



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

2026





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Bearberry, Saw palmetto, Pumpkin, Pygeum, Zinc, Vitamin B6

عنب الدب/ بلميط منشاري/ قرع العسل/ خوخ أفريقي/ زنك/ فيتامين ب6

1. Names & Synonyms

Bearberry (1)

Arctostaphylos uva-ursi L.

Family: Ericaceae.

Syns.: *Arbutus uva-ursi* L., *Arctostaphylos media* Greene, *Arbutus officinalis* Wimm., *Arbutus procumbens* Patzke, *Mairania uva-ursi* Desv., *Uva-ursi buxifolia* S.F. Gray, *Uvaursi procumbens* Moench.

Arabic: Enab eddib عنب الدب

English name: Bearberry, Uva ursi.

Saw palmetto

Serenoa repens (W.Bartram) Small (2,3).

Family: Arecaceae (2,3).

Syns: *Corypha repens* W.Bartram, *Corypha obliqua* W.Bartram, *Diglossophyllum serrulatum* (Michx.) H. Wendl. ex Salomon, *Sabal serrulata* (Michx.) Schult.f., *Chamaerops serrulata* Michx., *Brahea serrulata* (Michx.) H. Wendl. (2,3).

Arabic: Balmit minshary بلميط منشاري

English: Serenoa , Saw palmetto (4) and Saw palmetto berry (5).

Pumpkin (6)

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 عسل قرع

English: Pumpkin.

Pygeum (2)

***Prunus africana* (Hook.f.) Kalkman.**

Family: Rosaceae

Syns.: *Lauro-cerasus africana* (Hook.f.) Browicz, *Pygeum africanum* Hook.f.

Arabic: Barkouk Afriki برقوق أفريقي - Khoukh Afriki خوخ أفريقي

English: African stinkwood, African prune, African cherry, Bitter almond, Iron wood, Pygeum, red stinkwood (7).

2. Parts used for medicinal purpose

Bearberry: Dried leaves (1, 8-10).

Saw Palmetto: Dried ripe fruit (11).

Pumpkin: Dried seeds (6,12,13).

Pygeum: Bark (14,15).

3. Major chemical constituents

Bearberry

- **Hydroquinone derivatives:** Arbutin and methyl-arbutin (glycosides); galloyl arbutin, and hydroquinone (8, 16).
- **Flavonoids:** Myricetin, quercetin and their glycosides including hyperin, isoquercitrin, myricitrin and quercitrin; hyperoside; kaempferol (8,16,17).
- **Polyphenols:** Gallotannins, corilagin, catechin, anthocyanidin derivatives including cyanidin and delphinidin (8).
- **Phenolic acids:** Gallic, *p*-coumaric and syringic, salicylic acid, *p*- hydroxybenzoic, ferulic, caffeic and lithospermic acids (dimeric caffeic acid) (8).



- **Terpenoids:** α -Amyrin, α -amyrin acetate, β -amyrin, lupeol, uvaol, ursolic acid, and a mixture of mono- and di-ketonic α -amyrin derivatives (1,8,16).

Saw Palmetto (18)

- **Fatty acids and their glycerides:** Monoacylglycerides (1-monolaurin, 1-monomyristicin). Oleic acid (unsaturated) and capric acid, caproic acid, caprylic acid, lauric acid, myristic acid, palmitic acid and stearic acid (saturated).
- **Steroids:** β -Sitosterol, campesterol and stigmasterol.
- **Carbohydrates:** Invert sugar, mannitol, high molecular weight polysaccharides with galactose, arabinose and uronic acid identified as main sugar components.
- **Other constituents:** Flavonoids (e.g. rutin, isoquercitrin, kaempferol), pigment (carotene), resin, tannin and volatile oil.

