

Egyptian Herbal Monograph

Volume 3

Medicinal plants used in Egypt

Egyptian Drug Authority (EDA)

2024



Egyptian Herbal Monograph

Medicinal Plants Used in Egypt

Hedera helix L.

لبلاب

1. Names & Synonyms

Hedera helix L.

Family: Araliaceae

Syns.: *Hedera communis* Gray, *H. poetarum* Bertol., *H. poetica* Salisb (1).

Arabic: Liblab لبلاب

English name: English Ivy, Common Ivy (1, 2).

2. Parts used for medicinal purpose

Dried leaves (3).

3. Major chemical constituents

- **Triterpenoid saponins:** Hederasaponin C (=hederacoside C), hederasaponins B, D, E, F, G, H and I, and α -hederin and hederagenin 3-*O*- β -glucoside (4,5).
- **Flavonoids:** Quercetin, kaempferol (and their 3-*O*-rutinosides and 3-*O*-glucosides), rutin, isoquercitrin and astragalin (5-7).
- **Phenolic acids:** Caffeic, chlorogenic, neochlorogenic, 3,5-*O*-dicaffeoyl-quinic, 4,5-*O*-dicaffeoyl-quinic, rosmarinic, dihydroxybenzoic, protocatechuic and *p*-coumaric acids (5).
- **Others:** Scopolin, polyacetylenes, volatile oil, phytosterols and amino acids (5-7).

4. Medicinal Uses (Indications)

Expectorant in case of productive cough (8).

5. Herbal preparations correlated to medicinal use (8)

1. Dry extract

- 1.1. Extraction solvent ethanol, 24-30% m/m.
- 1.2. Extraction solvent ethanol, 40% m/m.



1.3. Extraction solvent ethanol, 60% m/m.

2. **Liquid extract:** extraction solvent ethanol, 70% V/V.

3. **Soft extract:** extraction solvent ethanol, 50% V/V: propylene glycol (98:2).

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 (8)

Preparation 1

Adolescents, adults and elderly

1.1. Single dose: 15-65 mg, 1-3 times daily, daily dose: 45-105 mg.

1.2. Single dose: 14-18 mg, 3 times daily.

1.3. Single dose: 33 mg, 2 times daily.

Children between 6-11 years of age

1.1. Single dose: 11-35 mg, 2-3 times daily, daily dose: 33-70 mg.

1.2. Single dose: 9-18 mg, 1-3 times daily, daily dose: 15-40 mg.

1.3. Single dose: 25 mg, 2 times daily, daily dose: 50 mg.

Children between 2-5 years of age

1.1. Single dose: 8-18 mg, 2-3 times daily, daily dose: 24-36 mg.

1.2. Single dose: 7-9 mg, 2-3 times daily, daily dose: 17-27 mg.

1.3. Single dose: 17 mg, 2 times daily, daily dose: 34 mg.

Preparation 2

Adolescents, adults and elderly

Single dose: 100 mg, 3 times daily, daily dose: 300 mg.

Children between 6-11 years of age

Single dose: 75 mg, 3 times daily, daily dose: 225 mg.

Preparation 3

Adolescents, adults and elderly

Single dose: 40 mg, 3 times daily, daily dose: 120 mg.

Children between 6-11 years of age

Single dose: 20-26 mg, 3-4 times daily, daily dose: maximum 80 mg.

Children between 2-5 years of age

Single dose: 20 mg, 3 times daily, daily dose: 60 mg.

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 (8)

Hypersensitivity to active substances and to other plants of the same family.

8. Special warnings and precautions for use (8)

- If the symptoms worsen or persist longer than 1 week during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- Persistent or recurrent cough in children between 2-4 years of age requires medical diagnosis before treatment.
- When dyspnoea, fever or purulent sputum occurs, a doctor or a pharmacist should be consulted.
- Concomitant use with opiate antitussives such as codeine or dextromethorphan is not recommended without medical advice.
- Caution is recommended in patients with gastritis or gastric ulcer.
- Preparation (2) should not be administered to children under 6 years of age because of the alcohol content.
- Use in children under 2 years of age is not recommended because of the general risk of aggravation of respiratory symptoms through secretolytic drugs so medical supervision is needed.

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

None reported (8).

10. Fertility, pregnancy and lactation (8)

- 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 (8)

No studies on the effect on the ability to drive and use machines have been performed.

12. Undesirable effects (8)

- If adverse reactions occur, a doctor or a pharmacist should be consulted.
- Gastrointestinal reactions (nausea, vomiting, diarrhoea) have been reported.

- Allergic reactions (urticaria, skin rash, dyspnoea) have been reported.

13. Overdose (8)

Overdose can provoke nausea, vomiting, diarrhoea and agitation.

14. Relevant biological activities (8)

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

15. Additional information

-

16. Date of compilation/last revision

20/02/2024

References

1	https://powo.science.kew.org
2	PDR for Herbal Medicines (2002). Montvale, NJ: Medical Economics Company, 2 nd ed., ISBN 1-56363-361-2.
3	Martindale: The Complete Drug Reference (2007). Pharmaceutical Press. Electronic version, London.
4	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.
5	Lutsenko, Y., Bylka, W., Matławska, I. and Darmohray, R. (2010). <i>Hedera helix</i> as a medicinal plant. <i>Herba Polonica</i> , 56 (1), 83-96.
6	Committee on Herbal Medicinal Products (HMPC) (2017). European Union herbal monograph on <i>Hedera helix</i> L., folium. EMA/HMPC/325716/2017.
7	Osama, S., El Sherei, M., Al-Mahdy, D. A., Refaat, M. M., Bishr, M. and Salama, O. (2023). Genus <i>Hedera</i> : A comprehensive review of its phytoconstituents, diverse pharmacological activities and medicinal properties. <i>Egypt. J. Chem.</i> , 66 (10), 203 – 245.
8	Committee on Herbal Medicinal Products (HMPC) (2017). European Union herbal monograph on <i>Hedera helix</i> L., folium. EMA/HMPC/325716/2017.