Malva sylvestris L.
(Malvaceae)

Compiled by: Dr. Zeineb Ghrabi
Edited by: Prof. Kamal H. Batanouny

Morphological description

The common mallow is a biennial or perennial, fairly much covered with simple or star-shaped hairs, with erect or supple branched stems 10-60 cm. long. The leaves are simple, lengthwise petiolated, suborbicular-twisted. The upper leaves have 5-7 lobes with rounded-toothed margins. The flowers are single or in axillary fascicles, on unequal peduncles, shorter than the leaves. The calicula has oval-lanceolated divisions that are shorter than the calyx. The calyx is slightly accrescent, with roughly triangular divisions that do not hide the carpels. The corolla is a beautiful rose-purple, veined with darker red and strongly indented, 3 to 4 times as long as the calyx. The carpels are reticulated-wrinkled on the back, with an acute non-toothed margin. The fruits are formed of 12 reniform achenes which remain fused at maturity.

The common mallow flowers and bears fruit from March to June.

Three varieties are mentioned in Tunisia. They have different degrees of hairiness, especially of the carpels. The var. *typica* Fiori is fairly downy-hairy with simple, spreading hairs, and the carpels are glabrous; the var. *tomentella* Presl. has star-shaped hairs, especially on the upper parts, and its carpels are glabrous; the var. *ambigua* (Guss.) Rouy f. *microphylla* Rouy is different from the others, having small leaves, 1-3 cm. wide, covered, as are the petioles, stems and inflorescence, with starshaped hairs. Its flowers are no longer than 2 cm. and its carpels are often downy.

***Malva sylvestris* L.,** Sp. Pl. : 689. 1753
Malva ambigua Guss., *Malva erecta* C. Presl., *Malva hirsuta* C. Presl., *Malva mauritanica* L., *Malva sylvestris* subsp. ambigua (Guss.) P. Fourn., *Malva sylvestris* subsp. vivianiana (Rouy) P. Fourn.

Arabic: Khobbiza خبيزة
French: Mauve des bois, grande mauve, fromageon, fausse guimauve, fouassier
English: Common mallow

Geographical distribution

Local: It is found almost throughout Tunisia: the Medjerda valley, the Tunisian dorsal ridge, the north-east, central and south Tunisia.
Regional: North Africa.
Global: The Mediterranean and Europe.

Ecology

The common mallow is a nitrophilous species; it is found in pastures, fallow ground, paths, cropland, etc.

Status, conservation, culture

The common mallow grows wild in most of Tunisia. It is the basic plant in a traditional Tunisian dish. It is picked and sold (in winter and spring) in bundles of fresh plants in the markets and at the sides of the roads. But this taxon can be planted in fairly new soil in full sun. Multiplication is by sowing out or in seedbeds in spring. The germinative power of the seeds only lasts a maximum three years. It is sensitive to the attacks of rust caused by *Puccinia malvacearum* on the leaves.

Part used

Leafy stems, leaves and flowery tips.

To harvest the leaves, they are cut while the vegetation is developing; this can be done twice a year.

The flowers are harvested before they are fully open; they must be dried out of the sun, at a temperature of below 35°C.

The dried flowers and leaves will be conserved in a dry place away from damp and light.

The pathology dictates whether an infusion, decoction, poultice or extract is used.

Constituents

The leaves contain a mucilage (8%) mostly composed of acid polysaccharids, flavonoids and tannins in small amounts. The flowers also contain a mucilage (10%), anthocyanosids and anthocyanidines and tannins in small amounts.

Pharmacological action and toxicity

No toxicity is mentioned in the bibliography. The flowers are reported by practitioners as acting against coughs and buccal-pharyngital inflammation. The leaves are reported as reducing inflammations of the respiratory tracts and of the pharynx. Because of their tannins, leaves and flowers are considered to be mild astringents for gastroenteritis.

Pharmaceutical production

For the purposes of the pharmaceutical industry, the flowers, leaves and extracts from common mallow are picked wild and marketed.

Traditional medicine

The fresh flowers and leaves are crushed and applied to wounds because of their softening, antipruriginous action and because they are said to help scars to form. In tisanes, the flowers and leaves are used to help internal wounds, lesions of the mucous membranes and stomach ulcers heal. A decoction of the aerial part of the common mallow is used for constipation and renal lithiasis, and the juice of this part is used externally for insect bites.
In Tunisia, leaves of the common mallow are appreciated as a vegetable that encourages the passage of food through the intestines and avoids digestive disorders of a functional origin.

Use in herbal medicine

The flowers and leaves are used for irritations of the buccal-pharyngal mucous membrances and for all dry irritating coughs associated.
Because of their anthocyanes, the flowers are used as a natural colourant in foodstuffs.

References

Al-Souyouti Jalel Ad-Dine, Xvème Siècle : La phytothérapie dans Kitab Al-Rahma, El Gharbi H.O. Médecine Arabe Traditionnelle. Centre de Recherche et de Formation Pédagogique. 133 p.

Greuter W., Burdet H. M. et Long G., 1984. Med-Cheklist. Volume 4 : *Dicotylédones (Lauraceae-Rhamnaceae)*. p.:239.

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.

Maghami P., 1979 : Culture et cueillette des plantes médicinales. Hachette.224p.

Pottier Alapetite G., 1979 : Flore de la Tunisie. Angiospermes- dicotylédones, Apétales - Dialypétales. Programme flore et végétation tunisiennes. 655 p.

Valnet J. 2001 : Phytothérapie. Se soigner par les plantes. Maloine S. A. Editeur.639 p.

Wichtel M., R. Anton, 1999 : Plantes thérapeutiques tradition, pratique officinale, science et thérapeutique. Edit. Technique et Documentation Paris, France : 335-338.