Thymus vulgaris, Thymus zygis

Dried flowers and leaves.

25-30 cm height, greyish-green, mostly branched, white-pink flowers, small brush.

Drug must contain at least 1.2% essential oil, and 0.5% phenolic substance (thymol equievalent).

Oleum Thymi: Essential oil obtained from Herba Thymi.

Thymus vulgaris grows naturally in Europe. Also cultivated in Spain, Portugal, France, Italy.



Essential oil amount 0,5-2,5%. The composition of the volatile oil can vary due to its chemotypes. Mainly contains carvacrol and thymol. These are isomers and p-cymene derivatives with an -OH.

$$CH_3$$
 CH_3 CH_3

- Apigenin, luteolin, 6-hydroxy luteolin glycosides, triterpenes, and phenolic acids are the other compounds in the drug.
- All the chemotypes have antibacterial and antifungal features. Also antispasmodic. To supply oral hygien as taking place in mouth rinsing preparations. Used in Aromatherapy mostly due to its antiseptic properties.
- Commission E, expectorant and antibacterial.

Traditionally used for

- 1. GI problems
- 2. Symptomatic cough treatment.

- Thymus vulgaris does not grow naturally in Turkey, but cultivated.
- Some plants are known as kekik in Turkey:
- ► Origanum sp. \rightarrow O. heracleoticum, İstanbul % 4.7—5.4 essentail oil. 66% of the essential oil is phenolic compounds. 84% carvacrol, 16% thymol.
- ▶ O. majorana, South Anatolia, 1% essential oil. 60% of the essential oil is phenolic compounds. 64% carvacrol, 36% thymol.
- Origanum onites, Aegea and Mediterranean, 2.1-3.4% essential oil. 62% of the essential oil is phenolic compounds. 69% carvacrol, 31% thymol.

HERBA SERPYLLI, Kekik

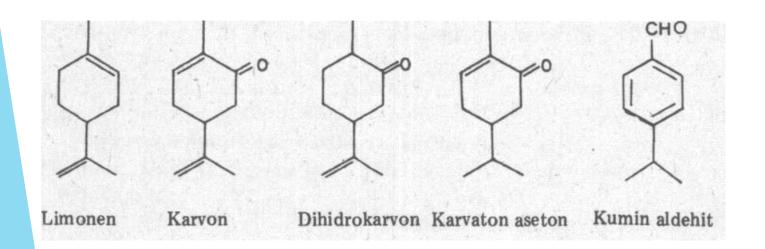
Thymus serpyllum (Labiatae) aerial parts. Widespread in Turkey.

► Herba Serpylli, essential oil amount 0.15-0.60%. 70 % of essentail oil is phenolic substances.

Antispasmodic, and used in cough preparations.

Fructus Carvi, Kimyon

- Carum carvi (Apiaceae)
- Dried fruits.
- Carum carvi is cultivated in Asia, Europe and America.
- The plant grown in Turkey to obtain spice is *Cuminum cyminum* (contains cumine aldehyde) (Apiaceae).
- Fr. Carvi has schizocarp fruit with two mericarps with 5 costas.
- Essential oil yield is 4-7%.
- > 35-45% of the oil is limonene and 50-55% carvone.







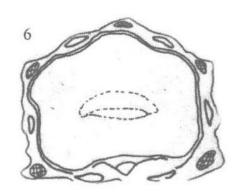






Carum carvi

Cuminum cyminum



Fructus Carvi has carminative and diuretic activity. Used as spice.

RHIZOMA IRIDIS

Iris pallida, I. germanica, I. florentina (Iridaceae) dried rhizomes.

Rhizomes are 5—10 cm height and 2—4 cm, sylindirically shaped, generally branched and white coloured. It has a viola like odour, so called as «menekşe kökü» in Turkish.

Rhizoma Iridis contains 0.1-0.2% essential oil. Main component of the oil is B-iron, a cyclocitral derivative especially used in perfume industry.

Rhizoma Iridis, used as an ingredient of some tooth preparations, also used as a fixation agent to obtain artificial viola odour.