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

Anise oil, Echinacea, Eucalyptus oil, Marshmallow **زيت الينسون / إشنسيا / زيت الكافور / الخطمية**

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.

Echinacea (2-4)

***Echinacea purpurea* L.**
Moench. Family: Asteraceae (Compositae).
Syns.: *Echinacea intermedia* Lindl., *E. purpurea* (L.) Moench var. *arkansana Steyerm.*, *E. purpurea* var. *purpurea* f. liggettii., *E. speciosa* Paxt., *Brauneria purpurea* (L.) Britton, *Rudbeckia purpurea* L., *R. hispida* Hoffm., *R. serotina* Sweet.
Arabic: Echinacea إشنسيا
English: Purple coneflower.

Eucalyptus (5)

***Eucalyptus globulus* Labill.**
Family: Myrtaceae.
Syns.: *Eucalyptus maidenii* subsp. globulus (Labill.) J.B.Kirkp.
Arabic: Kafur كافور (6).
English: Eucalyptus (7).

Marshmallow (2, 8).

Althaeaofficinalis **L.**
Family: Malvaceae.
Syns.: *Malva althaea* E. H. L. Krause, *Malva officinalis* (L.) K. F. Schimp. & Spenn. (5).
Arabic: Marshmallow مارشمالو, Al khatmia الخطمية ,الختمية, Al Khatmy الخطمى, Khairu خيرو (9).
English: Marshmallow, White-mallow (10).

2. Parts used for medicinal purpose

Anise oil: Dry ripe fruits (1).

Echinacea: Fresh or dried herb (aerial parts) (2,3), Rhizome/ root (2,4).

Eucalyptus oil: Fresh /dried leaves (7,11).

Marshmallow: Peeled or unpeeled dried root (2, 8, 12-14) and leaves (2, 10).

3. Major chemical constituents

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

Echinacea

Root:

- **Phenylpropanoids: Caffeic acid esters;** cichoric acid, caftaric acid, chlorogenic and isochlorogenic acids and **caffeic acid glycosides**; echinacoside, verbascoside, caffeoylechinacoside (15).

- **Alkamides:** Isobutylamides of straight-chain fatty acids with olefinic and/or acetylenic bonds contain mainly 2,4-dienoic units (2,15).

- **Polysaccharides**: Methylglucuronoarabinoxylan, rhamnoarabinogalactan, xyloglucan and glycoproteins; arabinogalactan-protein (protein has high concentrations of serine, alanine and hydroxyproline) (2).

- **Others**: **Polyacetylene (volatile oil components):** Alkylketones; (2,11) saturated pyrrolizidine-type **alkaloids** (tussilagine and isotussilagine) (2,11);

flavonoids (quercetin, kaempferol, isorhamnetin and their glycosides; betaine, fatty acids, simple sugars, sterols and vanillin (2).

Herb/aerial parts:

- **Phenylpropanoids: Caffeic acid esters;** cichoric acid, caftaric acid, chlorogenic and isochlorogenic acids, and **caffeic acid glycosides**; echinacoside, verbascoside, caffeoylechinacoside (11).
- **phenolic acids:** *p*-coumaric, *p*-hydroxybenzoic and protocatechuic acids; betaine (1).
- **Flavonoids:** quercetin, kaempferol, isorhamnetin and their glycosides (2,16).
- **Alkamides:** Isobutylamides of straight-chain fatty acids with olefinic and/or acetylenic bonds contain mainly 2,4-dienoic units (2,11).
- **Polysaccharides**: Methylglucuronoarabinoxylan, rhamnoarabinogalactan, xyloglucan and glycoproteins; arabinogalactan-protein (protein has high concentrations of serine, alanine and hydroxyproline) (2).
- **Others**: **volatile oil components;** borneol, bornyl acetate, germacrene D and caryophyllene (2,11), saturated pyrrolizidine-type alkaloids (tussilagine and isotussilagine) (2,11), anthocyanins, fatty acids, simple sugars, sterols and vanillin (2).

Eucalyptus oil: 1,8-Cineole (eucalyptol), *p*-cymene, α-pinene and α–limonene (17).

