



## ESSENTIAL OIL PRESERVATIVE CONTAINING TIMOL REPRESENTATIVES OF THE FAMILY LAMIACEAE.

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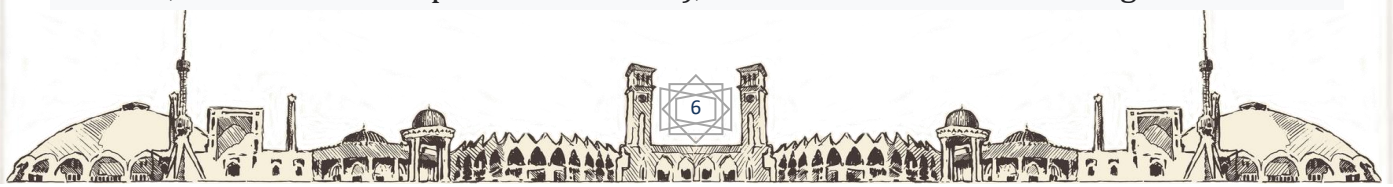
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**Abstract:** *In this article, the morphology, geographical distribution, appearance of the product, preparation, chemical composition, use, medical use, and medicinal preparations of the members of the family of labroses, which contain essential oil containing thymol, are explained.*

**Key words:** *the family of labguls, thyme, essential oil, common mountain rhododendron, creeping mountain rhododendron, mountain basil, perennial, semi-shrub.*

Thymol is a colorless, large and clear crystal with a specific aroma, well soluble in alcohol and ether, poorly soluble in water. It is a phenolic acid that is well soluble in water with alkaline solutions the compound forms thymolate. Uses: Thymol is used in medicine to disinfect the mucous membrane of the mouth and relieve toothache, as well as in the treatment of fungal skin diseases. In addition to these, the worm also has the property of driving. It is mainly used in a gelatin capsule to drive hookworms and hookworms. After consuming the Thymol drug, the patient is given saline rinses.

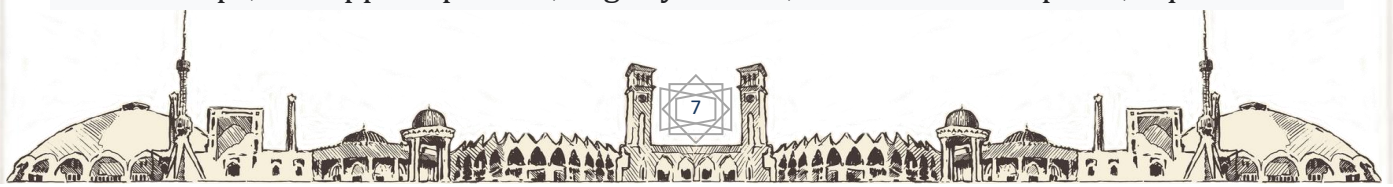
**COMMON GENERIC GROUND PART AND OIL -HERBA ET OLEUM THYME** The name of the plant. *Thymus vulgaris* L. belongs to the Lamiaceae (Labiatae) family. Perennial semi-shrub up to 50 cm tall. The stem grows upright, the lower part is woody, the branches are stiff and four-sided. The leaves are small, opposite on the stem with a short band settled. Leaves are lanceolate or lanceolate, flat-edged; the flowers are two-lipped, small, purple-red in color, they grow from the axils of the leaves at the ends of the branches and form a shingle-like inflorescence. The fruit is 4 nutlets united with the sepal. It blooms in June-July, the fruit ripens in August-September. Geographic distribution: Homeland Spain and the southern part of France. Togjambil is grown in the Krasnodar Territory, Crimea and the Republic of Moldova. Preparation of the product: When the ordinary togjambil blooms, the upper part is harvested, dried and crushed, and sifted in wire mesh. Appearance of the product: The finished product consists of a mixture of leaves, flowers and a very thin stem (sometimes only leaves). The leaf is small, short-banded, flat-edged, and the edge is turned more inward, forming a tube shape (distinct from creeping cypress). That is why the leaf has a linear appearance. Flattened, lanceolate or lanceolate leaf, 5-10 mm long, 2-3, sometimes 5 mm wide. The upper side of the leaf is dark green or brown-green, and the lower side is gray-green. The flowers are small, single or several together, the calyx is light green, double-lipped, five-toothed (the upper lip is three-toothed, and the lower lip is two-toothed), and is covered with flowing coarse hairs.





