



Egyptian Herbal Monograph

Volume 3

Medicinal Plants used in Egypt

Egyptian Drug Authority (EDA)

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Cinnamomum verum J. Presl

قرفة

1. Names & Synonyms (1)

Cinnamomum verum J. Presl.

Family: Lauraceae.

Syns.: *Camphorina cinnamomum* (L.) Farw., *Cinnamomum zeylanicum* var. *commune* Meisn., *Cinnamomum zeylanicum* var. *vulgare* Hayne, *Laurus cinnamomum* L.

Arabic: Qirfah قرفة

English name: Cinnamon, Ceylon cinnamon, true cinnamon (2,3).

2. Parts used for medicinal purpose

Dried inner bark (decorticated) (2-10).

3. Major chemical constituents

-Essential oil: Cinnamaldehyde, methoxy-cinnamaldehyde, linalool, β -caryophyllene, eucalyptol, eugenol, copaene, cadina-3,9-diene, cadina-4,9-diene and 17-pentatriacontene (11-15).

-Polyphenols (12):

Procyanidins: Procyanidin (A-type) trimers and tetramers (11).

Phenolic acids: Protocatechuic and cinnamic acids.

Flavanols: Catechin.

-Fatty acids/esters: Stearic and palmitic acids, glycerol monostearate and 1-monopalmitin (12).

-Organic acids: Quinic and oxalic acids (12).

-Others: sugars (glucose, fructose), diterpenes (cinnassiol A and B, cinnzeylanol and its acetyl derivative cinnzeylanine) (12, 16).

4. Medicinal Uses (Indications)

- A. Symptomatic treatment of mild spasmodic gastrointestinal complaints (dyspeptic conditions) including bloating and flatulence (2, 4, 7) and for anorexia (loss of appetite) (2, 7, 8, 10).
- B. Symptomatic treatment of mild diarrhoea (2-4, 7, 17) and to treat abdominal pain with diarrhoea (2).
- C. Treatment of pain associated with amenorrhoea and dysmenorrhoea (2, 4, 7, 18).

5. Herbal preparations correlated to medicinal use

1. Comminuted herbal substance as an herbal tea in the form of infusion or decoction (3, 5, 17).
2. Powdered drug (2, 4) (or its equivalent as a dry extract).
3. Liquid extract (5, 17) (Ethanol 70%) (4, 6).
4. Tincture (Ethanol 70%, 1:5) (5, 6, 17, 19).
5. Essential oil (2, 4, 6, 20).

Herbal preparations (2-5) are in a pharmaceutical dosage form. 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

Preparation 1

- 0.5 - 1 g, up to 4 times daily (2, 4, 6, 8, 17).
- One teaspoonful/ cup water, 2-3 times daily with meals (4, 21).

Preparation 2

Daily dose, 2-4 g, in divided doses (2, 4, 5).

Preparation 3

Single dose: 0.5 - 1 ml, 3 times daily, up to 4 ml daily (2, 4, 5, 8, 17, 21).

Preparation 4

Daily dose: 2 - 4 ml (2, 4, 8, 10, 17).

Preparation 5

Indication A

50 to 200 mg (0.05-0.2 ml), daily in 2 - 3 divided doses, diluted in carrier oil (vegetable oil) (2, 4, 5, 22, 20).



Duration of use (17):

Indication A: If the symptoms persist longer than 2 weeks during the use of the medicinal product, a doctor or a pharmacist should be consulted.

Indication B: If the symptoms persist longer than two days, a doctor or a pharmacist should be consulted.

Indications C and D: As directed by a physician.

Method of administration: Oral use.

7. Contraindications

- Hypersensitivity to the active substance or to Peru balsam (5, 17, 20).
- The use in children and adolescents under 18 years of age has not been established (5, 17, 20).
- In cases of fever of unknown origin, stomach or duodenal ulcers, major surgery, haemophilia and other bleeding disorders (2, 22).

8. Special warnings and precautions for use

- If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- Rehydration should be the first measure in case of diarrhoea (17).
- If recurrent diarrhoea or bloody stools occur, a doctor should be consulted (17).
- Contact with the skin by undiluted cinnamon oil is frequently irritating, associated with a burning sensation and occasional blistering (22).

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

- Diabetes and anticoagulant medications (22).
- May reduce activity of tetracycline (2).

10. Fertility, pregnancy and lactation

- It should not be used during pregnancy and breastfeeding (5, 17, 20).
- 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

- If adverse reactions occur, a doctor or a pharmacist should be consulted.



- Allergic reactions of the skin and local irritation of the oral mucosa (2, 17, 20, 22).

13. Overdose

High doses cause vomiting (4).

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 last compilation/last revision

16/07/2023.

