

***Peganum harmala* L.**  
Zygophyllaceae



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### ■ Morphological description

A perennial plant 30-60 cm. high, glabrous, with a woody stock and branched stems from the base. The leaves are alternate, multifid, with an unpleasant smell when crushed. The flowers are opposed to the leaves, with a big corolla, white veined with green, much longer than the evergreen sepals. The androecium is made up of 12-15 stamens set in a disc. The fruit is a protruding capsule with prickly seeds and a side opening. Two varieties are mentioned in Tunisia: the var. *typicum*, very common in Tunisia, with flowers whose petals are white veined with green, and the var. *garamantum* Maire, which is rare, sighted in Jerba, and which differs from *typicum* by having petals that are light ochre to orange pink. Flowering takes place in April-May.

### ■ Geographical distribution

**Local:** Common in the whole of central and south Tunisia, but rare in the north-east.

**Regional:** From Morocco to the orient.

**Global:** Mediterranean: from Spain, Italy, Albania, Greece to the Sahara (Hoggar, Tibesti); from Morocco to the orient.

### ■ Ecology

It develops in bioclimates ranging from the semi-arid to the Saharan. It is nitratophilous, growing in messicolous groups in the centre of Tunisia, near watering places and places where domestic animals are stalled. It either forms fleeting steppes on grazed routes, indicating very intense overgrazing,

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**Arabic:** Harmel

**French:** Peganum harmel

or forms a ruderal facies localised in several plant groups on coastal paths.

### ■ Status, conservation, culture

It is thought by the people of North Africa to be a panacea. It is mentioned in the Hadith as a healing plant. Picked for use, it is sold in all herbalists' (capsules and seeds) and local markets.

It is very little grazed because of its toxicity at the fruiting stage.

Multiplication is possible by dividing the clumps.

### ■ Part used

The roots, leaves and seeds.

### ■ Constituents

The whole plant contains alkaloids, particularly the seeds (4%) and roots (3%). These alkaloids give the plant a certain toxicity.

### ■ Traditional medicine

A decoction of the leaves is mentioned for high blood pressure and haemorrhoids: decoction of 50 grammes of roots in a litre of water, in a hip-bath twice a day morning and evening for one week. The powdered seeds of *Peganum harmala* mixed with the powdered seeds of barley are suggested for rheumatism. The powdered seeds of *Peganum harmala* mixed with the powdered seeds of cumin plus honey are used for bronchitis.

### ■ Use in herbal medicine

The seeds are aphrodisiac and galactagogue. The leaves are used for high blood pressure and haemorrhoids, rheumatism, inflammation and intestinal worms.

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