

Pharmacopeia Module 12

Jasmine (Jasminum officinale; J. sambac; J. grandiflorum; J. auriculatum)

Neroli (Citrus aurantium)

Orange (Citrus sinensis)

Patchouli (Pogostemon cablin)

Jasmine (Jasminum officinale; J. sambac; J. grandiflorum; J. auriculatum)

Overview:

Jasmine is a deciduous, shrubby, vine-like, flowering plant belonging to the Oleaceae family and native to Europe, Asia and other warm and humid regions around the world. There are over 300 jasmine species, with several of them known for their therapeutic and cosmetic properties. Jasmine flowers have a unique, easily recognizable scent is popular as an aromatic and cosmetic herb. Therapeutic use of jasmine has been documented since the oldest of times especially in the Persian, Indian and Chinese empires. It was used to treat various internal ailments, as a topical ingredient, sleep promoter and aphrodisiac.

Out of the numerous jasmine species, Jasmine sambac (night blooming jasmine) and Jasmine grandiflorum (dawn blooming jasmine) are the main sources for essential oil. Jasmine sambac flowers are nocturnal, opening and releasing their scent during night time; Jasmine grandiflorum opens in daytime. While their essential oils have similar properties the aromatic profiles are slightly different. Jasmine sambac is heavier and sweeter, with rich, deep, sultry, exotic with pronounced fruity notes. Jasmine grandiflorum is sweet, yet softer, delicate, light, evolving in fruity base notes and herbaceous dryout.

Jasmine essential oil is one of the most expensive oils. It takes over 8 million handpicked jasmine blossom to obtain 1 kilo of essential oil. As the flowers are very sensitive and bruising of the blossom must be avoided at all costs the harvesting is very labor intensive. The distillation process must begin shortly after picking the blossoms as there are numerous volatile molecules that will otherwise be lost.

Therapeutic Actions and Benefits:

Jasmine is highly rich in monoterpenes, sesquiterpenes and esthers. Jasmine has an affinity for the women's endocrine and reproductive system. Native Polynesian tribes have been using jasmine as a galactogogue, to increase milk production and encourage flow in nursing mothers. Jasmine is also a powerful aphrodisiac, with effects in both genders; it works by both stimulating the nervous system and by enhancing peripheral circulation. Jasmine is also effective in alleviating skin conditions, stretchmarks,

promoting wound healing and skin health, soothing muscles and joint pain and relieving local pain and spasm. In the nervous system, jasmine has relaxant, calming, and sedative properties that are helpful in relieving stress and anxiety and promoting a deep, resting sleep.

List Of Specific Therapeutic Actions

<u>Endocrine / reproductive:</u> galactogogue, regulates menstruation, helps in PMS and menopause, enhances libido, helps in frigidity, enhances romantic moods, aphrodisiac <u>Circulatory:</u> enhances peripheral circulation, soothes varicose veins, treats broken capillaries

<u>Skin:</u> mild on the skin, highly compatible with all skin types, helps in the treatment of broken capillaries and varicose veins, attenuates stretch marks, has anti-oxidant and anti-aging properties, helps in prematurely aged skin

<u>Musculoskeletal</u>: relieves muscular and joint pains, aids in rheumatism, relieves neuralgias, soothes sore muscles, aids in carpal tunnel and restless leg syndrome <u>Nervous</u>: fights stress and anxiety, reduces nervousness, has soothing and calming properties, sedative, helps in sleeping disorders and insomnia, helps in depression – especially post-partum

<u>Energetic</u>: has relaxing properties, soothes emotions and calms nerves, uplifts spirits, boosts self-confidence, supports positive emotions, stimulates the mind, enhances alertness

Ayurveda:

Jasmine is considered balancing for the emotions and indicated for depression related to pitta and kapha. It also relieves tension and nervousness.

Traditional Chinese Medicine:

In TCM it is used to address the shen (mind), heart and liver. It counteracts Qi energy stagnation and encourages flow.

Aromatic profile:

Scent:

Jasmine sambac: sweet, heavy, with rich, deep, sultry notes, exotic with pronounced fruity notes

Jasmine grandiflorum: sweet, soft ethereal, light; developing into herbaceous and fruit base notes.