Pumpkin

- **Fixed oil:** composed mainly of linoleic, oleic, palmitic and stearic acids (19).
- **Phytosterols:** β -Sitosterol, $\Delta^{5,24}$ - stigmastadienol, Δ^7 -stigmastenol, Δ^7 -avenasterol (20).
- **Phytoestrogens:** including lignans (as secoisolarisiresinol), isoflavones (as genistin, daidzin and formononetin) and quercetin (21).
- **Phenolic acids:** Protocatechuic, caffeic, syringic, vanillic, *p*-coumaric and ferulic acids (21).
- **Protein:** composed mainly of the amino acids: arginine, glutamic and aspartic acids (22).
- **Others:** Vitamin E (Tocopherols), micro-elements such as phosphorus, magnesium, potassium, zinc and iron (22) as well as β -carotene (23).

Pygeum

- **Phytosterols:** β -Sitosterol and its glucoside (24) and β -sitostenone (25,26).
- **Triterpenes:** Ursolic (24) and oleanolic acids (27).
- **Phenolic acids:** Ferulic acid and its esters of docosanol and tetracosanol (27).
- **Fatty acids:** Lauric and myristic acids (26).



- **Others:** *N*-Butylbenzene-sulfonamide and atraric, benzoic and *p*-hydroxybenzoic acids (24, 27).

4. Medicinal Uses (Indications)

Relief of lower urinary tract symptoms related to benign prostatic hyperplasia after serious conditions have been excluded by a medical doctor.

5. Herbal preparations correlated to medicinal use

Combination of bearberry powder extract (extraction solvent: water & ethanol 75%), saw palmetto powder, pumpkin powder extract (extraction solvent: CO₂) , pygeum powder extract (extraction solvent: water & ethanol 80%), zinc and vitamin B6.

Herbal preparations 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

Adults and elderly

Combination of 5 mg of bearberry extract, 160 mg of saw powder, 40 mg of pumpkin extract, 25 mg of pygeum extract, 2.1525 mg zinc and 4.114 mg vitamin B6, to be taken 1-3 times daily.

Duration of use: As directed by physician .

Method of administration: Oral use.

7. Contraindications

- Hypersensitivity to the active substance(s) or to other plants of the same families.
- In cases of Hepatic diseases.
- In cases of Kidney disorders (8)
- Children under the age of 12 years, as hepatotoxicity may occur (10).



- The use in children and adolescents under 18 years of age is contraindicated because of its effects on androgen and oestrogen metabolism and the lower urinary tract symptoms in these populations requires medical supervision (8-10, 12,14,28).

8. Special warnings and precautions for use

- 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 (8,9,12, 14,15,29).
- It should not be used for prolonged periods (1, 8-10).
- It should be used cautiously by persons with electrolyte imbalance, acidic urine, constipation, iron deficiency, anemia, malnutrition due to high tannin level, and disorders involving gastrointestinal irritation (10).
- Avoid concomitant use with medicines or foods that acidify the urine, such as acidic fruits or fruit juice. It should be administered with plenty of fluids (1,9).
- To be used under medical supervision (8).

9. Interactions with other medicinal products and other forms of interaction (4)

- A few cases of suspected interactions with warfarin have been reported. Increased INR-values have been described (29).
- The medicinal product may increase the effect of NSAIDs.
- Avoid concomitant use with urine acidifiers (1,9).
- Concomitant use with diuretics may enhance their effect and increase the risk of electrolyte loss, particularly hypokalemia, therefore caution is advised (10).

10. Fertility, pregnancy and lactation

- The use during pregnancy and lactation is not relevant and avoided (1,10, 30, 14, 28).
- 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 (29)

- Gastro-intestinal disorders (nausea, abdominal spasm) may occur (8,10, 12, 14, 28).
- Cases of acute hepatitis have been reported very rarely
- Skin rash and oedema have been reported very rarely.
- Reversible gynecomastia cases have been observed.
- If adverse reactions occur, a doctor or a pharmacist should be consulted

13. Overdose

Hepatotoxicity, cyanosis, tinnitus, vomiting, seizures, cardiovascular collapse, delirium, shortness of breath and feeling of suffocation (10).

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

20/04/2026



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