ESSENTIAL OIL MONOGRAPHS

Including:
BOTANICAL NAMES
PRODUCTION METHODS
DESCRIPTIONS OF OILS
CHEMICAL COMPOSITION
SAFETY INFORMATION
TRADITIONAL USES
REFERENCED MEDICINAL ACTIONS
POTENTIAL USES

Compiled from Internationally recognized resource materials on: Botany, Essential oil Production and Analysis, documented Adverse Effects, Medicine, Pharmacology and Microbiology.

By
Martin Watt
Cert. Phyt.

If viewing this .pdf file on a phone you may need to download a .pdf file reader for the internal document links to work

GENERAL ACTIONS INDEX

Some POTENTIAL USES are traditional or well-recognized, some are based on scientific/medical research. Always cross check the information in the oil monograph concerned for more detail.

Most actions of essential oils that affect the mind will vary according to individual circumstances and particularly the time of day and work regime. Therefore, the recommendations must only be considered a rough guide to likely effects. When dealing with the mind one cannot lay down hard and fast rules as to which essential oils may be useful. It is definitely a time to be guided by the odor preferences of the individual.

It cannot be overemphasized the need for correct diagnosis of the condition, and that the essential oils are used in the most appropriate manner. For example, using essential oils in a bath to treat internal thrush is a waste of time, whereas the oil used in the appropriate manner per vaginum may cure the problem.

ABSORPTION VIA BREATHING
See 'Eucalyptus-1,8-cineole'
d-limonene--see citrus oils
Neroli

ACNE
Bergamot
Cedarwood Virginian
Chamomile German
Clary sage
Juniper?
Lavender
Palamarosa
Rosemary
Tea tree

ACNE ROSACEA
Cajuput
Chamomile German

ALTITUDE SICKNESS
Peppermint
Thyme

Antibacterial next column>

Back to main index

ANTIBACTERIAL EFFECTS-NON SPECIFIC
Basil
Cajuput
Chamomile German
Cinnamon leaf
Citronella
Clove
Cornmint
Cubeb
Eucalyptus globulus (old)
Eucalyptus citriodora
Geranium
Ho leaf (linalool)
Jasmin
Juniper
Lavender
Lemon
Lemongrass
Lime
Iinalool
Neroli
Orange
Palmarosa
Peppermint
Pine

Continued next page left

ASTHMA
Depending on which type of asthma:
Aniseed
Cajuput
Cubeb
Eucalyptus
Frankincense
Ginger
Lavandin
Lemongrass
Sweet majoram
Myrrh
Mentha citrata
Pepper black
Petigrain
Pennyroyal
Petigrain

ATHEROSCLEROSIS
Basil
Lavender

ATHLETES FOOT- TINEA PEDIS
Clove
Eucalyptus citriodora
Fennel
Lavender
Ho leaf
Thyme-very dilute
Tea tree

BACKACHE after hard work
See also 'Muscular'
Juniper and/or Lavender

BOILS
Cajuput
Chamomile German
Lavender
Marjoram sweet
Myrrh
Tea tree

Back to main index

BRAIN INJURY
To improve performance
Peppermint
Rosemary

BRAIN- Confirmed or Likely effects on.
Basil
Bergamot
Chamomile Roman
Clove
Cornmint
Cubeb
Eucalyptus globulus
Geranium
Jasmin
Lavender
Lemon
Lemongrass
Marjoram sweet
Neroli
Orange
Patchouli
Peppermint
Pine
Rose
Rosemary
Sage

BRONCHIAL & NASAL CONGESTION
Basil
Bay
Cajuput
Camphor
Cedarwood Virginian
Chamomile German
Chamomile Roman
Cinnamon leaf
Clove
Cornmint
Cubeb
Cypress
Eucalyptus globulus?
Eucalyptus citriodora
Fennel
Ho leaf *Continued next page left*

4. **Organism resistance.**
Some bacteria are more likely to be inhibited by numerous essential oils, while other bacteria tend to only be affected by a relatively narrow range of oils. For example, Staph. aureus is very sensitive to numerous essential oils. *Elnima N. et al 1983. Pharmazie. 38, 743-745.*

5. **Dilution.**
As with most medicinal products, **how much** essential oil to use can be critically important. Testing of essential oils has demonstrated that some will inhibit pathogenic organisms at levels of use far below what would be considered 'normal' use. However, other oils require much greater amounts than it is normal to use in conventional aromatherapy. It is perhaps in this area that a divergence occurs between *'aromatherapy'* and the *'medicinal'* use of essential oils. In vitro testing of essential oils has demonstrated an effect commonly encountered in natural medicines. This is that the right amount of essential oil will kill or inhibit organisms, while the wrong amount will stimulate their growth. The difference between the two levels of concentration causing this effect can often be at or around the amount of essential oils conventionally used.

