

SUSTAINABLE WILD HARVESTING - State of the art

COMMERCIAL USE

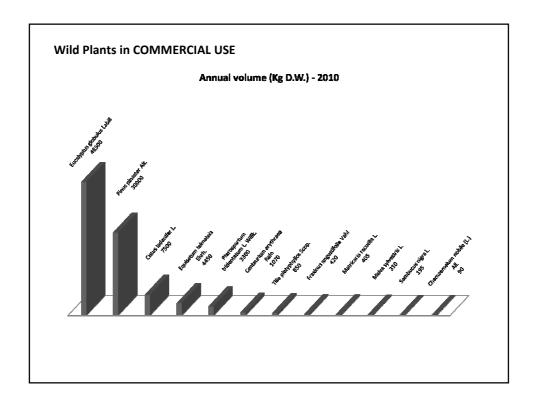
Species	Collected part
Eucalyptus globulus Labill	Leaves
Pinus pinaster Ait. ^{I)}	Buds, needles (leaves)
Cistus ladanifer L.	Flowering shoots
Equisetum telmateia Ehrh.	Sterile stems
Pterospartum tridentatum L. Willk. ")	Flowering shoots, flowers
Centaurium erythraea Rafn	Flowering shoots
Tilia platyphyllos Scop. ¹⁾	Inflorescences, inner bark
Fraxinus angustifolia Vahl	Leaves, sometimes bark
Matricaria recutita L.	Flower heads
Malva sylvestris L. ^{III)}	Leaves and flowers
Sambucus nigra L. ^{I)}	Flowers, sometimes fruits and bark
Chamaemelum nobile (L.) All.	Flower heads

Uses/purposes Medicinal and Aromatic

I) And ornamental

II) Medicinal and cooking

III) Medicinal



Species	Collection method
Eucalyptus globulus Labill	☐The leaves are gathered and sent to the distillery.
Pinus pinaster Ait.	☐The Buds and needles (leaves) are gathered and sent to the distillery
Cistus ladanifer L.	☐The leaves are gathered and sent to the distillery.
Equisetum telmateia Ehrh.	☐The sterile stems are collected (this species is an invasive weed in some areas), chopped and dried for use in herbal tisanes

Species	Collection method
Pterospartum tridentatum L. Willk.	There are several methods of collection: i)Pick the flowers by hand and dry them; ii)Cut the flowering branches and dry them, flail them to remove the flowers which are then separated; iii)Just chop the flowering branches and then they are dried; iv)To collect the young branches (no flowers) dry them and then either chop them or grind them into powder (for culinary use).
Centaurium erythraea Rafn	☐There are several methods of collection: i)Pick the flowers by hand and dry; ii)Cut flowering branches, dry, remove flowers; iii)Cut flowering flowers and dry.
Tilia platyphyllos Scop.	☐ Two methods: i)Gather the flowers by hand from the trees; ii)Chop the branches and then gather the flowers from the branches.
Fraxinus angustifolia Vahl	☐The ash tree branches are cut down then the leaves are removed and dried.

Species	Collection method
Matricaria recutita L.	☐ Two methods: i) The flowers are picked by hand in the abandoned fields; ii) The plant is cut down and then the flowers are removed.
Malva sylvestris L.	☐The section of the plant that has no rust is harvested, chopped and dried or harvested and dried.
Sambucus nigra L.	☐ The flowers are picked and dried in the sun as soon as possible. Turned over to insure the fast drying(given the elevated level of humidity present in the flowers it is important that at the beginning of the drying process can be sufficient ventilation and a higher temperature). We should be attentive not to allow humid night air to come in contact with the dried flowers.
Chamaemelum nobile (L.) All.	☐The flowers are picked and dried in the sun as soon as possible

Species	Collected part	Importance Conservation	Conservation status/Legal protection
Arnica montana L.	Flowers and roots	Conservation problems	Threatened species (E)/Yes
Asparagus acutifolius L.	Young shoots		No
Asphodelus ramosus L.	Rhizome		No
Foeniculum vulgare Mill.	Fruits, sometimes roots and leaves		No
Fragaria vesca L.	Roots		No
Gentiana lutea L.	Rhizomes and roots	Conservation problems	Threatened species (E)/Yes
Hypericum androsaemum L.	Flowering shoots	Conservation problems	No
Ilex aquilifolium L.	Leaves and berries	Conservation problems	Threatened species (E)/Yes
Lavandula stoechas L.	Flowering shoots, flowers		No
Lavandula viridis L´Hér	Flowering shoots, flowers	Conservation problems	No

