

Egyptian Herbal Monograph

Volume 3

Medicinal plants used in Egypt

Egyptian Drug Authority (EDA)

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Eurycoma longifolia Jack

تونكات علي

1. Names & Synonyms (1)

Eurycoma longifolia Jack

Family: Simaroubaceae (2).

Arabic name: Tongkat Ali تونكات علي

English name: Tongkat Ali, Long Jack, Malaysian ginseng (2).

2. Parts used for medicinal purpose

Root (2, 3).

3. Major chemical constituents (2,4)

- **Quassinoids:** Eurycomanone (pasakbumin-A), eurycomanols, pasakbumin-B, hydroxyklaineanonones, eurycomalactones, eurycomadilactones, eurylactones, laurycolactones, longilactones, hydroxyglauucarubol.
- **Alkaloids:** Canthin-6-one alkaloids, β -carboline alkaloids (5,9-dimethoxycanthin-6-one; 9,10-dimethoxycanthin-6-one, 11-hydroxy-10-methoxycanthin-6-one; 10-hydroxy-9-methoxycanthin-6-one; and 9-methoxy-3-methylcanthin-5,6-dione).
- **Squalene derivatives:** Teurilene, eurylene, 14-deacetyeurylene and longilene peroxide.
- **Biphenyl neolignans:** 2-Hydroxy-3,2,6-trimethoxy-4-(2,3-epoxy-1-hydroxypropyl)-5-(3-hydroxy-1-propenyl)-biphenyl, two isomeric 2,2-dimethoxy-4-(3-hydroxy-1-propenyl)-4-(1,2,3-trihydroxypropyl) diphenyl ethers and 2-hydroxy-3,2-dimethoxy-4-(2,3-epoxy-1-hydroxypropyl)-5-(3-hydroxy-1-propenyl) biphenyl.
- **Others:** Steroids and triterpene (Tirucallane type).

4. Medicinal Uses (Indications)

As a tonic to restore energy and vitality, improve sports and sexual performance and increase libido (2, 5).

5. Herbal preparations correlated to medicinal use

Dried aqueous extract (6-9).

Herbal preparation is 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

200 - 400 mg, daily or as directed by the physician (7-9).

Duration of use: 1 - 3 months or as directed by the physician (7,9).

Method of administration: Oral use (5,6,10).

7. Contraindications

- Hypersensitivity to active substances and to other plants of the same family.
- Prostate cancer (7, 11), male breast cancer, diabetes, heart disease, sleep apnoea and kidney disease (11).
- Concomitant immunosuppressants (11).

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.

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

- Concomitant use with testosterone might increase testosterone levels too much and increase the chance of side effects (10).
- Concomitant use with propranolol may cause side effects (12).

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 (2).
- Enhance fertility (8).

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.
- Insomnia, irritability or restlessness (11).

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

11/12/2023

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