



Thyme

1. Names and Synonyms

زعتر :Arabic

English: Thyme

• Scientific name and Family

Thymus vulgaris L.

Family: Lamiaceae

2. Geographical distribution:

Indigenous to Southern Europe. It is a pan-European species that is cultivated in Europe, the United States of America and other parts of the world.

3. Parts used for medicinal purpose:

The medicinal parts are the oil extracted from the fresh, flowering herb: the dried leaves; the striped and dried leaves; and the fresh aerial part of the flowering plant.

4. Morphology and Histology of the plant

An aromatic perennial sub-shrub, 20–30cm in height, with ascending, quadrangular, greyish brown to purplish brown lignified stems bearing oblong-lanceolate to ovatelanceolate greyish green leaves.

5. Active constituents

- **Essential oil:** the main components are thymol, carvacrol, p-cymene, α-terpinene, linalool, terpinen-4-ol, borneol, 1,8- cineole, α-thujene, α-pinene, and caryophyllene.
- **Flavonoids:** apigenin, narigenin, kaempferol, and luteolin (and its glycosides).
- **Phenolic acids:** salvianolic, rosmarinic, cinnamic, ferulic, caffeic and gallic acids.







6. Pharmacological applications

- Cough associated with cold.
- Symptoms of bronchitis, whooping cough and catarrh of the upper respiratory tract.
- Indigestion, flatulence, dyspepsia and colic (carminative).
- Acne
- Topically for warts and inflamed swellings.

7. Suitable methods of administration

Thyme is available as:

- Comminuted drug
- Powder
- Liquid extract or dry extract for infusions

8. Side effects

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

- **Internally:** Gastric disorders may occur.
- **The thyme oil** can cause nausea and vomiting, headache, dizziness, convulsions, cardiac or respiratory arrest if taken internally. As such, the crude herb is considered far safer.
- **Topically:** Thyme oil is possibly safe when applied to the skin, but in some people can cause skin irritation.
- **Contact dermatitis** reactions have been reported with topical use.

9. Contraindications

- **Hypersensitivity** to active substances and to other plants of the same family.
- **Thyme oil as bath additive** full hot baths is contraindicated in case of open wounds, large skin injuries, acute skin diseases, high fever, severe infections, severe circulatory disturbances and cardiac insufficiency.





10. Examples of drugs in the market.









11. References

https://www.gbif.org/species/5341442 https://www.gbif.org/species/7793938

WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, 3, 259-266

Community herbal monograph on Thymus vulgaris L. and Thymus zygis L.,herba.EMA/HMPC/342332/2013, Committee on Herbal Medicinal Products (HMPC).

Sarfaraz, D., Rahimmalek, M. and Saeidi, G. (2021). Polyphenolic and molecular variation in Thymus species using HPLC and SRAP analyses. Sci. Rep. 11, 5019. Blumenthal, M. (1998). The Complete German Commission E Monographs. Austin, Texas: American Botanical Council.

https://www.rxlist.com/thyme/supplements.htm

PDR for Herbal Medicines (2002). Montvale, NJ: Medical Economics Company, 2nd ed., ISBN 1-56363-361-2.

http://webprod.hc-sc.gc.ca/nhpid-bdipsn/monoReq.do?id=172

European Union herbal monograph on Thymus vulgaris L., Thymus zygis L., aetheroleum. EMA/HMPC/59032/2017, Committee on Herbal Medicinal Products (HMPC).

https://www.healthline.com/health/thyme-oil#benefits-uses

Chevallier, A. (1996). The Encyclopedia of Medicinal Plants. DK Pub., ISBN: 0789410672, 9780789410672.

Fisher, C. and Painter G. (1996). Materia Medica for the Southern Hemisphere. Auckland: Fisher-Painter Publishers.

Kowalczyk, A., Przychodna, M., Sopata, S., Bodalska, A. and Fecka, I. (2020). Thymol and thyme essential oil—New insights into selected therapeutic applications. Molecules, 9, 25(18), 4125. doi: 10.3390/molecules25184125. Mosby's Handbook of Herbs and Natural Supplements .4th ed., ISBN: 978-0-323-05741-7.

Braun, L. and Cohen, M. (2014). Herbs and Natural Supplements, an Evidence-Based Guide. 3rd ed. ISBN: 978 0 7295 3910 4.