



BPGV Mission and Activities



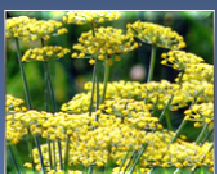
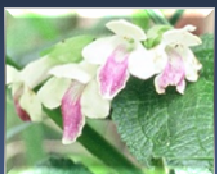
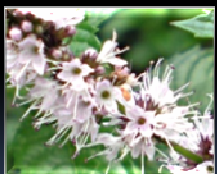
Banco Português de Germoplasma Vegetal (BPGV)



BPGV is located in Braga, with 8 ha of agricultural area, used entirely for the development of its mission

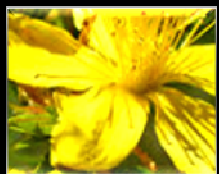
Banco Português de Germoplasma Vegetal (BPGV)



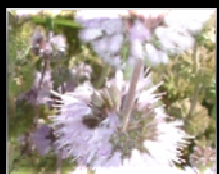


MISSION

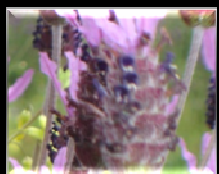
Plant Genetic Resources collection, conservation, evaluation, documentation and valorisation as a part of the National genetic resources Conservation System, ensuring biological diversity and sustainable use for agriculture in the present and future



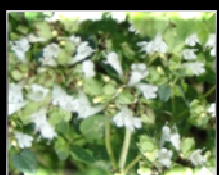
Banco Português de Germoplasma Vegetal (BPGV)



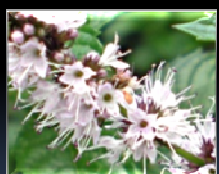
HISTORY



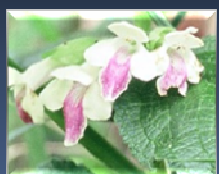
- Initiated in 1977



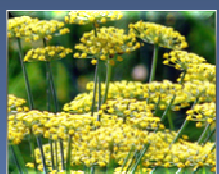
- Collecting and conservation of landraces from the major crops for Food and Agriculture



- *Ex situ* conservation of 42.203 accessions representing 155 Species and 90 Genus



- Medium and Long term Conservation, field collections, *in vitro* and cryopreservation





Banco Português de Germoplasma Vegetal (BPGV)

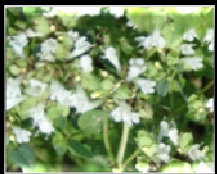


602 Accessions in Fields collections



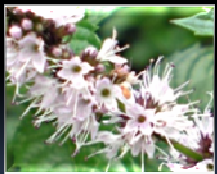
234 Accessions *In Vitro*:

(227 *A. sativum* L.; 2 *A. ascallonicum* L. and 5 *A. ampeloprasum* L.)

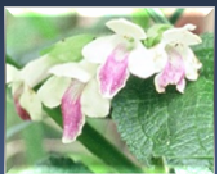


537 Accessions Genome collection:

(323 *Allium* spp., 118 *Phaseolus vulgaris* L. and 96 *Zea mays* L.)



