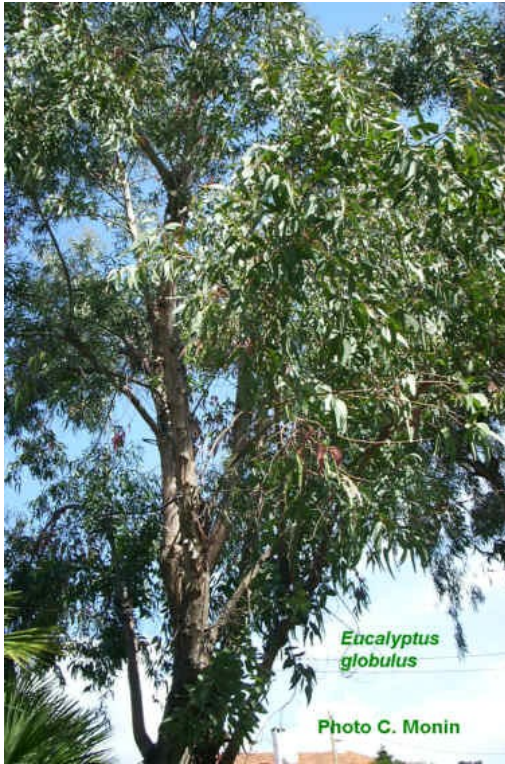


Eucalyptus globulus var. globulus

Aka blue gum, gum tree, stringy bark, Australian fever tree, Tasmanian blue gum



FAMILY: Myrtaceae

DESCRIPTION AND BOTANICAL INFORMATION: There are over 700 species in the Genus *Eucalyptus*. They are evergreen and the tallest species grows up to 328 feet tall, making it one of the world's tallest trees. About 500 of the species of *Eucalyptus* can produce an essential oil. Many of the eucalyptus oils are used in industrial and perfumery applications, in addition to those that are used for medicinal purposes. The other species that you see commonly in aromatherapy are:

- *E. citriodora* (lemon-scented eucalyptus)
- *E. dives* CT. Piperitone (broad leaved peppermint eucalyptus)
- *E. radiata*
- *E. smithii* (gully gum)
- *E. staigeriana* (lemon scented ironbark)

The eucalyptuses are native to Australia and Tasmania but they are grown now all over the world in areas with subtropical or Mediterranean climates.

Eucalyptus is now grown for essential oil production principally in China, Brazil, Spain, Portugal, South Africa, and Australia, although Australia is not the major producer of the oil anymore. I prefer the essential oil from Australia.

Eucalyptus globulus is a medium sized tree, usually with a single, branching trunk, bluish-green leaves and small, fragrant white flowers.

FOLKLORE AND HISTORY: The Genus name *Eucalyptus* comes from the Greek word “eucalyptos” which means “well-covered” and refers to the fact that the buds are initially covered in a membrane.

An interesting thing about eucalyptus is that although it will tolerate some drought, it makes very heavy use of water when it’s available so it was planted in the past to help drain marshy areas and prevent malaria epidemics. In Chinese medicine one of the properties of eucalyptus is that it clears dampness, which is the pernicious influence at the base of many infections.

Eucalyptus has been used medicinally by the aborigines for a very long time and they refer to it as *malee*. There is a very interesting note about it in the 1790 journal of John White, surgeon general of the British colony in New South Wales who wrote:

“On making incisions in the trunk of this tree, large quantities of red resinous juice are obtained, sometimes even more than 60 gallons from a single tree. When this juice is dried it becomes a very powerful astringent gum resin... we administered it to a great number of patients with the dysentery, which prevailed much soon after the landing of the convicts, and in no one instance found it to fail.”

EXTRACTION: The essential oil is produced by steam distillation of the fresh leaves. Branches may also be included by some distillers.

PHYSICAL AND AROMATIC PROPERTIES: Eucalyptus essential oil is a colorless to pale yellow liquid with a very characteristic fresh, sharp, penetrating camphoraceous odor that many people describe as medicinal. It feels thin but slightly oily when rubbed between the fingers. Top and middle notes dominate the aroma and it blends well in terms of fragrance with lavender, lemon, pine and many other conifers, rosemary, and thyme. It often does not blend well with florals and can overpower a delicate floral aroma.

MAIN CONSTITUENTS (Spanish Eucalyptus EO – values given are approximations:

1,8 cineole	66%*
alpha-pinene	15%
limonene	3%
trans-pinocarveol	3%
aromadendrene	2%

para-cymene	2%
pino-carvone	1%
alpha-terpinyl acetate	0.88%
globulol	0.47%
alpha-terpineol	0.44%
beta-pinene	0.35%

Eucalyptus essential oil contains over 250 chemical constituents. Oil produced for the pharmaceutical industry and other industrial application is frequently rectified, meaning that it has been redistilled and some of the minor constituents have been lost.

*Note: 1,8 cineole is aka eucalyptol. This same constituent is called cajaputol when it is found in cajaput essential oil. Samples of *Eucalyptus globulus* vary in terms of how much euclyptol they contain but generally the level is high, varying from about 45 to 84%

WESTERN ACTIONS WITH EMPIRICAL SUPPORT:

analgesic, anti-inflammatory, antibacterial (including MRSA), respiratory stimulant with anticatarrhal/expectorant effects, antifungal (candida albicans), pulmonary antiseptic, immunomodulator, mucolytic, pulmonary decongestant, antiviral (Herpes Simplex I & II), CNS stimulant (in non-toxic doses)

A sampling of references:

Cermelli, C. et al. (2008) Effect of eucalyptus essential oil on respiratory bacteria and viruses. *Current Microbiology*, 56 (1): 89-92.

