tradition, sustainability, and science to make a meaningful impact.

2024-2022 "Matéria aromática do Alentejo, probióticos e farinha de casca de amêijoas de pêscoço funcional"

Impact of Geographical Origin on the Quality and Composition of *Thymus mastichina* Essential Oil

Solange Magalhães¹, Margarida Oliveira¹, Isabela dos Anjos¹, Hugo Duarte^{1,2}, Célia Cabral¹, Carla Varela^{1,3}, Carlos Cavaleiro¹, Maria da Graça Rasteiro¹, Sandra Gonçalves¹, Anabela Romano¹, Bruno Medronho^{1,4}, Marta Laranjo¹, Miguel Elias¹, Maria Eduarda Potes¹, Ana Aguilheiro-Santos¹ and Luis Alves^{1,5}

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Motivation: This study investigates the impact of geographical origin on the physicochemical properties of essential oil extracted from *Thymus mastichina* (Thymus), focusing on samples from Évora, Faro, and Alentejo (Portugal), widely used in culinary, pharmaceutical, and food industries due to its therapeutic properties. *Thymus mastichina* essential oil's chemical profile is influenced by environmental factors, though the extent of this influence remains understudied. To address this knowledge gap, samples from these regions were analyzed to assess the variability of bioactive compounds, including phenols, terpenes, and antioxidants. The samples experienced detailed physicochemical analyses, including gas chromatography-mass spectrometry (GC-MS), to identify and quantify key components of the essential oil. Preliminary results indicate significant variations in chemical composition among the regions, suggesting that factors such as local climate and soil type play a direct role in shaping the properties of *Thymus mastichina* essential oil. This study provides a deeper understanding of how geographical origin influences the quality and therapeutic potential of essential oils, offering valuable insights for the development of region-specific products with tailored properties.

Thymus mastichina

- Botanical name: *Thymus mastichina*
- Family: Lamiaceae

The aromatic plant is a semi-woody shrub that grows up to 50 cm tall and is characterized by simple and opposite leaves and lobulate flower groups in a flower head or capitula, which blossom from April to June. 1 mestrinho can be found in single, uncultivated, natural, and riparian lands and in dry stony open places, occur in calcareous regions, being very resistant to frost, drought, and pests. 1 mestrinho is known for its strong exsiccative odour and it has been used for various health conditions due to its antispasmodic, digestive, antineurotic, and antiseptic effects [1].

Protocol:

- Extraction of essential oils from *Thymus mastichina* collected from three different sources.
- Purify the extraction process using distillation methods.
- Characterize the extracted essential oils using GC-MS (Gas Chromatography-Mass Spectrometry).

Result and some conclusions:

