

***Teucrium polium* L.**
Lamiaceae



Compiled by: Dr. Driss Lamnauer
Edited by: Prof. Kamal Batanouny

■ **Morphological description**

It is a very polymorphous perennial plant 10-35 cm. high. The leaves are white, tomentose on both sides, with downwards rolled rounded-toothed margins. The flowers have a white or yellow corolla, in a globular inflorescence. The calyx is bell-shaped with 5 subequal flat, triangular or acuminate triangular teeth. The fruits are light-brown to dark-brown nutlets with a latticed surface. The plant gives off a pleasant aromatic smell; flowering takes place from April until June.

In Tunisian flora, *Teucrium polium* has three subspecies:

- subsp. *polium* with white flowers and a triangular-toothed calyx
- subsp. *gabesianum* with a nervure with a short mucro, yellow flowers, a calyx with narrow triangular teeth and a flexible, branching white indiment
- subsp. *flavovirens* with a lengthily mucronate nervure, yellow flowers, a calyx with narrow

***Teucrium polium* L.**, Sp. Pl. 566. 1753

Teucrium polium subsp. *album* (Miller) Breistr. in Bull. Soc. Bot. France 121: 65.; *Teucrium virescens* Pomel in Bull. Soc. Sci. Phys. Algérie 11: 115. 1874

Arabic: Gattaba, jâada, khayatit lajrah

French: Germandrée polium

English: Germander

triangular teeth and a stiff, branching yellow indiment.

It should be mentioned that for reasons of convenience the genus *Teucrium* includes aggregates formed by the grouping together of several species that are often confused, being usually very close to each other. Thus, Greuter et al. (1984) consider *Teucrium polium* L. to be one of the 20 species belonging to the aggregate called *Teucrium polium* aggr., which changes the status of the three subspecies mentioned in Tunisia by Pottier Alapetite (1981). The species and subspecies developing in Tunisia and belonging to this *Teucrium polium* aggr. aggregate are:

Teucrium capitatum L. Sp. Pl. 566. 1753 = *Teucrium polium* subsp. *capitatum* (L.) Arcangeli, Comp. Fl. Ital.: 559. 1882

Teucrium lusitanicum Schreber, Pl. Verticill. Unilab.: 47. 1773 = *Teucrium polium* subsp. *mairei* Maire in

Bull. Soc. Hist. Nat. Afrique n. 23: 208. 1932

Teucrium luteum (Miller) Degen, Fl. Veleb 2: 587.

1937 = *Teucrium polium* subsp. *azureum* with three subspecies including:

subsp. *flavovirens* (Batt.) Greuter et Burdet in

Willdenowia 15: 79. 1985 = *Teucrium polium*

subsp. *flavovirens* Batt. in Batt. et Trabut, Fl. Algérie. 1: 714. 1890

subsp. *gabesianum* (S. Puech) Greuter et Burdet in

Willdenowia 15: 423. 1986 = *Teucrium polium*

subsp. *gabesianum* Le Houerou in Bull. Soc. Bot. France 107: 26. 1960

Teucrium polium L., Sp. Pl.: 566. 1753 = *Teucrium*

polium subsp. *album* (Miller) Breistr. in Bull. Soc.

Bot. France 121: 65. 1974 = *Teucrium virescens*

Pomel in Bull. Soc. Sci.

Teucrium sauvagei Le Houerou in Bull. Soc. Bot. France 107: 101. 1960.

■ Geographical distribution

Local: North-eastern, central and southern Tunisia.

Regional: North Africa.

Global: North Africa, Sicily, Italy, France and the Iberian peninsula.

■ Ecology

Teucrium polium usually develops in regions belonging to the semi-arid and arid bioclimates; it likes sun and a light, well-drained soil. It grows on hillsides, sands and in arid places.

Status, conservation and culture

The plant is not grown in Tunisia; it is much picked for use, unsupervised, and is sold at almost all herbalists' and in regional markets.

Much research work on the biodiversity of the genus *Teucrium* in Tunisia has been done (morphology, palynology, caryology, etc.).

Teucrium polium is a species to be protected.

■ Part used

The flowering branches and leaves.

■ Constituents

Several diterpenoids, possessing the skeleton of clerodane or of the 19-norclerodane, were found in *Teucrium polium*: picropolin, 6-acetyl-picropolin, isopicropolin, teucrincine P1, teucrincine P2, montanine-B, 19-acetyl-gnaphaline, teupoline I, teupoline II, diosphenol.

Furanic core diterpenes are the cause of the germanders' toxicity: they provoke an acute cytolytic hepatitis.

■ Traditional medicine

A healing substance; for dysmenorrhoea

■ References

- Gammar Z., 1984. Contribution à une étude caryosystématique des germandrées tunisiennes (Genre *Teucrium*, famille des Labiatae). DEA Fac des Sc. De Tunis.
- Puech S., 1982. Contribution à l'étude des *Teucrium* de la section polium (Labiatae) de Tunisie. Bull. Soc. Bot. Fr., 129, Lettres Bot., (1) : 41-52.
- Puech S., 1985. Contribution à l'étude des *Teucrium* de la section polium (Labiatae) de Tunisie. Bull. Soc. Bot. Fr., 132, Lettres Bot., (1) : 41-50.
- Nabli M. A., 1967. Contribution à l'étude taxinomique et écologiques des espèces tunisiennes du genre *Teucrium* L. Thèse 3ème cycle Ecologie, Fac. Des Sc. Montpellier. 111p.
- Chaieb M. et M. Boukhris, 1998 : Flore succincte et illustrée des zones arides et sahariennes de Tunisie. ATPNE, Sfax. 290 p.
- Ferchichi A . 1997 : Contribution à l'étude caryologique, caryosystématique, morpho-biologique et écologique de la flore de la Tunisie présaharienne. Doctorat d'Etat ; Fac. des Sc. de Tunis. 214p.
- Gordon C. et al. 1997. Botanica. encyclopédie de botanique et d'horticulture. Plus de 10 000 plantes du monde entier. Könemann. 1020 p.
- Le Floc'h E. 1983 : Contribution à une étude ethnobotanique de la flore tunisienne. Programme Flore et Végétation tunisienne. Min. de l'En. Sup. et de la Rech. Sci. 387 p.
- Pottier Alapetite G., 1981 : Flore de la Tunisie. Angiospermes- dicotylédones, Gamopétales. Programme flore et végétation tunisiennes. 655- 1190 p.
- Van Hellemont J., 1986. Compendium de phytothérapie. Ed. ABP.

