



Egyptian Herbal Monograph

Egyptian Herbal Monograph

Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

2026





Egyptian Herbal Monograph

Herbal Formulations Used in Egypt

Grape, Green tea, Zinc

العنب / شاي أخضر / زنك

1. Names & Synonyms

Grape

Vitis vinifera L

Family: Vitaceae

Syn.: *Cissus vinifera* (L.) Kuntze (1)

Arabic: العنب

English: Grapevine (2, 3), Grape (4, 5).

Green tea

Camellia sinensis L. Kuntze

Family: Theaceae.

Syns.: *Camellia thea* Link, *Thea sinensis* L., *Thea viridis* L. (1,3,6).

Arabic: شاي اخضر

English: Green tea (6,7,8), Chinese tea (3).

2. Parts used for medicinal purpose

Grape: Seeds (2, 9).

Green tea: Dried leaves (7, 8).

3. Major chemical constituents

Grape seed



- **Phenolics:** Catechin, epicatechin, procyanidins (10, 11); **phenolic acids:** gallic, caffeic, coumaric, coumaric, ferulic and ferulic acids and **flavonoids:** rutin, quercetin-3- β -D-glucoside, quercitrin and myricetin (12, 13).
- **Fatty acids:** Linoleic acid (12).
- **Others:** Proanthocyanidins, stilbenes (13), carbohydrates, proteins and vitamin C (12).

Green tea

- **Catechins:** (-)-Epigallocatechin-3-gallate (EGCG), (-)-epigallocatechin (EGC), (-)-epicatechin-3-gallate (ECG) and (-)-epicatechin (EC) (14, 15).
- **Phenolic acids:** Gallic acid, chlorogenic acid, theogallin, neochlorogenic acid, caffeoylquinic acid (7, 15, 16).
- **Alkaloids:** Caffeine (17), theobromine, and theophylline (7, 18)
- **Amino acids:** L-Theanine (15).
- **Flavonoids:** Quercetin-3-D-galactoside and kaempferol-3-glucoside (7, 15).

4. Medicinal uses (Indications)

- A) Treatment of chronic venous insufficiency, which is characterized by swollen legs, varicose veins, a feeling of heaviness, pain, tiredness, itching, tension and cramps in the calves.
- B) Relief of fatigue and sensation of weakness.

5. Herbal preparations correlated to medicinal use

Combination of grape seed powder extract, green tea extract and zinc.

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 156 mg grape extract, 1200 mg green tea extract, 21.6 mg zinc daily with food.

Duration of use:

If the symptoms persist longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.

Method of administration: Oral use.

7. Contraindications

- Hypersensitivity to active substance(s) and to other plants of the same families.
- Gastric and duodenal ulcers, cardiovascular disorders such as hypertension and arrhythmia, hyperthyroidism, kidney inflammation, insomnia or increased intraocular pressure (7,8).

8. Special warnings and precautions for use

- If symptoms worsen during the use of the medicinal products a doctor or a pharmacist should be consulted.
- The use in children and adolescents under 18 years of age is not recommended (2,7-9).
- A doctor or a pharmacist should be consulted in case of liver disorder or iron deficiency (2).
- Use should be stopped and a doctor or a pharmacist should be consulted if symptoms developed as liver trouble such as yellowing of the skin/eyes (jaundice), stomach pain, dark urine, sweating, nausea, unusual tiredness and/or loss of appetite (2).
- If there is an inflammation of the skin, thrombophlebitis or subcutaneous induration, severe pain, ulcers, sudden swelling of one or both legs, cardiac or renal insufficiency, a doctor should be consulted (2,8).
- Use is not recommended before bedtime as it may cause sleep disturbances (7).
- Take a few hours before or after taking other medications.



9. Interactions with other medicinal products and other forms of interaction (8)

- **Beta-adrenergic blockers:** Concurrent use may increase inotropic effects.
- **Bronchodilators, xanthines (theophylline):** The medicinal product increase the action of some bronchodilators, xanthines.
- **MAOIs:** It may lead to hypertensive crisis; concurrent use should be avoided.
- **Ephedra:** Concurrent use of ephedra may increase hypertension and CNS stimulation; so, it should be avoided.
- **Dairy products:** Dairy products may decrease the therapeutic effects of the product.
- **Iron:** The product may decrease iron absorption.
- **Caffeine** containing preparations reduce sedative action and increase side effects caused by sympathomimetic drugs.
- The resorption of alkaline medications can be delayed because of chemical bonding with the tannins.

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.
- 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

- Dizziness, nausea, anorexia and Rash (8).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.