Note: base

<u>Blends well with:</u> Roman chamomile, geranium, ginger, lavender, lemongrass, mandarin, lemon, grapefruit, orange, vetiver

Safety: Non-toxic, non-irritating

How To Use Jasmine Essential Oil:

Jasmine oil can be applied topically (pure or diluted), as a compress, in the bath, through direct inhalation, or diffuser.

Add 1-2 drops in the bathwater for a relaxing, sensual and romantic experience.

Add 2-3 drops in ½ oz. carrier oil or a skin lotion and massage into stretchmarks. The massage oil is recommended for mothers who just gave birth, to avoid post-partum depression.

Use a couple drops and massage on sore muscles, bruises and joints to reduce inflammation, alleviate pain and support the healing process.

Diffuse jasmine or use for direct inhalation to soothe nerves and relax, reduce stress and anxiety and enhance romantic moods.

Jasmine Oil Recipes:

Mood Balancing Blend:

- 2 drops jasmine
- 2 drops bergamot
- 4 drops clary sage

Use in diffuser or direct inhalation. Dilute the blend in $\frac{1}{2}$ oz. carrier oil for massage.

Romance Blend:

- 4 drops jasmine
- 4 drops sandalwood
- 2 drops rose

Use the blend in the diffuser or for direct inhalation. Dilute the blend in a carrier oil for massage.

Neroli (Citrus aurantium)

Overview:

Neroli is the essential oil obtained from the blossoms of bitter oranges (Citrus aurantium), a perennial, medium size tree, and belonging to the Citrus genus and part of the Rutaceae family. The name neroli comes from Nerola, Italy where in the 17th century Anne Mari Orsini, the local princess, used bitter orange blossom essential oil as perfume. The fragrance instantly became popular and it is currently one of the most extensively used fragrance in perfumery. Bitter orange flowers, white and pleasant smelling, are usually picked in April or May and immediately distilled to obtain neroli.

Neroli essential oil is steam distilled the blossoms of the bitter orange tree. The yield is very low, requiring around 1000 kg of blossoms to produce 1 kg of oil. It is pale to yellow green and a thin, mobile consistency. Neroli is not to be confused with petitgrain, which is a distillation of aerial parts such as leaves and twigs. Neroli is fresh and distinctive, with a slightly spicy, citrusy aroma with sweet and flowery notes that makes it a very popular perfumery ingredient. Neroli blends excellently with almost any type of fragrance, especially citrus and floral and is a great complementary top note for any perfumery or aromatherapy blend. It has an affinity for the skin. In aromatherapy neroli is bright, soothing and positive. Due to its scarceness and market value, neroli is frequently adulterated with petitgrain or synthetic products.

Therapeutic Actions and Benefits:

Neroli essential oil is rich in active ingredients that contribute to its therapeutic properties. Scientific research shows that neroli has antibacterial, antidepressant, anti-inflammatory, antiseptic, antifungal, antioxidant, regenerative, nervine, calming and sedative properties. Neroli essential oil has an affinity for the skin and musculoskeletal systems. It promotes skin regeneration and has antioxidant properties. It is also a great adjuvant in wound healing and reducing scars and stretch marks. In the musculoskeletal system neroli is soothing and relaxing. Massaged on the lower abdomen, it soothes menstrual pain and cramps. Neroli essential oil is also supports the circulatory system by promoting capillary health and encouraging flow. In the nervous system, neroli is calming, soothing, bright, optimistic, dispels tension and stress, supports mental balance and induces positive feelings.

List of specific therapeutic actions

<u>Skin:</u> has antioxidant and anti-aging properties, effective in wrinkle treatment, brightens skin, promotes skin, nail and hair health, promotes wound healing, supports skin regeneration, balances sebum production, helps in acne treatment, alleviates stress-triggered skin conditions, helps in acne treatment, reduces scarring and stretch marks

<u>Reproductive:</u> soothes menstrual pain, reduces cramping, regulates menstrual cycle <u>Musculoskeletal</u>: relieves muscular and joint pains, aids in rheumatism, relieves neuralgias, soothes sore muscles, aids in carpal tunnel and restless leg syndrome, helps fatique muscles

<u>Nervous:</u> fights stress and anxiety, reduces nervousness, has soothing and calming properties, aids in sleep disorders and insomnia

<u>Energetic</u>: calming, relaxing, soothes emotions, strengthens nerves, induces mental clarity, helps focus, fights negative and unproductive thoughts, boosts self-confidence, encourages positive thinking

Aromatic profile:

<u>Scent:</u> floral, light and refreshing, sweet-terpeney, powdery, citrusy, dried hay aroma with green, spicy hints

Note: top

<u>Blends well with:</u> all citrus oils, benzoin oil, frankincense, sandalwood, geranium, rose, jasmine, lavender, ylang-ylang

<u>Safety:</u> non-toxic, non-irritating, non-photo-sensitizing

Ayurveda:

In Ayurveda neroli is used to treat skin, anxiety, sleeping disorders and to balance emotions.

