

MEDICINAL LAVENDER (LAVANDULA ANGUSTIFOLIA MILL.) ANALYSIS OF THE MEDICINAL PROPERTIES OF THE PLANT

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Abstract: Every person's life is directly connected with the world of plants. They have a wide scope of treatment in terms of their healing properties, because they are very rich in chemical composition, they contain glycosides, alkaloids, enzymes, vitamins, bioelements and other substances that are important in medicine. A plant with such healing properties is Lavender (*Lavandula angustifolia* Mill). Lavender is a medicinal plant recognized as safe for its intended use. The healing properties of lavender, and at the same time, issues of obtaining a high-quality and high yield have not been scientifically studied in our republic. Therefore, nowadays there is a great need for treatment with medicinal plants, and conducting research in this regard has become one of the urgent problems of the day. Based on the information obtained in this article, we would like to explain in detail the main pharmacological properties of lavender medicinal plant.

Key words: Lavender, *Lavandula angustifolia* Mill, essential oil, pharmacological properties, role in medicine.

Introduction: The number of wild and cultivated plants in Uzbekistan is about 4150, of which 577 are medicinal plants. Plants are chemically very complex, containing 21 elements, 16 of which are found in all plants, and the remaining 5 in some. Plants have 29 organic molecules (glucose, ribose, oils, phosphatides, 20 amino acids, 5 nucleosides, countless different complex compounds. Due to the availability of highly effective chemotherapeutic agents, the use of medicinal plants has become secondary. There are many highly active chemicals in medicine "drug disease" appeared as a result of its use, the number of such patients increased day by day. According to the information provided by the World Health Organization, 2.5-5% of the patients in the hospital are sick from the negative effects of drugs. Therefore, nowadays there is a great need for treatment with medicinal plants, and conducting research in this regard has become one of the urgent problems of the day. The body of plants contains special biologically active substances: alkaloids, cardiac glycosides, anthraglycosides, saponins, flavonoids, chromones, coumarins, terpenes, oils, vitamins, phytoncides, glues, astringents, mucus and other substances. Biologically active substances are found in different parts of plants, in some parts they are abundant, in others they are less or they may not be present at all. Biologically active substances are found in the same types of plants - leaves (*digitalis* leaves), some - flowers (marigold flower), fruits (chemical fruit), stems - roots, rhizomes (valerian root and rhizomes), bark (*oak* bark) can be there. That is why medicinal products are collected mainly from the part of plants with the most biologically active substances. Medicinal plants have been used by people as medicine for thousands of years. Especially in recent years, the demand for medicinal products made from plants has increased sharply. Their protection, cultural cultivation, processing, rational and effective use of available plant resources, and providing people with medicinal plant products is one of the urgent tasks of today. When collecting raw materials, it is necessary not only to determine the distribution of species of medicinal plants, their reserves and productivity, but also to study the ability of harvesting and drying, and then restoring the natural state of plants. It is worth noting that in recent years, consistent reforms have been implemented and studied in the republic regarding the protection of medicinal plants, the rational use of natural resources, the establishment of plantations where

medicinal plants are grown and their processing. The demand for creating a raw material base for the production of *Lavandula angustifolia* Mill products in our republic, and for supplying the domestic and foreign market of the republic with lavender medicinal plant products for use in pharmaceutical and medical fields is increasing.

The purpose of the study. Lavender (*Lavandula angustifolia* Mill) is a study and analysis of the medicinal properties of the plant based on scientific data.

Research methodology and literature analysis. Literature analysis was studied and analyzed based on the conducted researches and data of more than 20 scientific publications. Lavender oil is characterized by various pharmacological activities based on anti-inflammatory, antioxidant, antibacterial, antifungal, antiseptic, antidepressant, sedative, immune-stimulating and even anti-cancer effects [1,7]. It has a strong bactericidal effect on many strains of bacteria (for example, *Staphylococcus aureus*, *Enterococcus faecalis*), accompanied by weak fungicidal activity (for example, *Botrytis cinerea*, *Aspergillus fumigatus*). Lavender essential oil is used to treat inflammation in the mouth and throat and upper respiratory tract infections. In dermatology, essential oil preparations help relieve skin inflammation, psoriasis or eczema [1]. In addition, the oil is part of ointments used to treat wounds and burns. According to the literature, pure lavender oil was used to treat wounds after burns during the First World War [1]. Due to its antimicrobial properties, it reduces the purulent condition of the skin and improves the speed of wound healing. However, it should be noted that direct contact of essential oils with the skin may cause irritation and allergic reactions [8]. In aromatherapy, lavender oil acts as an agent with potential sedative, hypnotic, anxiolytic, and mood-elevating effects [4]. In the cosmetics industry, it is used for the production of bath salts, shampoos, tonics for the skin, cosmetic face masks, naturally produced creams, balms or for the aromatization of toilet waters [9]. The essential oil can also be used to preserve cosmetic products as an effective alternative to synthetic preservatives such as DMDM hydantoin, which releases formaldehyde [10]. The above-ground part of the plant has a calming effect on the body, increases resistance to stress, normalizes the mental state, and improves the skin condition. Lavender flowers have diuretic, anticonvulsant and sedative properties, and their oil has an antiseptic and bactericidal effect. The cineole included in its composition is widely used in the preparation of antiseptics and expectorant preparations in the pharmaceutical industry. Due to the presence of tannins in the composition, they have an effect against diarrhea, especially diarrhea caused by fermentation. Diluted with alcohol lavender oil during migraine, with strong palpitations, increased irritability it is drunk during acute attacks of rheumatism. Lavender tincture or tea headache, migraine, dizziness, low energy, liver and spleen diseases, nausea, abdominal swelling, abdominal pain, heart failure, used for initial dropsy, gout and rheumatic pains. Lavender oil has a positive effect in the treatment of active wounds (especially chemical burns) with the property of complete regeneration of epidermal cells. Helps to reduce scars and absorption of bumps. When taken, it reduces cranial blood pressure, relieves bronchospasm, increases intestinal tone, acts as a laxative and mild diuretic, increases stomach acidity and improves appetite. [2].

Conclusion. Based on the obtained and transmitted data, it should be noted that lavender (*Lavandula angustifolia* Mill) is a medicinal plant based on its medicinal properties, and because this plant has a wide range of uses in medicine, we offer cheaper and quality medicine to the population. It is necessary to establish the production of medicines. It differs from other plants with its rich composition. We can use it not only in the pharmaceutical industry, but also in the cosmetology, aromatology, and perfumery industries on a large scale.

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