# ESSENTIAL OILS FOR DRY SKIN



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# Dry skin

Dry skin, also known as **xerosis**, is a common skin condition characterized by a lack of moisture in the outer layer of the skin (epidermis). It can occur anywhere on the body but is often noticeable on the hands, arms, legs, and face.

#### Symptoms of dry skin may include:

- Rough or flaky texture
- Tightness or a feeling of discomfort, especially after bathing or swimming
- o Itching, which can sometimes be intense
- Redness or inflammation
- Fine lines or cracks, especially in more severe cases



## Reasons of Dry skin

- This condition arises when the skin's natural lipid barrier, responsible for retaining moisture and protecting against external irritants, becomes compromised, leading to dehydration and various discomforts.
- The epidermis consists of multiple layers, with the outermost layer, the *stratum corneum*, acting as a protective barrier against environmental stressors.
- Within this layer, natural moisturizing factors (NMFs) such as ceramides, fatty acids, and cholesterol maintain hydration by preventing water loss and promoting skin cell cohesion. However, various factors can disrupt this delicate balance, resulting in dry skin.

#### Moist Skin Dry Skin

#### Moist Skin

Amino

42%

acids

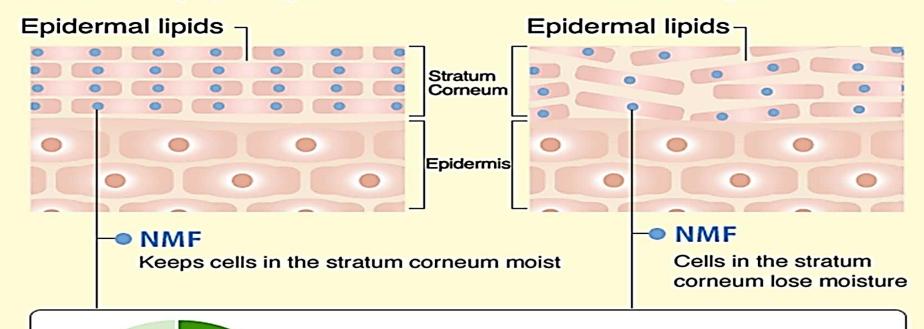
Other

46%

Moist skin has a good balance of NMF and epidermal lipids. The cells of the stratum corneum are tightly arranged.

#### Dry Skin

Dry skin has insufficient NMF.
The cells of the stratum corneum are loosely arranged.



Pyrrolidone Carboxylic Acid (PCA): is derived from the amino acid proline. It functions as a humectant, helping to attract and retain water within the skin, thereby maintaining hydration levels.

#### Composition of NMF

Roughly half of NMF is amino acids and PCA made from amino acids.

H.W.Spier, G Pascher Der Hatotarzt, 7,55-60,1956







- Chamomile is a versatile herb that belongs to the Asteraceae Family.
- There are two main species of chamomile commonly used for medicinal and aromatic purposes:
- German chamomile (Matricaria chamomilla) and
- Roman chamomile (*Chamaemelum nobile*).
- These species have similar properties but differ in their chemical compositions and morphology.

#### **Chemical Constituents:**

- Both German and Roman chamomile contain a variety of chemical constituents that contribute to their therapeutic properties. Some of the key constituents include:
- Chamazulene: A blue-colored compound formed during the distillation process, known for its anti-inflammatory and antioxidant properties.
- α-Bisabolol: Also known as chamomile alcohol, this compound has anti-inflammatory, antibacterial, and wound-healing properties.
- Apigenin: A flavonoid with antioxidant and anti-inflammatory properties.
- Matricin: A precursor to chamazulene, which converts to chamazulene during steam distillation.
- Farnesene: A sesquiterpene with anti-inflammatory properties.
- **Bisabolol oxide A and B:** Additional compounds with anti-inflammatory and skin-soothing effects.

#### Chamomile aromatherapy



Here's how chamomile aromatherapy can help with dry skin:

- 1. Moisturizing: Chamomile essential oil contains *bisabolol and chamazulene*, which have moisturizing properties. When diffused into the air, the oil can help hydrate the skin by increasing moisture levels in the surrounding environment.
- **2. Soothing Irritation:** Dry skin often comes with symptoms like itching, redness, and inflammation. Chamomile essential oil has anti-inflammatory properties that can help calm irritated skin and reduce redness and inflammation.



## Chamomile aromatherapy

- 3. Promoting Skin Healing: Chamomile oil contains compounds like  $\alpha$ -bisabolol and apigenin, which have wound-healing properties. These compounds can help repair the skin's natural barrier function, allowing it to retain moisture more effectively and heal dry, cracked areas.
- **4. Preventing Infections:** Dry skin is more prone to cracks and fissures, which can create openings for bacteria and other pathogens to enter. Chamomile essential oil has antimicrobial properties that can help prevent infections and promote overall skin health.



