

***Arbutus unedo* L.**  
Ericaceae



Compiled by Dr. Salima Benhouhou

■ **Morphological description**

The plant is an evergreen shrub between 1 and 5 m. high with erect branches. It grows up to 2.5 m. in 10 years. The leaves are simple, with a short stalk, alternate, glabrous, and elliptic to lanceolate, 3-10 cm. long, 1-4 cm. wide, toothed, leathery, dark glossy green above, paler beneath. The flowers are bell-shaped and form falling inflorescences of 6 to 10 cm. composed of 15-30 flowers, white to pinkish, appearing between October and January. The fruits are small 4-8 g. berries, globular, red, with a granular surface; they vary considerably in size, on average 15-20 mm. in diameter. The number of seeds varies.

Since the fruit takes 12 months to ripen, the tree bears mature fruit and flowers at the same time. Flowering takes place in the autumn.

■ **Geographical distribution**

**Local:** Well represented in the Algerian Tell.

**Regional:** North Africa except Egypt.

**Global:** *Arbutus unedo* is native to the coastal regions of the Mediterranean, extending from southern Europe to western Asia and northern Africa, where the climate is mild and the summers dry.

■ **Ecology**

The strawberry tree is usually found in the holm and cork oak forests of the lower mountains and flat country and is characteristic of the Mediterranean landscape from sea-level to 700-1000 m. Although it grows spontaneously in different types of soil it does best in loose, sub-acid subsoil and in sunny

***Arbutus unedo* L.**

*Unedo edulis* Hoffm; *Arbutus vulgaris* Bub.

*Arbutus*: from arbor, little tree; *unedo* from the Latin 'eat one only'.

**Arabic:** lendj

**Berber:** ticsinou, sisonou, bahennou

**English:** strawberry tree

**French:** arbousier, arbre aux fraises

areas not subject to frost. Its fruit is an important food source for forest animals during the winter.

■ **Status**

*Arbutus unedo* is a widespread shrub in the Mediterranean basin; according to the IUCN criteria it is not a threatened species.

Conservation, particularly ex situ and cultivation, is possible and well documented in the literature. The best way to cultivate *Arbutus unedo* is from seed; it is best sown on compost in a greenhouse as soon as it is ripe.

■ **Part used**

The leaves, bark, roots and fruits.

The leaves and bark contain active principles of value to herbalists and have been used for tanning and medicinally.

The fruits are collected wild in the autumn by teenagers and sold along the roadside in small 500 g. baskets (prices are variable).

For internal use, a decoction of 20 g. of leaves in one litre of water is the recommended dose; two cups a day should be taken. The roots are macerated for 12 hours (20 g. per litre), and then gently heated and filtered before drinking. The recommended dose is one cup taken by mouth on an empty stomach for three days.

■ **Constituents**

According to the available literature, the active principles taken from *Arbutus unedo* are phenylglycerol glucoside, gaulterine, arbusterine.

The leaves are rich in tannin (about 37%) and contain mainly arbutoside (arbutine), unedoside, ursolic acid, arbutoflavol A and B. Other compo-

nents are: traces of free hydroquinone, saccharose, invertine, emulsine, hentriacontane, triacontanol, dotriacontanol, unedosterol, alcohol polyterpenic-alcohol acid, arbutolic acid, carotenoïdic pigment. The bark contains 35 to 45% of tannin; the branches contain the same components as the leaves plus nonacosanol. The seeds contain 39% of oil, known for its siccativ properties.

### ■ Pharmacological action and toxicity

The leaves are known for their diuretic, urinary disinfectant and anti-diarrhoeic properties. They are also antiseptic and very astringent.

The flowers have well-known sudorific properties. The fruits have a narcotic effect and can stop diarrhoea; if taken in excess they are a purgative. The roots are depurative and decongestant.

Recent work by a group of Moroccan scientists showed the efficiency of *Arbutus unedo* in treating hypertension.

### ■ Pharmacopeias

Not relevant for this species.

### ■ Pharmaceutical product

Not relevant for this species.

Traditional medicine and local knowledge

The strong antibiotic properties of this species have been used to treat diarrhoea and biliousness, and to cure nephritic colic, urinary calculus and diverse renal troubles.

This is a good plant to grow in towns because it tolerates industrial pollution. It is also resistant to fire and is used in reforestation, strengthening dunes and soil protection.

The fruit is edible, rich in sugar and vitamin C, but has never, even in ancient times, been considered as particularly good when eaten raw. Cooked, the



fruits are used in recipes to make jams, sorbets and alcoholic drinks.

This medicinal plant is part of a European programme for improvement; it should be subject to market authorisation.

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