Egyptian Herbal Monograph

Volume 3

Herbal Formulations used in Egypt

Egyptian Drug Authority (EDA)

2025

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Guava/ Tilia جوافة / تيليو

1. Names & Synonyms (1)

Guava
***Psidium guajava* L.**
Family: Myrtaceae.
Syns: *Guajava pyrifera* Kuntze, *Myrtus guajava* (L.) Kuntze, *Myrtus guajava* var. *pyrifera* Kuntze, *Psidium pyriferum* L.
Arabic: Gawafa جوافة
English name: Guava (2).

Tilia
***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).
Syns: *T. europaea* auct. non L.
Arabic: Tilio تيليو.
English: European linden (3), European lime tree, Linden and Tilia (4).

2. Parts used for medicinal purpose

Guava: Dried leaves (2).

Tilia: Flowers (7-9).

3. Major chemical constituents

Guava:

Phenolic compounds (7)

-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 (8,9)

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 (7)

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).

Tilia:

Phenolic compounds (3, 5)

Flavonoids: Kaempferol, quercetin, myricetin and their glycosides (mainly Kaempferol-3-*O*-*β*-D-(6″-E-*p*-coumaroyl)-glucopyranoside "tiliroside") and proanthocyanidins.

Phenolic acids: Caffeic, chlorogenic and *p*-coumaric acids.

Essential oil: Alkanes (mainly tricosane) (6), phenolic alcohols and esters, and terpenes including citral, citronellal, citronellol, eugenol, limonene, nerol, *α*-pinene and terpineol (monoterpenes), and farnesol (sesquiterpene) (3).

Others: Mucilage, tocopherol (phytosterol) and amino acids (3).

4. Medicinal Uses (Indications)

Cough sedative, relief irritation of the throat in colds and catarrh of the respiratory tract (2,3,4,8,10,11).

5. Herbal preparations correlated to medicinal use

1. Combination of aqueous liquid extracts of Guava (2:1) and Tilia (1:1).
2. Combination of aqueous liquid extracts of Guava (1:1) and Tilia (1:1).
3. Combination of aqueous liquid extracts of Guava (2:1) and Tilia (15:1).
4. Combination of Guava aqueous liquid extract (4:1) and Tilia dry extract (ethanol 95%) (8:1).
5. Combination of aqueous dry extracts of Guava (2:1) and Tilia (1.5:1).

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.

Preparation 1
Adolescents and Adults

- 333.375 mg Guava extract and 52.5 mg Tilia extract, 3 times daily.

Children above 4 years

- 111.125 - 222.250 mg Guava extract and 17.5 – 35 mg Tilia extract, 3 times daily.

Preparation 2
Adolescents and Adults

- 0.75 -1.5 ml of Guava extract and 0.75 -1.5 ml of Tilia extract, 3-4 times daily.

Children above 4 years

- 111.125 - 222.250 mg Guava extract and 17.5 - 35mg Tilia extract, 3 times daily.
- 0.125 - 0.250 ml Guava extract and 0.125 -0.25 ml Tilia extract, 3-4 times daily.

Preparation 3
Adolescents and Adults

- 140 - 280 mg Guava extract and 31.2- 62.4 mg Tilia extract, 3-4 times daily.

Children above 4 years

- 15.6 - 31.2 mg Guava extract and 15.6 – 31.2 mg Tilia extract, 3-4 times daily.

Preparation 4
Adolescents and Adults

- 125 - 250 mg Guava extract and 15-30 mg Tilia extract, 3-4 times daily.

Children above 4 years

- 62.5 - 125 mg Guava extract and 7.5-15 mg Tilia extract, 3-4 times daily.

Preparation 5
Adolescents and Adults

- 140 mg Guava extract and 31.2 mg Tilia extract, 3-4 times daily.

Children above 4 years

- 70 mg Guava extract and 15.6 mg Tilia extract, 3-4 times daily.

Duration of use (3):

- If the symptoms persist longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.

Method of administration: Oral use (6).

7. Contraindications (3, 4)

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

8. Special warnings and precautions for use (3, 4)

- If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- The use in children under 4 years of age is not recommended.

9. Interactions with other medicinal products and other forms of interaction (3, 4)

None reported.

10. Fertility, pregnancy and lactation (4,7)

- 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 (7)

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

12. Undesirable effects (7)

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

13. Overdose (7)

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

13/09/2023.

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