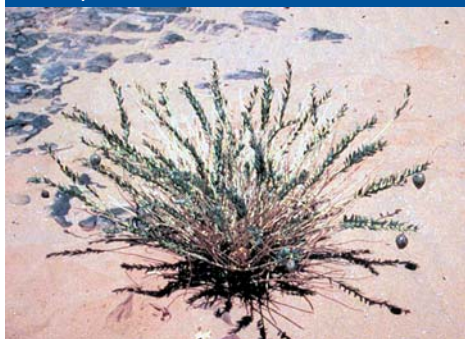


***Solenostemma argel* (Del.) Hayne**
Asclepiadaceae



Compiled by Dr. Salima Benhouhou

■ Morphological description

A perennial shrub 60 cm. high with several vigorous stems. The leaves are opposite, oval, glaucous, leathery and covered with fine hairs. The numerous flowers have white petals, and a strong smell. Their inflorescences are dense umbels that give the plant an attractive look. The fruits are thick, pyriform follicles, 5 cm. long and 1.5-2 cm. wide, green with violet lines; they contain pubescent seeds. The plant has a long flowering period from March to June.

■ Geographical distribution

Local: In the central Algerian Sahara, the Tassili n'Ajjer and the Hoggar mountains.

Regional: Algeria, Libya and Egypt.

Global: Tropical plant that spreads across the central Sahara to the Sinai and the south-eastern (Arabian) desert.

■ Ecology

The plant grows in extremely dry conditions with a yearly rainfall of around 50-100 mm. It grows on the gravelly soils of wadis and on the stony and pebbly soils of regs.

■ Status

According to the IUCN criteria this tropical-Saharan species falls into the "C" category. No particular threat is reported for Algeria, but in Egypt the plant is vulnerable because of its intensive overuse. The largest population of *Solenostemma*

***Solenostemma argel* (Del.) Hayne**

Cynanchum argel Delile,

Cynanchum oleaefolium Nect.

Solenostemma oleaefolium (Nectoux) Bullock & Bruce.

Arabic: arghel, hargal

Targui: aghallachem

English: arghel

argel grows in the upper part of the Wadi Allaqi conservation area and from 1989 on has been protected by Egyptian law. The plant is cultivated on a farm in the downstream part of Wadi Allaqi to increase its population and promote the cultivation of this economically important plant.

■ Part used

The leaves and stems. They are collected in the spring and prepared as an infusion, a decoction or a powder. This can be taken by mouth or used externally.

■ Constituents

Acylated phenolic glycosides, namely argelin and argelosid, choline, flavonoids, monoterpene and pregane glucoside, sitosterol and a triterpenoid saponin.

■ Pharmacological action and toxicity

Anti-inflammatory activity, antimicrobial activity and larvicidal activity. The plant is reported to be toxic.

■ Pharmacopeias

Not relevant for this species.

■ Pharmaceutical products

Not relevant for this species.

■ Traditional medicine and local knowledge

It is used for colds, diabetes, respiratory troubles, rheumatism, stomach pain, urinary infection and as a febrifuge. The bitter sap from the stem is used for colds; a drop of this sap helps to clear the sinuses.

This sap helps to heal wounds and is an efficient collyrium (eye lotion). A decoction in milk or an infusion is used for respiratory troubles, diabetes, urinary infection and as a febrifuge. The powdered dried leaves are used to treat rheumatism. The dried leaves boiled in milk or any other liquid are also very helpful to stop the spitting of blood.

In traditional farming, small tufts of the plant are put in irrigation channels to kill insects or as green manure. The branches are used to disinfect water. It can also be used as a soap to clean the body and clothes.

In Egypt the leaves of *Solenostemma argel* are an effective remedy for bronchitis and are used to treat neuralgia and sciatica. The plant is used in the treatment of measles and sometimes crushed and used to cure suppurating wounds. An infusion of the leaves is used for gastro-intestinal cramps, stomachache, colic, cold and infections of the urinary tract and is effective as an anti-syphilitic if used for prolonged periods (40-80 days). The leaves possess purgative properties which may be due to the latex present in the stems.

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