



Pharmacopeia Module 11

[Jatamansi \(Nardostachys jatamansi\)](#)

[Mandarin \(Citrus reticulata\)](#)

[Vetiver \(Vetiveria zizanoides\)](#)

Jatamansi (Nardostachys jatamansi)

Overview:

Nardostachys jatamansi, commonly known as jatamansi or Indian spikenard, is a perennial, herbaceous, flowering plant related to valerian, belonging to the Caprifoliaceae family and native to Himalayan region. Jatamansi roots and rhizomes are the sources of an amber-colored essential oil known as spikenard that has been used as a cosmetic ingredient, medicine and for religious purposes since ancient times. Therapeutic use of jatamansi has been documented for hundreds of years, especially in the Ayurvedic and Unani traditional medicines where it was used as a sedative, against insomnia and in many other ailments.

Jatamansi essential oil is produced through steam distillation out of spikenard roots. The oil has a clear color, a thin, mobile consistency and a medium strength. Jatamansi essential oil aromatic profile is like valerian, yet smoother, sweeter and more pleasant, reminding of moist earth. With great balancing effects on the nervous system, jatamansi essential oil is a great alternative to valerian to soothe and calm the nervous system. The oil is extremely helpful in addressing sleeping disorders and insomnia.

Therapeutic Actions and Benefits:

Due to its valerianol content jatamansi is used to alleviate numerous conditions that affect the nervous system such as insomnia, sleeping disorders, anxiety, nervousness, mental fatigue, poor memory, lack of concentration, withdrawal, neuralgias, spasms, cramps, seizures, restlessness, irritability. It is also used as a circulatory system tonic and can be used in a proper dilution as a massage oil to stimulate circulation and promote capillary health. As a circulatory promoter and anti-stasis herb it also has positive effects on menstrual problems, uterine cramps, PMS and menopause, through gentle massage in the pelvic area. It is considered a brain tonic and rejuvenative. Due to its benefic effects on the CNS (central nervous system) jatamansi essential oil is a great adjuvant in stress related conditions.

List of specific therapeutic actions

Circulatory: stimulates peripheral circulation, protects blood vessels, promotes capillary health

Musculoskeletal: relieves spasms, soothes sore muscles

Topical: promotes wound healing, reduces swelling, fights inflammations, promotes a healthy complexion of the skin, antibacterial, antiseptic

Nervous: antispasmodic, anti-seizure, fights restlessness, adjuvant in withdrawal, alleviates neuralgias, reduces panic attacks, attenuate headaches, calms irritability, treats exhaustion, helps in chronic fatigue, relieves stress and anxiety, has sedative effects, aids in insomnia and sleeping disorders

Energetic: calming, grounding, soothing, relaxing, sedating, helps dealing with grief, balances mind

Aromatic profile:

Scent: heavy, sweet-woody valerian-like, with dark green notes

Note: middle

Blends well with: cedarwood, sandalwood, lavender, patchouli, pine, vetiver

Safety: non-toxic, non-sensitizing, might be irritant in pure form

Ayurveda:

Jatamansi is considered bitter, sweet and astringent with cooling effects. Jatamansi is among the more revered herbs in Ayurvedic healing. From an Ayurvedic perspective, jatamansi is a supreme remedy for problems caused by Vata, which causes deterioration of tissues, depletes energy and creates dryness, fatigue and persistent dissatisfaction. By balancing "wind," this Himalayan spikenard oil will greatly assist in slowing down the overly active mind and will support tranquility and peacefulness. Jatamansi oil is also useful in addressing Pitta related problems, especially those of the mind such as anger and rage.

Traditional Chinese Medicine:

In TCM jatamansi is considered dry and cool, used in addressing conditions associated with excess moist. It clears head and balances the yin and yang energies ratio. It balances and harmonizes shen (mind).

Important Scientific Data

Jatamansi has a chemical profile similar to valerian with important volatile components such as spikenard and valeranone, a sesquiterpene with potent effects on the nervous system.