## **Jasmine**

Jasmine, a fragrant flowering plant, belongs to the genus Jasminum, which is part of the Oleaceae family.

Jasminum officinale (Common Jasmine) and Jasminum grandiflorum (Royal Jasmine).

Jasmine plants are native to tropical and subtropical regions of Eurasia, Africa, and Australasia, India



They produce clusters of small, star-shaped white flowers with a distinctively sweet and intense fragrance.

#### **Chemical Constituents**

- **Linalool:** It is one of the main components of jasmine essential oil and contributes to its characteristic scent.
- Benzyl acetate: This ester compound has a sweet, fruity aroma and is commonly found in floral essential oils, including jasmine.
- **Jasmone:** A ketone compound with a floral, jasmine-like scent, jasmone adds depth and complexity to jasmine essential oil.
- **Indole:** An aromatic compound with a floral, slightly animalistic odor, indole is responsible for the rich, narcotic quality of jasmine fragrance.
- **Methyl anthranilate:** This compound has a sweet, fruity aroma and contributes to the overall sweetness of jasmine essential oil.
- Eugenol and Phytol



### **Jasmine Aromatherapy**

Jasmine aromatherapy can be an effective and luxurious treatment for dry skin.

- 1. Hydration: Jasmine essential oil has emollient properties, meaning it helps to lock in moisture and prevent water loss from the skin. When used in aromatherapy, the aromatic molecules of jasmine oil can penetrate the skin, providing hydration to dry skin cells.
- 2. Soothing Irritation: Dry skin often experiences irritation, redness, and inflammation. Jasmine essential oil contains compounds like benzyl acetate and linalool, which have anti-inflammatory properties and can help calm irritated skin, reduce redness, and alleviate discomfort.



## **Jasmine Aromatherapy**

- 3. Improving Skin Elasticity: Jasmine essential oil is rich in antioxidants that can help protect the skin from environmental stressors and free radical damage. By promoting collagen production and improving skin elasticity, jasmine aromatherapy can help to reduce the appearance of fine lines and wrinkles associated with dry skin.
- 4. Relaxation and Stress Reduction: Aromatherapy using jasmine oil has been shown to have mood-enhancing effects, promoting relaxation and reducing stress and anxiety. Stress can make worse dry skin conditions, so incorporating jasmine aromatherapy into your self-care routine can help to address both the physical and emotional aspects of dry skin.



#### Naroli

Neroli, also known as **orange blossom**, is derived from the flowers of the **bitter orange tree**, known as *Citrus aurantium* (Rutaceae family). It is native to Southeast Asia but is cultivated in various regions worldwide for its fragrant flowers and bitter fruits.



The tree produces fragrant white flowers with **five petals**, known as orange blossoms, which bloom in spring and early summer. These flowers are highly aromatic and prized for their use in perfumery and aromatherapy.

#### **Chemical Constituents:**



- •Linalool
- •Limonene
- •α-Terpineol
- Nerolidol

- •Geraniol
- •Farnesol
- •Neryl acetate
- •Eugenol





- 1. Hydration: Neroli essential oil has emollient properties, meaning it helps to lock in moisture and prevent water loss from the skin. Diffusing neroli oil in the air can create a humid environment that helps to hydrate dry skin, keeping it soft and supple.
- 2. Soothing Irritation: Dry skin is often accompanied by itching, redness, and irritation. Neroli essential oil contains compounds like *linalool and a-terpineol*, which have anti-inflammatory and soothing effects on the skin.

## Naroli Aromatherapy



- 3. Promoting Skin Regeneration: Neroli essential oil is rich in antioxidants, such as limonene and nerolidol, which help protect the skin from free radical damage and promote skin regeneration.
- **4. Stress Reduction:** Neroli aromatherapy has been shown to have calming and stress-reducing effects, promoting relaxation and emotional well-being. By reducing stress levels, neroli oil can indirectly help improve dry skin conditions.





- **1.Diffusion:** Add a few drops of neroli essential oil to a diffuser filled with water and diffuse it in your living space. The gentle aroma of neroli will fill the air, creating a calming and moisturizing atmosphere that can benefit your skin.
- **2.Facial Steam:** Add a few drops of neroli essential oil to a bowl of hot water and lean over it with a towel draped over your head to trap the steam. Allow the steam to penetrate your skin for several minutes to hydrate and soften dry skin while enjoying the soothing fragrance of neroli.
- **3.Massage Oil:** Dilute neroli essential oil in a carrier oil such as jojoba, sweet almond, or coconut oil, and use it to massage your body after a bath or shower. The moisturizing and aromatic properties of neroli oil will leave your skin feeling soft, hydrated, and pampered.
- **4.Bath Soak:** Add a few drops of neroli essential oil to your bathwater along with a cup of Epsom salts for a luxurious and moisturizing soak. Relax in the fragrant bath for 15-20 minutes to nourish and hydrate dry skin while enjoying the calming effects of neroli aromatherapy.

