



Egyptian Herbal Monograph

Egyptian Herbal Monograph

Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

2026





Egyptian Herbal Monograph

Herbal Formulations Used in Egypt

Fennel oil, Guava, Thyme

زيت الشمر / جوافة / زعتر

1. Names & Synonyms

Fennel (1)

***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

Guava (2)

***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. (3)**

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

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر

English: English Thyme, Garden Thyme.



***Thymus zygis* L. (4)**

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

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر

English: Spanish Thyme.

2. Parts used for medicinal purpose

Fennel oil: Dried ripe fruits (5).

Guava: Dried Leaves (2).

Thyme: Herb (6,7).

3. Major chemical constituents

Fennel oil (8)

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

Guava

Phenolic Compounds (9)

- 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 (10,11)

- 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 (9)

- 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 (7).
- **Flavonoids:** apigenin, narigenin, kaempferol, and luteolin (and its glycosides) (12).
- **Phenolic acids:** salvianolic, rosmarinic, cinnamic, ferulic, caffeic and gallic acids (12).
- **Others:** monoterpene glycosides.

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

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

Children more than 4 years: Combination of 0.125mg of fennel oil, 41.7mg of guava extract and 41.7mg of thyme extract, 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 substance(s) 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 (5).

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 (7, 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 (13).
- 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 (7, 13).
- Gastric disorders may occur (7).
- 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

-

16. Date of compilation/last revision

27/04/2026.



References

1.	WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, 3, 136-144.
2.	WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, 4, 127-139.
3.	https://www.gbif.org/species/5341442
4.	https://www.gbif.org/species/7793938
5.	European Union Herbal Monograph on <i>Foeniculum vulgare</i> Miller subsp. <i>vulgare</i> var. <i>vulgare</i> , fructus (2024). Committee on Herbal Medicine Products (HMPC).
6.	WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, 3, 259-266
7.	Community Herbal Monograph on <i>Thymus vulgaris</i> L. and <i>Thymus zygis</i> L., Herba. EMA/HMPC/342332/2013. Committee on Herbal Medicinal Products (HMPC).
8.	Faudale, M., Viladomat, F., Bastida, J., Poli, F. and Codina, C. (2008). Antioxidant activity and phenolic composition of wild, edible, and medicinal fennel from different Mediterranean countries. <i>J. Agric. Food Chem.</i> 56 , 1912–1920.
9.	Kumar, M., Tomar, M., Amarowicz, R., Saurabh, V., Nair, M. S., Maheshwari, C., Sasi, M., Prajapati, U., Hasan, M., Singh, S., Changan, S., Prajapat, R. K., Berwal, M. K. and Satankar, V. (2021). Guava (<i>Psidium guajava</i> L.) leaves: Nutritional composition, phytochemical profile, and health-promoting bioactivities. <i>Foods</i> , 10 , 752.
10.	Karawya, M. S., Abdel Wahab, S. M., Hifnawy M. S., Azzam S. M. and EL- Gohary H. M. (1999). Essential oil of Egyptian Guajava leaves. <i>Egypt. J. Pharm. Sci.</i> , 40 (2), 209-217.
11.	El-Ahmady, S. H., Ashour, M. L. and Wink, M. (2013). Chemical composition and anti-inflammatory activity of the essential oils of <i>Psidium guajava</i> fruits and leaves. <i>The Journal of Essential Oil Research</i> , 25 (6), 475–481. http://dx.doi.org/10.1080/10412905.2013.796498 .
12.	Sarfaraz, D., Rahimmalek, M. and Saeidi, G. (2021). Polyphenolic and molecular variation in <i>Thymus</i> species using HPLC and SRAP analyses. <i>Sci. Rep.</i> , 11 , 5019.
13.	Skidmore-Roth, L. (2010). <i>Mosby's Handbook of Herbs & Natural Supplements</i> . 4 th ed. ISBN 9780323057417.