

***Solanum sodomaeum* L.**
Solanaceae



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■ **Morphological description**

Solanum sodomaeum is a perennial with a branched, spiny bushy appearance. The stems and leaves are covered with starry hairs. The leaves, easy to recognise by their strongly spined veins, are alternate, simple, sinuate, lobed and pennatifid. The flowers have a purplish, downy corolla three times as big as the calyx, which is covered with spiny hairs. The fruit is a big globular berry about 3 cm. in diameter, soft, yellowish, containing many seeds. Flowering occurs from March to May.

■ **Geographical distribution**

Local: The whole of Tunisia.

Regional: Tunisia, Algeria and Morocco.

Global: The western Mediterranean.

■ **Ecology**

Solanum sodomaeum is a species that is present all over Tunisia on the sand of the coast and the interior. It grows in waste places, and especially likes cactus hedges.

***Solanum sodomaeum* L.** Sp. Pl.: 186. 1753

Arabic: teffah el ghoul, lim ennsara

French: pomme de Sodom

English: apple of Sodom

■ **Status, conservation and culture**

The apple of Sodom is not cultivated in Tunisia; it is picked wild.

■ **Part used**

The fruits.

■ **Constituents**

The fruit has a fairly high gluco-alkaloid content (1-1.7% of solasodine heterosides) and saponosides whose genines are diosgenine and gigenine.

■ **Traditional medicine**

For eczema: one kilo of *Solanum sodomaeum* fruits decocted in 3 litres of water, then boiled down to one litre; swab three times a day. Haemorrhoids: crushed fruits of *Solanum sodomaeum*; applied locally as a poultice.

■ **Pharmacological action and toxicity**

The fruit's toxic molecules are gluco-alkaloids, of which the main aglycone is solasodine; poisoning leads to vomiting, abdominal pain, mydriasis, dryness of the mucous membranes, headache, delirium and coma.

■ **Use in herbal medicine**

Gluco-alkaloids are being researched for the treatment of skin cancer.

■ **References**

Cham B. E. et H. M. Meares, 1987. Glycoalcaloides from *Solanum sodomaeum* are effective in the treatment of skin cancers in man., *Cancer Letters*, volume 36, Issue 2: 111-118.

Bellakhdhar J., 1997. *La Pharmacopée Marocaine Traditionnelle*, Ed. IBIS Press.