



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

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Guava, Thyme, Fennel Oil

جوافة / زعتر / زيت الشمر

1. Names & Synonyms

Guava (1)

Psidium guajava L.

Family: Myrtaceae.

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

Arabic: جوافة

English name: Guava.

Thyme

Thymus vulgaris L. (2)

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

Family: Lamiaceae (Labiatae).

Arabic: زعتر

English name: English Thyme, Garden Thyme.

Thymus zygis L. (3)

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

Family: Lamiaceae (Labiatae).

Arabic: زعتر

English name: Spanish Thyme.

Fennel (4)

Foeniculum vulgare Mill.

Family: Apiaceae (Umbelliferae).

Syns: *Anethum foeniculum* Clairv., *A. foeniculum* L., *A. rupestre* Salisb., *Feniculum commune* Bubani., *F. azoricum* Mill., *F. capillaceum* Gilib., *F. dulce* DC., *F. foeniculum* L. H. Karst., *F. officinale* All., *F. panmorium* DC., *F. piperitum* DC., *F. sativum* Bertol., *Ligusticum*



divaricatum Hoffmannsegg et Link, L., *Foeniculum* Crantz., *Meum foeniculum* L. Spreng., *Ozodia foeniculacea* Wight et Arn., *Selinum foeniculum* L. E.H.L.Krause.

Arabic: Shamar شمر

English: Fennel

2. Parts used for medicinal purpose

Guava: Dried Leaves (1)

Thyme: Herb (5,6)

Fennel oil: Dried ripe fruits (7)

3. Major chemical constituents

Guava

Phenolic Compounds (8)

- 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 (9,10)

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

Others (8)

- 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 (6).
- **Flavonoids:** apigenin, narigenin, kaempferol, and luteolin (and its glycosides) (11).
- **Phenolic acids:** salvianolic, rosmarinic, cinnamic, ferulic, caffeic and gallic acids (11).
- **Others:** monoterpene glycosides.

Fennel oil (12)

trans-anethole (+)-fenchone, estragole (methylchavicol), limonene, *p*-anisaldehyde, α -pinene and α -phellandrene.

4. Medicinal Uses (Indications)

- A. Expectorant in cough associated with the common cold.
- B. Relief of symptoms associated with bronchitis, whooping cough, and catarrh of the upper respiratory tract.

5. Herbal preparations correlated to medicinal use

Combination of guava liquid extract (extraction solvent: warm water), thyme liquid extract (extraction solvent: hydroalcoholic (24%)) and fennel oil.

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: Combination of 125mg of guava extract, 125mg of thyme extract and 0.375mg of fennel oil, 3 times daily.

Children more than 4 years: 41.7mg of guava extract, 41.7mg of thyme extract and 0.125mg of fennel oil, 3 times daily.



Duration of use:

- If the symptoms persist for longer than one week a doctor or pharmacist should be consulted.

Method of administration: Oral use.

7. Contraindications.

- Hypersensitivity to the active substances or to other plants of the same families.
- Patients with known hypersensitivity to Asteraceae (Compositae) should avoid the use of the product because of cross reactivity risk (7).

8. Special warnings and precautions for use

- If the symptoms worsen during the use or if dyspnoea, fever or purulent sputum occurs, a doctor or a pharmacist should be consulted (6, 13).

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

- **Ciprofloxacin:** The medicinal product may affect the absorption, distribution, and elimination of ciprofloxacin. If the two are used concurrently, their dosages should be separated by at least 2 hours (19).
- If the patient is on other medications he/she should seek medical advice.

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

- Allergic reactions affecting the skin, the respiratory or and gastro-intestinal system may occur (6, 13).
- Gastric disorders may occur (6).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.

13. Overdose

- In case of overdose, the side effects mentioned may become more severe. In this case, a doctor should be consulted.

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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