



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

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Pygeum, Saw palmetto, Pumpkin, Tomato

خوخ أفريقي / بلميط منشاري / قرع عسل / طماطم

1. Names & Synonyms

Pygeum (1)

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

Family: Rosaceae .

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

Arabic: Barkouk Afriki برفوق أفريقي - Khoukh Afriki خوخ أفريقي

English: African stinkwood, African prune, African cherry, bitter almond, iron wood, pygeum, red stinkwood (2).

Saw palmetto

***Serenoa repens* (W.Bartram) Small (1,3).**

Family: Arecaceae (1,3).

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. (1,3).

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 قرع عسل

English: Pumpkin.

Tomato (1)

Solanum lycopersicum L.

Family: Solanaceae

Syns: *Lycopersicon esculentum* Mill., *Lycopersicon cerasiforme* Dunal,

Arabic: Tamatem طماطم

English: Tomato.

2. Parts used for medicinal purpose

Pygeum: Dried bark (stem /trunk) (7,8).

Saw palmetto: Dried ripe fruit (9).

Pumpkin: Dried seeds (6,10).

Tomato: Fruit (11).

3. Major chemical constituents

Pygeum

- **Phytosterols:** β -Sitosterol and its glucoside (12) and β -sitostenone (13,14).
- **Triterpenes:** Ursolic (12) and oleanolic acids (15).
- **Phenolic acids:** Ferulic acid and its esters of docosanol and tetracosanol (15).
- **Fatty acids:** Lauric and myristic acids (14).
- **Others:** *N*-Butylbenzene-sulfonamide and atraric, benzoic and *p*-hydroxybenzoic acids (12,15).



Saw palmetto (16)

- **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 (17).
- **Phytosterols:** β -Sitosterol, $\Delta^{5,24}$ - stigmastadienol, Δ^7 -stigmastenol, Δ^7 - avenasterol (18).
- **Phytoestrogens:** including lignans (as secoisolarisiresinol), isoflavones (as genistin, daidzin and formononetin) and quercetin (19).
- **Phenolic acids:** Protocatechuic, caffeic, syringic, vanillic, *p*-coumaric and ferulic acids (19).
- **Protein:** composed mainly of the amino acids: arginine, glutamic and aspartic acids (20).
- **Others:** Vitamin E (Tocopherols), micro-elements such as phosphorus, magnesium, potassium, zinc and iron (20) as well as β -carotene (21).

Tomato (11)

- **Carotenoids:** mainly lycopene and in small amounts β -carotene, α -carotene, β -cryptoxanthin and lutein.
- **Phenolics:** rutin, naringenin and chlorogenic acid.
- **Others:** vitamin C, and vitamin E



4. Medicinal uses (Indications)

Aid in case of Benign Prostatic Hyperplasia (BPH) or related to an overactive bladder, after serious conditions have been excluded by a medical doctor.

5. Herbal preparations correlated to medicinal use

Combination of pygeum powder extract (Extraction Solvent: alcohol Ethanol), saw palmetto extract (Extraction Solvent: carbon dioxide), pumpkin powder extract (Extraction Solvent: ethanol), and tomato powder extract (Extraction Solvent: ethyl acetate).

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 80-160 mg of pygeum extract, 180-360 mg of saw palmetto extract, 30-60 mg of pumpkin extract and 41.67-83.34 mg of tomato extract, daily.

Duration of use:

as directed by the physician.

Method of administration: Oral use.

7. Contraindications

- Hypersensitivity to active substance(s) and to other plants of the same families.
- The use in children and adolescents under 18 years of age, because of its effects on androgen and oestrogen metabolism (22,23) and the lower urinary tract symptoms in these populations requires medical supervision (7).

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 (7,8, 22, 24).



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

- A few cases of suspected interactions with warfarin have been reported. Increased INR- values have been described (24).
- Diuretics: the medicinal product may increase the action of diuretics; use together cautiously (23).

10. Fertility, pregnancy and lactation

- Pregnancy and lactation: not relevant.
- 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

- Nausea, vomiting, diarrhea, abdominal pain (especially when taken on an empty stomach) (22-24).
- Allergic or hypersensitivity reactions may occur such as skin rash, headache (22-24).
- Electrolyte loss (sodium, potassium) (23).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.

13. Overdose

- No case of overdose has been reported.

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

01/06/2026.