## Rose

Roses are flowering plants belonging to the genus Rosa within the family Rosaceae. There are over a hundred species of roses, and they are native to various regions of the world, including Asia, Europe, North America, and Africa. Rosa damascena and Rosa centifolia are two species commonly used in the production of rose essential oil due to their intense fragrance.







## **Chemical Constituents:**



- •Citronellol: Citronellol is one of the major components of rose essential oil and contributes to its characteristic scent.
- •Geraniol: Geraniol has a rosy, floral aroma and is abundant in rose essential oil.
- •Nerol,
- •Phenylethyl alcohol,
- •Eugenol,
- •n-heneicosane,
- •n-nonadecane,
- •nonadecene
- phenylethyl alcohol



## Uses

- **1.Perfumery:** Rose oil is highly valued in perfumery for its rich, floral fragrance.
- **2.Skincare:** Rose oil is popular for its skin-nourishing and restoring properties. Rose oil can help improve the appearance of fine lines and wrinkles, reduce redness and inflammation, and promote a radiant complexion.
- **3.Aromatherapy:** In aromatherapy, rose oil is valued for its calming, uplifting, and mood-enhancing effects. It is used to promote relaxation, reduce stress and anxiety, uplift mood, and enhance emotional well-being.



- **4. Massage:** Rose oil can be diluted in a carrier oil and used for massage to relax the body and mind, relieve muscle tension, and promote overall well-being. Rose oil's moisturizing and aromatic properties make it ideal for massage therapy.
- **5. Hair Care:** Rose oil benefits hair health and can be added to hair care products such as shampoos, conditioners, and hair masks. It helps to hydrate the scalp, nourish hair follicles, and promote healthy hair growth.
- **6. Aromatherapy Diffusion:** Adding a few drops of rose oil to an aromatherapy diffuser filled with water can fill the air with its soothing fragrance, creating a calming and relaxing atmosphere. This is particularly beneficial during meditation, yoga, or relaxation practices.

# Ylang Ylang

Ylang Ylang (*Cananga odorata*) is a tropical tree native to Southeast Asia, particularly Indonesia, Malaysia, and the Philippines. It belongs to the Annonaceae family and is characterized by its glossy, dark green leaves and fragrant, star-shaped flowers.



## **Chemical Constituents**



- Linalool,
- Geraniol,
- β-Caryophyllene,
- Benzyl acetate,
- Methyl benzoate,
- β-Caryophyllene,
- op-Cresyl methyl ether,
- Farnesene
- $\circ$  **Sesquiterpenes:**  $\beta$ -caryophyllene oxide, germacrene D, and  $\delta$ -cadinene.

# Uses



- **Skincare:** Ylang Ylang oil is beneficial for skincare due to its hydrating, soothing, and balancing properties. It helps moisturize dry skin, soothe irritation, and regulate oil production, making it suitable for both dry and oily skin types.
- Aphrodisiac: Ylang Ylang oil has long been associated with romance and sensuality due to its exotic fragrance and reputed aphrodisiac properties. It can help enhance libido, increase arousal, and promote intimacy when used in aromatherapy or massage.
- Aromatherapy, Perfumery, Hair Care, Relaxation, Emotional Balance, Natural Perfume

### Vetiver

Vetiver (*Vetiveria zizanioides*), also known as Vetiver grass or Khus, is a perennial grass belonging to the Poaceae family. It is native to India and is cultivated in various tropical regions worldwide for its aromatic roots.







- Vetiverol,
- Vetiverone,
- β-Vetivone,
- Khusimol,

- α-Vetivone,
- Vetiselinenol,
- Vetiselinenone,
- α-Bisabolol.

# Uses



- Aromatherapy
- Perfumery
- Skincare
- Hair Care
- Insect Repellent
- Erosion Control
- Land Reclamation
- Traditional Medicine: It is believed to have anti-inflammatory, antiseptic, and analgesic properties and is used to relieve muscle aches, joint pain, and skin conditions such as eczema and dermatitis.



## References

- Evans, W. C. (2009). Trease and Evans' Pharmacognosy. Elsevier Health Sciences.
- Price S, Price L. Aromatherapy for health professionals. 4<sup>th</sup> Edn., London: Churchill Livingstone; 2011.
- Lis-Balchin M. Aromatherapy Science: A guide for healthcare professionals. London: Pharmaceutical Press; 2006



# Thank You