Traditional Chinese Medicine:

In TCM neroli is used to balance Qi and encourage its circulation. It is also used to relax shen (mind)

Important scientific data:

Neroli essential oil is rich nerol, a-pinene, a-terpinene, farnesol, nerolidol, geraniol, b-pinene, neryl acetate, camphene, linalyl acetate, methyl anthranilate, indole and linalool.

The volatile ingredients in neroli essential oil are efficient antibacterial, antifungal and antiviral agents, effective even against resilient bacteria and fungi. Furthermore, both alpha-pinene and camphene have antioxidant properties by scavenging free radicals. This makes neroli essential oil ideal for topical applications. In vitro studies showed that nerol is equal or even superior to menthol, when it comes to antibacterial activity.

Alpha-pinene has potent antimutagen properties with great potential in anti-cancer therapy. Alpha pinene also has anti-tumor and anti-mutagenic effects. In other in vitro studies alpha-pinene showed anti-inflammatory effects in vitro, by inhibiting pre-inflammatory cytokines.

Early studies on aromatherapy effects on the nervous system showed that essential oils affect the state of mind by simple inhalation. Diffusing essential oil or directly inhaling essential oils allows active micro particles to go through capillary barrier into the blood stream. This validates the hypothesis of essential oils efficiency on CNS. Neroli showed calming, sedating effects.

How to Use Neroli Essential Oil:

Neroli oil can be applied topically (always diluted), as a compress, in the bath, through direct inhalation, or diffuser.

Neroli can be used as perfume alone, or in a blend. Wearing neroli boosts optimism, encourages connection and supports friendship.

Its primary use is by topical application to support skin healing. Neroli has a great compatibility with the skin. Incorporate alone or with helichrysum and carrot seed essential oil in skin creams, lotions and ointments. Dilute neroli in marula oil and use for bright, glowing and radiant healthy skin. Use neroli in massage oil and gently massage the lower abdomen when experiencing menstrual cramps.

Use a couple drops and massage on sore muscles, bruises and joints to reduce inflammation, alleviate pain and support the healing process.

Add 2-3 drops in the bathwater for an uplifting and relaxing experience.

Diffuse neroli or use for direct inhalation to induce positive thinking, calm and soothe, and balance emotions. Blend with lavender to promote a deep, restful sleep.

Neroli Oil Recipes:

Smooth skin blend:

- 4 drops neroli
- 4 drops mandarin
- 10 drops helicrhysum
- 4 drops lavender
- 2 drops carrot seed

Dilute the blend in $\frac{1}{2}$ oz. carrier oil (rosehip) and used on prematurely aged or troubled skin.

Soothing massage blend:

- 4 drops neroli
- 4 drops orange
- 4 drops ginger
- 2 drops black pepper

Dilute the blend in ½ oz. carrier oil (jojoba) and use on sore muscles and overtired body.

Orange (Citrus sinensis)

Overview:

Orange is a perennial, small to medium sized tree, belonging to the Citrus genus and part of the Rutaceae family. The fruits of the orange tree are amongst the most popular fruits in the world. Orange is native to the Mediterranean basin other areas in the world with similar climate. The orange fruit is rich in vitamin C and it has a sweet, slightly sour, unmistakable aroma. Orange is extensively used in the food and beverage industry. Preparations of the fruit and its skin have been used therapeutically for ages, and as a dietary supplement for vitamin C helpful against scurvy and helpful in anemia. Scientific research showed that oranges are benefic for the health by contributing vitamins and minerals to the body, lowering blood pressure and regulating blood sugar levels.

