

Egyptian Herbal Monograph

Volume 3

Medicinal Plants used in Egypt

Egyptian Drug Authority (EDA)

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Panax quinquefolius L.

جنسنج

1. Names & Synonyms (1)

Panax quinquefolius L.

Family: Araliaceae

Syns.: *Aralia quinquefolia* (L.) Decne. & Planch, *Ginseng quinquefolium* (L.) Alph. Wood (2).

Arabic: Ginseng جنسنج

English: Ginseng, American ginseng, American white ginseng, Canadian ginseng, Canadian white ginseng (3).

2. Parts used for medicinal purpose

Dried root (1, 3-5).

3. Major chemical constituents (1)

- **Triterpenoid saponins (Ginsenosides):** A complex mixture of compounds including Rb1, Re, Rc, and Rd (6).
- **Polysaccharides:** Pectins and glucans.
- **Unsaturated fatty acids:** Linolenic acid (7).
- **Others:** Starch, β -amylase, vitamins (B1, B2, B12, pantothenic acid, biotin), choline, fats, minerals.

4. Medicinal uses (Indications)

- A. As adaptogen to increase recuperative power of the body (3, 5, 8).
- B. Mild sedative to relieve nervousness, nervous dyspepsia and enhance stress resistance (3, 5).

5. Herbal preparations correlated to medicinal use (3-5)

1. Comminuted herbal substances as herbal tea.
The dried roots are added to 150 ml of hot water as infusion or boiled with water as a decoction or concentrated decoction.
2. Powder dried root.
3. Dry extract.
4. Fluid extract.
5. Tincture.

Herbal preparations (2-5) 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

Preparation 1: 2.4 - 9 g, daily (4, 5).

Preparations 2: 0.5 - 12 g, daily (4, 5) or 3 - 9 g, daily in divided doses (3).

Preparations 3 - 5: The equivalent amount of the dried root (0.5- 12 g, daily) (5).

Preparations 5: 1-2 ml, daily (1:1 dilution) (4).

7. Contraindications

- Hypersensitivity to active substances and to other plants of the same family.
- If breast cancer or other estrogen-dependent conditions are present, ginseng should not be used (4).

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 18 years of age is not recommended (5).
- Diabetic patients should consult a physician prior to use (5).

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

- Blood thinner and Digoxin (5).
- An extract of the root (containing 10% ginsenosides) inhibited the activity of cytochrome P450 isozymes CYP1A1, CYP1A2 and CYP1B1 *in vitro* in human liver microsomes. Thus, there is a potential for interactions with other drugs that are metabolized by these enzymes (3).



Lab Test (4)

- **Blood glucose:** Ginseng may decrease blood glucose.
- **Plasma partial thromboplastin time, INR:** Ginseng may increase plasma partial thromboplastin time and INR.
- **Serum digoxin:** Ginseng may falsely increase serum digoxin.

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 (1, 3).
- 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

- None reported (3, 5).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.

13. Overdose

No case of overdose has been reported.

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

9/8/2022.

References

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