



YLANG YLANG (Cananga Odorata)

Main Components of Ylang-Ylang

Ylang-ylang essential oil is extracted from the flowers and is chemically complex, with composition varying by distillation fraction. The main to moderate components include:

1. Linalool

- A major monoterpene alcohol
- Contributes to floral scent
- Known for calming and sedative effects

2. Benzyl Acetate

- Major contributor to the characteristic sweet aroma
- Associated with relaxing and mood-enhancing properties

3. β -Caryophyllene

- A sesquiterpene
- Interacts with the endocannabinoid system (CB2 receptors)
- Anti-inflammatory effects

4. Germacrene-D

- Contributes to antimicrobial activity

6. Other Constituents

- Farnesene
- Geranyl acetate

- Methyl benzoate
- Eugenol

Key Roles of Ylang-Ylang in the Body

1. Nervous System Regulation

- Promotes relaxation and reduces stress
- Often used in aromatherapy for calming effects

2. Mood Enhancement

- Can help reduce symptoms of anxiety and mild depression
- May improve emotional balance

3. Cardiovascular Effects

- Associated with **reduced heart rate and blood pressure** (mild hypotensive effect)

4. Skin & Hair Support

- Used in topical formulations
- Helps balance sebum production and improve skin condition

Major Health-Related Properties of Ylang-Ylang Essential Oil (in Humans)

1. Anxiolytic (Anti-Anxiety) Effects

- Linalool and benzyl acetate act on the central nervous system
- Inhalation studies show reduced stress markers

2. Cardiovascular Modulation

- May lower **blood pressure and heart rate**
- Promotes a relaxed physiological state

3. Anti-inflammatory Activity

- β -caryophyllene modulates immune responses
- Potential to reduce chronic inflammation

4. Antimicrobial Properties

- Effective against some bacteria and fungi
- Supports skin health and hygiene

5. Sedative and Sleep Support

- Mild sedative effects
- Can improve sleep quality when used aromatically

6. Dermatological Benefits

- Antiseptic and balancing effects on skin
- Used for acne and oily skin conditions

Important Considerations

- Essential oil is **highly concentrated** → must be diluted for topical use
- Overuse may cause headaches or nausea in some individuals
- Not a replacement for medical treatment in cardiovascular or mental health conditions

In Summary

Ylang-ylang essential oil is rich in:

- **Linalool & benzyl acetate** → calming, anxiolytic effects
- **β-caryophyllene** → anti-inflammatory action
- **Eugenol & other terpenes** → antimicrobial and analgesic roles

Overall, it is most strongly associated with **nervous system relaxation, mood regulation, and mild cardiovascular effects**, making it a widely used oil in aromatherapy and complementary health practices.

Here are **5 well-cited research papers and reviews** supporting the composition and health-related effects of Ylang-ylang essential oil.

Key Research Papers

1. Human study on relaxation and physiological effects

Hongratanaworakit, T., 2006. *Stimulating effect of aromatherapy massage with jasmine oil and ylang-ylang oil on humans*. **Natural Product Communications**, 1(1), pp. 41–46.

Supports:

- Reduced **blood pressure and heart rate**
- Evidence of **calming and relaxing effects** in humans

2. Pharmacological and therapeutic review

Tan, L.T.H. et al., 2015. *An overview of *Cananga odorata* (ylang-ylang)*. **Journal of Essential Oil Research**, 27(3), pp. 1–10.

Supports:

- Chemical composition (linalool, benzyl acetate, eugenol)
- **Antimicrobial, anti-inflammatory, and sedative properties**

3. Essential oils and anxiety reduction

Perry, N. and Perry, E., 2006. *Aromatherapy in the management of psychiatric disorders: Clinical and neuropharmacological perspectives*. **CNS Drugs**, 20(4), pp. 257–280.

Supports:

- Role of essential oils (including ylang-ylang) in **reducing anxiety**
- Effects on the **central nervous system**

4. Antimicrobial activity of essential oils

Burt, S., 2004. *Essential oils: Their antibacterial properties and potential applications in foods*. **International Journal of Food Microbiology**, 94(3), pp. 223–253.

Supports:

- Broad **antibacterial and antifungal effects** of essential oils
- Relevance of terpene compounds found in ylang-ylang

5. Linalool and its biological effects

Peana, A.T. et al., 2002. *Anti-inflammatory activity of linalool and linalyl acetate constituents of essential oils*. **Phytomedicine**, 9(8), pp. 721–726.

Supports:

- **Anti-inflammatory and analgesic properties** of linalool
- Mechanistic basis for therapeutic effects

How These Papers Support the Claims

Claim	Supporting Papers
Relaxation and reduced blood pressure	1
Chemical composition of ylang-ylang oil	2
Anti-anxiety and nervous system effects	1, 3
Antimicrobial activity	2, 4
Anti-inflammatory effects (linalool)	2, 5

Summary

These studies support that ylang-ylang essential oil contains key compounds such as **linalool, benzyl acetate, and eugenol**, which contribute to:

- **Calming and anxiolytic effects** in humans
- **Mild cardiovascular benefits** (reduced heart rate and blood pressure)
- **Antimicrobial and anti-inflammatory activity**

Overall, the evidence shows that ylang-ylang oil has **measurable physiological and therapeutic effects**, especially through inhalation and topical use in controlled settings.