

Egyptian Herbal Monograph

Volume 3

Medicinal Plants used in Egypt

Egyptian Drug Authority (EDA)

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Zingiber officinale Roscoe

چنزیل

1. Names & Synonyms (1)

Zingiber officinale Roscoe.

Family: Zingiberaceae.

Syns. *Amomum zingiber* L., *Zingiber blancoi* Massk.

Arabic: Janzabeil - چنزیل - Zanjabeel - زنجبیل - Zingibil - زنجبیل

English: Ginger.

2. Parts used for medicinal purpose

The dried rhizome (1-4).

3. Major chemical constituents (4, 5)

- **Oleo-resin:** Gingerols, shogaols, paradols, zingerone, gingerenone-A, and 6-dehydrogingerdione.
- **Essential oil:** β -Bisabolene and zingiberene, zingiberol, zingiberenol, *ar*-curcumene, β -sesquiphellandrene, β -sesquiphellandrol (*cis* and *trans*), phellandrene, camphene, geraniol, neral, linalool, *d*-nerol).
- **Others:** Starch, lipids, proteins and amino acids.

4. Medicinal uses (Indications)

- A. Prevention of nausea and vomiting in motion sickness (1-3, 6), postoperative nausea and seasickness (1).
- B. Symptomatic treatment of mild, spasmodic gastrointestinal complaints including bloating and flatulence (1-4), lack of appetite, indigestion, dyspepsia (1, 3, 4, 6).
- C. Expectorant (3, 6) and cough suppressant (antitussive), to help relieve bronchitis (3) as well as colds (1, 3, 6).
- D. Adjunctive treatment for inflammatory conditions, such as osteoarthritis and rheumatoid arthritis (1, 4, 7).

5. Herbal preparations correlated to medicinal use

1. Comminuted herbal substance as herbal tea for oral use as decoction.
1.5 teaspoonful of the comminuted herbal substance in 1 cup of boiling water (7).
2. Powdered herbal substance (1-3).
3. Ethanolic extracts (dry extract, fluid extract, tincture) (3, 7).
4. Aqueous dry extracts (3, 7).

Herbal preparations (2-4) 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

Indication A

Preparation 1

Adults: 0.7-3g as infusion (3) or decoction (3, 7).

Adolescents and children more than 6 years: 0.7-3g as infusion or decoction (3).

Take a single dose 30 minutes before travel or every 4 hours as needed (optional) (3).

Preparation 2

Adults: 1-2 g, 30 minutes to one hour before traveling or upon arising (2, 4, 7) or 0.5 g, 2-4 times daily as needed (1, 4) without exceeding the maximum daily dose of 3g (3).

Adolescents: 750 mg, 30 minutes before travelling (2) or 0.5 g, 2-4 times daily as needed (1) without exceeding the maximum daily dose of 3g (3).

Children between 6 and 12 years of age: 250 or 500 mg, 30 minutes before travelling (2) or 0.5 g, 2-4 times daily as needed (1) without exceeding the maximum daily dose of 3g (3).

Preparation 3

Adults: 100-200 mg extract, standardized to 20% gingerol and shogaol (7) or extracts equivalent to 0.5g, 2-4 times daily (1) without exceeding the maximum daily dose of 3g of dried rhizome equivalent (3).

Adolescents and children more than 6 years: extracts equivalent to 0.5g, 2-4 times daily (1) without exceeding the maximum daily dose of 3g of dried rhizome equivalent (3).

Preparation 4

Adults: 100-200 mg extract, standardized to 20% gingerol and shogaol (7) or extracts equivalent to 0.5 g, 2-4 times daily (1) without exceeding the maximum daily dose of 3g of dried rhizome equivalent (3).

Adolescents and children more than 6 years: extracts equivalent to 0.5-0.7 g, 2-4 times daily (1, 3) with maximum daily dose of 3g of dried rhizome equivalent (3).

Indication B**Preparation 1**

Adults, adolescents and Children more than 6 years: 0.7-3 g as infusion or decoction (3).

Preparation 2

Adults: 180 mg, 3 times daily (2) or 0.5 g, 2-4 times daily (1) without exceeding the maximum daily dose of 3g of dried rhizome (3).

Adolescents and children more than 6 years: 0.3–3g of dried rhizome daily (3).

Preparation 3

Adults: extracts equivalent to 0.3-0.5 g, 2–4 times daily (1, 3) without exceeding the maximum daily dose of 3g of dried rhizome equivalent (3).

Adolescents and children more than 6 years: extracts equivalent to 0.3- 3g of dried rhizome, daily (3).

Preparation 4

Adults: extracts equivalent to 0.5-0.7g, 2–4 times, daily (1, 3) without exceeding the maximum daily dose of 3g of dried rhizome equivalent (3).

Adolescents and children more than 6 years: extracts equivalent to 0.7- 3g of dried rhizome, daily (3).

Indication C (3)

Adults, adolescents, and children more than 6 years:

Preparation 1: 0.7g-3g of dried rhizome as infusion or decoction.

Preparation 2: powdered herbal substances equivalent to 0.3–3 g of dried rhizome daily.

Preparation 3: ethanolic extract equivalent to 0.3- 3 g of dried rhizome daily.

Preparation 4: aqueous extract equivalent to 0.7- 3 g of dried rhizome daily.

Indication D (7)**Preparation 3, 4**

Adults: 100-200 mg extract, standardized to 20% gingerol and shogaol.

Duration of use (2)

If the symptoms persist longer than 5 days (for indication A) or longer than 2 weeks (for indication B) during the use of the medicinal product, a doctor or a pharmacist should be consulted.

Method of administration: Oral use (2).

7. Contraindications

- Hypersensitivity to active substances and to other plants of the same family.
- Ginger should not be used by persons with cholelithiasis (6, 7).
- It should not be used during childhood fevers or in children with gallstones (7).

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.
- The use in children and adolescents under 6 years of age is not recommended (1-3).

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

Ginger may increase plasma partial prothrombin time in clients taking warfarin concurrently and may increase prothrombin time (6, 7).

10. Fertility, pregnancy and lactation

- Ginger use in pregnancy is avoided (2). Ginger is reputed to be an abortifacient and utero-activity has been documented for a related species (4).
- Safety during lactation has not been established. In the absence of sufficient data, the use during lactation is not recommended.
- No fertility data available.

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.
- Minor gastrointestinal complaints, particularly stomach upset, eructation, dyspepsia and nausea have been reported (2).

13. Overdose

No case of overdose has been reported (2).



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

22/06/2022.

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