13. Overdose

- Anxiety, nervousness, insomnia, increased blood pressure, palpitations, irregular heartbeat, nausea, heartburn, increased stomach acid (3, 8).
- Quantities corresponding to more than 300 mg caffeine or 5 cups of tea can lead to restlessness, tremor and elevated reflex excitability. The first signs of poisoning are vomiting and abdominal spasm (7).

14. Relevant biological properties

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

15. Additional information

-

16. Date of compilation/last revision

21/05/2026.



References

1	https://powo.science.kew.org
2	European Union Herbal Monograph on <i>Vitis vinifera</i> (L.) Kuntze. (2017). EMA/HMPC/424583/2016. Committee on Herbal Medicinal Products (HMPC).
3	Edwards, S. E., Rocha, I. D. C., Williamson, E. M. and Heinrich, M. (2015). Phytopharmacy: An Evidence-Based Guide to Herbal Medicinal Products. 1 st edition. John Wiley & Sons, Ltd.
4	Duke, J. A. (2002). Handbook of Medicinal Herbs. CRC Press, 2 nd edition, ISBN 9780849312847.
5	www.herbalgram.org
6	Natural Health Product, Green Tea Extract (2018). Health Canada, http://webprod.hc-sc.gc.ca/nhp/bdipsn/atReq.do?atid=greentea_thevert&lang=eng .
7	Community herbal monograph on <i>Camellia sinensis</i> (L.) Kuntze, non fermentatum folium (2013). EMA/HMPC/283630/2012. Committee on Herbal Medicinal Products (HMPC).
8	Skidmore-Roth, L. Mosby's Handbook of Herbs and Natural Supplements (2010). 4 th ed., ISBN: 978-0-323-05741-7.
9	Natural Health Product, <i>Vitis vinifera</i> (L.) Kuntze. (2018). Health Canada, http://webprod.hc-sc.gc.ca/nhp/bdipsn/monoReq.do?id=110&lang=eng
10	Spranger, I., Sun, B., Mateus, A. M., Freitas, V. and Ricardo-da-Silva, J. M. (2008). Chemical characterization and antioxidant activities of oligomeric and polymeric procyanidin fractions from grape seeds. <i>Food Chem.</i> , 108 , 519–532.
11	Furiga, A., Lonvaud-Funel, A. and Badet, C. (2009). <i>In vitro</i> study of antioxidant capacity and antibacterial activity on oral anaerobes of a grape seed extract. <i>Food Chem.</i> , 113 , 1037–1040.
12	Yalcin, H., Kavuncoglu, H., Ekici, L. and Sagdic, O. (2017). Determination of fatty acid composition, volatile components, physico-chemical and bioactive properties of grape (<i>Vitis vinifera</i>) seed and seed oil. <i>Journal of Food Processing and Preservation</i> , 41 , e 12854.



13	Insanu, M., Karimah, H., Pramastya, H. and Fidrianny, I. (2021). Phytochemical compounds and pharmacological activities of <i>Vitis vinifera</i> L.: An updated review. <i>Biointerface Research in Applied Chemistry</i> , 11 (5), 13829 – 13849.
14	Lee, L. S., Kim, S. H., Kim, Y. B. and Kim, Y. C. (2014). Quantitative analysis of major constituents in green tea with different plucking periods and their antioxidant activity. <i>Molecules</i> , 19 (7), 9173 -9186.
15	Barreira, S., Carla, M., André, M. N. Silva, J. N., Ean-Jeong, S., Mohamed-Elamir, F. H., Thomas, E. and Lígia, R. G. (2021). Phytochemical characterization and biological activities of Green tea (<i>Camellia sinensis</i>) produced in the Azores, Portugal. <i>Phytomedicine Plus</i> , 1 (1), 100001.
16	Graham, H. N. (1992). Green tea composition, consumption, and polyphenol chemistry. <i>Prev. Med.</i> , 21 , 334–350. DOI: 10.1016/0091-7435(92)90041-f.
17	De Oliveira, A. P., Guimarães, A. L., De Oliveira-Júnior, R. G., Quintans, J. S., De Medeiros, F. A., Barbosa-Filho, J. M., Quintans-Júnior, L. J. and Guedes da Silva Almeida, J. R. (2016). <i>Camellia sinensis</i> (L.) Kuntze: A Review of chemical and nutraceutical properties. In book: Natural Products: Research Reviews, 4 , 21-62. 1 st edition. Publisher: Daya Publishing House, New Delhi. Editor: Gupta, V. K.
18	Chacko, S. M., Thambi, P. T, Kuttan, R. and Nishigaki, I. (2010). Beneficial effects of green tea: a literature review. <i>Chin. Med.</i> , 6 (5), 13. doi: 10.1186/1749-8546-5-13.