References

1	www.science.kew.org
2	WHO monographs on selected medicinal plants (1999). Monographs on selected medicinal plants, 1, 95-104.
3	Edwards, S. E., Rocha, I. C., Williamson, E. M. and Heinrich, M. (2015). <i>Phytopharmacy: An Evidence-Based Guide to Herbal Medicinal Products</i> . 1 st ed., John Wiley & Sons, Ltd. ISBN: 978-1-118-54356-6.
4	Duke, J. A. (2002). <i>Handbook of Medicinal Herbs</i> . 2 nd ed. CRC Press. ISBN 978084931284.
5	Skidmore-Roth, L. <i>Mosby's Handbook of Herbs and Natural Supplements</i> (2010). 4 th ed. ISBN: 978-0-323-05741-7.
6	PDR for Herbal Medicines (2002). Montvale, NJ: Medical Economics Company, 2 nd ed., ISBN 1-56363-361-2.
7	https://www.herbalgram.org/resources/herbalgram/issues/95/table-of-contents/herbalgram-95-herb-profile-cinnamon/
8	Barnes, J., Anderson, L. A. and Phillipson, J. D. (2007). <i>Herbal Medicines</i> , 3 rd edition. Published by the Pharmaceutical Press. ISBN 978 0 85369 623 0.
9	https://www.health.belgium.be/nl/cinnamomum-verum .
10	Spiteri, M. (2011). <i>Herbal Monographs including Herbal Medicinal Products and Food Supplements</i> . Department of Pharmacy University of Malta. Set and printed by Print Right Ltd, Qormi.
11	Elgendy, E. M., Ibrahim, H. S., Elmechery, H. F., Sedki, A. G. and Mekhemer, F. U. (2017). Chemical and biological comparative <i>in vitro</i> studies of Cinnamon bark and lemon peel essential oils. <i>Food and Nutrition Sciences</i> , 8 , 110 – 125.
12	Farag, M. A., Kabbash, E. M., Mediani, A., Döll, S., Esatbeyoglu, T. and Afifi, S. M. (2022). Comparative metabolite fingerprinting of four different Cinnamon species analyzed via UPLC–MS and GC–MS and chemometric tools. <i>Molecules</i> , 27 , 2935. https://doi.org/10.3390/molecules27092935 .
13	Behbahani, B. A., Falah, F., Arab, F. L., Vasiee, M. and Yazdi F. T. (2020). Chemical composition and antioxidant, antimicrobial, and antiproliferative activities of <i>Cinnamomum zeylanicum</i> bark essential oil. <i>Evidence-Based Complementary and Alternative Medicine</i> , Article ID: 5190603. https://doi.org/10.1155/2020/5190603 .
14	Singh, G., Maurya, S., deLampasona, M.P. and Catalan, C.A.N.(2007). A comparison of chemical, antioxidant and antimicrobial studies of cinnamon leaf and bark volatile oils, oleoresins and their constituents. <i>Food and chemical toxicology</i> , 45 (9), 1650-1661.
15	Sharifi-Rad, J., Dey, A., Koirala, N., Shaheen, S., El Omari, N., Salehi, B., Goloshvili, T., Cirone Silva, N. C., Bouyahya, A., Vitalini, S., Varoni, E. M., Martorell, M., Abdolshahi, A., Docea, A. O., Iriti, M., Calina, D, Les, F., López, V. and Caruntu, C. (2021). <i>Cinnamomum</i> Species: Bridging phytochemistry knowledge, pharmacological properties and toxicological safety for health benefits. <i>Front. Pharmacol.</i> , 11 (12), 600139. doi: 10.3389/fphar.2021.600139.
16	Pathak, R. and Sharma, H. (2021). A Review on medicinal uses of <i>Cinnamomum verum</i> (Cinnamon). <i>Journal of Drug Delivery and Therapeutics</i> , 11 (6-S): 161-166. doi: http://dx.doi.org/10.22270/jddt.v11i6-S.5145 .



17	European Union Herbal Monograph on <i>Cinnamomum verum</i> J.S. Presl, Cortex (2011). EMA/HMPC/246774/2009. Committee on Herbal Medicinal Products (HMPC).
18	Heinrich, M., Barnes, J., Gibbons, S. and Williamson, E. M. (2012). Fundamentals of Pharmacognosy and Phytotherapy. 2 nd edition, Elsevier Churchill Livingstone. ISBN 978-0-7020-3388-9.
19	Fisher, C. and Painter G. (1996). Materia Medica for the Southern Hemisphere. Auckland: Fisher-Painter Publishers.
20	European Union Herbal Monograph on <i>Cinnamomum verum</i> J.S. Presl, corticis aetheroleum (2011). EMA/HMPC/706229/2009 Committee on Herbal Medicinal Products (HMPC).
21	Braun, L. and Cohen, M. (2010). Herbs and Natural Supplements, An evidence-Based Guide, 3 rd ed. ISBN: 978 0 7295 3910 4.
22	Tisserand, R. and Young, R. (2014). Essential Oil Safety. A Guide for Health Care Professionals, 2 nd ed. Churchill Livingstone. ISBN 978-0-443-06241-4.