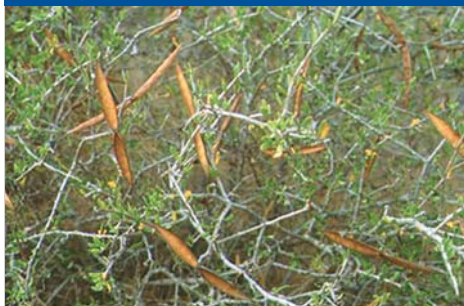


***Periploca angustifolia* Labill.**
Asclepiadaceae



Compiled by: Dr. Zeineb Ghrabi

■ Morphological description

An erect small tree up to 3 m. high or a bushy-branched shrub when nibbled by animals. The branches are interwoven; the foliage evergreen. The leaves are subsessile, with an entire, narrowly lanceolated limb. The flowers are grouped in little axillary cymes, with few flowers; the corolla is wheeled and has purple-brown lobes edged with greenish yellow, alternate, with 5 purple filaments hooked inwards. The fruit is dry, formed of two smooth divaricated follicles containing a number of small seeds. Flowering starts in February and goes on until June. Multiplication is usually done by sowing.

■ Geographical distribution

Local: It is mentioned in north-eastern Tunisia, Cap Bon, the Sahel, central Tunisia and all the mountains in pre-Saharan Tunisia.

Regional: North Africa: from Morocco to Egypt.

Global: A species thought to be a Mediterranean-Saharan element since it is found wild in the low and middle hills of the Mediterranean basin and descends southwards to the northern and central Sahara. It is found in North Africa (from Morocco to Egypt), southern Spain, Sicily, Malta, Crete, Lebanon and Syria.

■ Ecology

It is present from the sub-humid stage to the Saharan stage, between the annual 400-100 mm. isohyets, in hot to temperate variants. It is highly accommodating as to rainfall and can adapt to extremely varied hydric conditions, but is particularly

***Periploca angustifolia* Labill.** Icon. Pl. Syr. 2: 13. 1791

Periploca laevigata Ait., Hort. Kew. 1: 301. 1789;

Periploca laevigata subsp. *angustifolia* (Labill.)

Markgraf in Bot. J. Linn. Soc. 64: 375. 1971

Arabic: Hallab

French: Périploque

abundant in the upper semi-arid stage. From the edaphic point of view it is fairly indifferent, growing on the driest and poorest soils, but its substratum is formed of calcareous rocks. In pre-Saharan Tunisia, its distribution area is scattered, and its presence signals degradation of the forest. It is therefore seen as a relict species of forest degradation groups.

In fact, *Periploca angustifolia* belongs to the shrubby stratum (3 m. high) of the Tetraclinia (*Tetraclinis articulata* mixed with *Juniperus phoenicia*, *Rhus tripartitum*, *Olea europaea* form *oleaster*, *Rhamnus lycioides*, etc.) which dominates a low dense stratum with a *Stipa retorta* base. But usually this Tetraclinia is degraded (wood-cutting and overgrazing) and

Periploca angustifolia becomes infrequent, lower, prostrate and sometimes stunted. As an example we can mention the association with *Callitris articulata* and *Lavandula multifida* (Boukornine) or the association with *Genista microcephala* var. *tripolitana* and *Teucrium alopecurus* (Jbel Matmata).

■ Status, conservation, culture

Periploca angustifolia is sought after for its traditional medicinal virtues (picking) and for its pastoral and anti-erosion interest. Much research work has been done on it (collection, conservation, characterisation, evaluation and domestication) in order to integrate and use it in development programmes linked to pastoralism and water and soil conservation work.

It is a fodder that is much appreciated in arid areas, eaten by camels, sheep and goats. The long tender shoots of the current year and the leaves are grazed. But the heavy pressure of livestock grazing pulls it down and stunts it.

Multiplication by sowing has been successfully tried to use this sand-resistant species for stabilizing dunes or reforesting the talwegs in arid areas.

■ Part used

The leaves and roots.

■ Constituents

It contains triterpenes: b sistosterol, a and b amyrin, periplocadiol and phenol acid derivatives, particularly caffeic acid.

■ Traditional medicine

Rheumatism: bathe with a decoction of the leaves.

Haemorrhoids: decoction of 50 grammes of bark of the roots of *Periploca angustifolia* Labill. in a litre of water; three times a day for a week in a hip-bath.

Gastric ulcer: decoction of 50 grammes of bark of the roots of *Periploca angustifolia* Labill. in a litre of water; three glasses a day taken by mouth before meals.

Sugar diabetes, with no mention of complications: decoction of 50 grammes of bark of the roots of *Periploca angustifolia* Labill. in a litre of water; two glasses a day taken by mouth.

In the Ababsa region, the resin is used as a masticatory. When burned, this resin gives off a pleasant smell that country people appreciate.

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