

**Thymus saturejoides Coss. & Bal.**

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Labiatae

**Nomenclatural reference** 1126 World Checklist of Selected Plant Families, RBG Kew. [apps.kew.org/wcsp/home.do](http://apps.kew.org/wcsp/home.do)

**Remarks Taxonomy**

The name was originally published as "Thymus satureioides" by Cosson & Balansa in Bull.Soc.Bot.France 20:253.

According to rule 60.5 of the ICBN the first "i" has to be changed to "j" for orthographic reasons.

2 subspecies are recognized: subsp. saturejoides and subsp. commutatus

During collection, identification to species level is difficult and indiscriminant collection takes place, e.g. Morocco: "Even though Thymus species collected are not yet identified at their species and sub-species level, we think that T. broussonetii and T. satureioides are the dominant species in our collection, since the sites in which they were collected correspond to their original habitat."

Morocco: "Thymus satureioides, which constitutes the bulk of exported Thyme, is wrongly treated as the common Thyme." [p.50]

**Reference**

1125 IPNI - International Plant Names Index. <http://www.ipni.org/ipni/plantnamesearchpage.do>

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1126 World Checklist of Selected Plant Families, RBG Kew. [apps.kew.org/wcsp/home.do](http://apps.kew.org/wcsp/home.do)

8978 Anon. (2008): National development strategy for the aromatic and medicinal plants sector. Morocco integrated agriculture and agribusiness program. USAID, s.loc. Retrieved from [http://pdf.usaid.gov/pdf\\_docs/PNADP091.pdf](http://pdf.usaid.gov/pdf_docs/PNADP091.pdf), viewed: 27.03.2013.

8991 Imane Thami Alami (2010): International status of selected Moroccan MAPs with market accessibility. Plants of Morocco's south and oasis. In: UNDP (ed.): Mainstreaming biodiversity into value chains for Mediterranean medicinal and aromatic plants. GEF Proposal. pp. 46-52. - GEF, Washington. Retrieved from [http://www.thegef.org/gef/sites/thegef.org/files/documents/document/Morocco\\_01\\_14\\_10.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/document/Morocco_01_14_10.pdf) viewed: 02.04.2013.

**Summary**

Distribution	Thymus saturejoides is an endemic species of Morocco, restricted to the High Atlas region of the country.
Legislation	The species is not protected by CITES.
Threat Category	Not assessed globally by IUCN. Not included in the 1998 national red list of Morocco.
Threat	(i) Populations are under pressure from collection for export, habitat loss, overgrazing, and droughts. (ii) Unsustainable collection practices (uprooting of entire plant). (iii) Risk of indiscriminant collection, since plants are often not identified to species level during collection.
Abundance	No published information on abundance.
Habitat	Found in forest clearings and in mattoral (= macchia) vegetation.
Regeneration	No published information on vegetative regeneration.
Reproduction	No published information on reproductive systems.
Lifeform	Semi-shrub, up to 30m in height.
Plant Parts	The herb of the plant is used.
Use	Moroccan thyme is used as a traditional medicine in the form of infuses and decoctions to treat whooping cough, bronchitis and rheumatism. Antimicrobial and antispasmodic effects have been demonstrated.
Trade Scale	In Morocco it has been identified as a target plant in the development strategy for the medicinal and aromatic plants sector. Export figures from Morocco have been stable in recent years.

**Synonyms**

Name	Ref
Origanum saturejoides (Coss.) Kuntze	1126 World Checklist of Selected Plant Families, RBG Kew. <a href="http://apps.kew.org/wcsp/home.do">apps.kew.org/wcsp/home.do</a>
Thymus commutatus (Batt.) Batt.	1126
Thymus pseudomastichina (Ball) Murb.	1126

**Name Used in Pharmacopoeias and other References**

**Common Names**

Common Name	Val	Typ	Lang	Country	Region	Ref
Azukni		ver				8974 Aicha, N., Chendid Rachida, T. & El Mesk
Marokkanischer Thymian		ver	ger			1101 Hänsel, R. & al. (1992-1998): Hagers Han
Pizzathymian		ver	ger			1101
Tazouknite		ver				8975 Mehdioui, R., Chattou, Z. & El Houssine Z
Thym sarriette		ver	fre			8975