References



Egyptian Herbal Monograph

1.	https://www.powo.science.kew.org .
2.	Maurice, M. Iwu, M. M. (2014). Pharmacognostical Profile of Selected Medicinal Plants from: Handbook of African Medicinal Plants. CRC Press. Print ISBN: 9781466571976, eBook. ISBN: 9781466571983, Adobe ISBN: 10.1201/b16292-4.
3.	http://www.theplantlist.org/tpl/record/kew-190787
4.	Braun, L. and Cohen, M. (2010). Herbs and Natural Supplements, An Evidence-Based Guide, 3 rd ed. ISBN: 978 0 7295 3910 4.
5.	https://www.herbalgram.org/resources/expanded-commission-e/saw-palmettoberry/ .
6.	WHO monographs on selected medicinal plants (2007). Monographs on Selected Medicinal Plants, 4, 83-91.
7.	European Union Herbal Monograph on <i>Prunus africana</i> (Hook f.) Kalkm., Cortex (2016). EMA/HMPC/680626/2013. Committee on Herbal Medicinal Products (HMPC).
8.	Natura Health Product, Pygeum – <i>Prunus africana</i> (2019). Health Canada. https://webprod.hc-sc.gc.ca/nhp/nd-bdipsn/atReq.do?atid=pygeum&lang=eng .
9.	WHO monographs on selected medicinal plants (2002). Monographs on selected medicinal plants, 2, 285-299.
10.	PDR for herbal medicines (2002). Montvale, NJ: Medical Economics Company, 2nd ed., ISBN 1-56363-361-2.
11.	García-Valverde, V., Navarro-González, I., García-Alonso, J. <i>et al.</i> Antioxidant Bioactive Compounds in Selected Industrial Processing and Fresh Consumption Tomato Cultivars. <i>Food Bioprocess Technol</i> 6, 391–402 (2013). https://doi.org/10.1007/s11947-011-0687-3
12.	Deresá, D. A., Abdissa, Z., Gurmessa, G. T. and Abdissa, N. (2022). Chemical constituents of the stem bark of <i>Prunus africana</i> and evaluation of their antibacterial activity. <i>JOTCSA</i> , 9(2), 395414. doi: https://doi.org/10.18596/jotcsa.1001676 .
13.	Rubegeta, E., Makolo, F., Kamatou, G., Enslin, G., Chaudhary, S., Sandasi, M., Cunningham, A. B. and Viljoen, A. (2023). The African cherry: A review of the botany, traditional uses, phytochemistry, and biological activities of <i>Prunus africana</i> (Hook.f.) Kalkman. <i>Journal of Ethnopharmacology</i> , 305, 116004. ISSN 0378-8741. https://doi.org/10.1016/j.jep.2022.116004 .
14.	Nyamai, D. W., Mawia, A. M., Wambua, F. K., Njoroge, A., Matheri, F., Lagat, R., Kiambi, J., Ogola, P., Arika, W., Cheseto, X., King'ori, E., Ramni, J., Ngugi, M. P., Muchugi, A., Ng'ang'a, M.



	and Burugu, M. W. (2015). Phytochemical profile of <i>Prunus africana</i> stem bark from Kenya. <i>Journal of Pharmacognosy and Natural Products</i> , 1 , 110-118. 10.4172/jpnp.1000110.
15.	Komakech, R., Kang, Y., Lee, J. H. and Omujal, F. (2017). A Review of the potential of phytochemicals from <i>Prunus africana</i> (Hook f.) Kalkman stem bark for chemoprevention and chemotherapy of prostate cancer. <i>Evid. Based Complement. Alternat. Med.</i> , ID 3014019. doi: 10.1155/2017/3014019.
16.	Barnes, J., Anderson, L. A. and Phillipson, J. D. (2007). Herbal Medicines, 3 rd edition. Published by the Pharmaceutical Press. ISBN 978 0 85369 623 0.
17.	Ardabili, A. G., Farhoosh, R. and Khodaparast, M. H. (2011). Chemical composition and physicochemical properties of pumpkin seeds (<i>Cucurbita pepo</i> Subsp. <i>pepo</i> var. <i>Styriaca</i>) grown in Iran. <i>J Agr Sci Tech</i> , 13 , 1053-1063.
18.	Rabrenovic, B. B., Dimic E. B., Novakovic M. M., Tesevic, V. V. and Basic, Z. N. (2014). The most important bioactive components of cold pressed oil from different pumpkin (<i>Cucurbita pepo</i> L.) seeds. <i>LWT Food Sci. Technol.</i> , 55 , 521-527.
19.	Richter, D., Abarzua, S., Chrobak, M., Vrekoussis, T., Weissenbacher, T., Kuhn, C., Schulze S., Kupka, M.S., Friese, K., Briese, V., Piechulla, B., Makrigiannakis, A., Jeschke, U. and Dian, D. (2013). Effects of phytoestrogen extracts isolated from pumpkin seeds on estradiol production and er/pr expression in breast cancer and trophoblast tumor cells. <i>Nutrition and Cancer</i> , 65 (5), 739-745.
20.	Dowidar, M. F., Ahmed, A. I., Hanaa, R. and Mohamed, H. R. (2020). The critical nutraceutical role of pumpkin seeds in human and animal health: An updated review. <i>Zagazig Vet J</i> , 48 (2), 199-212.
21.	Stevenson, D. G., Eller, F. J., Wang, L., Jane, J. L., Wang, T. and Inglett, G. E. (2007). Oil and tocopherol content and composition of pumpkin seed oil in 12 cultivars. <i>J. Agric. Food Chem.</i> , 55 , 4005-4013. doi: 10.1021/jf0706979.
22.	WHO monographs on selected medicinal plants (2002). Monographs on selected medicinal plants, 2 , 246 - 258.
23.	Skidmore-Roth, L. (2010). Mosby's Handbook of Herbs & Natural Supplements. 4 th ed. ISBN 9780323057417.
24.	European Union Herbal Monograph on <i>Serenoa repens</i> (W. Bartram) Small, Fructus (2013). EMA/HMPC/280079/2013. Committee on Herbal Medicinal Products (HMPC).