# Egyptian Herbal Monograph

# Volume 2 Medicinal Plants used in Egypt

Egyptian Drug Authority (EDA)
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# Egyptian Herbal Monograph Medicinal Plants Used in Egypt

Tilia cordata Mill.

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## 1. Names & Synonyms (1, 2)

#### Tilia cordata Mill.

Family: Tiliaceae (Malvaceae).

Arabic: Tilio تيليو

**English**: Lime flower (3), Linden, Tilia and small leaf linden, small leaf lime (4).

#### Tilia platyphyllos Scop.

Family: Tiliaceae (Malvaceae)

Arabic: Tilio تيليو

**English**: Lime flower (3), Linden, Tilia and large-leaf Linden

#### Tilia x vulgaris Heyne

Naturally-occurring hybrid of *T. cordata* and *T. platyphyllos* Scop.

**Family:** Tiliaceae (Malvaceae) **Syn:** *T. europaea* auct. non L.

Arabic: Tilio تيليو

**English**: European linden, European lime tree, Linden and Tilia (4).

# 2. Parts used for medicinal purpose

Flower (2-4).

# 3. Major chemical constituents (2)

- **Flavonoids**: Kaempferol, quercetin, myricetin and their glycosides (mainly Kaempferol-3-O- $\beta$ -D-(6"-E-p-coumaroyl)-glucopyranoside "tiliroside") and proanthocyanidins (3, 5).
- **Phenolic acids:** Caffeic, chlorogenic and p-coumaric acids (3, 5).
- **Essential oil:** Alkanes (mainly tricosane) (6), phenolic alcohols and esters, and terpenes including citral, citronellal, citronellol, eugenol, limonene, nerol,  $\alpha$ -pinene and terpineol (monoterpenes), and farnesol (sesquiterpene) (3).
- Others: Mucilage, tocopherol (phytosterol) and amino acids (3).



# 4. Medicinal uses (Indications)

- **A.** Relief cough and irritation of the throat in colds and catarrh of the respiratory tract (3, 4).
- **B.** Relief of mild symptoms of mental stress (3, 4).

## 5. Herbal preparations correlated to medicinal use (3)

- 1. Comminuted herbal substance as herbal tea for oral use.
  - 1.5 g of the comminuted herbal substance in 150 ml of boiling water as a herbal infusion
- **2. Liquid extract,** extraction solvent ethanol 25% v/v.
- **3. Tincture**, extraction solvent ethanol 45% v/v.
- 4. Aqueous extract

Herbal preparations (2-4) are in pharmaceutical dosage forms. The pharmaceutical form should be described by the pharmacopoeia full standard term.

# 6. Posology and method of administration correlated to medicinal use (3)

#### **Preparation 1**

**Indication A** 

**Adolescents, adults and elderly:** 1.5 g as herbal tea, 2–4 times daily. Daily dose: 3-6g. **Children between 4 and 12 years of age:** 1 g as herbal tea, 2–4 times daily. Daily dose: 2-4 g.

#### **Indication B**

**Adolescents, adults and elderly:** 1.5 g as herbal tea 2–4 times daily. Daily dose: 3-6 g.

#### Preparations 2 and 3

Indications A, B

Adolescents, adults and elderly

**Preparation 2:** 2 ml, 1-2 times daily. Daily dose: 2-4 ml. **Preparation 3:** 1 ml, 1-2 times daily. Daily dose: 1-2 ml.

#### **Preparation 4**

**Indication A** 

**Adolescents, adults and elderly:** extract Eq. to 3-6 gm, 2-4 times daily.

**Children between 4 and 12 years of age:** extract eq. to 2-4 gm, 2-4 times daily.



#### **Duration of use:**

#### Indication A

The therapy should start at first signs of common cold. If the symptoms persist longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.

#### **Indication B**

If the symptoms persist during the use of the medicinal product, a doctor or a pharmacist should be consulted.

Method of administration: Oral use.

#### 7. Contraindications (2-4)

Hypersensitivity to active substances and to other plants of the same family.

## 8. Special warnings and precautions for use (3)

- If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- The use in children under 12 years of age is not recommended.
- In case of infusion; the use in children under 4 years of age for the relief of symptoms of common cold is not established.

# 9. Interactions with other medicinal products and other forms of interaction (2, 3)

None reported.

# 10. Fertility, pregnancy and lactation (2, 3)

- Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy and lactation is not recommended.
- No fertility data available.

# 11. Effects on ability to drive and use machines (3)

No studies on the effect on the ability to drive and use machines have been performed.

# 12. Undesirable effects (3)

- None known.
- If adverse reactions occur, a doctor or a pharmacist should be consulted.



## 13. Overdose

No case of overdose has been reported (3).

# 14. Relevant biological activities

Not required as per Egyptian guidelines for registration of herbal medicines.

# 15. Additional Information

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# 16. Date of compilation/last revision

06/08/2023.



# References

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