

# Bergamot

*Citrus bergamia* syn. *Citrus aurantium* ssp. *bergamia*

**Botanical Family:** Rutaceae

**Botany:** A hybrid of bitter orange and lemon, the tree grows to about 16 feet, with strong lush green leaves and star shaped white flowers. The fruit is round to pear shaped, ripens from green to yellow and is inedible. (The peel is dried and used in cooking, the drinks industry and is also candied). More fragile than orange or lemon trees, it requires a special soil and climate and is mainly grown in the Calabria district of Southern Italy. It is harvested from November to February and 100 kilos of fruit produces approx. 500 grams of essence. The pulp is used in making citric acid. The leaves are also sometimes distilled producing a form of petitgrain. Not to be confused with the herb Bergamot or Bee Balm (Monardi didyma).

**Country of Origin:** Southwest coast of Calabria, Southern Italy, Morocco, Ivory Coast. Native to tropical Asia.

**Part of Plant used:** Zest or peel of fruit

**Extraction method:** Expression from the fresh peel of the nearly ripe fruit

**Color of Oil:** Emerald green - olive green  
• The color of bergamot will change to a yellowish to clear color upon aging or exposure to light

**Odor Description:** Rich, exotic, fresh, sweet, sharp, citrus becoming more spicy after a time.

**Safety Information:** • Photo toxic - Do not use prior to going into the sun or other similar light. \*To overcome problems with photo toxicity the Bergamot oil can be vacuum distilled to create a terpeneless and bergaptenless oil. This process will result in an oil which has greater solubility and a slightly stronger and finer odor • Recent research by Britains Cancer Research Campaign and Bergderm Labs in Paris: A suntan lotion which includes small quantities of the chemical 5-MOP (5-methoxypsoralen) or Bergaptene which stimulates the natural process of tanning, has been found to protect the skin from burning. This lotion is expected to be licensed for use in Britain soon. However the amounts of 5-MOP is only 30ppm, where as an expressed Bergamot oil contains from 3,000 – 7,000 ppm of 5 MOP. What is being used in the suntan lotion is almost a homeopathic dosage.

**Chemical Constituents:** *Monoterpenes* (30-48%): **limonene** (26.7-55%), **b-pinene** (2.9-15%), r-cymene (0.1-3.6%), g-terpinene (1.2-12%), a-pinene (0.5-3%), camphene (trace-.03%), sabinene (0.6-1%), d-3-carene (0-2%), myrcene (0.9%), alpha-bergamotene (0.23%) *Alcohols* (45-60%): linalool (11-25%), nerol, geraniol (0.5-6%), a-terpineol (0-0.13%) *Esters* (30-60%): **linalyl acetate** (30-50%), geranyl acetate (0.46-1.5%), neryl acetate (0.5-0.9%), a-terpinyl acetate (0.21%) *Aldehydes:* geranial (0.1-0.5%), neral (.04-.4%) *Coumarins:* **bergaptene** (5-10%)

**Actions of the body:** Analgesic, *antidepressant*, *antiseptic*, antispasmodic, carminative, cicatrisant, deodorant, *digestive*, expectorant, febrifuge, insecticide, sedative, *stomachic*, *tonic*, vermifuge, vulnerary

**Keywords:** "Brings in the sunshine". Uplifting, antidepressant, antiseptic, refreshing

## Main Therapeutic Properties

The Head: good for bad breath (strong oral bacteria disinfectant), mouth infections, sore throats, tonsillitis

*The Digestive system:* helps to relieve painful digestion, flatulence, colic and indigestion.

*The Nervous system:* sedative, useful during states of anxiety, colitis, has a balancing effect on appetite (anorexia or compulsive eating), intestinal infections, parasites

*The Respiratory system:* due to antiseptic property, can be useful in treating respiratory infections such as bronchitis, it is particularly good with lemon (*Citrus limon*)

*The Skin:* can heal dermatitis including acne, psoriasis and eczema, oily complexion, herpes, insect bites and repellent, dandruff, shingles

*The Urinary system:* a valuable antiseptic, treat inflammations and infection with e.g. cystitis, urethritis, urinary infections

*Psychology of:* uplifting and yet can be calming depending on what you blend it with.

## History and Myth

It is said to have been bought from the Canary Islands to Calabria, Italy by Christopher Columbus. It is named after the city of Bergamo in Lombardy where the essence was first sold.

The essence has been used in Italian folklore medicine since 1725, although it does not appear in any other cultures. It was used primarily for fever (including malaria) and worms.

Recent research (1960's) in Italy by Paolo Rovesti has shown Bergamot to be successful in mouth, skin, respiratory and urinary tract infections, It has been used for gonococcal infections, leucorrhoea, vaginal pruritis and in cancer of the uterus it minimizes local infection, purulent secretions and irritation of the genitalia. A strong antiseptic, it is effective against gonococcus, staphylococcus, coli, meningococcus, vibrio Nasik, diphtheria bacillus and many more. It is indicated in tonsillitis and most types of sore throat. It is extensively used in cosmetics, toiletries, suntan lotions and perfumes. It is a classic ingredient of eau-de-cologne and used to flavour Earl Grey tea.