One of the most researched active ingredients of Jatamansi is valeranone, which showed capacity to prolong barbiturate anesthesia, to inhibit convulsion and spasms as it was demonstrated by several in vitro studies. Jatamansi's effects on the central nervous system and on the smooth muscles is the result of the GABA (gamma-aminobutyric acid - a CNS naturally occurring neurotransmitter) precursors found in its root and with a higher concentration in the essential oil. Several studies

showed that constituents of jatamansi essential oil influence GABA metabolism by interacting with its specific receptors in the brain.

Asian studies showed that jatamansi induces relevant and significant improvement as an antidepressant with improvement in overall quality of life and without the side effects of the pharmaceutical drugs. Other in vitro studies showed that jatamansi has neuroprotective actions, most likely due to the enhancement of glutathione levels and inhibition of lipid peroxidation in the neural tissues.

Spikenard essential oil is a potent antibacterial and antifungal agent as it was shown in several studies.

How To Use Jatamansi Essential Oil:

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

Add 1-2 drops in ½ oz. carrier oil for a massage oil that will promote a restful deep sleep. Apply on the feet and the crown of the head. Massage on the lower abdomen to soothe menstrual pain. Massage on the whole body to completely relax.

Add a couple of drops in the bathwater for a relaxing, sedating experience

Use 1-2 drops in the diffuser or for direct palm inhalation to support a balanced, calm mind and emotional equilibrium

Jatamansi Essential Oil Recipes:

Soothing Blend:

- 4 drops jatamansi
- 8 drops clary sage
- 15 drops grapefruit or other citrus

Dilute the blend in 2 oz. carrier and use as a relaxing, sedating massage oil

Mind / Body Balancing Blend:

- 5 drops jatamansi
- 2 drops sandalwood
- 2 drops vetiver
- 4 drops lavender
- 4 drops orange or mandarin

Diffuse the blend when anxious or in need of peace. Dilute the blend in 1 oz. carrier oil or cream and massage onto the feet, or gently on the belly to attain a calm, rested state.

Mandarin (*Citrus reticulata*)

Overview:

Mandarin is a perennial, small sized tree, belonging to the Citrus genus and part of the Rutaceae family. The fruits of the mandarin tree are smaller and sweeter than oranges and are used for consumption or as ingredient in various foods and beverages. Mandarin thrives in Mediterranean-like climates and is now cultivated all over the world. The mandarin fruit is regarded as a very healthy option that is less acid than orange yet very rich in vitamin C. Mandarin fruits were used in the prevention and treatment of scurvy. Various preparations of the fruit and its skin have been used therapeutically for ages.

The essential oil is pressed out from the fruit peel. It takes about 400-500 hundred kilos of peel to produce 1 kilo of essential oil, depending on the yield. It has a yellow to greenish color and a mobile texture. The essential oil has therapeutic properties, being a potent antibacterial, antifungal and antiviral agent. In aromatherapy mandarin essential oil is balancing, uplifting and warming properties. As most of the citrus essential oils it is a great addition in a blend, because it enhances the properties of other oils. The pure essential oil is aggressive to the skin and can be mildly phototoxic, so a high dilution / low concentration (1%) is recommended. In perfumery, mandarin is a great addition, for a tangy, sweet yet citrusy aroma.

Therapeutic Actions and Benefits:

Mandarin oil is known to have analgesic, antidepressant, antiseptic, antispasmodic, carminative, deodorant, digestive, decongestant, febrifuge and tonic properties. Mandarin essential oil is very versatile and beneficial to all systems. In aromatherapy mandarin oil is deeply soothing to the nervous system, inducing a contented feeling. Mandarin essential oil also fights stress and anxiety, helps in sleeping disorders and insomnia and promotes a deep, restful sleep. Mandarin essential oil is a great adjuvant in stress-related conditions, such as digestive or skin problems. Topically applied it stimulates peripheral circulation and relieves joints and muscle pain and promotes musculoskeletal health. As any member of the citrus family, mandarin oil also decongests airways and clear sinuses. Massaged on the abdomen, it stimulates digestion and considered an adjuvant in supporting the digestive transit.