9.295 Accessions duplicated from Nacional Institutions

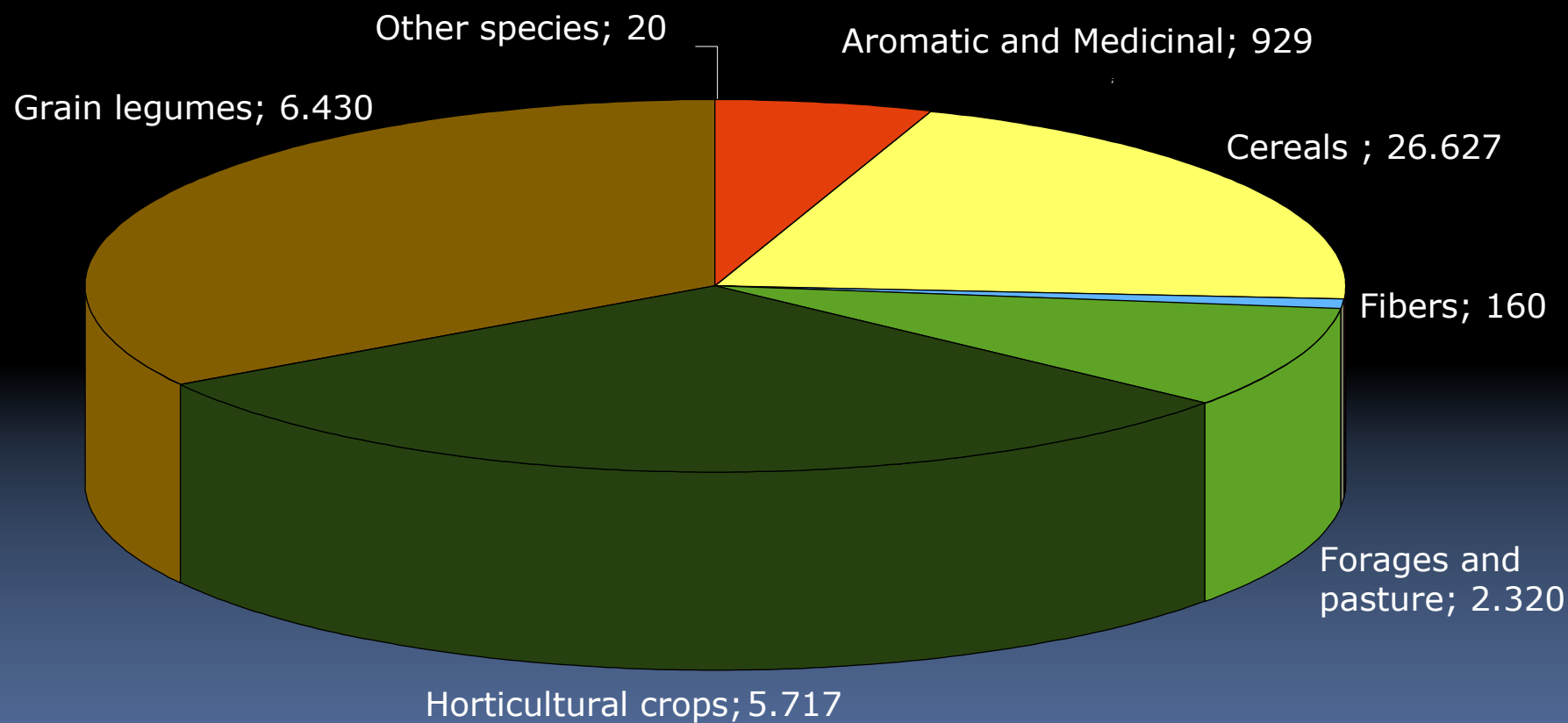


748 Accessions Duplicated from European GeneBanks



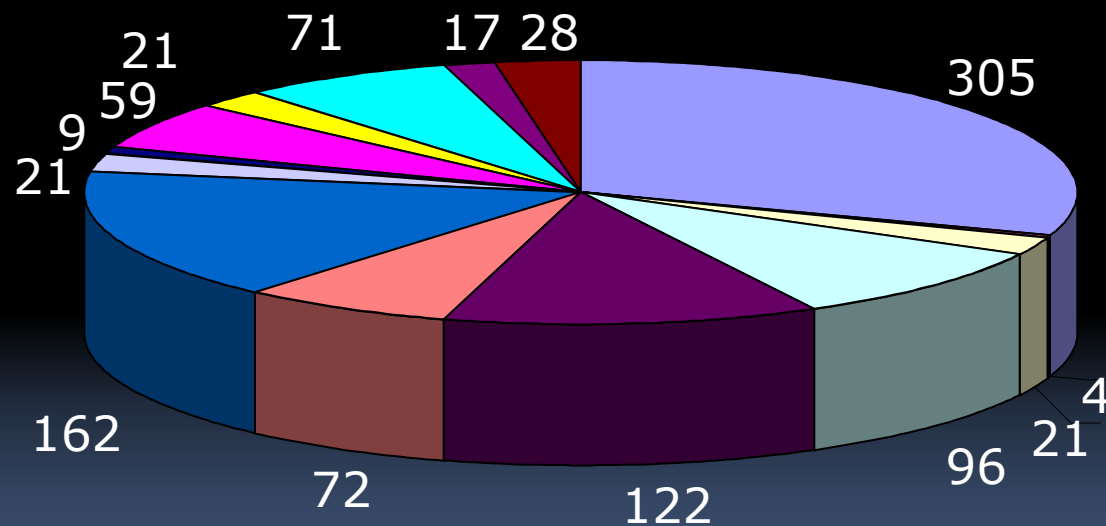
Banco Português de Germoplasma Vegetal (BPGV)

