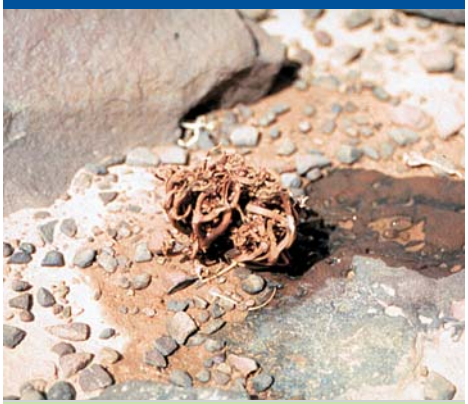
Anastatica hierochuntica L.



Compiled by Dr. Salima Benhouhou

Anastatica hierochuntica L.

Anastatica: From the Greek anastasis (resurrection), referring to the plant's ability to revive on application of water

Arabic: keff Meriem, schajrat Meriem, schajrat el talk, keff lala Fatma, yedd Fatma, keff el adhra, bint Ennabi, el kemcha, kerchoud
Berber tamkelt
Targui: akaraba
English: St. Mary's flower, resurrection plant, rose of Jericho
French: main de Fatma, rose de Jéricho

Morphological description

A small annual, between 5 and 10 cm., with a rosette of branches and leaves. The plant, inconspicuous when green and flowering, is more commonly observed in the dry season after it has taken its characteristic woody globose form. The plant curls inward after maturity to form a tight woody ball during drought. The size is variable from 8 to 12 cm. across with some individuals reaching 25 to 30 cm. after a good rainy spell.
The leaves are lanceolate to obovate, covered with dense hairs, roughly toothed, 3 cm. long and 2 cm. wide, falling rapidly.
The tiny flowers are white, sessile, with four petals.
The fruit is a hairy, ovoid silicula with two wings.
The fruiting plants are hygroscopic, expanding their branches easily when immersed in water.
The flowering takes place in early spring for the northern Algerian Sahara; it can flower at any time after rain in the central Algerian Sahara.

Geographical distribution

Local: Common in the Algerian Sahara.
Regional: North Africa.
Global: It is common throughout the Sahara and across Iran and Pakistan.

Ecology

A small annual plant that thrives in desert conditions with an average 100 mm. rainfall a year. *Anastatica hierochuntica* shows a wide ecological soil range: found in sandy-loamy depressions, in non-saline wadi beds, on gravelly-sandy soils, it has also been observed in stony plateaux (regs).

Status

According to the IUCN criteria, this saharo-sindian species falls into the "C" category.
Although no problems are reported for the species, human collection near settlements may be a threat in the long term.
As an annual the best conservation method is collecting the seeds and sowing them in nurseries.

Part used

The whole plant dried, leaves and seeds. It is picked in the spring and prepared as an infusion, or macerated in water. It is taken internally.

Constituents

The whole plant contains flavonoids: luteolin-7-glucoside, isovitexin, kaempferol 7-glucoside, kaempferol 3-rhamnoglucoside, quercetin and lucitin. It also contains glucosinolates: glucoiberin and glucocheirolin. Sterols. The fruits contain glucose, galactose, fructose, sucrose, raffinose and stachyose.

Pharmacological action and toxicity

Anti-diabetic activity.
The plant is not reported as toxic by nomads and the Tuareg.

Pharmacopeias

Not relevant for this species.

Pharmaceutical products

Not relevant for this species.

Traditional medicine and local knowledge

It is used for colds; reduces the pain of and facilitates childbirth; acts as a pain-killer, an emmenagogue, and for epilepsy.

In Morocco, *Anasatica hierochuntica* is used to ease pain during childbirth. After maceration, the liquid is given to the woman just before giving birth. The plant is considered as bringing good luck.

In the Dra, the plant is used for colds and is taken either as an infusion or as a powder mixed with honey and olive oil.

In Tissint, drops from the sap of the fresh leaves are given to cure various ophthalmic problems like conjunctivitis. An infusion of the plant is said to combat sterility.

In the past, the plant was used for epilepsy.

In Egypt, the dried plant crushed with sugar is taken as a violent purge for jaundice, followed by a milk diet. Use as a pain killer in childbirth is reported in Egypt.

References

Relevant to the plant and its uses

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