



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

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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: Guava.

Thyme

Thymus vulgaris L. (2)

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

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر

English: English Thyme, Garden Thyme.

Thymus zygis L. (3)

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

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر

English: 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 adolescents (above 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 substance(s) 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.

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.



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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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