

Artemisia judaica* ssp. *sahariensis
(Chev.) Maire
Compositae (Asteraceae)



Compiled by Dr. Salima Benhouhou

■ Morphological description

A perennial semi-shrub appearing sometimes like a herb, densely ramified, between 50 to 80 cm. high. The leaves are small, alternate, sessile and dissected, densely covered with fine whitish hairs that give the plant a silvery aspect.

The flowers are grouped in pale yellow, discoid, hemispherical heads 5-10 mm. in diameter, surrounded by woolly bracts and containing 10 to 20 florets.

The fruits are small achenes not exceeding 5 mm. in size.

The plant's foliage produces an agreeable odour when crushed and a bitter sensation if tasted.

It flowers in early spring.

■ Geographical distribution

Local: This sub-species is present in the mountains of the central Sahara.

Regional: The sub-species is endemic in Morocco, Algeria and Libya.

■ Ecology

This small shrub thrives in desert conditions with an average 100 mm. rainfall a year. In the Tassili, it does not grow above 1200 m. altitude. It has a large ecological range for soils and is found on sandy wadi floors, on gravelly soils and on the vast plateaux or regs.

■ Status

According to the IUCN criteria this endemic species

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(Chev.) Maire

Artemisia: The Latin name comes from Artemis (good health) which was the Greek name for Diana, the moon goddess; *judaica*, from Judea

Arabic: baatharan, baethran

Targui: téharagélé

English: Judean wormwood

French: armoise de Judée

falls into the "E" category.

The plant is frequently used and much appreciated by the Tuareg. High pressure is noticeable, requiring urgent conservation measures.

■ Part used

The stems with their leaves and flower heads, are collected in spring when in flower. It is prepared as a decoction, an infusion, dried and ground into powder.

It is used internally.

■ Constituents

A flavone (cirsimaritin).

The essential oil of *A. judaica* contains piperitone (53.5%), chrysanthenone (9.8%) and chrysanthenyl acetate (7.4%): those constituents show good activity against *Staphylococcus* spp., *Candida* spp. and *Microsporum* spp. Other constituents are caryophyllene, bornyl acetate, borneol, p-cymene, a and b-pinenes, camphene, myrcene, thymol and nerolidol.

■ Pharmacological action and toxicity

Anti-microbial activity; prophylactic action.

A search on its toxicity appears negative.

The other known actions are insecticidal, anthelmintic, expectorant, anti-inflammatory, anti-pyretic and stimulant.

■ Pharmacopeias

Not relevant for this species.

■ Pharmaceutical products

Not relevant for this species.

■ Traditional medicine and local knowledge

An anthelmintic; for digestive problems; a tonic. In the Tassili, the Judean mugwort is commonly used. Before celebrations a spoonful of dried leaves is taken with a glass of water to prevent intestinal troubles.

An infusion of the leaves is relaxing and helps bring on sleep.

In the past, a flourishing trade was carried on in this plant: caravans used to take loads of bags to Agades. Nowadays it is distributed to the northern oases by lorry.

In the Sahara, the plant is greatly appreciated when added to green tea.

Because of its prophylactic virtues, a branch is frequently attached to the wrists of babies and small children to ward off negative influences. In Djanet, when the grapes are ripe, several branches are hung in the vineyards to keep insects away. In Egypt, *Artemisia judaica* is also much appreciated for its antispasmodic and anthelmintic effects. An infusion of the flowering summits relieves gastrointestinal cramps and is also stomachic. Inhalation of the leaves gives relief from cold congestion. The plant is believed to prevent skin diseases if camels eat it. It is also used as fuel and an insect repellent; snakes are kept away by smoke from the burnt branches.

■ References

Relevant to the plant and its uses

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