Marshmallow

- **Acidic polysaccharides**: Mucilage (galacturono–rhamnans, arabinans, glucans, arabinogalactans) (2, 18).
- **Flavonoids:** Hypolaetin-8-glucoside, isoquercitrin, kaempferol (18).
- **Phenolic acids:** Caffeic, *p*-coumaric, ferulic, *p*-hydroxybenzoic and syringic acids (2, 18).
- **Others**: Starch, pectin, asparagine, calcium oxalate, coumarins (scopoletin), sucrose, amino acids and tannins (2, 18,19).

4. Medicinal Uses (Indications)

Symptomatic relief of common cold and as a demulcent preparation for the symptomatic treatment of upper respiratory tract irritation and associated dry cough.

5. Herbal preparations correlated to medicinal use

Combination of anise oil, echinacea powder extract (Extraction solvent: hydroalcoholic), eucalyptus oil, and marshmallow aqueous powder extract.

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 (12 years old and above): Combination of 60 mg of anise oil, 100 mg of echinacea extract, 60 mg of eucalyptus oil, and 400 mg of marshmallow extract, 3 times daily.

Children (4–12 years old): Combination of 15 mg of anise oil, 25 mg of echinacea extract, 15 mg of eucalyptus oil, and 100 mg of marshmallow extract, twice daily with medical advice.

Duration of use :

- The therapy should start at the first signs of a common cold.
- If the symptoms persist longer than one week during the use of this medicinal product, a doctor or a pharmacist should be consulted.
- Not to be taken for more than 10 days.

Method of administration : Oral use**.**

7. Contraindications.

- Hypersensitivity to the active substances and to other plants of the same families.

- Progressive systemic disorders, collagen disease, tuberculosis, immunodeficencies (HIV/AIDS), immunosuppression diseases of white blood cell system, and autoimmune diseases such as lupus erythematosus and multiple sclerosis (4,15,20).

8. Special warnings and precautions for use

- If the symptoms worsen or if dyspnea, fever or purulent sputum occurs during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- There is a possible risk of allergic reactions in sensitive individuals. Those patients should consult their doctor before using the product (15).
- There is a possible risk of anaphylactic reactions in atopic patients. Atopic patients should consult their doctor before using the product (15).
- The product should be used with caution in inflamed and ulcerated conditions of the gastrointestinal tract, gall bladder disease or impaired liver function (11).
- Absorption of concomitantly administered medicines may be delayed. As a precautionary measure, the product should not be taken ½ to 1 hour before or after intake of other medicinal products (8,12).
- Use in children from 4 years to 12 years of age is not recommended without medical supervision.

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

- Oral medications: It may reduce the absorption of oral medications; concurrent use should be avoided (8, 21).
- Antidiabetics and Hypoglycemic herbs: The product may increase hypoglycemic action.
- Warfarin: The product may increase the action of warfarin.
- It may inhibit cytochrome P4503A4 enzymes.
- The action of Econazole vaginal cream may be decreased; concurrent use should be avoided.

- It may decrease the effects of immunosuppressants, protease inhibitors, corticosteroids and should not be used immediately before, during, or after transplant

Lab Tests:

- Blood glucose: It may decrease blood glucose.
- Prothrombin time (PT/INR): It may increase Prothrombin time (PT/INR).

10. Fertility, pregnancy and lactation

- The use during pregnancy and lactation is avoided (22).
- 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 (4)

- Occasional allergic reactions affecting the skin, respiratory system and gastrointestinal tract e.g., nausea and vomiting (1,22).
- Hypoglycemia, anorexia, vomiting, and hypersensitivity reactions.
- Hypermineralocorticism.
- Hepatotoxicity, acute asthma attack, anaphylaxis and angioedema may occur.
- If adverse effects occur, a doctor or a pharmacist should be consulted.

13. Overdose

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

-

16. Date of compilation/last revision

20/04/2026.