List of specific therapeutic actions

Endocrine/reproductive: soothes menstrual pain, supports the body during hormonal changes, helps in PMS and menopause, attenuates mood swings

Respiratory: clears airways and sinuses, decongestant

Circulatory: stimulates peripheral circulation, protects blood vessels

Immune: tonic, antibacterial, antifungal

Musculoskeletal: relieves joints and muscular pain, soothes sore muscles

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

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

Energetic: uplifting, soothing, brightens mood, helps in mental fatigue, strengthens the mind, supports creativity, supports the spirit, cleanses energies, promotes positive thinking, increases relaxation, fights negative feelings.

Aromatic profile:

Scent: tangy, fresh, sweet, citrusy with a slightly spicy dryout

Note: top

Blends well with: cleary sage, vetiver, sandalwood, rose, geranium, jasmine, lavender, ylang-ylang, lime, grapefruit, bergamot, lemon, cinnamon, clove, ginger

Safety: photo-sensitizing, might be irritant in pure form

Ayurveda:

In Ayurveda mandarin is considered useful in vata excess, in conditions associated with anger, excitability, and irritation. It can also help soothe anger caused by excess pitta.

Traditional Chinese Medicine:

In TCM mandarin relaxes spirits, freshens and harmonizes shen (mind). It balances the Qi and encourages its circulation.

Important Scientific Data

Mandarin essential oil is rich in monoterpenes, sesquiterpenes, esthers and benefic alcohols such as a-thujone, a-pinene, camphene, sabinene, b-pinene, myrcene, limonene, y-terpinolene, linalool, citronellal, terpineol-4-ol, nerol and geranial. The active ingredients are very potent and can be aggressive to the skin and human tissue. A high dilution is always recommended as well as a precaution to photosensitive persons.

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 mandarin 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 it was showed in in-vitro studies.

Active ingredients in mandarin essential oil such as alpha-pinene, sabinene, limonene, have potent anti-inflammatory agent with relevant effects in inhibiting pre-inflammatory cytokines.

How To Use Mandarin Essential Oil:

Mandarin essential oil can be applied topically, always highly diluted, maximum 1%, 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.

Blending mandarin essential oil in a perfume will calm, relax, balance emotions and induce positive feelings.

Add 1 drop of mandarin essential oil in a carrier oil or a skin lotion to address nervous triggered skin conditions such as eczema and psoriasis and to soothe insect bites. 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. Massage on the lower abdomen to soothe menstrual pain.

Add a couple of drops in the bathwater for a relaxing, uplifting experience. Use 1-2 drops on a cloth and place it

Use 1-2 drops in the diffuser or for direct palm inhalation to uplift spirit, fight stress, calm anxiety, fights negative feelings, support mental focus and balance emotions.

Mandarin Essential Oil Recipes:

Abdominal Soothing Blend:

- 6 drops mandarin
- 4 drops lavender
- 2 drops chamomile

Dilute the blend in a carrier oil and gently massage on the abdomen to soothe menstrual or digestive cramps.

Healthy Skin Formula:

- 4 drops mandarin
- 10 drops helichrysum
- 6 drops lavender
- 2 drops neroli

Dilute the blend in a carrier oil (rosehip) and apply on the skin, or add 1-2 drops in a skin lotion.

Vetiver (Vetiveria zizanioides)

Overview:

Vetiver is a biochemically complex essential oil with potent therapeutic and aromatic properties. It contains over 150 identified and many unidentified aromatic compounds. Vetiver is a deeply relaxing oil with a sweet, earthy scent evoking fields of green, riverbanks and marshlands. Vetiver oil is a key component in the cosmetic industry, used as a scenting agent or fixative.

In aromatherapy it is used therapeutically as a nervine and a grounding essence that supports the nervous system. It also has anti-inflammatory, anti-rheumatic, antiseptic, antispasmodic, aphrodisiac, astringent and sedative effects.

