



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

2026





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Milk thistle, Astragalus, Zinc, Selenium, Ascorbic acid, Lecithin

الأستراجالاس / شوك الجمل / زنك / سيلينيوم / حمض الأسكوربيك / ليسيثين

1. Names & Synonyms

Milk thistle (1)

Silybum marianum L. Gaertn. (2).

Family: Compositae (Asteraceae) (2).

Syns.: *Carduus marianus* L. (2).

Arabic: Shawk Sennari شوك سناري, Shok El-Gamal شوك الجمل (3).

English: Milk thistle and St. Mary's thistle (3).

Astragalus (4,5)

Astragalus mongholicus Bunge.

Family: Fabaceae (Leguminosae).

Syns.: *A. membranaceus* (Fisch.) Bunge; *A. membranaceus* var. *mongholicus* (Bunge) P. G. Xiao.

Arabic: الأستراجالاس

English name: Astragalus root, Membranous milk vetch, Mongolian milk-vetch.

2. Parts used for medicinal purpose

Milk thistle: Dried ripe fruits, freed from the pappus (1).

Astragalus: Dried root (6,7).



3. Major chemical constituents

Milk thistle (2, 3, 8-10)

- **Flavonolignans:** Silymarin mixture mainly (silybin A, silybin B, isosilybin A, isosilybin B, silychristin, isosilychristin, silydianin).
- **Flavonoids:** Taxifolin, apigenin, kaempferol and their derivatives.
- **Fixed oil:** Linoleic, oleic, palmitic and stearic acids.
- **Sterols:** Tocopherol (vitamin E) and phospholipids.
- **Others:** Mucilage, sugars, amines and saponins.

Astragalus

- **Flavonoids (11):** Kaempferol and quercetin (and their glycosides) (12), astrasieversianin XV (II) (13).
- **Polysaccharides (11):** Gum (12), astragalan, astraglukan AMem-P (6) and mucilage (11).
- **Triterpenoid saponins:** Astragalosides I–X and isoastragalosides I–IV (6,12).
- **Sterols:** Daucosterol and β -sitosterol (13).
- **Fatty acids:** Heptenoic, tetradecanoic, pentadecanoic, hexadecanoic, octadecenoic, octadecanoic, octadecadienoic, linoleic, linolenic, palmitic, stearic, eicosanoic, eicosenoic and docosanoic acids (13).
- **Amino acids:** *γ*-L-glutamyl-Se-methyl-seleno-L-cysteine, Se-methylseleno-L-cysteine (13).
- **Minerals:** Ni and Cr (11).

4. Medicinal uses (Indications)

Support the liver function, after serious conditions have been excluded by physician.



5. Herbal preparations correlated to medicinal use

Combination of milk thistle extract, astragalus root extract, zinc, selenium, ascorbic acid and lecithin powder.

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 200 mg of milk thistle extract ,20 mg of astragalus root extract ,1.967 mg of zinc, 27.5 mcg of selenium,30 mg of ascorbic acid and 300 mg of lecithin, daily.

Duration of use:

should be used at least 3 weeks to see beneficial Effects.

Method of administration: Oral use.

7. Contraindications

- Hypersensitivity to active substances and to other plants of the same families.
- Conditions such as breast, uterine and ovarian cancers, endometriosis or uterine fibroids (14,15).
- It should not be used by patients with acute infections or in the presence of fever or inflammation (16).
- It should not be used by patients with autoimmune diseases and who have had transplant surgery (5).

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.
- The use in children and adolescents below 18 years of age is not recommended (16-18, 7).



- If icterus or a change in color of urine or stool appears, a doctor should be consulted immediately (18).

9. Interactions with other medicinal products and other forms of interaction (16).

- **Antihypertensives:** The product may decrease or increase the action of antihypertensives; concurrent use should be avoided.
- **Cyclophosphamide:** The product may decrease the effect of cyclophosphamide.
- **Immunosuppressants:** The product may interfere with immunosuppressant therapy.

Lab Test

- **Semen specimen analysis:** The product *Astragalus* may increase sperm motility.
- **PT, INR:** The product *Astragalus* may increase Prothrombin Time (PT) and International Normalized Ratio (INR)

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

- Adverse effects are mainly transient, non-serious, gastrointestinal complaints. It is stated that silymarin may occasionally produce a mild laxative effect (2).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.



13. Overdose

No cases of overdose have been reported to date.

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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