

Methods of Fertility and Increasing of the Seeds of Medicinal Lavanda (*Lavandula Officinalis* L.) in the Climate and Soil of Fargona Volley

Khomidov Jasurbek Jamoldinovich¹,

Tukhtaev Bobokul Yorkulovich²

Doctoral student of the Forestry Research Institute,¹.

Director of the scientific center "Saffron"².

Tel; 99 901 10 08. email: jasurbekxomidov86@gmail.com

Annotation. The article examines the lavender (*Lavandula angustifolia-officinalis*.) plant, the lavender *Lavandula* family and *Lamiaceae* two bushes family. The soil of the plant is the French and Spanish coast of the Mediterranean Sea. The plant is naturally sown in all parts of Europe, North Africa and North America. In Russia, it naturally grows on the Black Sea coasts, in the Caucasus. In particular, important information on the general characteristic of this plant introduced in Uzbekistan and technology of cultivation is given.

Key words: Lavender, seeds, hair, pink, flower, essential oil.

The study of medicinal plants belonging to the flora of Uzbekistan and introducing and climatizing medicinal herbs belonging to the other flora, supplying local pharmaceutical production with local raw materials and production of local remedies have become one of the urgent tasks of independence during the years of independence. In accordance with the Decree of the President of the Republic of Uzbekistan dated May 3, 2017, №PP-5032, "Nukus - Farm, Zaamin - Farm, Kosonsoy - Farm, Syrdarya - Farm, Boysun - Farm, Parquet - farm and Bostanlyk – farm" 7 free economical areas were organized and the Decree of the Cabinet of Ministers of the Republic of Uzbekistan "On the organization of the State Committee for Forestry of the Republic of Uzbekistan" of May 11, 2017, № 544 of July 26, 2017, the Andijan branch of the Forestry Research Institute this refers to the implementation of the policy in the current prosecution.

Planned Research Projects due to the introduction and conditioning of medicinal lavender (*LAVANDULA OFFICINALIS* L.) in climatic and soil conditions in Andijan, it is aimed at creating large-scale plantations and creating a raw material base for these medicinal, food, perfumery and nectar.

The place and style of research

Field experiments are being carried out in the experimental field of the Andijan branch of the Forestry Research Institute in Andijan district of Andijan region and in the nursery of ornamental plants of Andijan Yol Kokalam in Pakhtaabad district and in the lands of Iymon Rizq LLC in Yazyovan district of Fergana region.

The research site was selected, leveled and prepared. Harbour thin-leaved lavender seeds were sown at a depth of 0.3 cm under local fertilizer, sand and normal soil conditions by preparing special lysimeters in the soil and climatic conditions under which each experiment was carried out.

Systematic system of plants. Medicinal or real lavender (*Lavandula angustifolia* - *officinalis*), Lavender (*Lavandula*) group, Lamiaceae family of seminal herbs.

The distribution of the plant. The soil of the plant is the French and Spanish coast of the Mediterranean Sea. The plant is naturally sown in all parts of Europe, North Africa and North America. In Russia, it naturally grows on the Black Sea coasts, in the Caucasus.

According to the information provided in the literature, when sowing a medicinal lavender plant, the plant is delayed or blossomed in the forthcoming year [3].

It is recommended to sow seeds of Medicinal lavender in the open field outside and special seedlings or seedlings planted in containers in the spring months when it is +16, +21 ° C, [4].

In order to grow the medicinal lavender plant cuttings, the plant should be planted to 10-12 cm cuttings and buried at a depth of 6-8 cm in the soil in the late autumn. The cuttings can be planted in an open field at +16, +21 °C in the early spring months, and it may carry out flowering stage in the first year [4].

Medicinal lavender plant usually blooms in June and July and spreads strong sharp odours. The height of the plant can be about 1 meter or more in this period. The plant keeps the same height during preparations for the winter. Their ribs are ripe and resistant to strong frosts [5].

Medicinal lavender plant is widely used in European countries and it is used not only for cosmetology and farming, but also for landscaping, gardening construction in architecture. It is also widely used in local medicine [6].

Medical applications and chemical composition. The plant has a very strong fragrance and taste, and its essential oils are widely used in perfumery, cosmetics and making liqueurs. The plant's flowers and oil are widely used in fragrances and flavors of Spanish, French and Italian cuisine.

Plant extracts are present in neurons and myotropic agents, mainly used to prevent inflammation of the nerve cells. Vegetable oils are also used in dental medicine in pediatrics, pneumonia, and renal disease, as well as for the smell of various medicinal products.

The first stage of scientific research on the medicinal lavender in the climate and soil conditions of the Ferghana Valley was carried out in the Pakhtaabad district of Andijan region under the conditions of dry grassy conditions, in the Andijan district of Andijan region and under the conditions of the Yozyovon district of Ferghana region.

In the course of our experiments, the medicinal lavender plant was cultivated in three different environments: local fertilizer environment, sandy soils and normal soils.

In our research, the experiment was firstly designated and prepared as three variants of greenhouse conditions: soil, specially prepared fertilizer substrate (3x1x1x1-soil-dung-sand), sandy substrate and three bumps. Fresh seeds were harvested from each of the 100 fertilizers in autumn and winter (November-December-January). Seeds were planted at a depth of 0.5-1 cm soil. Once the seeds were sown, water was irrigated once in 3-4 days (leachate irrigation on a large area of 1000-1200 m³). Seeds were grown for 15-20 days. The first grasses appeared in the 30-35th days.

