



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

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Anise, Chamomile, Fennel, Ginger, Peppermint, Bromelain, Papain

ينسون / بابونج / شمر / جنزبيل / نعناع / بروميلين / بابين

1. Names & Synonyms

Anise (1)

Pimpinella anisum L.

Family: Apiaceae (Umbelliferae).

Syns: *Anisum officinarum* Moench., *A. vulgare* Gaertn., *Apium anisum* L. Crantz., *Carum anisum* L. Baill., *Pimpinella anisum* cultum Alef., *P. aromatica* Bieb., *Selinum anisum* L. E.H.L. Krause., *Sison anisum* Spreng., *Tragium anisum* Link.

Arabic: Yansoon ينسون

English: Anise, Aniseed.

Chamomile

Matricaria chamomilla L. (2,3).

Family: Asteraceae (Compositae) (2).

Syns.: *Chamomilla recutita* (L.) Rausch., *Chamomilla officinalis* K. Koch, *Matricaria recutita* L. and others (2,4).

Arabic: Baboonig بابونج

English: Matricaria Flower (5), Blue Chamomile, Hungarian Chamomile, Matricaria, Sweet False Chamomile, Wild Chamomile (4), German Chamomile (6).

Fennel (7)

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

Ginger (8)

***Zingiber officinale* Roscoe.**

Family: Zingiberaceae.

Syns. *Amomum zingiber* L., *Zingiber blancoi* Massk.

Arabic: Janzabeil - Zanjabeel - Zingibil

English: Ginger.

Peppermint (9)

***Mentha piperita* L.**

Family: Lamiaceae.

Arabic: Ni'na نعناع

English: Peppermint.

2. Parts used for medicinal purpose

Anise: Dried ripe fruits (1).

Chamomile: Flowerheads (3-5).

Fennel: Dried ripe fruits (10).

Ginger: The dried rhizome (6,8,11,12).

Peppermint: The fresh over ground parts and the dried leaves (9,13,14).

3. Major chemical constituents

Anise

- **Essential oil:** Contains mainly trans-anethole, estragole (methylchavicol, isoanethole), β -anisaldehyde, α -terpenol, cis-anethole (1).



Fennel (15)

- **Essential oil:** *trans*-Anethole (+)-fenchone, estragole (methylchavicol), limonene, *p*-anisaldehyde, α -pinene and α -phellandrene.
- **Phenolic acids:** Rosmarinic acid and caffeoylquinic acid derivatives.
- **Flavonoids:** Eriodictyol-7-rutinoside, quercetin-3-rutinoside.

Others: Triterpenes, smaller terpenes (monoterpenoids, sesquiterpenoids and diterpenoids) and reducing sugars.

Chamomile

- **Essential oil:** Esters of angelic and tiglic acids, 1,8 cineole, 1-*trans*-pinocarveol, 1*trans*-pinocarvone, chamazulene, farnesol, and nerolidol (2,6).
- **Phenolic compounds:** **Flavonoids:** Apigenin, luteolin, quercetin and their glycosides. **Phenolic acids:** caffeic and ferulic acids. **Coumarins:** scopolin, umbelliferone and herniarin (2,6).
- **Sesquiterpenes lactones:** Nobilin, 3-epinobilin, 1, 10-epoxynobilin and 3dehydronobilin (2,6).
- **Others:** Anthemic acid, fatty acids, phytosterols, choline and inositol (2).

Ginger (6, 16)

- **Oleo-resin:** Gingerols, shogaols, paradols, zingerone, gingerenone-A, and 6dehydrogingerdione.
- **Essential oil:** β -Bisabolene and zingiberene, zingiberol, zingiberenol, *ar*-curcumene, β -sesquiphellandrene, β -sesquiphellandrol (*cis* and *trans*), phellandrene, camphene, geraniol, neral, linalool, *d*-nerol).
- **Others:** Starch, lipids, proteins and amino acids.

Peppermint

- **Essential oils:** Menthol, menthone, menthyl acetate, menthofuran, and 1,8cineole (eucalyptol) (17).
- **Flavonoids:** Luteolin, luteolin-7-O-glucoside, naringenin-7-O-glucoside, isorhoifolin, eriodictyol, eriocitrin glycoside and apigenin (18).



4. Medicinal uses (Indications)

Symptomatic treatment of minor digestive ailments such as dyspepsia, epigastric bloating, indigestion, gastritis, lack of appetite and flatulence.

5. Herbal preparations correlated to medicinal use

Combination of anise powder, chamomile powder, fennel powder, ginger powder, peppermint powder, bromelain, and papain.

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 elderly

Combination of 25 mg of anise powder, 150 mg of chamomile powder, 50 mg of fennel powder, 70 mg of ginger powder, 25 mg of peppermint powder, 50 mg of bromelain, and 50 mg of papain, 3 times daily after meals.

Duration of use

If the symptoms persist more 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 active substance(s) and to other plants of the same families.
- The product should not be used by persons with cholelithiasis (19,20).

8. Special warnings and precautions for use

- If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- Patients with gallstones and any other biliary disorders should be cautious in using the product (21).



- In case of allergy to latex or fruits, a doctor should be consulted before use (22).
- In case of gastrointestinal lesions/ulcers or having any surgery, ask the physician before use (22,23).
- This product should not be given to children and adolescents under age of 18 years.

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

- This product may increase the action of anticoagulants; concurrent use should be avoided (20, 22, 23).
- Other medicinal products used to decrease stomach acid, such as histamine-2 blockers and proton pump inhibitors may cause premature dissolution of the enteric coating and should be avoided (21).

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

- Hypersensitivity/allergy may occur (22, 23).
- Gastrointestinal discomfort or disturbance may occur (22).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.

13. Overdose

No cases of overdose have been reported to date.



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14. Relevant biological properties

Not required as per Egyptian guidelines for registration of herbal medicines.

15. Additional information

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16. Date of compilation/last revision

21/05/2026.



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