Ex situ conservation Number of Accessions

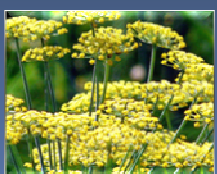
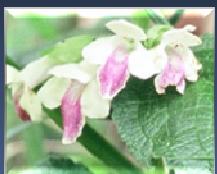
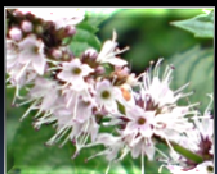
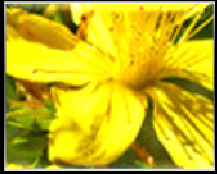


Banco Português de Germoplasma Vegetal (BPGV)

MAP CONSERVATION



- *Allium sativum* L.
- *Anthemis nobilis* L.
- *Apium graveolens* L.
- *Coriandrum sativum* L.
- *Daucus* sp.
- *Foeniculum vulgare* L.
- *Humulus lupulus* L.
- *Hypericum* sp.
- *Mentha aquatica* L.
- *Mentha pulegium* L.
- *Origanum vulgare* L. ssp. *virens*
- *Petroselinum crispum* Mill. A. W. Hill
- *Thymus caespititius* Brot.
- *Lavandula* sp.



BPGV ACTIVITIES

COLLECTING MISSIONS

Landraces - major crops



COLLECTING MISSIONS

crop wild relatives (CWR)









ETHNOBOTANICAL SURVEYS



ETHNOGRAPHIC SURVEYS



Camisas de linho de homem e de mulher, usadas outrora pelos lavandeiros na região de Guimarães. São bordadas a ponto de cantôfo.

ITINERARY FOR CONSERVATION

Registration



Cleaning



moisture content



Germination



Dehydration



Weighing



Packaging



Sealing



EX SITU CONSERVATION

Medium term

Long term



FIELD COLLECTIONS



Allium sativum L.



Mentha aquatica L.



Mentha pulegium L.



Humulus lupulus L.



Origanum vulgare L. ssp *virens*



Thymus caespititius Brot

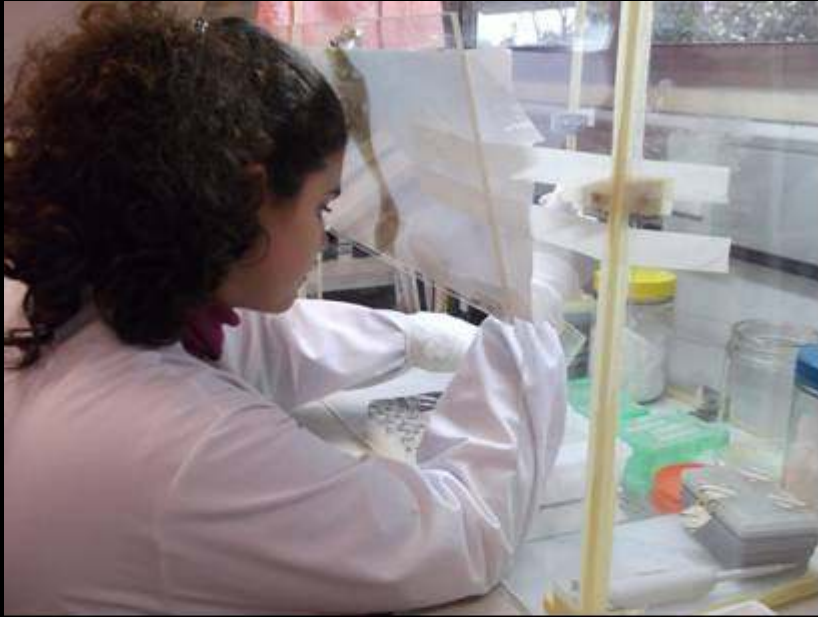
IN VITRO CONSERVATION



MORFOLOGICAL CHARACTERIZATION



MOLECULAR CHARACTERIZATION



DOCUMENTATION DATA BASE



Nº	ESP.	INDIC.	LOCAL	DT. COL.	N.º COL.	N.º	N.º	N.º
10001	Pinus	Pinus	Pinus	10/10/1990	10001	10001	10001	10001
10002	Pinus	Pinus	Pinus	10/10/1990	10002	10002	10002	10002
10003	Pinus	Pinus	Pinus	10/10/1990	10003	10003	10003	10003
10004	Pinus	Pinus	Pinus	10/10/1990	10004	10004	10004	10004
10005	Pinus	Pinus	Pinus	10/10/1990	10005	10005	10005	10005