The inflorescence is double-lipped, light purple, red or purple in color; There are 4 paternal nodes, two of them are short, and the maternal node is four-digit, located at the top. The product has a specific smell (thymol smell) and a sharp taste. Chemical composition: The product contains 0.8-1.2% essential oil, triterpene thymon (saponin) acid, 0.2% thymus saponin and ursolic, oleanol, chlorogenic and other acids, flavonoids. According to the XI DF, the essential oil content of the product should not be less than 1%. Essential oil is extracted from a wet or dried product using steam. It is a volatile, yellowish liquid, it has a unique smell (timol smell) and a sharp taste. Density 0.901-0.935, refractive index 1.490-1.500. Essential oil contains up to 42% (25-60%) phenols (mainly thymol, partially carvacrol), simol, pinene, borneol, linalool and other compounds. Use: essential oil is used in medicine as a disinfectant and antiseptic drug to disinfect the mucous membranes of the mouth and throat. The liquid extract of the rhizome is part of pertussin, which is used in bronchitis and whooping cough as an expectorant. Thymol is also extracted from the essential oil. Medicinal preparations: essential oil, thymol (capsule), plant liquid extract prepared from the root part, pertussin. The essential oil is included in Hartmann's liquid, a pain reliever used in dentistry. The root part of the plant is part of expectorant herbal teas.

**THE GROUND PART OF A TREEPING PLANT -HERBA SERPYLLI** The name of the plant: *Thymus serpyllum* L belongs to the Lamiaceae (Labiatae) family. Perennial, aromatic herb. The lower part of the stem is woody, and many upright or climbing branches grow from it. The length of the branches is 2-10, sometimes 15 cm, they are four-sided and covered with hair. The leaf is simple, pentagonal, elongated pentagonal or lanceolate, flat-edged, opposite to the stem band. The flowers are two-lipped, small, purple-red in color, they grow in bunches from the axils of the leaves on the upper part of the branches, forming a head-shaped flower cluster. The fruit is 4 nutlets united with the sepal. Geographical distribution: it grows in the sand-soil lands of the forest, forest-desert zones (pine forests) in Moldova, Ukraine, Belarus, the Baltic region, and the European part of Russia. Western Siberia, around Lake Baikal, in the Caucasus and others it is also found in lands. Its small species are common. Creeping togjambil and its small species are mainly produced in Krasnodar and Stavropol Territories, Voronezh and Rostov Regions, Dagestan and Khabar-Balkar, as well as in Ukraine, Belarus and Armenia. Product preparation: The plant is harvested and dried when it flowers. Then it is crushed and sieved in a sieve. Lignified stems and large branches are discarded. Appearance of the product: The finished product consists of a mixture of leaves and flowers. The leaf is lanceolate, oblong or lanceolate, with straight edges and short bands. there are essential oil glands in small pits on the lower side (they can be seen with a magnifying glass). The leaf is 15 mm long and 7 mm wide. The main part of the leaf is covered with coarse hairs. The flowers are small, the edge of the calyx is brown-red colored, covered with hairs on the outside, double-lipped, five-toothed, multicellular long hairs grow from the edges of the teeth. The flower is pink-purple, with two lips, the upper lip is flat, slightly carved, and the lower lip is 3, equal to each



