

Egyptian Herbal Monograph

Volume 3

Medicinal Plants used in Egypt

Egyptian Drug Authority (EDA)

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Trigonella foenum-graecum L.

الحلبة

1. Names & Synonyms (1)

Trigonella foenum-graecum L.

Syns.: *Buceras foenum-graecum* (L.) All., *Foenum-graecum officinale* Moench, *Folliculigera graveolens* Pasq., *Telis foenum-graecum* (L.) Kuntze, *Xiphostylis erectus* Gasp.

Family: Fabaceae (Leguminosae)

Arabic: Hulbah, Helba حلبة (2,3).

English name: Fenugreek, Greek hay, Greek clover and Greek hay seed (4-6).

2. Parts used for medicinal purpose

Dried seeds (4,5,7,8).

3. Major chemical constituents

- **Polysaccharides:** Mucilage (mainly galactomannan) (9).
- **Steroidal saponins:** Diosgenin (as main sapogenin) (10).
- **Alkaloids:** Trigonelline (11), carpaine and choline (12,13).
- **Others:** Protein (13), fats, fibres, minerals (zinc and iron), flavonoids (apigenin, orientin, luteolin, quercetrin, vitexin, and isovitexin) and volatile oil (10).

4. Medicinal Uses (Indications)

- A. Loss of appetite (anorexia) (4,5).
- B. Digestive disorders include constipation (laxative), dyspepsia, gastritis, gastric ulcers and convalescence (5,7,8,14,15).
- C. As an adjunct for the management of hypercholesterolaemia (5,8,16) and hyperglycaemia in cases of non-insulin diabetes mellitus (8,15,16).
- D. Galactagogue/lactagogue (help promote milk production/secretion) (5,14,15).
- E. Topically for symptomatic treatment of local inflammation of the skin (4,8), wounds, leg ulcers, eczema, burns, boils (15) and as an emollient (8). Also, for furunculosis, myalgia, lymphadenitis and gout (7).

5. Herbal preparations correlated to medicinal use (4)

1. Comminuted herbal substance.
2. Powdered herbal substance.
3. Dry extract, ethanol 20% V/V.
4. Soft extract, ethanol 60% V/V.
5. Tincture 1:5 (8).

Herbal preparations (2-5) are in a pharmaceutical dosage form. The pharmaceutical form should be described by the pharmacopoeia full standard term.

6. Posology and method of administration correlated to medicinal use (4)

Adults and elderly

Preparation 1

Indication A

1-2 g in 250 ml of boiling water, 3 times daily, before meals (4).

Indications A, B, C and D

- 0.5 g macerated in 150 ml cold water for 3 hours; strain. Drink 3 times daily (4, 8).
- 6 g of cut or crushed seed (8,14,15) daily (8).

Indication E

- 1 tbsp mashed seed in about 240 ml water, up to 3 times daily as a gargle (16).
- Infusion for cutaneous use: 50 g in 250 ml of water, 2-3 times daily. The still warm infusion is used in cataplasm over the affected areas (4).

Preparation2

Indication A

Single dose: 380-1100 mg, 3 times daily.

Daily dose: 1140-3300 mg (4).

Indications A, B, C and D

Dose equivalent to 6 g of cut or crushed seeds daily. (8 14,15).

Indication E

- 50 g of powdered seed mixed with 250 ml water, added to a hot bath 2-3 times daily. (8,14-16).

- 50 g of powdered seed per enough hot water to make a semi-solid paste, apply locally as poultice as needed. (5,8).
- 50 g in 250 ml of water, the still warm infusion is used in cataplasm over the affected areas, 2-3 times daily (4).

Preparation3

Indication A

Single dose: 295 mg, 2 times daily.

Daily dose: 590 mg (4).

Indications A, B, C and D

Dose equivalent to 6 g of cut or crushed seed daily. (8,14,15).

Preparation 4

Indication A

Single dose: 500 mg, 2 times daily.

Daily dose: 1 g (4).

Indications A, B, C and D

Dose equivalent to 6 g of cut or crushed seed daily. (8,14,15).

Preparation 5 (8)

30 ml daily.

Duration of use: (4)

If the symptoms persist more than two weeks for **indication A** or one week for **indication D** during the use of the medicinal product, a doctor or a pharmacist should be consulted.

Method of administration (4)

- Oral use.
- Cutaneous /topical use.

7. Contraindications (4)

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

8. Special warnings and precautions for use (4)

- 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 under 18 years of age has not been established.
- Due to a possible hypoglycaemic effect of Fenugreek, close monitoring of glycaemic control should be considered in patients treated for diabetes mellitus.

9. Interactions with other medicinal products and other forms of interaction (14)

There is a possible increased risk of bleeding when Fenugreek is used concurrently with anticoagulants, antiplatelet and NSAIDs.

10. Fertility, pregnancy and lactation (4)

- Owing to its stimulatory effects on the uterus, the seeds should not be used during pregnancy (8).
- Promote lactation (5,14,15).
- No fertility data available.

11. Effects on ability to drive and use machines (4)

No studies on the effect on the ability to drive and use machines have been performed.

12. Undesirable effects (4)

- Flatulence, diarrhea and dizziness may occur.
- Allergic reactions have been reported after local application, ingestion or inhalation. These reactions range from facial angioedema, rhinorrhoea, wheezing, asthma and allergic rhinitis (4,8).
- After its ingestion, a bitter taste and bad odour appear in human sweat and urine due to volatile oils and alkaloids content (12,17).
- If other adverse reactions not mentioned above occur, a doctor or a pharmacist should be consulted.



13. Overdose

- High doses (25-100 g of Fenugreek seeds powder divided into two equal daily doses) have been reported to cause minor gastrointestinal symptoms such as diarrhea and flatulence (4).
- High doses of Fenugreek are not recommended in patients with low thyroid activity (18).

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 last revision

25/05/2023.

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