## Distribution Range

Distribution Range	Ref
Atlas saharien, Anti Atlas, Haut Atlas, Moyen Atlas, Maroc atlantique moyen	8989 Fennane, M., Ibn Tattou, M., Ouyahya, A. & El Qualidi, J. (2007): Flore pratique du Maroc. Vo. 2. Institut Scientifique, Rabat.
endemic to Morocco	1147 Euro+Med PlantBase. - <a href="http://ww2.bgbm.org/EuroPlusMed/query.asp">http://ww2.bgbm.org/EuroPlusMed/query.asp</a>
endemic to Morocco	1126 World Checklist of Selected Plant Families, RBG Kew. <a href="https://apps.kew.org/wcsp/home.do">apps.kew.org/wcsp/home.do</a>
The 1986 printed version of the Med-Checklist lists Algeria as a range state. This information is superseded by the more recent data in the Euro+Med Checklist [1147].	2214 Greuter, W. & al. (1984-1989): Med-Checklist, vols. 1,3,4.

## Distribution

Continent	Region	ICC	Status	Free Text	Ref
2 Africa	20 Northern Africa		DZ		2214
			MA		2214
			MA native		1126
			MA native		1147
			MA native	"Sur y suroeste"	8971

## Abundance

## Ecology

TypeEc	ICC	Ecology	Ref
alti	MA	subsp. satorejoides: 350-1800m, subsp. commutatus 1000-2100m	8971 Morales Valverde, R. (1994): El
habit		High Atlas region	8972 Morales, R. (1997): Synopsis of
habit	MA	"Clairières des forets, matorrals, ermes; basses et moy. montagnes"	8989 Fennane, M., Ibn Tattou, M., Ou
habit	MA	In the Ouneine watershed in the High Atlas Mountains, T. satorejoides was found to be present and dominating in 8 out of 13 vegetation classes distinguished using satellite images.	8973 Klik, A., Kaitna, R. & Badraoui, I
repro		gynodioecious [Having bisexual flowers on some plants and only female flowers on other plants]	8359 Mabberley, D.J. (2008): The pla

## Life Form

Duration	Lifeform	Woodiness	Height	Remark	Ref
		woody			8972 Morales, R. (1997): Synopsis o
	semi-shrub		up to 30cm	"matilla"	8971 Morales Valverde, R. (1994): E
perennial	shrub				6198 Lange, D. (1996): MAPCIS. M

## Population Status / Threat Causes

TypePop	ICC	PopulationStatus	Remark	Ref
	MA	"Level of threat: medium to high; Factors involved: Over harvesting, unsustainable harvesting, habitat destruction" [p. 49]		8991 Imane Thami Alami (2010): Int
	MA	"Thymus broussonetii [...] is likely to disappear from Amsittene Forest because of the intensive collecting, if no protection measures are taken [...]. Thymus satoreioides, relatively abundant in Amsittene Forest, does not seem to suffer from this pressure. This, however, does not exclude the possibility that in the foreseeable future it will become threatened if its exploitation is not handled in a more reasonable manner."		8975 Mehdioui, R., Chattou, Z. & El
cause	MA	"Wildcrafting and cutting begin even before the plant flowers, and generally on clumps that are growing older and older, and shrinking by the pace of successive cuts" [p.49]		8991 Imane Thami Alami (2010): Int
cause	MA	"most Thyme growth areas are in the mountains that are also pressured by degradation factors (deforestation, overgrazing, erosion and climatic change impacts)" [p. 46]		8991
cause	MA	"tendency to pull out the entire plant, including its root"		8975 Mehdioui, R., Chattou, Z. & El
cause	MA	"Natural pressures: [...] Drought has become a structural element in the natural environment in the southern part of Morocco. [...] Human pressures: [...] They can be classified as follows: Collecting for traditional medicinal uses, Land clearing, Overgrazing, Marketing"		8973 Klik, A., Kaitna, R. & Badraoui,
cause	MA	"threatened due to [...] overexploitation"		8974 Aicha, N., Chendid Rachida, T

cause	MA	"Like Origanum, Thymus species are also threatened due to their overexploitation. The most exploited species is <i>T. satureioides</i> , which is widely exported as herbs or essential oil. The diversity of the other species was also degraded because of destruction of their ecosystem, (where they evolved) by human and animal activities. Thymus is more drought tolerant and could easily survive on rocky soils. Thus, we didn't face the same difficulties in finding them as that of Origanum, which require more soil fertility and humidity."	8979	Chaouki Al Faiz (ed.) (2007): E
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## Threat Categories

