

LAVANDULA OFFICINALIS IS A MEDICINAL PLANT USED IN TRADITIONAL MEDICINE

Atoyeva Rukhsora Odilovna

Bukhara State University

Assistant Professor, PhD

Ne'matova Laziza Bahodir kizi

1st-year Master's Student of Bukhara State University

<https://doi.org/10.5281/zenodo.17983690>



ARTICLE INFO

Received: 16th December 2025

Accepted: 17th December 2025

Online: 18th December 2025

KEYWORDS

Lavandula officinalis, essential oil plant, antiseptic and sedative effect, pharmacological properties, chemical composition, medicinal collection

ABSTRACT

This thesis presents the cultivation of Lavandula officinalis under the conditions of the Bukhara district using cuttings and seeds, as well as methods of using its medicinal raw materials in folk medicine and pharmacology.

Medicinal plants are understood as plants used for the treatment of humans and animals, prevention of diseases, as well as in the food, cosmetic, and perfume industries. To date, there are about 10–12 thousand species of medicinal plants worldwide, and more than 1,000 species have been scientifically studied in terms of their chemical composition, pharmacological properties, and therapeutic effectiveness [1]. In addition, under the conditions of Uzbekistan, research is being conducted on the cultivation of essential oil-bearing plants with sedative properties and on the study of their chemical composition and pharmacological characteristics.

In particular, under the sharply continental climate and moderately saline soil conditions of the Bukhara region, the cultivation of *Lavandula officinalis*, which is not only an essential oil-bearing but also an ornamental plant, and the study of changes in its chemical composition and pharmacological properties adapted to local climatic conditions are considered among the most relevant scientific issues.

Lavandula officinalis belongs to the Lamiaceae family and is an essential oil-bearing, evergreen semi-shrub. The species *Lavandula angustifolia* is widely cultivated in France, Italy, Spain, Hungary, Moldova, Crimea, and the Krasnodar region of Russia. Fresh lavender inflorescences contain 1.2–2.3% essential oil, which is used in the perfumery, food industry, and medicine [2]. Moreover, lavender is a light-loving and drought-tolerant plant and can withstand temperatures as low as –30°C, which makes it possible to cultivate it under the conditions of the Bukhara region from cuttings or seeds.



Lavender contains essential oils such as linalool and its esters, geraniol, and a number of other biologically active compounds. In addition, it contains flavonoids including apigenin, luteolin, and quercetin, as well as phenolic compounds, coumarins, and tannins [3]. Recent studies have focused on the biological activity of the main components of lavender essential oil, particularly linalyl acetate and linalool, which are responsible for the plant's characteristic aroma and its therapeutic properties.

Lavender extract not only helps to relieve nervous tension but also calms the mind, normalizes sleep, improves blood circulation, nourishes hair, and provides anti-inflammatory, antiseptic, and antipruritic effects. For this reason, cultivation of lavender from seeds is currently being carried out under the environmental conditions of the Bukhara region [3].

Tea prepared from lavender flowers exhibits anti-inflammatory properties and plays an important role in reducing various inflammatory processes and preventing a number of serious diseases. It improves the condition of blood vessels, reduces the risk of hemorrhage, helps prevent heart attacks, and alleviates pain by reducing inflammation in muscles and joints, while also relieving muscle spasms.

The anti-inflammatory effect of lavender soothes gastric muscles and reduces stomach pain; moreover, its antispasmodic properties help relieve gas and bloating. Its aromatic fragrance supports digestive processes by stimulating bile secretion and promoting efficient food digestion. In addition, lavender aroma may help reduce nausea by activating chemical reactions in the brain [4].

To prepare lavender infusion, 2–3 teaspoons of dried raw material are required; 500 ml of boiling water is poured over it and left to infuse. It is taken as half a glass four times a day. The leaves and flowers of the plant are added to teas. The dried herbal mixture is also placed in fabric sachets and used as an aromatherapy agent. Lavender may be used alone or as an ingredient in more complex formulations [5].

Conclusion. Currently, the demand for essential oil-bearing medicinal plants, particularly *Lavandula officinalis*, is increasing in both folk medicine and scientific medical practice due to its chemical composition and pharmacological properties, as well as its evergreen ornamental characteristics. Therefore, in the conditions of the Bukhara region, propagation of this plant through cuttings and seeds has been established with the aim of obtaining high-quality medicinal raw material.

References:

- 1.To'xtayev, B. Y, Ahmedov, E. T. Cultivation and Growing of Medicinal Plants. Tasvir Publishing House, Tashkent, 2021.
- 2.Sulaymonov, I. J, Ergashev, D. T. Practical Classes on the Technology of Cultivating Medicinal Plants (Educational and Methodological Manual). Namangan, 2020.
- 3.Yarmuhammedov, J. M. Medicinal Plants and Herbal Collections Recommended for the Treatment of Nervous System Diseases.
- 4.To'xtayev, B. Y., Axmedov, E. T. The "100 Books" Series: Cultivation and Growing of Medicinal Plants, Book 41.
- 5.Ahmedov, O', Ergashev, A., Abzalov, A., Yulchiyeva, M., Azimboyev, S. Practical Classes on the Technology of Cultivating Medicinal Plants. Tashkent: Iqtisod-Moliya Publishing House, 2018.