The essential oil is pressed out from the fruit peel. It takes a couple of hundred kilograms of peel to express a kilogram of essential oil that has a greenish orange color and a thin, mobile texture. The orange scent is one of the most recognizable in the world. It is fresh, uplifting, energizing and mood elevating. The essential oil has been scientifically proven to have antibacterial, antifungal, antiseptic and antiviral properties. Orange essential oil is very versatile in blending, enhancing the properties of other oils and harmonizing their scents.

Pure orange essential oil is aggressive to the skin and can be phototoxic; a high dilution (maximum 1%) is recommended for use. Because of the large industrial use of oranges, the essential oil is one of the most affordable and a great asset for any aromatherapy enthusiast.

Therapeutic Actions and Benefits:

Orange essential oil has analgesic, antidepressant, antibacterial, antifungal, antiviral, antiseptic, antispasmodic, carminative, deodorant, digestive, decongestant, soothing and tonic properties. Topically applied in proper dilution orange essential oil stimulates peripheral circulation and relieves joint and muscle pain and promotes musculoskeletal health. Massaged on the abdomen, it stimulates digestion and is considered an adjuvant in supporting the digestive transit. Applied on the skin in a proper dilution orange oil regulates sebum production, which is useful in both dry and greasy skin. In

aromatherapy orange oil is soothing to the nervous system, inducing contentment and positive emotions. The orange scent is associated with optimism; it also fights stress and anxiety, helps in sleeping disorders and insomnia and promotes a deep, restful sleep. Orange essential oil is also a great adjuvant in stress-related conditions, such as digestive or skin problems triggered by anxiety and nervousness

List Of Specific Therapeutic Actions

Endocrine/reproductive: soothes menstrual pain, reduces mood swings

Respiratory: clears airways and sinuses, decongestant

Circulatory: stimulates peripheral circulation, protects blood vessels

Immune: tonic, antibacterial, antifungal, antiseptic, antiviral

Musculoskeletal: relieves joint and muscular pain, soothes sore muscles

Topical: balances sebum production, helps in rashes, eczema, psoriasis, soothes insect bites, promotes skin and hair health

Nervous: alleviates anxiety, calms nervousness, strengthens nerves, helps in sleeping disorders and insomnia, helps in eating disorders

Energetic: uplifting, energizing, elevates spirit, brightens mood, helps in mental fatigue, strengthens the mind, supports creativity, encourages clear and positive thinking, cleanses energies, increases relaxation, fights negative feelings

Aromatic profile:

Scent: sweet, fresh, light, clear, citrus

Note: top

Blends well with: clary sage, vetiver, sandalwood, rose, geranium, jasmine, lavender, ylang ylang, mandarin, lime, grapefruit, bergamot, lemon, cinnamon, clove, ginger Safety: photo-sensitizing, might be irritant in pure form

Ayurveda:

In Ayurveda orange is considered light and dry. It balances Vata and Kapha in conditions associated with anxiety and the feelings of heaviness.

Traditional Chinese Medicine:

In TCM orange balances Qi energy and encourages its circulation. It helps in the liver Qi stagnation, supports the stomach, liver and gallbladder. Orange is also calming and relaxing to the shen (mind).

Important Scientific Data

Orange, as most essential oils, is rich in monoterpenes, sesquiterpenes, esters and benefic alcohols. The main ingredients in orange essential oil are alpha-pinene, beta-myrcene, limonine and other volatile compounds specific to the citrus family.

The volatile ingredients in orange essential are very efficient antibacterial, antifungal and antiviral agents, effective even against resilient bacteria and fungi. Studies have shown effectiveness against resilient pathogens such as E. coli and Candida This makes orange essential oil ideal for topical applications, where it cleanses the and balances sebum production.

In vitro research showed that alpha-pinene has very potent antioxidant and antimutagen by scavenging free radicals and inhibiting tumor growth. The volatile compounds in orange essential oil are also cytotoxic in vitro.

In studies assessing the efficiency of aromatherapy and aromatherapy massage as a complementary treatment in oncology, orange ranked in the top 3 out of 25 essential oils.

The active ingredients, common amongst the citrus family are very potent and can be aggressive to the skin and human tissue. A high dilution of maximum 1% is always recommended as a precaution to photosensitive persons.

How To Use Orange Essential Oil:

Orange essential oil can be applied (always highly diluted, maximum 1%) topically, as a compress, in the bath, through direct inhalation, or diffuser. However, because it can sensitize the skin a patch test before using undiluted is recommended.

