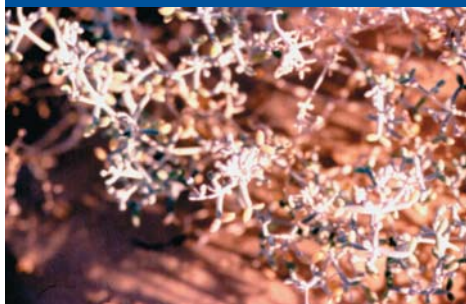


***Tetraena gaetula* (Emb. & Maire)  
Beier & Thulin  
Zygophyllaceae**



Compiled by Dr. Salima Benhouhou

■ **Morphological description**

A perennial shrub of intermediate size, 50 cm., woody at the base. Intense ramifications of the branches. The young shoots are thin and are covered with white hairs. The leaves are small, with two fleshy folioles (stipules) at the base, also covered with white hairs. The flowers, borne on a small hairy peduncle, are tiny (5 mm.), ovoid, with 5 white petals. The fruit has a tubular base which widens towards the top with five lobes and is approximately 2 cm. long. It usually flowers in spring, but has been observed in flower in the autumn.

■ **Geographical distribution**

**Local:** Endemic of southern Morocco and the North-West Algerian Sahara.

■ **Ecology**

*Zygophyllum gaetulum* grows on sandy or loamy soils in flat salinas and wadi floors. It is a good representative of a saline pasture species in open ground. The plant grows in severe climatic conditions with an average rainfall of 100 mm./year.

■ **Status**

According to the IUCN criteria this endemic species falls into the "EN" category. Due to its being intensely collected, it is likely to become endangered in the near future. Appropriate conservation measures for this plant are therefore urgently required.

***Tetraena gaetula* (Emb. & Maire)**

Beier & Thulin *Zygophyllum gaetulum* Emb et Maire  
*Zygophyllum*: leaves grouped in pairs; *gaetulum*: from the Latin gaetuli, the Maghreb and the Sahara

**Arabic:** aâgaya, berraya

■ **Part used**

The leaves and flowers are collected in the spring and autumn and prepared as an infusion, a decoction, a powder and mixed with other plants. A decoction of the dried leaves, or powdered leaves, and an infusion of the flowers are the main means of preparation. It is taken by mouth and used externally.

■ **Constituents**

Hypoglycaemia elements, flavonoids: mono and diglycoside of three flavonols: kaempférol, quercetine, isorhamnetine and saponosides.

■ **Pharmacological action and toxicity**

The hypoglycaemic effect of its leaves makes the plant known for its anti-diabetes properties.

■ **Anti-inflammatory activity.**

No toxicity is reported for this plant.

■ **Pharmacopeias**

Not relevant for this species.

■ **Pharmaceutical products**

Not relevant for this species.

■ **Traditional medicine and local knowledge**

It is used for diabetes, eczema and liver and stomach pain, and is a haemostat.

The dried flower heads are used to make a refreshing drink or added to tea. Forming extensive pastures, it is appreciated by herds of goats and camels.

Its anti-diabetic properties are well known by the nomads in the area of its distribution (north-western Sahara). In the Dra and Tarfaya region (western Sahara) the dried leaves in a decoction

used to be drunk for stomach pain, or for the liver swollen by an excess of bile.  
The finely powdered leaves are applied externally to wounds to act as a haemostat and as a maturing plaster on furuncles and abscesses. The plant is used by nomads to treat eczema and skin problems; it is also used for colds. In Tissint and Tata (Morocco), suppositories are made from *Zygophyllum gaetulum* leaves to which are added garlic, nigella seeds, colocynth root and date pulp. In the western Sahara, an infusion of the flowers is used in baths and as an antiseptic lotion for infant hygiene and for body care.  
The sap is dropped into the ear to treat otitis and into the eyes for ocular tiredness (blurred eyesight).

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