Base de Dados Herbario

- Introdução Via Fichas de Trabalho
- Introdução Via Dados
- Introdução Via Base de Dados
- Extracção de Dados
- Consulta Base de Dados

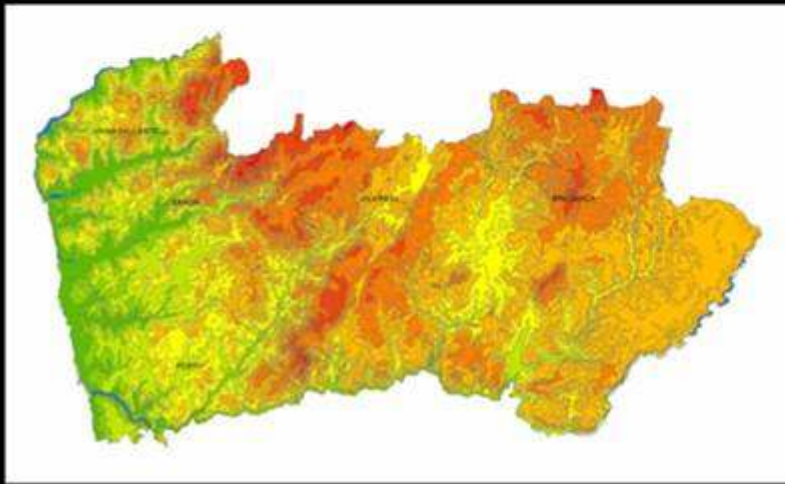
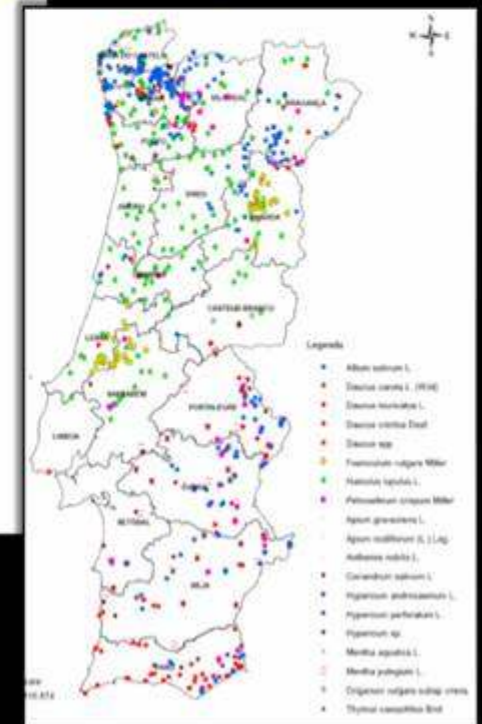
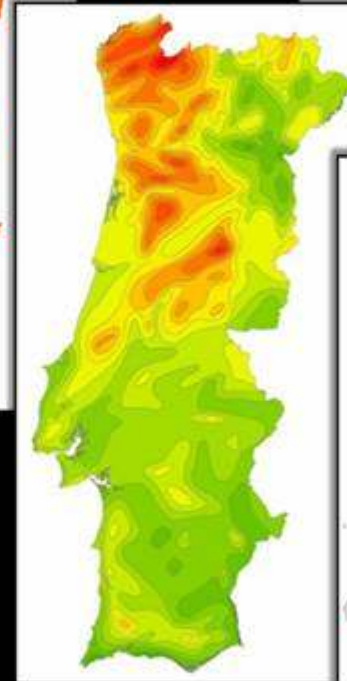
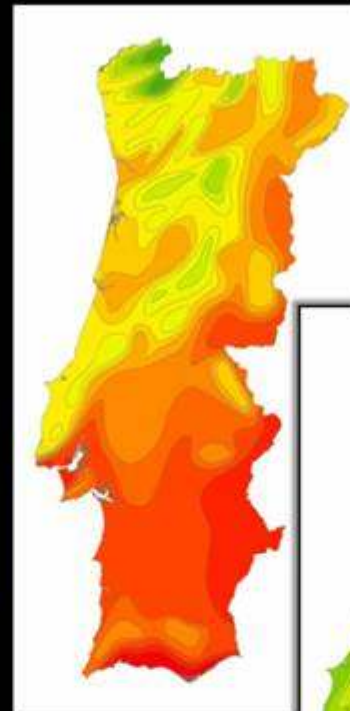
BD In Vitro

