

AGROTECHNICS OF THE NARROW-LEAVED LAVENDER PLANT CULTIVATION (LAVANDULA ANGUSTIFOLIA OFFICINALIS L.)

¹Rasulov Ilkhom Makhmudovich

²Nazarmetov Khasan Yusupakhmatovich

^{1,2}Research Institute of Plant Genetic Resources

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Abstract. *The article studied the plant lavender officinalis (Lavandula angustifolia-officinalis L.). Plant reproduction. This is the French and Spanish coast of the Mediterranean Sea. The plant grows in all parts of Europe. Cultivated in North Africa and North America. In nature, it grows on the shores of the Black Sea, on the slopes of the Caucasus Mountains. It was introduced in Uzbekistan, and many researchers carried out a general classification of the plant and the agrotechnics of its cultivation.*

Keywords. *Medicinal lavender, DNS, Soil fertility, crop rotation, organic fertilizer, mineral fertilizer, linalool, linalyl acetate, cosmetic, perfume, immunomodulatory, pharmaceutical, aromatherapy, rheumatic, diuretic.*

In pursuance of the Decree of the President of the Republic of Uzbekistan dated April 10, 2020 No. PQ-4670 "On measures for the protection of medicinal plants growing in the wild, cultural cultivation, processing and rational use of available resources", Research Institute of Plant Genetic Resources, breeding of medicinal plants According to the work plan the department of seed production and agricultural technology for 2023 is planning to plant in a large collection nursery Lavender officinalis (Lavandula angustifolia-officinalis L.) the plant is propagated by seeds and vegetatively. Since the plant is perennial, permanent places are planned and trimmed. Lavender officinalis (Lavandula angustifolia-officinalis L.) is not recommended to be planted in crop rotation fields, as this medicinal plant tends to produce crops in one place for 15-20 years. In autumn, 15-20 kg of organic fertilizers and 30-40 kg of mineral fertilizers (superphosphate) are applied to the lands where medicinal lavender plants are planted, the land is plowed to a depth of 25-28 cm. Propagation by plant seeds is the most effective method. The most optimal time for sowing is the first decade of November. The seed (2-3 cm) is sown in a hole. If you plan to plant a medicinal lavender plant in early spring, then you need to plant it in cold weather. Before planting, the land is cleared of various weed residues and leveled with a shovel. When the air temperature reaches 10-15 C0, seedlings are planted with a width of 70 cm. Before the seeds sown in early spring germinate, the soil DC should be 70%.

Lavender officinalis (Lavandula angustifolia-officinalis L.) requires 4-6 kg of seeds per hectare. In the OGRITI collection nursery, carob is planted at the rate of seeds that can be used per hectare of the total area.

Seeds of medicinal lavender fully germinate in 7-10 days, depending on the fertility of the soil. The first true leaves appear after 10-15 days, and the aisles of plants are softened by cultivation and weeding. At a distance of 25-30 cm from each bush, 2-3 young shoots of officinalis lavender are left. Plants usually flower after the 3rd year. Before the flowering phase, the plant is

watered twice, and after watering, the aisles are loosened to a depth of 8-10 cm by loosening or a small mulching is carried out in a small collection nursery.

Plants bloom in early July. Fertilization starts from the planing phase, and before irrigation, 50 kg of nitrogen and 30 kg of potash fertilizers are applied per hectare. Good results are obtained by feeding plants with diluted manure juice. Fields planted with lavender should be watered every 2-3 waterings. The second top dressing is carried out in the flowering phase (40-50 kg of nitrogen and 20 kg of phosphate fertilizers per 1 ha), in one flower there are 16-25 flowers. The flowers open in the morning and are pollinated by bees and butterflies. During the growing season, medicinal lavender is watered 9-12 times, taking into account air temperature and soil moisture. The raw material of the plant is a prickly ball. Their raw materials are harvested in the horizontal flowering phase (when the flowers are 30 cm long). Raw materials are crushed to the required size and laid out on racks. Dried raw materials are placed in special bags. The lavender medicinal plant grows well in warm climates that do not suffer from sudden changes in air temperature.

Harvesting of raw materials is carried out in July or August, always in the morning, when the flowers open. Drying is done naturally by hanging small bunches of lavender. The use of hot drying methods is generally prohibited, because the plant loses all its beneficial properties. Thoroughly dried, packed in sealed containers for storage.

Medicinal Uses of Lavender Lavender tea calms, relaxes and boosts immunity for human health and is used in the following cases:

1. With frequent stress, a fragrant drink calms the nervous system, you can relieve excessive aggression. It is effective in treating depression and anxiety;
2. With any headache, lavender contains substances that eliminate spasms, so this drink is a useful herb for nerve fibers;
3. Prevents insomnia, which can be caused by both nervous diseases and simple experiences during the working day;
4. Dissolving excess fat in the human body and losing weight;
5. It has the property of improving the problems associated with the digestive system in an effective carminative quality.
6. Useful for problems associated with high blood pressure, which can be caused by stressful situations or diseases of the heart and blood vessels of the body;
7. For colds and flu, lavender tea has immunomodulatory properties, which is important for a quick recovery;
8. Lavender also has a calming effect due to its aroma, which brings a person into a calm rhythm.

Medicinal lavender is considered medicinal, and therefore, in addition to useful properties, it also has contraindications:

1. Do not use for low blood pressure;
2. Therapeutic lavender tea is not recommended during pregnancy;
3. not allowed during lactation;
4. In principle, it is impossible up to 10 years;
5. It is not recommended in a volume of more than 0.5 liters per day, as severe pain may occur.

The most economically used part of the lavender medicinal plant is its flowers. The essential oil extracted from the flowers and stems of the plant is one of the top 15 best-selling

essential oils in the world. Essential oil components contain the most common linalool, valinyl acetate.

The quality of an essential oil is determined by the ratio of these components in linalyl acetate. Lavender essential oil is often used in the cosmetic and perfume industries. In addition, due to its pleasant smell, it is used in the soap and other industries, in the pharmaceutical industry, in aromatherapy, due to its analgesic, sedative and anti-sleep properties. In addition, it is a diuretic plant that relieves rheumatic pains.

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