6. **In vitro versus in vivo activity.**
A common mistake found in most aromatherapy books is that the writers rarely take account of the different modes of testing for antimicrobial activity. It is common to find that following tests *'in vitro'*, that authors simply assume the same or similar results will be forthcoming *'in vivo'*. In some cases that may be true, but commonly results of in vitro testing do not hold good when the same oil is used to treat an animal or human.

A large difference in activity between testing an essential oil in vitro and in vivo has been found. Listeria monocytogenes was found to be inhibited by 0.5% of clove oil in vitro. However, when 1% of the oil was used in a meat product no inhibition occurred. *Aureli P. et al 1992. J. Fd. Protection 55, 344-348 and Ting E. et al 1992. J. Fd. Safety 12, 129-137.*

7. **Internal versus external use.**
Many essential oils given internally in the appropriate dose, may be capable of inhibiting systemic bacterial infections because of their ready absorption from the gut, followed by excretion from the lungs, kidneys, liver and intestinal tracts. The huge problem is that many essential oils are adulterated or modified in a variety of ways making internal use dangerous or ineffective.

Certain oils when applied to the skin in the appropriate dose, will inhibit microbial contamination of wounds in the same manner as in vitro tests.

There is a strong possibility that when aromatic vapors are inhaled, that enough of these compounds may get into the bloodstream to be able to exert a systemic effect. For example, when the major component of orange oil, *d*-limonene, was administered to men by short-term vapor inhalation. Up to 70% of the.....*cont*..

BASIL OILS

Family: Lamiaceae (Labiatae).
Main Genera: Ocimum (Ocymum) with about 150 species.
Species: The species said to be used for essential oils are:
O. basilicum *Linn*. With at least 60 varieties
O. gratissimum *Linn.*
O. sanctum (Indian),
O. canum and numerous varieties, hybrids and clones.

Apart from the main characteristics of the Lamiaceae family, the botanical characteristics of the different species are so huge it is pointless describing them in detail here.

MAIN COUNTRIES OF ORIGIN: Different varieties of basil are produced world-wide, but in some cases the plants commonly called 'basil' are not necessarily related to the Ocimum genera. A lot of so called 'sweet basil' is produced in Egypt, Southern Europe including the Balkans, and some parts of Eastern Europe. Some 'Reunion' or 'Comores' type basil is produced in the Madagascan islands. Other varieties are produced in India, Haiti, Central America, Africa, Fiji, Morocco, etc.

Detailed horticultural information can be found in the following report: *Simon J. 1985. Sweet Basil: A Production Guide. Cooperative extension Service, Purdue university. Bulletin HO-189.*

EXTRACTED FROM: The leaves and/or flowering tops by steam distillation yielding 0.2-1.5% of essential oil. The yield increases as the plant matures and is at a maximum at full blossom. However, the chemical composition of the oil can vary significantly depending on the stage at which the plants are harvested. For essential oil the cut basil is normally field dried for 1-3 days before the material is collected and distilled.

DESCRIPTION: Basil oils in general are clear, pale-yellow to greenish-yellow. The oils high in *methyl chavicol* have a sweet, fresh-spicy fragrance reminiscent of the popular herb. The oils high in *linalool* have an entirely different fragrance somewhat reminiscent of a cross between basil and aniseed. Oils containing appreciable amounts of 1,8-cineole are very camphoraceous.

COMPOSITION: The chemical composition of the different sub varieties of Basil oil is about as variable as it is possible to get. There are about 4 major classifications used in the essential oils trade for the different types of basil oil: **Methyl cinnamate type, Methyl chavicol type, Eugenol type and Linalool type.**

The following analysis are presented simply as a sample of the diversity of chemical compositions found in so called 'basil oils'.