Dixit, A. et al. (2012) *Eucalyptus globulus*: a new perspective in therapeutics. *INTERNATIONAL JOURNAL OF PHARMACEUTICAL AND CHEMICAL SCIENCES*, 1 (4): 1678-1683.

Mishra, A. et al. (2010) Phytochemical Screening and Antioxidant Activity of essential oil of Eucalyptus leaf. *Pharmacognosy Journal*, 2 (16): 25-28

Serafino, A. et al. (2008) Stimulatory effect of *Eucalyptus* essential oil on innate cell-mediated immune response. *BMC Immunology* 2008, 9:17 doi:10.1186/1471-2172-9-17.

Silva, J. et al. (2003) Analgesic and anti-inflammatory effects of essential oils of Eucalyptus. *Journal of Ethnopharmacology*, 89 (2-3): 277-283

TRADITIONAL AROMATHERAPY ACTIONS:

Antineuralgic/rheumatic, antibacterial, antifungal, anti-inflammatory, antispasmodic, antitussive, antiviral, anticatarrhal, balsamic, decongestant, depurative, diuretic, expectorant, febrifuge, rubefacient, stimulant, tonic, vulnerary

TYPICAL WESTERN INDICATIONS:

Eucalyptus globulus is the classic remedy for colds, flu, and respiratory tract infections and is best known for its applications in these areas. Its analgesic and anti-inflammatory properties also make it useful for arthritis, rheumatism and muscular aches and pains. Its antimicrobial properties are useful for addressing many types of skin problems and it is one of the essential oils that can be very good to use with foul-smelling necrotic skin ulcers. Eucalyptus essential oil may be helpful for viral diarrhea when used in an abdominal compress or massage oil rubbed over the abdomen. It has been successfully used in sprays to address shingles and is also useful in cases of Herpes simplex, measles and chickenpox.

CHINESE MEDICINE CORRELATES

Energy: Warm
Dry
Main Element: Metal
Main Spheres of Action: BMS

CM Actions:

- Clears Damp and Cold
- Lung Qi tonic
- Opens the chest
- Strengthens Defensive Qi

CM Indications: Recommended for respiratory problems that produce a lot of mucous and other “damp” conditions such as cystitis, vaginal infections and oozing sores. Because it’s a lung tonic and opens the chest it helps to normalize breathing. Because it strengthens Defensive Qi it’s used in Chinese Medicine to help prevent/ward off infection.

SUBTLE ACTIONS: Like clary sage, eucalyptus helps to normalize and restore the Bodily Soul (P’o). Mojay says that it cleanses the mind and spirit like it cleanses the air and blood, so it helps to dispel stagnant feelings that prevent people from moving forward; he recommends it for people who feel hemmed in and constricted by their circumstances/environment or suffocated by someone.

SUBTLE INDICATIONS: emotional constriction, constricted breathing; bitter and obsessed with what others/circumstances have done to them; not moving forward

BEST USES BY SYSTEM:

Skin Care –abscesses, acne, boils, burns/blisters, cuts, herpes simplex, insect bites/stings, skin infections, wounds, necrotic ulcers

Musculoskeletal Complaints – arthritis, muscle stiffness/muscular aches and pains, plantar fasciitis, sprains, rheumatism

Digestive System Complaints - infectious diarrhea

Nervous System Complaints - neuralgia, headaches/migraine, adrenal fatigue/exhaustion/neurasthenia; use in low amounts to avoid over-stimulation

Endocrine and Reproductive Complaints – urinary tract and vaginal infections (sitz bath)

Respiratory System Issues: asthma (this is a specialized intervention that requires specific training and should be applied only in appropriate settings since application of any essential oil can, in some cases, initiate an asthma attack), bronchitis, sinus congestion/sinus infection, chest congestion, colds/flu/infections, sore throat/laryngitis. Note: eucalyptus essential oil has an extremely drying effect and is best used for damp respiratory conditions; used with dry, hacking coughs or other signs of dryness it may be aggravating.

Lymphatic System: lymphatic congestion

Immune System: poor immune function related to chronic stress; it helps to strengthen immune function after prolonged colds/flu/bronchitis/pneumonia

Mental/Emotional: can help cool down heated emotions, like anger but use in small amounts as it can be very stimulating; do not use when there is agitation or mania.

SAFETY ISSUES/CONTRAINDICATIONS: Used externally and in proper dilution it's generally non-toxic, non-irritant and safe for adults. **It is not a good essential oil to use with babies and children under ten years of age as there are many documented instances of infant collapse and even death following application near the nose/face of infants; cases of CNS effects/poisoning have been reported in older children as well. People who will be holding infants or young children should not apply this essential oil to themselves and it should not be diffused into the air when babies/young children will be present.**

A potential disadvantage of eucalyptus essential oil is that it **can be unpleasantly stimulating** for some people, especially in larger amounts; it can make some people restless and/or nervous and impair sleep. In such cases *E. radiata* is a better choice. Use no more than 3 drops of any *Eucalyptus* in a bath and one drop in a steam inhalation. Eucalyptus can have a very drying effect, both in the nose and on the skin, which can become unpleasant if too much is used or it is used too frequently.

Because it's a respiratory system stimulant, it will increase the output of respiratory fluids so you must avoid dairy and stay well hydrated to keep those fluids thin.

Eucalyptus essential oil may antidote (negate) homeopathic remedies and **should not be used when homeopathics are being taken.**

Eucalyptus essential oil is NOT included on Tisserand and Balacs' list of essential oils that are safe to use in pregnancy.

Eucalyptus essential oil has been shown to produce seizures with oral use.