### Purpose of Use (standardised)

Purpose	ICC	Ref
Used as spice	6198	Lange, D. (1996): MAPCIS. Medicinal and Aromatic Plant Conservation Information System. - Dat

### Purpose of Use (free text)

ICC	Purpose	Ref
	"used as traditional medicine, in form of infuse and decoctions to treat whooping cough, bronchitis and rheumatism"	8974 Aicha, N., Chendid Rachida, T
	antimicrobial and antispasmodic effects have been demonstrated	8974 Aicha, N., Chendid Rachida, T

### Plant Parts Used

PlantPart (standardized entry)	Plant Part (free text)	Remark	Ref
herb			8979 Chaouki Al Faiz (ed.) (2007): E

### Scale and Trend of Trade

ICC	Utilization	Remark	Ref
	Lamiaceae: "The food industry is becoming increasingly interested in aromatic herbs, mainly of the Lamiaceae family due to growing consumer demands for healthy natural foods. In addition to the food industry, Lamiaceae herbs are also of high demand in dyeing, fragrances, cosmetics, beverages and smoking industries"		8974 Aicha, N., Chendid Rachida, T

### Trade

Type	ICC	Utilization	Ref
com	MA	"widely exported as herbs or essential oil"	8974 Aicha, N., Chendid Rachida, T
com	MA	essential oil	8978 Anon. (2008): National develop
com	MA	herb, essential oil	8979 Chaouki Al Faiz (ed.) (2007): E
exp	MA	"Thyme": 2005/6: 1.311t, 2006/7: 1.800t, 2007/8: 1.369t = stable [p. 47]	8991 Imane Thami Alami (2010): Int
exp	MA	Plants commonly used in Morocco for essentials oils and aromatic flavouring production: <i>Rosmarinus officinalis</i> , <i>Artemisia herba-alba</i> , <i>Cedrus atlantica</i> , <i>Myrtus communis</i> , <i>Origanum compactum</i> , <i>Origanum elongatum</i> , <i>Thymus satureioides</i> , <i>Laurus nobilis</i> , <i>Evernia prunastri</i> , <i>Evernia furfuracea</i> , <i>Ormenis mixta</i> , <i>Mentha pulegium</i>	8978 Anon. (2008): National develop
exp	MA	<i>T. satureioides</i> is mentioned in the USAID funded National Development Strategy for the Aromatic and Medicinal Plants Sector which aims to enable the sector to shift from supplying raw materials to a genuinely industrial sector.	8978

## Legislation

### Regulation

### Bibliography

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- 1126 World Checklist of Selected Plant Families, RBG Kew. [apps.kew.org/wcsp/home.do](http://apps.kew.org/wcsp/home.do)
- 1147 Euro+Med PlantBase. - <http://ww2.bgbm.org/EuroPlusMed/query.asp>
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## Abbreviations and Standards

ICC = ISO Country Codes Ref = literature reference

Altitude: Low / High = minimum and maximum limits of altitude range [m]

Legislation: Source Taxon = name of taxon as contained in legislation

### Utilization: TypeUtil

<i>TypeUtil</i>	<i>TypeUtilLong</i>
com	commodity
cul	cultivation
exp	export
har	harvest
imp	import
price	price
pur	purpose
rem	remark
sus	sustainability
tra	trade
trend	trend and scale of trade

### Distribution Status: Standard

<i>Status</i>	<i>Explanation</i>
chk	check entry
nat	native
int	introd., established
adv	introduced, not established
ocd	occurrence doubtful
unc	status unclear
ext	extinct
cul	cultivated
sou	source doubtful
ica	introduced (casual or naturalized)
don	doubtfully native
pex	(presumably) extinct
ali	casual alien
ina	introduced (naturalized)

### Common names: Type

<i>TypeShort</i>	<i>Type</i>
?	<unknown>
ayn	ayurvedic name
hom	homoeopathic name
pha	pharmaceutical name
scn	standardized common name
tra	trade name
ver	vernacular name

### Ecology: TypeEcol

<i>TypeEcol</i>	<i>Explanation</i>
alti	altitude
feed	feed
grow	growth rate
habit	habitat
morph	morphology
regen	regeneration
repro	reproduction
soil	soil