

Egyptian Herbal Monograph

Volume 2

Medicinal plants used in Egypt

Egyptian Drug Authority (EDA)

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Gentiana lutea L.

جنتيانا

1. Names & Synonyms (1)

Gentiana lutea L.

Family: Gentianaceae.

Syns.: *Asterias lutea* (L.), *Gentianusa lutea* (L.), *Swertia lutea* (L.)

Arabic: Gentiana جنتيانا

English name: Bitterwort, Gentian, Gentian-root, Yellow gentian (2-4).

2. Parts used for medicinal purpose

Dried root and rhizomes (2-7).

3. Major chemical constituents

- **Secoiridoid glycosides:** Gentiopicroside, swertiamarin, sweroside (8) and amarogentin (9).
- **Iridoids:** Loganic acid (8).
- **Xanthones:** Gentioside, gentioside isomer, gentisin, isogentisin, 1-Hydroxy-3,7-imethoxyxanthone and gentianin (8,10).
- **Carbohydrates:** Monosaccharides (glucose and fructose), disaccharides (saccharose and gentiobiose), trisaccharides (gentianose) and polysaccharides (pectin) (9).
- **Others:** Volatile oil, phytosterols and triterpenes (8,9).

4. Medicinal Uses (Indications)

- A. For temporary loss of appetite e.g. after illness (2,4-6).
- B. Treatment of digestive complaints such as feeling of distension, flatulence and for mild dyspeptic complaints (2,5-7).



5. Herbal preparations correlated to medicinal use

- 1) Comminuted herbal substances are added to water as herbal tea in the form of infusion, decoction or maceration (2, 5-7).
- 2) Powdered drug (2,4).
- 3) Dry extract, extraction solvent: Ethanol 53% (6).
- 4) Liquid extract, extraction solvent: Ethanol 45% (6).
- 5) Tincture (1:5), extraction solvent, Ethanol 45-70 % (6).

Herbal preparations (2-5) 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

Preparation 1

Indications A and B

Adults and elderly

- Single dose: 0.1 - 2 g in 150 ml of water in the form of infusion, decoction or maceration, 1 - 3 times daily (5).
- Single dose: 0.6 - 2 g of the comminuted herbal substance in 150 ml of boiling water as an infusion, 1- 3 times daily (3,6). Daily dose: 0.6 - 6 g (6, 11, 12).

Preparation 2

Adults and elderly

0.1 - 6 g of dried root daily, in 3 divided doses (2, 4, 13, 14).

Preparations 3

Adults and elderly

Single dose: 240 mg, 2 - 3 times daily. Daily dose: 480 - 720 mg (6,13).

Preparation 4

Adults and elderly

- Single dose: 1 g, 2 - 4 times, daily. Daily dose: 2 - 4 g (6,13,14).
- Single dose: 1 – 4 ml, up to 3 times daily (4,11).



Preparation 5

- 1 – 4 ml, up to 3 times daily (3, 5, 6, 11, 13,14).

Duration of use

If the symptoms persist longer than 2 weeks during the use of the medicinal product, a doctor or pharmacist should be consulted (6).

Method of administration: Oral use (5,6).

- **For Indication A:** Liquid preparations are to be taken half an hour before meal and solid dosage forms to be taken one hour before meal due to additional mechanism of the disintegration of the solid form (6).
- **For Indication B:** A single dose after the meal (5).

7. Contraindications

- Hypersensitivity to the active substance and to other plants of the same family.
- Gastric and duodenal ulcers, hyperacidity, acute stomach irritation, inflammation (2,5).

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 under 18 years of age is not recommended (6).

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

- None reported (5).

10. Fertility, pregnancy and lactation (5,6)

- 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

- If adverse reactions occur, a doctor or a pharmacist should be consulted.
- Occasional headache may occur (5).



- May cause hyperacidity and gastric distress (13).

13. Overdose

- Overdose may lead to nausea or vomiting (5).

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 compilation/last revision

15/01/2024

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