Wearing orange essential oil properly diluted in perfume blends offers an energizing, positive energy.

Add 1 drop of orange essential oil in a carrier oil or a skin lotion to balance sebum production. Add 1-2 drops in 1 oz. carrier oil to obtain massage oil with great effects in enhancing peripheral circulation and soothing muscles. Gently massage in an anti-clockwise motion on the abdomen to support digestion.

Add a couple of drops in the bathwater for a relaxing and uplifting experience. Use in the bath should be diluted in an emulsifier as milk, and used in the evening to prevent exposure to UV light afterward.

Add a couple of drops of orange oil on a cloth and add it in the washing machine to obtain a clean, fresh, citrusy smelling clothes. Mix with a couple of drops of peppermint, dilute it in two cups of water and use a spray to freshen the room.

Use in the diffuser to uplift spirit, enlighten mind, elevate mood, energize and create an positive atmosphere.

Orange Essential Oil Recipes:

Massage oil:

- 4 drops orange
- 4 drops ginger
- 2 drops black pepper
- 2 drops neroli

Dilute the blend into $\frac{1}{2}$ oz. jojoba oil and use as massage oil for a relaxing, uplifting experience.

Confidence blend:

- 3 drops orange
- 2 drops rosemary
- 1 drop sandalwood
- 1 drop bergamot

Diffuse the blend or use diluted for direct palm inhalation to boost confidence.

Garden insect spray:

- 4 drops orange
- 2 drops grapefruit
- 2 drops lavender
- 2 drops chamomile

Dilute the blend in 4 oz. water and spray on infested leaves to repel harmful insects.

Patchouli (Pogostemon cablin)

Overview:

Patchouli is a perennial, herbaceous, shrubby plant belonging to the Lamiaceae family. Originally from the tropical areas of Asia patchouli is currently spread worldwide and cultivated for cosmetic use, especially in perfumery. Its name can be translated as "green leaf". Due to its pleasant smell determined by the high content of volatile oils, patchouli has been used for centuries as an odorizing, scenting and perfuming herb. It was placed indoors to scent the air and repel insects, and traditionally used to perfume clothing items and linens, due to its long lasting and pleasant aroma. In Asian herbal and folk medicine patchouli was used to treat and alleviate a wide spectrum of diseases. Currently patchouli is one of the most widely used perfume ingredient worldwide.

Patchouli essential oil is produced through steam distillation of leaves. The patchouli essential oil has a pale yellow to olive green color, a mobile, thin texture and a unique, easily recognizable aromatic profile. Patchouli essential oil is a great perfume fixative, which highly recommends it for perfumery blends. Its rich base notes have the power of holding top and middle notes to the skin for long periods. Patchouli essential oil gets better with age, its aroma deepens and mellows. The essential oil has potent antibacterial, antifungal and antiseptic properties and has an affinity for the skin. In aromatherapy patchouli is grounding, calming and enhances a romantic mood.

Therapeutic Actions and Benefits:

Patchouli oil is known to have analgesic, antidepressant, antiseptic, antispasmodic, carminative, deodorant, digestive, decongestant, febrifuge and relaxing properties. Patchouli essential oil has an affinity for the skin and the musculoskeletal system. It is a great adjuvant in stress-related or hormonally triggered skin problems such as acne, sebum imbalance, seborrhea, psoriasis and others. Topically applied it stimulates peripheral circulation and relieves joints and muscle pain, promotes musculoskeletal health and supports peripheral circulation. Massaged on the abdomen, it stimulates digestion and is considered an adjuvant in supporting the digestive transit. In aromatherapy patchouli oil is deeply soothing to the nervous system, inducing a feeling

of contentment. Patchouli essential oil also fights stress and anxiety, helps in sleeping disorders and insomnia and promotes a deep, restful sleep. It is also believed to have aphrodisiac effects.

