

Egyptian Herbal Monograph

Volume 3

Medicinal Plants used in Egypt

Egyptian Drug Authority (EDA)

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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: β -Sitosterol, $\Delta^{5,24}$ - stigmastadienol, Δ^7 -stigmastenol, Δ^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 β -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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