



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

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Guava, Thyme, Tilia

جوافة / زعتر / تليو

1. Names & Synonyms

Guava (1)

Psidium guajava L.

Family: Myrtaceae.

Syns.: *Psidium aromaticum*, *P. cujavillus* Burm, *P. pomiferum*, *P. pyriferum*, *P. pumilum*.

Arabic: Gawafa جوافة

English name: Guava.

Thyme

Thymus vulgaris L. (2)

Syns.: *Origanum thymus* Kuntze, *Thymus collinus* Salisb.

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر

English name: English Thyme, Garden Thyme.

Thymus zygis L. (3)

Syns.: *Origanum zygis* (L.) Kuntze, *Thymus angustifolius* Salisb.

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر

English name: Spanish Thyme.

Tilia (4,5)

Tilia cordata Mill.

Family: Tiliaceae (Malvaceae).

Arabic: Tilio تليو

English: Lime flower (6), Linden, Tilia and small leaf linden, small leaf lime (7).



***Tilia platyphyllos* Scop.**

Family: Tiliaceae (Malvaceae)

Arabic: تيليو

English: Lime flower (6), 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: تيليو

English: European linden, European lime tree, Linden and Tilia (7).

2. Parts used for medicinal purpose

Guava: Dried Leaves (1)

Thyme: Herb (8,9)

Tilia: Flowers (5-7)

3. Major chemical constituents

Guava

Phenolic Compounds (10)

- Flavonoids: Quercetin and its glycosides, avicularin, apigenin, guaijaverin, kaempferol, kaempferol-3-arabofuranoside, hyperin, myricetin, rutin, catechin, epicatechin, epigallocatechin gallate and proanthocyanidins.
- Phenolic acids: Gallic acid and caffeic acid.

Essential Oil (11,12)

- β -Caryophyllene, 4 α -selin-7 (11)-enol, β -caryophyllene oxide, α -selinene, β -selinene, δ -cadinene, daucol, cubenol, 1,8-cineole (eucalyptol) and aromadendrene.



Others (10)

- Sugars: Sulphated and unsulphated polysaccharides (uronic acid), minerals (calcium, potassium, sulfur, sodium, iron, boron, magnesium, manganese and zinc), vitamins (C and B) and macronutrients (protein and fat).

Thyme

- **Essential oil:** the main components are thymol, carvacrol, *p*-cymene, α and β -terpinene, linalool, terpinen-4-ol, borneol, 1,8- cineole, α -thujene, α -pinene, and caryophyllene (9).
- **Flavonoids:** apigenin, narigenin, kaempferol, and luteolin (and its glycosides) (13).
- **Phenolic acids:** salvianolic, rosmarinic, cinnamic, ferulic, caffeic and gallic acids (13).
- **Others:** monoterpene glycosides.

Tilia (5)

- **Flavonoids:** Kaempferol, quercetin, myricetin and their glycosides (mainly Kaempferol-3-*O*- β -D-(6''-*E*-*p*-coumaroyl)-glucopyranoside "tiliroside") and proanthocyanidins (6, 14)
- **Phenolic acids:** Caffeic, chlorogenic and *p*-coumaric acids (6, 14).
- **Essential oil:** Alkanes (mainly tricosane) (15), phenolic alcohols and esters, and terpenes including citral, citronellal, citronellol, eugenol, limonene, nerol, α -pinene and terpineol (monoterpenes), and farnesol (sesquiterpene) (6).
- **Others:** Mucilage, tocopherol (phytosterol) and amino acids (6).

4. Medicinal Uses (Indications)

- A. In case of productive cough associated with the common cold.
- B. Relief of symptoms associated with common cold.



5. Herbal preparations correlated to medicinal use

Combination of guava aqueous extract, thyme liquid extract (extraction solvent: ammonia solution 10% (m/m), glycerol 85%, ethanol 90% V/V and purified water) and tilia liquid extract (extraction solvent: hydroalcoholic solution (25%)).

Herbal preparations 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

- **Adults and children over 12 years:** Combination of 83.4-125 mg of guava extract, 166.66-250mg of thyme extract and 166.66-250mg of tilia extract, 2 times daily.
- **Children 4-11 years:** Combination of 41.7mg of guava extract, 83.33mg of thyme extract and 83.33mg of tilia extract, 2 times daily.
- Only at necessary conditions the dose can be increased by combination of 41.7mg of guava extract, 83.33mg of thyme extract and 83.33mg of tilia extract daily.
- The doctor should be consulted before use.

Duration of use:

- The therapy should start at first signs of common cold.
- Not to be used more than one week and period between doses must be not less than 4 hours.
- If the symptoms persist for longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.

Method of administration: Oral use.



7. Contraindications.

- Hypersensitivity to any of the active substances or to other plants of the same families.

8. Special warnings and precautions for use (9,16)

- If the symptoms worsen during the use or if dyspnoea, fever or purulent sputum occurs, a doctor or a pharmacist should be consulted.
- Not to be given to children who are under 4 years of age.
- Do not exceed the recommended dose or duration of treatment.
- Keep out of reach of children.

9. Interactions with other medicinal products and other forms of interaction

- Non reported.

10. Fertility, pregnancy and lactation

- 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

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

12. Undesirable effects

- Gastric disorders may occur (9).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.



13. Overdose

- No case of overdose has been reported.

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

27/04/2026



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