

Achillea fragrantissima
Compositae (Asteraceae)



Fresh *Achillea fragrantissima* plant
Dry heads of *Achillea fragrantissima*



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■ Morphological Description

It is a small perennial herb. Plants are white woolly, with erect stems up to 1 m high, old stems woody, much branched from the base; flowering branches are numerous, herbaceous, terete, rigid. Leaves are white to greyish-green, small, exstipulate, thick, sessile, ovate, oblong or oblong-lanceolate, the margins being slightly undulate, shallowly dentate and short mucronate, and the apex rounded. Flower heads are terminal discoid composed of numerous tubular florets, the ray florets are yellow and very short and the herb is hairy with a fragrant odour. Flowering period: from June to September.

■ Geographical Distribution

Local: The Isthmic Desert, Sinai, Red Sea Coastal Region.

Regional: North Africa, The Eastern Mediterranean Coastal Region.

Global: Native to Southern Europe and is now cultivated worldwide.

***Achillea fragrantissima* (Forssk.)**

Sch. Bip.; *Santolina fragrantissima* Forssk.

Names

Arabic: Qaysum قيصوم, Gesoom جسوم,

Bu'eithraan بعيثران

English: Lavender cotton, Grade robe.

French: Guarda roba, Aurone femelle, Santoline.

■ Ecology

The plant grows in natural habitats, in limestone wadis of the North Eastern Desert and Sinai.

■ Status

The plant is over exploited by collection for folk medicinal uses. It seems that the rate of exploitation exceeds that of regeneration. The plant may therefore be considered threatened.

■ Part(s) Used

The herb and flower heads.

■ Collection

The tops are collected when the plant is flowering.

■ Preparations

Infusion, oil.

■ Use

Oral, ointment.

■ Constituents

The herb contains essential oil (0.81%) and consists of 59 components of which α and β -thujone, α -pinene, β -pinene, limonene, 1,8-cineole, linalool, carvacrol, eugenol, artemisia ketone, palustrol, sabinene hydrate, α -terpineol and santolina alcohol are the major constituents. Its tannin content reaches 8% such as resorcin, phloroglucin, methyl phloroglucin, and pyrocatechol. Flavonoids were also reported, such as afroside, cirsimartin, chryso-plenol and cirsiliol. Also, fatty acids, lauric, myristic, palmitic, stearic, oleic, linoleic and linolenic as well as sesquiterpene lactones as achilloide A, in addition to taraxasterol and pseudotaraxasterol acetates have been identified.

■ Pharmacological Action and Toxicity

The essential oil of *Achillea fragrantissima* inhibited the growth of all tested micro organisms. The aqueous extract exhibited strong cytotoxicity against cultured melanoma cell lines . The effects of the flavone, cirsiolol, have been studied in vitro in rats. It caused concentration–dependent relaxation of the phenylephrine–precontracted proximal aorta, the acetyl choline–precontracted trachea and the urinary bladder, and inhibited the phasic contractions and the tone of the uterus .

■ Pharmacopoeia

Not available

■ Phytopharmaceutical Products

Not available

■ Traditional Medicine and Indigenous Knowledge

History: *Achillea* species have been used in folk medicine and sold in herbal shops. An infusion of the dry or fresh flowering herb is used by the Bedouin for the treatment of coughs, aromatic bitter stomachic, and anthelmintic.

■ Traditional Medicinal Use

- Anthelmintic
- Antispasmodic
- Astringents
- Carminatives
- Expectorant
- Skin irritations

Other uses of the plant: The plant is known to be used as an insect repellent and in cough mixtures. It has also been known to be used to cure stomach ache in children. *Achillea fragrantissima* is used in Egypt to treat gastrointestinal disturbances, eye infections and smallpox and also as an anthelmintic.

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