Species	Collected part	Importance Conservation	Conservation status/Legal protection
Melilitis melissophyllum L.	Shoots, leves and seeds	Conservation problems	No
Mentha cervina L.	Flowering shoots	Conservation problems	No
Origanum vulgare L. subsp. virens (Hoffm. & Link)	Flowering shoots	Conservation problems	No
Prunus lusitanica L.	Leaves	Conservation problems	Threatened species (E)/Yes
Ruscus aculeatus L.	Rhizomes and roots, shoots		Yes
Thymbra capitata L.	Flowering shoots; Leaves		No
Thymus caespititius Brot.	Flowering shoots	Conservation problems	Threatened species (V)/No
Thymus mastichina L.	Flowering shoots		No
Tuberaria lignosa (Sweet) Samp.	Roots, shoots and inflorescences		No
Vaccinium myrtillus L.	Leaves and fruits	Conservation problems	Threatened species (V)/No

Species	Collection method
Arnica montana L.	oPick the whole plant
Asparagus acutifolius L.	Cut young shoots
Asphodelus ramosus L.	oPick the whole plant
Foeniculum vulgare Mill.	•Cut the young plants in the spring, cut aerial part, the seeds are harvested to use in the cooking and to flavor liqueurs.
Fragaria vescaL.	•Pck the whole plant
Gentiana lutea L.	oPick the whole plant
Hypericum androsaemum L.	○Cut aerial part
Ilex aquilifolium L.	 At Christmas time the leaves and berries are used for ornamental purposes.
Lavandula stoechas L.	 Two methods of collection: i) Cut the flowering branches, dry them and then remove the flowers; ii) Cut plants, dry them and after separate the flowering branches
Lavandula viridis L´Hér	 Two methods of collection: i) Cut the flowering branches and dry them then remove the flowers; ii) Cut plants, dry and after separate the flowering branches

Species	Collection method
Melilitis melissophyllum L.	○Cut the aerial part of the plant
Mentha cervina L.	○Pick the whole plant
Origanum vulgare L. subsp. virens (Hoffm. & Link)	 Two methods of collection: i) Cut the flowering branches and dry them then remove the flowers; ii) Cut plants, dry and after separate flowering branches
Prunus Iusitanica L.	Collect leaves or stems and after remove the leaves
Ruscus aculeatus L.	○Cut the arerial part
Thymbra capitata L.	○Collect the flowering shoots and leaves; cut aerial part
Thymus caespititius Brot.	○Cut aerial part or pick whole plant
Thymus mastichina L.	oCut aerial part or pick whole plant
Tuberaria lignosa (Sweet) Samp.	○Cut whole plant
Vaccinium myrtillus L.	 Three methods of collection: i) Collect fruits and leaves by hand; ii) Cut flowering shoots, after separate fruits and leaves; iii) Cut whole plant and after separate the plant parts

Species	Sustainability		
✓ Arnica montana L.	It is against the law to harvest. Rare plant.		
√ Asparagus acutifolius L.	unknown		
✓ Asphodelus ramosus L.	unknown		
✓ Foeniculum vulgare Mill.	a very common species		
√ Fragaria vescaL.	unknown		
✓ Gentiana lutea L.	It is against the law to harvest. Rare plant.		
✓ Hypericum androsaemum L.	people have in their gardens for both medicinal and ornamental purposes.		
√ Ilex aquilifolium L.	It is against the law to harvest. Rare plant.		
✓ Lavandula stoechas L.	a very common species		
√Lavandula viridis L´Hér	unknown		
✓ Melilitis melissophyllum L.	unknown		
✓ Mentha cervina L.	unknown		
✓ Origanum vulgare L. subsp. virens (Hoffm. & Link)	a very common species		
✓ Prunus Iusitanica L.	unknown		
✓ Ruscus aculeatus L.	unknown		
✓ Thymbra capitata L.	unknown		
√ Thymus caespititius Brot.	a very common species		
√ Thymus mastichina L.	unknown		
√ Tuberaria lignosa (Sweet) Samp.	unknown		
√ Vaccinium myrtillus L.	unknown		

