

# **Egyptian Herbal Monograph**

**Volume 2**

**Medicinal Plants used in Egypt**

**Egyptian Drug Authority (EDA)**

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## Medicinal Plants Used in Egypt

*Cucurbita pepo* L.

قرع عسل

### 1. Names & Synonyms (1)

*Cucurbita pepo* L.

**Family:** Cucurbitaceae.

**Syns:** *Cucurbita aurantia* Willd., *C. courgero* Ser., *C. esculenta* Gray, *C. fastuosa* Salisb., *C. melopepo* L., *C. ovifera* L., *C. subverrucosus* Willd., *C. verrucosus* L., *Pepo melopepo* Moench., *P. verrucosus* Moench., *P. vulgaris* Moench.

**Arabic:** kar-e-asal قرع عسل

**English:** Pumpkin.

### 2. Parts used for medicinal purposes

Dried seeds (1-3).

### 3. Major chemical constituents

-**Fixed oil:** composed mainly of linoleic, oleic, palmitic and stearic acids (4).

-**Phytosterols:**  $\beta$ -Sitosterol,  $\Delta^{5,24}$  - stigmastadienol,  $\Delta^7$ -stigmastenol,  $\Delta^7$ - avenasterol (5).

-**Phytoestrogens:** including lignans (as secoisolarisiresinol), isoflavones (as genistin, daidzin and formononetin) and quercetin (6).

-**Phenolic acids:** Protocatechuic, caffeic, syringic, vanillic, *p*-coumaric and ferulic acids (6).

-**Protein:** composed mainly of the amino acids: arginine, glutamic and aspartic acids (7).

-**Others:** Vitamin E (Tocopherols), micro-elements such as phosphorus, magnesium, potassium, zinc and iron (7) as well as  $\beta$ -carotene (8).

#### 4. Medicinal uses (Indications)

Relief of lower urinary tract symptoms related to benign prostatic hyperplasia (2, 3, 9-11) or related to an overactive bladder, after serious conditions have been excluded by a medical doctor (2,3).

#### 5. Herbal preparations correlated to medicinal use (2)

1. Comminuted herbal substance.
2. Soft extract, extraction solvent ethanol 92% m/m.
3. Dry extract, extraction solvent ethanol 60% v/v.
4. Pumpkin seed oil.

Herbal preparations (2-4) are in pharmaceutical dosage forms. The pharmaceutical dosage form should be described by the pharmacopoeia full standard term.

#### 6. Posology and method of administration correlated to medicinal use (2)

**Adults and elderly:**

**Preparation 1:** Comminuted herbal substance, single dose: 2.5 – 7.5 g, 2 times daily.

**Preparation 2:** Soft extract, single dose: 500 mg, 2 times daily.

**Preparation 3:** Dry extract, single dose: 105 mg, 3 times daily or 152 mg, 2 times daily.

**Preparation 4:** Pumpkin seed oil, single dose: 1 – 1.2 g, 3 times daily, daily dose: 3-4 g.

**Method of administration:** Oral use.

#### 7. Contraindications (2)

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

#### 8. Special warnings and precautions for use (2)

- If complaints worsen or if symptoms such as fever, spasms or blood in the urine, painful urination or urinary retention occur 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.

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

**Diuretics:** Pumpkin may increase the action of diuretics; use together cautiously (11).

## 10. Fertility, pregnancy and lactation

- Pumpkin is prohibited in pregnancy (12).
- Safety during lactation has not been established. In the absence of sufficient data, the use during lactation is not recommended (2).
- No fertility data available (2).

## 11. Effects on ability to drive and use machines (2)

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.
- Gastric disorders (Vomiting, nausea, anorexia) (2).
- Pumpkin Seed oil: Hypersensitivity reactions and skin irritation have been observed (2).
- Electrolyte loss (sodium, potassium chloride) (11).

## 13. Overdose

No case of overdose has been reported (2).

## 14. Relevant biological properties

Not required as per Egyptian guidelines for registration of herbal medicines.

## 15. Additional Information

For benign prostatic hyperplasia (BPH): pumpkin seed oil could be used in combination with saw palmetto and other herbs (10).

## 16. Date of compilation/last revision

26/04/2022.

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