References

1.	WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, **3**, 42-63.
2.	Barnes, J., Anderson, L. A. and Phillipson, J. D. (2007). Herbal Medicines, 3rd edition. Published by the Pharmaceutical Press. ISBN 978 0 85369 623 0.
3.	WHO monographs on selected medicinal plants (1999). Volume 1, 136-144.
4.	Skidmore-Roth, L. Mosby's Handbook of Herbs and Natural Supplements (2010). 4th ed., ISBN: 978-0-323-05741-7.
5.	http://www.powo.org.
6.	Quattrocchi, U. (2016). CRC World Dictionary of Medicinal and Poisonous Plants. Common Names, Scientific Names, Eponyms, Synonyms, and Etymology (5 Volumes Set). CRC Press, https://doi.org/10.1201/b16504. E-book ISBN 9780429171482.
7.	European Union herbal monograph on *Eucalyptus globulus* Labill., folium (2013). EMA/HMPC/892618/2011. Committee on Herbal Medicinal Products (HMPC).
8.	WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, **2**, 5-11.
9.	Provençal, P. (2010). The Arabic Plant Names of Peter Forsskål's Flora Aegyptiaco-Arabica. The Royal Danish Academy of Sciences and Letters.
10.	Natural Health Product, *Althaea officinalis* L. leaf. (2018). Health Canada, http://webprod.hc-sc.gc.ca/nhpid-bdipsn/monoReq.do?id=2772&lang=eng.
11.	WHO monographs on selected medicinal plants (2002). Monographs on Selected Medicinal Plants, **2**, 97 - 113.
12.	European Union herbal monograph on *Althaea officinalis* L. (2016). EMA/HMPC/424583/2015. Committee on Herbal Medicinal Products (HMPC).
13.	PDR for herbal medicines (2002). Montvale, NJ: Medical Economics Company, 2nd ed., ISBN 1-56363-361-2.

14.	Natural Health Product, *Althaea officinalis* L. root. (2018). Health Canada, http://webprod.hc-sc.gc.ca/nhpid bdipsn/atReq.do?atid=althaea.officinalis.root.racine&lang=eng.
15.	European Union herbal monograph on *Echinacea purpurea* (L.) Moench, (2017). EMA/HMPC/424583/2016 Committee on Herbal Medicinal Products (HMPC).
16.	Coelho, J., Barros, L., Dias, M. I., Finimundy, T. C., Amaral, J. S., Alves M. J., Calhelha, R. C., Santos, P. F. and Ferreira, I. C.F.R. (2020). "*Echinacea purpurea* (L.) Moench: Chemical Characterization and Bioactivity of Its Extracts and Fractions", *Pharmaceuticals*, 13, 125.
17.	Čmiková, N., Galovičová, L., Schwarzová, M., Vukic, M. D., Vukovic, N. L., Kowalczewski, P. Ł., Bakay, L., Kluz, M. I., Puchalski, C. and Kačániová, M. (2023). Chemical composition and biological activities of *Eucalyptus globulus* essential oil. *Plants* (Basel), **12**(5), 1076. doi: 10.3390/plants12051076. PMID: 36903935, PMCID: PMC10004840.
18.	Bonaterra, G. A., Bronischewski, K., Hunold, P., Schwarzbach, H., Heinrich, EU., Fink, C., AzizKalbhenn, H., Müller, J. and Kinscherf, R. (2020). Anti-inflammatory and anti-oxidative effects of Phytohustil® and root extract of *Althaea officinalis* L. on macrophages *in vitro*. *Front. Pharmacol.*, **11**, 290. doi: 10.3389/fphar.2020.00290.
19.	Ali, E. A. (2013). The pharmaceutical importance of *Althaea officinalis* and *Althaea rosea*: A review. *Int. J. Pharm Tech. Res.*, **5**(3), 1378-1385.
20.	Natural Health Product, *Echinacea purpurea* (L.) (2018). Health Canada, http://webprod.hc-sc.gc.ca/nhpid-bdipsn/atReq.do?atid=echinacea.purpurea&lang=eng
21.	ESCOP Monographs (2019). *Althaea officinalis* L. European Scientific Cooperative on Phytotherapy. Edited by Roberta Hutchins and Simon Mills.
22.	Community Herbal Monograph on *Pimpinella anisum* L., Fructus (2013). EMA/HMPC/321184/2012. Committee on Herbal Medicine Products (HMPC).