

# **Egyptian Herbal Monograph**

**Volume 3**

**Medicinal Plants used in Egypt**

**Egyptian Drug Authority (EDA)**

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## Medicinal Plants Used in Egypt

*Cynara cardunculus* L.

خرشوف

### 1. Names & Synonyms (1)

*Cynara cardunculus* L.

**Family:** Asteraceae (Compositae).

**Syns:** *Cynara scolymus* L.

**Arabic:** Kharshouf خرشوف

**English:** Artichoke, Globe Artichoke.

### 2. Parts used for medicinal purposes (1)

Fresh and dried leaves.

### 3. Major chemical constituents (2)

- **Phenolic acids:** Caffeic acid, chlorogenic acid (3-*O*-caffeoylquinic acid), cynarin (1,5-di-*O*-caffeoylquinic acid), 1-*O*-caffeoylquinic acid, 4-*O*-caffeoylquinic acid, 5-*O*-caffeoylquinic acid.

- **Sesquiterpene lactones:** Cynaropicrin, dehydrocynaropicrin, grosheimin and their derivatives.

- **Flavonoids:** Luteolin-7-*O*-rutinoside (scolymoside), luteolin-7-*O*-glucoside, and luteolin-4-*O*-glucoside, cynaroside and cynarotrioside.

- **Essential oil:** Consisting mainly of  $\beta$ -selinene and caryophyllene.

- **Phytosterols:** Taraxasterol.

### 4. Medicinal uses (Indications)

- A. Symptomatic relief of digestive disorders such as dyspepsia with a sensation of fullness, bloating and flatulence (3).
- B. In hyperlipidemia (high levels of fats) (4).
- C. As choleric (increase bile flow) (4, 5).

## 5. Herbal preparations correlated to medicinal use

1. Comminuted dried leaves for herbal tea as an infusion (3).  
Comminuted herbal substance in 150ml of boiling water as a herbal infusion.
2. Powdered dried leaves (3).
3. Dry extract of dried leaves, extraction solvent water (3).
4. Dry extract of fresh leaves, extraction solvent water (3).
5. Soft extract of fresh leaves, extraction solvent water (3).
6. Soft extract of dried leaves, extraction solvent ethanol 20% (V/V) (3).
7. Liquid extract (4, 6).

Herbal preparations (2-7) 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:** Comminuted dried leaves for herbal tea (3):

- 1.1 1.5g of the herbal substance as a herbal infusion 4 times daily.
- 1.2 3g of the herbal substance as a herbal infusion 1-2 times daily.

**Preparation 2:** Daily dose: 600-1500g (in divided doses, 2-4 times a day) (3).

**Preparation 3:** Daily dose: 400-1320mg in divided dose (3).

**Preparation 4:** Daily dose: 600-2700mg in divided dose (3).

**Preparation 5:** Daily dose: 600mg-1800 mg in divided dose (3).

**Preparation 6:** Daily dose: 700 mg three times daily (3).

**Preparation 7:** Daily dose: 3-8 ml three times daily (4, 6).

**Duration of use:** It is possibly safe when taken as a medicine for up to 12 weeks (7).

**Method of administration:** Oral use (3).

## 7. Contraindications

- Hypersensitivity to active substances and to other plants of the same family.
- Obstruction of bile duct (1, 3, 8).

## 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 under 12 years of age is not recommended (3).
- The use in cholangitis, gallstones and any other biliary disorders require medical supervision and advice (3, 6, 8-10).
- Use cautiously in hepatic or renal diseases (9).

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

- Possible interaction with coumarin-type anticoagulants (1).
- Artichoke tea may interfere with the absorption of iron salts (9).
- Artichoke decreases blood glucose, taking artichoke along with diabetes medications might cause blood sugar to drop too low (7, 9).

## 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 (1, 3, 9, 10).
- 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.
- Gastrointestinal complaints included mild diarrhea, accompanied by abdominal cramps, upper abdominal pain, nausea, and heartburn (3, 7).

## 13. Overdose

No case of overdose has been reported (3).

## 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

13/10/2022.

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