

**IT CONTAINED MONOCYCLIC MONOTERPENES BIOFORPHOLOGY OF ESSENTIAL OILS
AND MEDICINAL PLANTS**

<https://doi.org/10.5281/zenodo.10182670>

Z.A.Yusupova

Senior reader of the Department of Botany and biotechnology

Axmadjonova Dilrabo

Master of Fergana State University

Annotation: *this article highlights the morphology, geographical distribution, chemical composition of essential oils and medicinal plants, which contain monocyclic monoterpenes*

Keywords: *peppercorn, essential oil, monoterpenes, medicinal plants, marmarak, menthol, syneol, limonene, pulegon, menton, caravan.*

The main influencing parts of the essential oils of medicinal plants that belong to this group are menthol, syneol, limonene, pulegon, menton, caravan and other compounds.

Pepper leaf and oil-Folia Et Oleum Menthae Piðeritae is the name of the plant. Pepperyalpiz-Mentha piðerita L., yasnotkadoshlar is a member of the family Lamiaseae (labguldashlar — Labiatae). A perennial herb growing to 30-100 cm tall. The STEM is several, erect-growing, four-pointed, hairless or sparsely hairy. The Leaf is simple, oblong ovoid or lanceolate, with a sharp tip, with a sharp saw edge. The leaves are arranged opposite with short bands on the stem. The flowers are small, pink, light purple or red-purple, forming a spike-shaped flower cluster with a bud at the ends of the stems and branches. The inflorescence is tubular, purple, five-toothed and remains with the fruit. The inflorescence is slightly oblique, funnel-shaped, four-lobed (different from other lipsticks); the paternity is 4, the maternal node is 4-lobed, located above. The fruit is 4 nuts fused with kosachabarg.

Geographical distribution. Peppercorn is not found wild. He is a member of the Mentha aquatica L. with Mentha spicata Gilb. it is hypothesized that ning was created from mutual interbreeding. Peppers are grown mainly in Ukraine, as well as in the Krasnodar Territory, Belarus and the republics of Moldova. There are two types of peppermint: black peppermint and white peppermint. The stems and veins of the white peppercorn are whitish, while the stems and veins of the black peppercorn are reddish-purple.

As a medicinal product, mainly black pepper, which is a natural variety, is grown. Since the white type of mint smells delicate and pleasant, it is grown for perfumery (perfumery) and the food industry. The Breeders bred the fertile varieties No. 541, "Prilukskaya-6", "Krasnodarskaya — 2" and others, which give Pepper a lot of essential oil and menthol.

These varieties are frost-resistant and practically do not get sick with fungi. non-menthol acetate is suitable for complex Ether).

When the essential oil cools down, its stearoptin — menthol-is released in a crystalline state. The oil contains 41-70% menthol, 6-25% menthone, limonene, syneol, pulegone, and 4-9% menthol esters and other compounds formed by acetic, Valerian acids. According to XI DF, the essential oil should not contain less than 50% of the total content of menthol in a free and complex essential state.

In addition to essential oil, peppercorn contains 40 mg% carotene, flavonoids, 0.3% ursol and 0.12% oleanol acids.

Use. Peppermint leaf preparations, peppermint water and nastoyka made from Essential Oil are used against nausea and vomiting and to improve the digestive process. In addition, mint water is applied to improve the taste of mouthwash and mixers. Menthol, extracted from Essential Oil, is used for diseases of the ear, nose, respiratory tract, as well as for leaving toothache. Menthol is used to make a migraine pencil that leaves headaches. The drug menthol-validol is used in the disease of chest tightness (stenocardia).

Essential oil and menthol are also used in the food and perfumery industries.

Marmarak (sage) leaf is the name of the plant *Folia Salviae*. Medicinal marmarak (sage) -*Salvia officinalis* L., yasnotkadoshlar is a member of the family Lamiaceae (labguldashlar — Labiatae). Perennial, hemispherical, reaching 20-50 CM in height. The STEM is numerous, branched, serrated, four-edged, with a slightly woody underside. The Leaf is simple, long-banded, the uppermost part of the STEM is unbound, and sits opposite the stem. The flowers are short - banded, small, forming a spike-shaped circular false cluster on the yu-qori of the stems and branches. The flower is oblique, the inflorescence is two-lipped, serrated, the inflorescence is two-lipped, blue-purple, the paternity is two, the maternal node is four-lobed, located above. Fruit-consists of 4 nuts. blooms in Lyon-July.

Geographical distribution. Countries whose homeland is on the Mediterranean Sea. Grown in Moldova, Ukraine, Krasnodar Territory. Product preparation. The Marmarak Leaf is picked by hand three times a year (starting from flowering). In the first and second skin, only the leaves at the bottom of the STEM are taken. In the third skin (in September), on the other hand, all fleas on the STEM and the upper part of the stem — tip (up to 10% allowed) are harvested and dried in cherdaks or air dryers. Chemical composition. All organs of the plant contain essential oil. The leaf contains 0.5-2.5% essential oil, alkaloids, additives, flavonoids, ursol and oleanolic acids, as well as other compounds. According to XI DF, the content of essential oil in the product should not be less than 1% in the entire product, and 0.8% in the shaved product. Essential oil contains up to 15% syneol, tuyon, borneol, camphor and other compounds. Use. Preparations of the medicinal marmarak Leaf are used as a crease, disinfectant and anti-inflammatory drug in case of inflammation of the upper respiratory tract, for rinsing the mouth (in stomatitis and gingivitis) and throat.

LIST OF USED LITERATURE:

1. Karimov V., Shomahmudov A. Folk medicine and modern science are healing herbs that are used in medicine. Tashkent, 1993.
2. Kursanov A. I. vagabonds. Botany Volume 2-Tashkent, 1963.
3. Mustafayev S.M. Botany-Tashkent, 2002.
4. Nabiyev M. Botanical atlas-dictionary. - Tashkent, 1969.
5. Oripov R.O, Khalilov N.X. Osimlikhsiya-Tashkent, 2007.
6. Pratorov O.P, Nabiyev M.M. Modern system of high plants of Uzbekistan Tashkent, 2007.
7. Yusupova, Z. A., Baratjon ogli, S. F., & Laziz ogli, A. M. (2022). ЖИЗНЕННЫЕ ФОРМЫ, МОРФОЛОГИЯ И РАСПРОСТРАНЕНИЕ ПРЕДСТАВИТЕЛЕЙ СЕМЕЙСТВА ГУБОЦВЕТНЫХ. Scientific Impulse, 1(4), 452-458.
8. Yusupova, Z. A., & Baratjon ogli, S. F. (2022). FEATURES OF THE GENUS LAMIACEAE FAMILY, WHICH WE KNOW AND DO NOT KNOW ABOUT. IJODKOR O'QITUVCHI, 2(23), 87-90.
9. Yusupova, Z. A., Baratjon ogli, S. F., & Abduqunduzovna, M. Z. (2023). Medicinal Plants Growing in Our Republic Medicinal Properties. Periodica Journal of Modern Philosophy, Social Sciences and Humanities, 15, 5-7.
10. Yusupova, Z. A., & Baratjon o'g'li, S. F. (2022). LAMIACEAE OILASINING EFIR MOYIGA BOY BO'LGAN BAZI TURLARINING MORFOLOGIYASI. Scientific Impulse, 1(2), 692-695.
11. Yusupova, Z. A., & Baratjon ogli, S. F. (2022). LABGULDOSHLAR OILASI VAKILLARINING HAYOTIY SHAKLLARI, MORFOLOGIYASI VA TARQALISHI. IJODKOR O'QITUVCHI, 2(24), 472-479.