- Introdução Via Petri-dish ou Placas
- Introdução Via Culturas In Vitro
- Introdução Via Lista
- Introdução Via Petri-dish 1
- Introdução Via Petri-dish 2
- Consulta Base de Dados

BD Coleção de ADN

- Introdução Via Coleção de ADN
- Introdução Via Dados em Documento
- Introdução Via Lista de Espécies
- Introdução Via Petri-dish
- Consulta Base de Dados

GEOGRAPHICAL INFORMATION SYSTEM





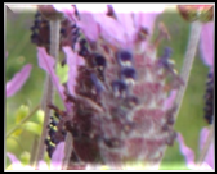




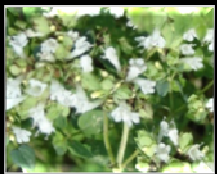
STATE OF THE ART



Mediterranean Region

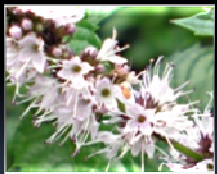


The Portuguese Flora is rich in aromatic and medicinal species

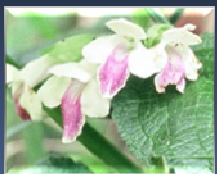


3800 species of vegetation

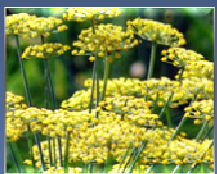
500 are aromatic and medicinal



Main Families



Apiaceae, Asteraceae, Lamiaceae, Mirtaceae, Oleaceae, Liliaceae, Rosaceae, Leguminosae, Rutaceae, Hipericaeae, Pinaceae, Cupressaceae, Lauraceae, e Malvaceae

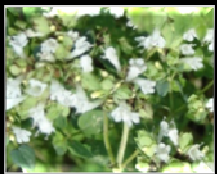




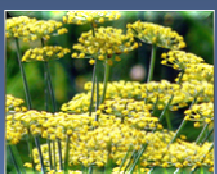
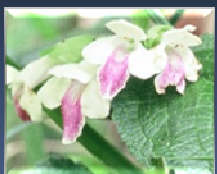
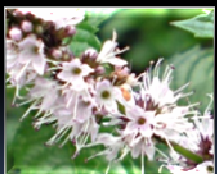
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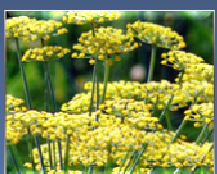
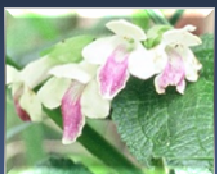
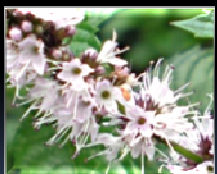
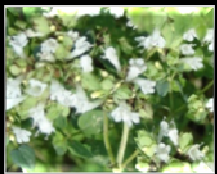
In the past few decades, research programmes on MAP GR in Portugal have been focusing on biochemical evaluation of wild material.



In the last decade, efforts have been made to preserve this genetic material *in situ* and *ex situ*, along with morphological and chemical evaluation and ethnobotanical studies.



STATE OF THE ART



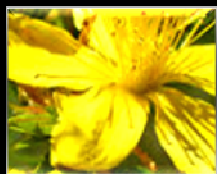
Flora with endemic species are often very vulnerable to ecological niches

Traditional utilization

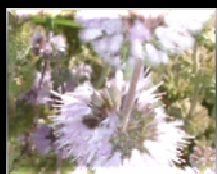
Cultural value

Ethnobotanical knowledge

Wild harvesting



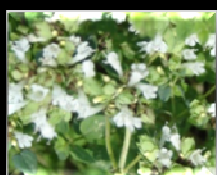
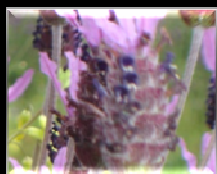
TRAINING IN PORTUGAL



Graduated students

MAP Production, oil extraction and commercialization

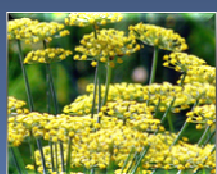
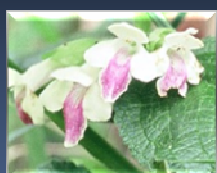
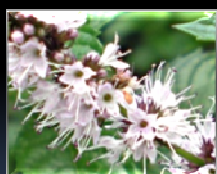
Genetic Resources Conservation, including MAP