The oil is extracted from *Vetiveria zizanioides*, also known as Khas or Khus grass in India, a perennial tufted grass native to the plains and riverbanks of India. Vetiver has been known and therapeutically used in Indian culture since ancient times to treat various ailments and as a perfume base.

The best vetiver oil is extracted through a slow distillation process, out of wild harvested 18 to 24 month old roots. The freshly harvested roots are cleaned, dried, rehydrated and then distilled. From the distillation process essential oil and hydrosol are obtained. After distillation the essential oil is aged for a period, as vetiver improves with age.

Therapeutic Actions and Benefits:

Vetiver oil has nervine, anti-inflammatory, anti-rheumatic, antiseptic, antispasmodic, aphrodisiac, astringent and sedative effects. Used in massage oils and topical preparations it supports musculoskeletal health with benefits to muscle and joints. It is also used in various cosmetic preparations to promote a healthy, glowing skin, to stimulate skin regeneration and to prevent and repair stretch marks. Vetiver oil is also useful in balancing the hormonal system and enhancing relaxation and romantic moods, especially in women where it acts similar to estrogen. In the nervous system vetiver is deeply relaxing, calming, sedative, restorative, aiding sleep and promoting revitalization and rejuvenation.

In aromatherapy vetiver is grounding, relaxing, neurotonic, and regenerating. It promotes mental health by supporting the nervous system and balancing emotions. It helps reduce stress and inducing a comfortable state of mind. Vetiver also helps mental

focus and concentration by purifying the thinking process and maintaining the emotional equilibrium.

List of specific therapeutic actions

Circulatory: alleviates varicose veins, improves peripheral circulation, aids in cool extremities

Immune: boosts immunity, strengthens the immune response in stressful situations

Musculoskeletal: alleviates muscular aches and pains, relieves stiff joints, aids in arthritis and rheumatism

Nervous: fights stress, aids in insomnia, promotes mental and emotional health; relaxing, calming, sensorial, provides a sense of security, fights anxiety, induces mental clarity, balances emotions, boosts confidence

Reproductive/endocrine: enhances romantic moods, aids in menopause and PMS, helps in postnatal depression

Skin: promotes skin health, boosts skin rejuvenation, helps in acne, enhances skin elasticity, balance sebaceous activity, fights fungal infection

Energetic (aromatherapy): grounding, centering, helps focused thinking, facilitates creativity, cools emotional intensity, promotes strength, encourage practical thoughts, binds body and mind.

Ayurveda:

It is considered soothing, relaxing and sedative, cooling pita and grounding vata. It is believed to improve concentration and calm the solar plexus and it is used in nervousness, exhaustion, eating disorders, stress and to enhance romantic moods.

Traditional Chinese Medicine:

In TCM, vetiver essential oil is considered to have a cool and moist energy. It is used to cool heat and to calm and nourish the mind and body.

Aromatic profile:

Scent: Sweet, earthy, warm, woody, deep

Note: Base note

Blends well with: Frankincense, Jatamansi, Lavender, Mandarin, Palo santo, Patchouli, Rose geranium, Sage, Ylang ylang

Safety: Non-toxic, non-irritating

How To Use Vetiver Essential Oil

Vetiver essential oil has a strong aromatic profile that can overpower other scents; it is

recommended to limit vetiver to 5% of the mix. It can be also be used undiluted, directly on skin, where a single drop will linger for days. It can also be used in diffusers preferable premixed with thinner oils (due to its sticky consistency it might be problematic to use on its own in some diffusers). Vetiver can also be added in skin products, massage oil and bath water.

Vetiver Oil Recipes:

Rest and rejuvenation

Blend: 8 drops vetiver, 8 drops clary sage, 8 drops lavender in 15 ml evening primrose & jojoba blend

- Use directly on skin, in bath water or diffuse (essential oil blend only) when exhausted, stressed, anxious, or with insomnia

Calming and uplifting:

- Blend: 3 drops vetiver, 6 drops roman chamomile, 6 drops bergamot
- Diffuse when anxious, stressed, sad, tired, moody