List of specific therapeutic actions

<u>Endocrine/reproductive:</u> soothes menstrual pain, supports the body during hormonal changes, has aphrodisiac effects

<u>Circulatory:</u> stimulates peripheral circulation, protects blood vessels

Immune: antibacterial, antifungal, antiseptic

<u>Musculoskeletal:</u> relieves joints and muscular pain, soothes sore muscles, relaxes strained muscles

<u>Topical:</u> balances sebum production, helps in rashes, eczema, psoriasis, alleviates skin conditions associated with stress and anxiety, soothes insect bites, promotes skin and hair health, helps nail recovery

<u>Nervous:</u> alleviates anxiety, calms nervousness, strengthens nerves, helps in sleeping disorders and insomnia, soothes

<u>Energetic</u>: grounding, soothing, brightens mood, helps in mental fatigue, strengthens the mind, supports creativity, encourages romance, supports the spirit, promotes positive thinking, increases relaxation, fights negative feelings.

Aromatic profile:

<u>Scent:</u> rich, sweet-herbaceous, aromatic, spicy, smoky, woody-balsamic with a slightly floral, wine-like dryout

Note: base

<u>Blends well with:</u> Bergamot, black pepper, cedarwood, chamomile, cinnamon, clary sage, clove, coriander, frankincense, geranium, ginger, grapefruit, jasmine, lavender, lemongrass, mandarin, myrrh, neroli, opopanax, orange, rose, sandalwood, vetiver <u>Safety:</u> non toxic, non-sensitizing, might be irritant in pure form

Ayurveda:

Patchouli is considered warming and moistening so it is an excellent remedy for conditions of excess wind or where the Vata dosha are present. The earthy qualities of this oil have calming, grounding and centering properties that work on both the body and the mind equally; its watery nature can assist in working against excess heat or Pitta dosha in the body and mind.

Traditional Chinese Medicine:

In TCM patchouli is known as Huo Xiang. It is considered slightly warm and dry and used to dispel conditions associated with dampness. It soothes and balances shen (mind)

Important Scientific Data

Patchouli essential oil is rich in monoterpenes, sesquiterpenes, esters and beneficial alcohols. The main volatile components are pachulol and norpachunelol which are important contributions to the patchouli aromatic profile.

All the volatile compounds of the essential oil have very potent antibacterial, antifungal and antiviral properties, effective even against resilient bacteria and fungi. This makes patchouli essential oil ideal for topical applications.

The monoterpenes and sesquiterpenes have very potent antioxidant and antimutagen properties with great potential in anti-cancer therapy, as was showed in in-vitro studies. Patchulol is currently used in the synthesis of the chemotherapeutic drug Taxol (Paclitaxel) which is extensively used worldwide to address various types of cancer.

Active ingredients in patchouli essential oil such as patchulol, have potent anti-inflammatory effects in inhibiting pre-inflammatory cytokines. Studies assessing aromatherapy effects as an adjuvant therapy in palliative nursing for dementia and other degenerative conditions showed that patchouli essential oil has relevant effects on enhancing anti-inflammatory effects.

How To Use Patchouli Essential Oil:

Patchouli essential oil can be applied (in a proper dilution) topically, in the bath, through direct inhalation, or diffuser. However, because it can sensitize the skin a patch test before using undiluted is recommended.

Blending patchouli essential oil in a perfume will calm, relax, balance emotions and induce positive feelings. However, due to its richness and long lasting aroma, use maximum 5% patchouli essential oil in a perfumery blend to avoid overpowering the middle and top notes.

Add 1-2 drops of patchouli essential oil in a carrier oil or a skin lotion to address nervous or hormonally triggered skin conditions such as acne, dry skin, oily skin, eczema and psoriasis and to soothe insect bites. Add 1-2 drops in 1 oz. carrier oil to make a massage oil with great effects in enhancing peripheral circulation and soothing muscles.

Gently massage on the abdomen to support digestion. Massage on the lower abdomen to soothe menstrual pain.

Add a couple of drops in the bathwater for a relaxing, uplifting and romantic experience.

Use 1-2 drops in the diffuser or for direct palm inhalation to uplift the spirit, calm anxiety and fight negative feelings.

Patchouli Essential Oil Recipes:

Skin rejuvenation:

- 2 drops patchouli
- 8 drops clary sage
- 3 drops rose
- 3 drops carrot seed

Dilute the blend in 1 oz jojoba or almond oil and apply on the prematurely aged skin to rejuvenate and brighten complexion.

Romance blend:

- 3 drops patchouli
- 3 drops rose
- 3 drops jasmine
- 3 drops sandalwood

Diffuse the blend, or dilute into a non-scented carrier oil for massage purposes.