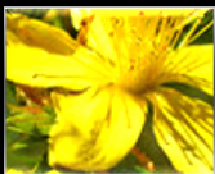
Plant wild collectors and farmers

MAP Organic Production

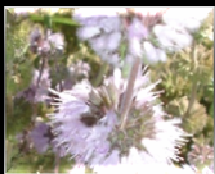
MAP Propagation Methods and Techniques



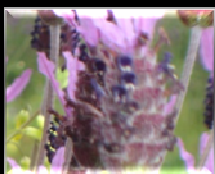
BPGV PROJECTS



1997 – 2000. Melhoramento do lúpulo (*Humulus lupulus* L.) por selecção de novas cultivares e por engenharia genética para indução de resistência contra vírus e/ou fungos

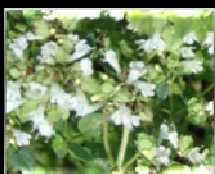


2001 – 2004. Etnobotânica, o uso e a gestão das plantas aromáticas e medicinais e a sua utilização sustentável como contributo para a valorização do meio rural

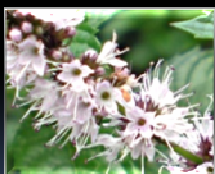


2001 – 2002. Characterization and Collection of *Daucus* Germoplasm

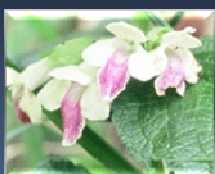
2001 – 2004. Avaliação, conservação e obtenção de material isento de vírus de populações regionais de *Allium*



2005 – 2006. Plantas aromáticas e medicinais em modo de produção biológico – Programa de dinamização para a introdução / produção de plantas aromáticas e medicinais do EDM

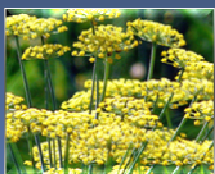


2004 – 2007. Conservação *in situ* em áreas protegidas e no campo do agricultor: estratégias complementares da conservação da agrobiodiversidade



2004 – 2007. Rede Nacional para a Conservação e Utilização Sustentável das Plantas Aromáticas e Medicinais.

2009-2010. Conservation and characterization of oregano (*Origanum vulgare* L.) wild populations in South - Eastern of Europe




2008 – 2011. Recuperação e conservação de recursos fitogenéticos de espécies agrícolas e de interesse paisagístico, Alentejo and Extremadura.

Medicinal and Aromatic Plants Working Group

■ Useful links

Report of a Working Group on Medicinal and Aromatic Plants. Second Meeting, 16-18 December 2004, Strumica, Macedonia (FYR) and Third Meeting, 26-28 June 2007, Olomouc, Czech Republic

 **MAP 2nd and 3rd**
(PDF file 2558KB)

■ **Workplan agreed in June 2007**



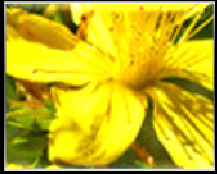
- ▶ Recent events
- ▶ Background information
- ▶ Scope of the WG activities
- ▶ European Status of MAPs
- ▶ Conservation programmes
- ▶ Long-term tasks

■ Recent events ▲

- The Medicinal and Aromatic Plants Working Group held its 4th meeting at Kuşadası, Turkey on 29 September - 1 October 2009.
 - ▶ **Draft report**
 - ▶ **Presentations given during the meeting.**

■ Background information ▲

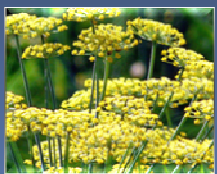
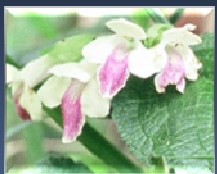
The proposal to establish a Working Group on Medicinal and Aromatic Plants (MAPs) was advanced at the first meeting of the Minor Crops Network Coordinating Group, in June 1999 in Turku, Finland. During its eighth meeting, in October 2001, the ECPGR Steering Committee agreed on the establishment of this Working Group. The MAP Working Group met for its first time in Gozd Martuljek, Slovenia, September 2002. A second meeting was held in Skopje, Macedonia, 16-18 December 2004, jointly with the SEEDNet MAP Working Group meeting. The third meeting of the WG took place in Olomouc, Czech Republic, on 26-28 June 2007. (See: report of the



MAP Companies in Portugal



- Ervital
- Cantinho das Aromáticas
- Vitacress
- Green Planet
- Segredo da Planta
- Socidestilda
- Planalto Dourado
- Bela Luz ®
- Vale Côvo
- RPC Aroma





Thank you for your attention