COMMERCIAL USE and NON-COMMERCIAL USE

EXISTING STUDIES and GUIDELINES

Research Studies

have been done in several Institutions in the country

PLANT POPULATION MONITORING

There is $\boldsymbol{\mathsf{NO}}$ monitoring system for plant population.

SUSTAINABILITY There are **NO** measures adopted for sustainability

of Wild Harvesting

Normative	Scale	Brief description	Wild collected species	Control system	Adopted by collectors /Reasons
Resolução do Conselho de Ministros n.º 11- B/2011	REG	Protection area type 1 Odemira and biogenetic reserve of Sagres	Cistus ladanifer L. ssp. sulcatus	unknown	unknown
Anexo B-V Directiva 92/43/CEE /Decreto-Lei nº 140/99/DL 49/2005)	EU; NAT	WH and exploitation may be subject to management measures	Arnica montana L., Genciana lutea L., Ruscus aculeatus L.	unknown	unknown
Decreto-Lei nº 423/89; Decreto-Lei n.º 254/2009	NAT	WH not permited	llex aquilifolium L.	unknown	unknown
Anexo B-II Directiva 92/43/CEE/Decreto- Lei nº 140/99/DL 49/2005)	EU; NAT	Specifics conservation reserves	Prunus lusitanica L. subsp. azorica	unknown	unknown

Guideline or certification	Brief description	Wild collected species	Control system	Adopted by collectors/Reasons
➤Yes ➤By certified companies ➤A list guidelines provided by ECOCERT PORTUGAL	✓ Not close to sources of pollution - roads, cultivated fields. ✓ Dried with hygienic conditions.	For all species	Inspector visits to harvesting and drying sites.	Yes The collectors have persued that premise that plants used for health must be free of contaminations

SWH TRAINING

EXISTING TRAINING

Adult training	Year	Type of training	Type of training	Main topics teached	Type of learners	Number of learners
APDM (Associação para o Desenvolvimento do Concelho de Moura	2011 - 800 h (600 T + 200 P)	Financed (POPH))	Course	Social and personal Capacities (200 h) Managment Capacities (200 h) Professionalis Capacities (350 h) MAP historical, environmental, social and cultural, scientific, technological and marketing Ateliers Individual project (50 h)	General public: young and adults with conditions to be able to have MAP activity	12

NEED ON SWH AND FUTURE TRAINING

Which are the target stakeholders to be trained in order to really implement SWH? How should be the training to reach these stakeholders?

Please, rate each stakeholder from 1 to 6 (1 = most important, 6= less important) and tick an "X" below all the training actions that you consider optimal to reach them.

stakeholder	Importance (1 to 6)	Training actions								
		Regular training	Voluntary training	leaflets, posters, CD, DVD	technical documents	open seminars	mobile apps	media actions (TV, press)	on-line training	other (indicate which)
collectors	1	×	x	x	x	x	×		х	
forest owners	1	×	x	×	x	x	x	x	×	
companies	1	х	x	x	x	×	x	x	x	
wholesalers	1	x		x	×	×	x	×		
policy makers	2		x	×	x	x	x	x		
consumers	4		x	x	х	x	x			

 In your opinion, which stakeholders are the most interested in promoting SWH? And, in learning about SWH?

stakeholder	Promoting (1 to 6)	Learning (1 to 6)	Reasons
collectors	1	1	
forest owners	1	4	
companies	3	1	
wholesalers	6	4	
policy makers	3	1	
consumers	3	3	

NEED ON SWH AND FUTURE TRAINING

3. Which are the main factors affecting the SWH implementation?

factors	Advantatges	Disadvantatges	
Conservation	х		
Economics		х	
Social perception	х	х	

4. Is your organisation interested in doing adult training on SWH in the future?

Yes, BPGV is interested in doing adult training on SWH