**Herba *Thymi***

*Thymus vulgaris, T. serpyllum* L.,are indigenous to Europe, especially the Mediterranean region, andare cultivated extensively. Both have thymol and are used as culinary herbs.

Essential oil constituent; majör thymol, with lesser amounts of carvacrol, 1,8-cineole, borneol, thymol methyl ether a-pinene.

Uses; Thyme, and essential oil , are carminative, antiseptic, antitussive, expectorant and spasmolytic, and are used for coughs, bronchitis, sinusitis, whooping cough and similar respiratory complaints.

Most of the activity is thought to be due to the thymol, which is expectorant and highly antiseptic. Thymol and carvacrol are spasmolytic.

The fragrance of this plant is due to essential oil, which gives flavoring value for culinary purposes as well as its medicinal properties. The studies showed that T. vulgaris has carminative, antimicrobial, muscle relaxant and antioxidant properties.

Thymol is a popular ingredient of mouthwashes and dentifrices because of its antiseptic and deodorant properties.

Timol is used for preparing of mouthwashes and tooth cleaners due to its antiseptic and deodorant properties.

Thymol is irritant, and toxic in overdose, and should be used with care.

Species used as thyme in Turkey

The genus *Origanum* is represented in Turkey by 22 species; the ratio of endemism in the genus is 63%.T he Flora ofTurkey has 22 species

(32 taxa) of Origanum, 21 beingendemic to Turkey, and the ratio of endemism in thegenus is 63%.

*Thymbra*

*Coridothymus*

*Satureja*

*Thymus*

The main active component of thyme is essential oil, widely used in pharmacy, medicine, perfumery-cosmetic and food industries. Thyme (Thymus vulgaris L.) is a pleasant smelling perennial shrub, which grows in several regions of the world. Its natural habitat is the Western Mediterranean region and southern Italy.

*Thymus capitatus* (Beyaz Kekik)

% 0.4-1 UY taşır, % 60 karvakrol bulunur

*T longicaulis ve T praecox* türleri known as Wild Thyme and Wild Sater.

and these two species are used instead of thyme

*T sipyleus* ( lemon smell) citral and 1,8-cineole

*Thymus eigiii*

*Origanum onites* “İzmir Kekiği , Bilyalı Kekik, Türk Kekiği”

*Origanum majonara*“Beyaz Kekik” %6.5-7.7 essential oil High yield carvacrol %78-80 dir.

*Origanum vulgare subsp. hirium (= O. heracleoticum)* “İstanbul Kekiği, Yunan Kekiği”

(Balıkesir, Çanakkale, İzmir, Aydın, Muğla ) essential oil ; %2.5-5.4 arasında değişir. carvacrol %57-78 *O. majorana %7 e. oil %60phenolic compounds.*

* *Origanum minutiflorum* "Sütçüler Kekiği, Toka Kekiği"
* endemic in Antalya-Isparta
* E.oil%2.4-4.0 dır. %40-80 carvacrol %25 thymol
* *Origanum syriacum* var. *bevani*
* (Güney Doğu Anadolu'da İçel, Hatay ve Amanoslarda)
* e. oil % 3.7 dir. % 43 carvacrol , % 25 thymol.
* *Thymbra spicata****,*** “Karakekik, Karabaşkekik, Sivrikekik”
* carvacrol % 50-71 (export)
*Satureja cuneifolia* Adana( export)
* *Satureja hortensis* "Zahter, Çibrişka" thymol % 35-70, carvacrol % 25-70 dir.
* ***Coridothymus capitatus*** ***"***İspanyol Kekiği" carvakrol % 44-78
* **Herba Serpylli**

*Thymus serpyllum* grown in Europe.

* dried flowering aerial parts of plant.
* essential oil 0.15-0.60%. It is required to contain a minimum of
* 0.3% essential oil (dried drug)
* Because of its antiseptic and antispasmodic effect, it the composition of cough syrups.
* The drug has been used traditionally for the treatment of respiratory
* infections, gastrointestinal problems and skin conditions requiring an antiseptic.

