

Last updated: 20<sup>th</sup> September 2002

## JASMINE

**Family:** *Oleaceae*

**Genus:** *Jasminum*

**Species:** *officinale*



Source: <http://www.fragrantflowers.co.uk/picture/jasmine.htm>

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## **General Background**

Jasmine is an evergreen scrambling shrub with thin woody stems of older growth and long (up to several metres) ribbed and spirally-twisting current year's stems. Current year's stems bear opposite leaves of 5-11 lanceolate, dull green leaflets, 1-8cm long, the terminal leaflet being longer than the others. Flowers are formed in groups of 1-5 at the ends of branches, with a small green calyx with awl-shaped teeth and a white tubular corolla expanding into 5 petal lobes. Flowers are very fragrant. The fruit is a shiny black berry. Several species of jasmine are native to Europe but have yellow flowers.

*J.officinale* is native to China, northern India, Pakistan and the north-western Himalayas. It is widely grown in European gardens for ornament and is grown commercially in a few places in south-east France for the perfume. Jasmine concentrate is produced in Italy, France, Morocco, Egypt, China and Turkey but also the absolute is produced mainly in France.

*J.grandiflorum* is a similar plant, often with broader leaves and larger flowers, the corolla tube is often tinged with mauve. It is cultivated in the same way as *J.officinalis* for the perfume industry in France.

## **Details of Quality Characteristics**

There are over 100 constituents of the oil including benzyl acetate, linalool, phenylacetic acid, benzyl alcohol, farnesol, *cis*-jasmone, methyl jasmonate, among others.

## **Current Production and Yields**

In southern France in the first year one hectare of Jasmine produces 1,200 to 2,000 kg of flowers, in the second year 3,000 to 4,000 kg. Yields of concentrate vary between 0.28 and 0.3%, producing between 42 and 55% absolute. (Guenther, 1949)

### **Constraints upon Production**

Jasmine can not tolerate strong winds and therefore requires protection of a wall or barrier in susceptible, open areas. The plants need to over-winter in the glasshouse in the first year as protection from frosts when they are still in the early stages of growth.

### **Markets and Market Potential**

- Toiletries
- Cosmetics
- Perfume
- Aromatherapy
- Food
- Drinks (soft and alcoholic)
- Medicinal (Antiseptic, Antispasmodic)
- Therapeutic

Jasmine flowers make a calming and sedative infusion, taken to relieve tension. The oil is considered antidepressant and relaxing. It is used externally to soothe dry or sensitive skin. Jasmine is used extensively in India to control fertility in women.

### **Other Information**

The plants succeed well in well-drained loamy soil. Plants are hardy to about -15°C. The flowers are very fragrant with a delicious aroma. The plants should be sown outside in late spring/early summer after the last frosts when the plant has been over-wintered in the glasshouse. Flowers will then be hand picked throughout the summer when they become visible. Jasmine is a very fast growing crop.

Plants are resistant to the commonly destructive disease honey fungus. It was also reported in research from 1988 that Jasmine is a host of root-knot nematodes (especially common in Iraq).

## Research

Research is being undertaken within the crop to identify the anti-inflammatory effect against acute and chronic inflammation, it is thought that Jasmine is beneficial in this area but needs further study to confirm the outcome. Research has also recently been carried out with the view to improving the quality and virus status of *Jasminum officinale*.

## Useful Websites

[http://www.comp.leeds.ac.uk/cgi-bin/pfaf/arr\\_html?Jasminum+officinale](http://www.comp.leeds.ac.uk/cgi-bin/pfaf/arr_html?Jasminum+officinale) - General plant database providing a wide range of information

<http://www.nybg.org/plants/plants/jasmine.html> - General plant information and cultural requirements

## BioMat Net

[FAIR-CT97-3628 – Improving production and quality of essential oil from aromatic plants by genetic engineering](#)

## Contacts

## References

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**Lawless, J.,** (1995). *Essential oils*. Element: Shaftsbury

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