Morphological description
A perennial shrub about 50-60 cm. high, reaching 1 m in good conditions, with older woody stems around which the younger ones wind. The stems are covered with erect green hairs. The leaves are opposite, entire, 1-2 cm. long, heart-shaped, with long stalks that are also covered with green hairs. There are small flowers with 5 yellow-whitish free petals. The fruits are oblong, globulous follicules, covered in fleshy bristles. At the slightest touch the plant secretes a white sticky fluid from the leaves and fruits. It flowers in spring in the northern Sahara and any time of year in the central Sahara.

Geographical distribution
Local: Common in the Algerian Sahara.
Regional: North Africa.
Global: A Saharo-sindian species that spreads from Morocco in the west to India in the east.

Ecology
A hardy chamaephyte that shows a rather wide amplitude for soil from sandy, clayey to gravelly-stony sites. It is found on wadi beds as well as on gravelly plateaux (regs). The plant thrives in hot deserts where the rainfall does not exceed 100 mm.

Status
According to the IUCN criteria this Saharo-sindian species falls into the “C” category.

Part used
The latex, leaves and roots. These are collected in spring in the northern Algerian Sahara and any time after a rainy period in the central Algerian Sahara. They are prepared as an infusion, decoction, powder and mixed with other plants, and taken by mouth or used externally.

Constituents
Calcium oxalate crystals (leaves), cardenolides (roots), b-sitosterol glucoside, ghalakinoside (steroid), pergularine, coroglaucigenine, choline, terpenoids, saponine, polyphenols, flavonoid and carotenoids.

Pharmacological action and toxicity
Anticancer activity: recent research show promising results in killing cancer cells in laboratory tests (Internet source 1). Hypoglycaemic effects. The distribution, importance, conventional propagation, micropropagation, tissue culture studies, and in vitro production of important medicinal and pharmaceutical compounds in Pergularia tomentosa are currently underway (Internet source 2). It is known to be toxic because of the poisonous milky sap and the toxic cardenolides in the roots.

Pharmacopeias
Not relevant for this species.
Pharmaceutical products
Not relevant for this species.

Traditional medicine and local knowledge
It is used for bronchitis and tuberculosis, and for snake bites.

*Pergularia tomentosa* produces a corrosive white latex and may severely harm the skin.

The entire plant crushed in powder and spread on like a plaster removes the hair in a few days. In the Tassili, *Pergularia tomentosa* is known to be the desert varan’s weapon against vipers – wound around the snake.

In Egypt it is used as a depilatory, poultice, laxative, anthelmintic, and abortifacient and for skin diseases. In the Dra (Morocco), the latex is applied externally to mature furuncles and abscesses and to extract spines from the skin. The leaves are applied as poultices on snake and scorpion bites. In Tissint (Morocco), a decoction of the leaves and stems is used for bronchitis and tuberculosis. This medication should be taken with great care and is forbidden for pregnant women.

References

Relevant to the plant and its uses


Arch Exp Veterinarmed. 44 (3). pp. 389-94.

Internet source 1 : http://biotech.icmb.utexas.edu/botany/ptab.html

Internet source 2 : http://www.agritechpublications.com/medi-vii.htm

General references