 Antispasmodic (infusion )is used.

* ***Satureja spicigera :*** “Trabzon Kekiği”, thymol % 20-35, p-simen % 9-34, carvakrol % 2-26
***Thymus longicaulis:*** thymol % 45-70
***Thymus kotschyanus :*** carvakrol % 53-60
***Thymus eigii*** : Adana, Mersin, Hatay, carvakrol % 65
***Thymus sipyleus*** ssp. ***rosulans:*** tymol % 64-68
***Thymus sibthorpii*** :tymol %34-50, carvakrol % 39-40
* *Timol is cultivated with species containing 50 thymol.*
* *There are 3 types for this.*
* *1- Carum capticum*(Umbelliferae)-Grows in the Antilles. 3-4% UY. tymol 40-50%
* Thymolum (TF, EP)
* Thymus zygis var gracilis (Labiatae) grows in Spain
* Monarda punctata(Labiatae) USA
* Monarda didyma (Labiatae) USA
* Studies report that thyme essential oils are among the main ones used in the food industry and in cosmetics as antioxidants and preservatives. Mouth antiseptic, carminative and fungustatic. It is also anthelmentic effective.
* It can be synthetically derived from m-cresol and p-simene.
* **Camphora –Kafur TK**
* *Cinnamomum camphora* 'nın (Lauraceae)
* Camphor tree is native to China, India, Mongolia, Japan and Taiwan. it is also produced commercially in India and Georgia.
* E. Oil is produced by the steam distillation of the wood and is rich in camphor,
* Camphor accumulates in heartwood as tree ages; ready for collection at 40 years(The best yield of camphor is obtained from old trees).
* Oil from Cinnamomum camphora (Lauraceae) is produced by the steam distillation of the wood and is rich in camphor,
* Essential oil yağ % 2-3
* Major compounds Camphor and safrole
* Uses. Camphor is used externally as a rubefacient, and internally as a mild antiseptic and carminative. which is antiseptic and used in soaps.It finds many non-pharmaceutical uses.
* Camphor has antiseptic, secretolytic and decongestant effects. Small doses were formerly taken internally for colds, diarrhoea and other complaints,
* but it is now used only externally. camphor may be absorbed through the skin causing systemic toxicity. Overdose causes vomiting, convulsions and palpitations, and can be fatal. However, when used externally in therapeutic doses it is generally well tolerated.
* Synthetic camphor is largely prepared from American turpentine( pinene- bornly cloride-isobornyl acetate.
* **Flos caryophylli- Karanfil  (TK,EP)**
* *Syzygium aromaticum* (*Eugenia caryophyllus*) (Myrtaceae),
* flower buds
* a tree 10–20 m high which is indigenous
* to the Molucca or Clove Islands.
* It is cultivated in Zanzibar Madagascar, Indonesia and Brazil.
* Essential oil 15–20%
* consisting mainly of eugenol 85–90%,
* 3% of acetyleugenol), sesquiterpenes (α- and β-caryophyllenes).
* Uses. Cloves are used as a stimulant aromatic, as a spice. Clove oil is used for the symptomatic relief of toothache and is a constituent of many dental preparations.
* **Oleum Eucalypti, Ökaliptol Esansı (TK, EP)**
* *Eucalyptus globulus* Labill., and other species (Myrtaceae)

 Oil of eucalytus is distilled from the fresh leaves and rectified. Eucalyptus oils are produced in

 Portugal, South Africa, Spain, China, Brazil, Australia, India and Leaves

* Essential oil 2.0% v/w
* Oil of eucalyptus is a colourless or pale yellow liquid.
* It has an aromatic and camphoraceous odour; a pungent, camphoraceous taste, which is
* followed by a sensation of cold. It is required to contain not less than 70.0% of cineole.
* Compounds: 1,8-cineole (eucalyptol)
* Uses : antiseptic, antispasmodic, expectorant, stimulant and insect repellent. internally in the
* form of mixtures, inhalations, lozenges and pastilles and applied externally as ointments and
* liniments.