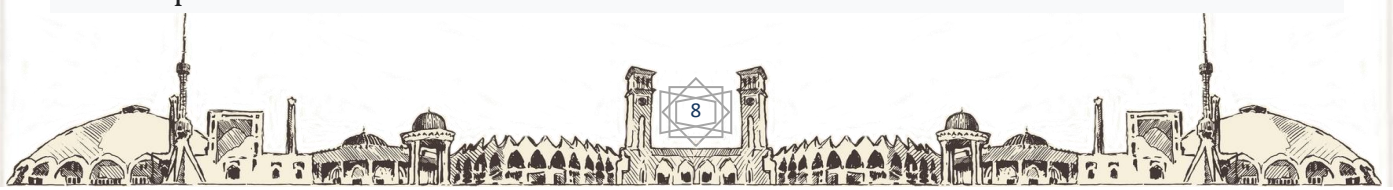




other, the father's node is 4, the mother's node is 4 digits, it is located above. The product has a unique aroma, a pleasant smell and a bitter, sharp taste. Chemical composition: The product contains 0.5-1% essential oil, flavoring and bitter substances, glue, flavonoids and ursolic and oleanolic acids. Essential oil contains thymol, carvacrol, simol, terpineol, borneol and other compounds. The content of phenols in essential oil is up to 35%, and the content of thymol in phenols is up to 60%. Use: creeping togjambil preparations in medicine It is used as an expectorant for bronchitis and upper respiratory tract diseases, and as a pain reliever for radiculitis and neuritis. Medicinal preparations: Tincture, liquid extract of pertussin, as well as the product is part of expectorants.

**THE GROUND PART OF TOGRAYKHAN IS THE HERBA ORIGANI VULGARIS** The name of the plant. *Origanum vulgare* L belongs to the family Lamiaceae (Labiatae). Perennial herbaceous plant, 30-60, sometimes 90 cm tall. The stem is several, growing upright, the upper part is branched, hairy and four-sided. The leaf is simple, oblong-ovate, sharp-pointed, flat-edged, opposite on the stem with a band. The flowers are small, 2-3 are placed in the axils of the leaves and form a shield-shaped inflorescence. The shield-shaped inflorescences form a bulbous inflorescence at the end of the stem. The fruit is four nutlets united with a sepal. It blooms from June to September. Geographic distribution: in the European part of Russia (except the northern part), in the Republics of Moldova, Ukraine, Belarus, It is found in the Caucasus, in the south of Siberia, and partly in some districts of Kazakhstan and Kyrgyzstan. It grows in dry, open meadows, dry forests and forest edges, hills, slopes, rocks and bushes. Product preparation: Tograyhan is harvested when it blooms, dried, and the dried leaves and flowers are pulled from the stem. Appearance of the product: Finished product leaf and

consisting of flower mixtures. The leaf is short-banded, oblong-ovate, sharp-pointed, flat-edged or toothed, dark green on the upper side, gray-green on the lower side, 1-4 cm long. Rose petals are ovate and dark purple in color. The flowers are small, light red, the calyx is bell-shaped, five-toothed, and there are white hairs in the mouth; gultojisi is double-lipped, paternal 4-lobed, maternal 4-lobed, located above. The leaves and petals contain essential oil glands. Chemical composition: The product contains 0.12-1.20% essential oil, additives, ascorbic acid (up to 166 mg% in flowers, up to 565 mg% in leaves) and phenol-carboxylic acids. According to the XI DF, the amount of essential oil in the product should not be less than 0.1% (0.08% in the chopped product). Essential oil contains up to 44% phenols (thymol and carvacrol), 12.5% sesquiterpenes, 12.8-15.4% pure alcohols and Contains 2.63-5% geranyl acetate. Uses: In medicine, preparations made from toggrayhan are used for intestinal atony (intestinal relaxation, weakening) and as an appetite suppressant and digestive, expectorant and diaphoretic drug, and essential oil for toothache. used in leaving. Medicinal preparations: Tincture. Product sweat driver and is a part of herbal teas used for chest diseases.





**Conclusion:** In summary, since ancient times, people have been using the leaves, fruits, and seeds of various spices and essential oil plants in order to give food a good, tasty, full and pleasant aroma. Recently, raw materials obtained from essential oil plants have been used in various sectors of the national economy. In particular, essential oils are widely used in the production of perfumes, toothpastes and powders, lipsticks and soaps in the perfumery industry. Due to the fact that essential oils have volatile and bactericidal properties, they can be used for disinfecting public buildings, schools, kindergartens, cinemas. They are used to fight against pests and diseases of agricultural plants. Thus, in addition to the use of essential oils in various sectors of the national economy, the demand for them in the international market is increasing day by day.

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