Table-1

The rate of fertility of the seeds of medicinal lavanda

№	The name of the experimental site	Spreading rate (%)		
		Under normal soil conditions	In sandy soils	Fertilizer, soil, wooden pebbles, sand droppings (3x1x1x1)
1	Pakhtaabad district of Andijan region	73	65	75
2	Andijan district of Andijan region	60	59	76
3	Yozyovon district of Ferghana region	58	54	74

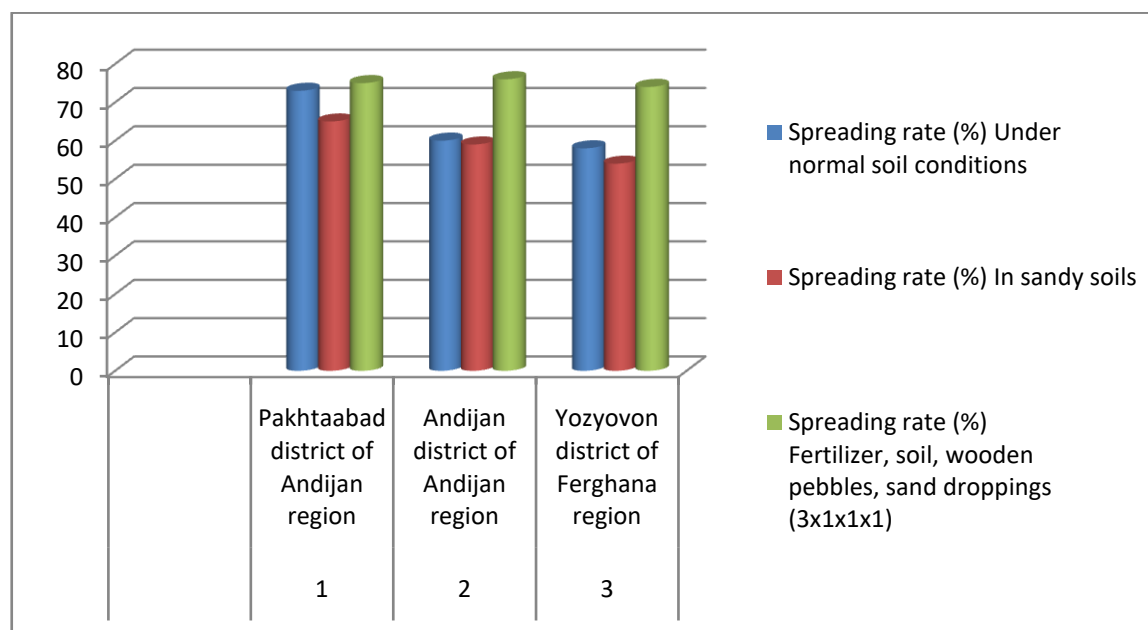


Figure 1; Examples of seeds sown during the experiments are IZOX; 1. Under normal soil conditions (%) 2. In sandy soil conditions (%) 3. Youth balls, sand, local humus and soil conditions (%).

When analyzing the parameters of the mosquitoes, the medicinal lavender seeds were sown in three different conditions, and the soil and climatic conditions of the Andijan region were insignificant. It is also known that the effects of the substrate on the sowing process are great.

The height of the seedlings in the beginning of April was 10-14 cm. By that time, 60 ready seedlings were re-planted in separate areas between 90 cm rows. In the experiments, seedlings were planted late in the evening (1000-1200 m3 irrigation between 17-18 hours). During the first vegetation year, the plants were watered 7-8 times and 2 times a year.

The results of experiments have shown that the degree of uncertainty of medicinal lavender plants has been greatly influenced by differences in soil conditions or specially prepared substrates.

According to preliminary analysis, all three regions were identified in the first year of vegetation, in all climatic and soil conditions, as well as in specially prepared substrates (special wooden sand, sand, local humus and soil), vegetation growth and development. In all experimental variants (scheme prepared substrate), the control variance was higher, compared with plants planted in normal soil conditions.

In December 2018, 12-15 cm long beans were harvested from medicinal lavender horns, with three varieties of beans - special soil, specially prepared fertilizer substrate (3x1x1x1-soil-dung-sand), sandy substrate and three bruises. The experiments on the treatment of medicinal lavender cuttings were carried out. In each variant, 60 cans were poured into 20 pieces each in a

single loaf, and then watered by the root cultivator (Cornawin). The medicinal lavender cuttings were always kept in a moisture because they were green plants. Medicinal herbs have been producing a new leaf 25-30 days later. In the beginning the cuttings from the upper part began to yield the first new leaf. The wooden top, sand, local fertilizer humus and the first dermatological lavender leaves have created a new leaf. In normal soil conditions, medicinal lavender cuttings were high.

In the soil and climatic conditions of the Fergana valley, the susceptibility of medicinal lavender, growth and development of the plant for the first year of vegetation is much higher than in the literature sources, in which the introduction of the plant and its extensive expansion to the next stage will be effective;

Plan -2

Depending on the rate of cuttings planted in experimental choices

№	The name of the experimental site	Cutting spreading rate (%)		
		Under normal soil conditions	In sandy soils	Wooden balls, sand local fertilizer humus and soil equal to 1:1 ratio (%)
1	Pakhtaabad district of Andijan region	92	70	86
2	Andijan district of Andijanregion	89	63	79
3	Yozyovon district of Ferghana region	83	59	82

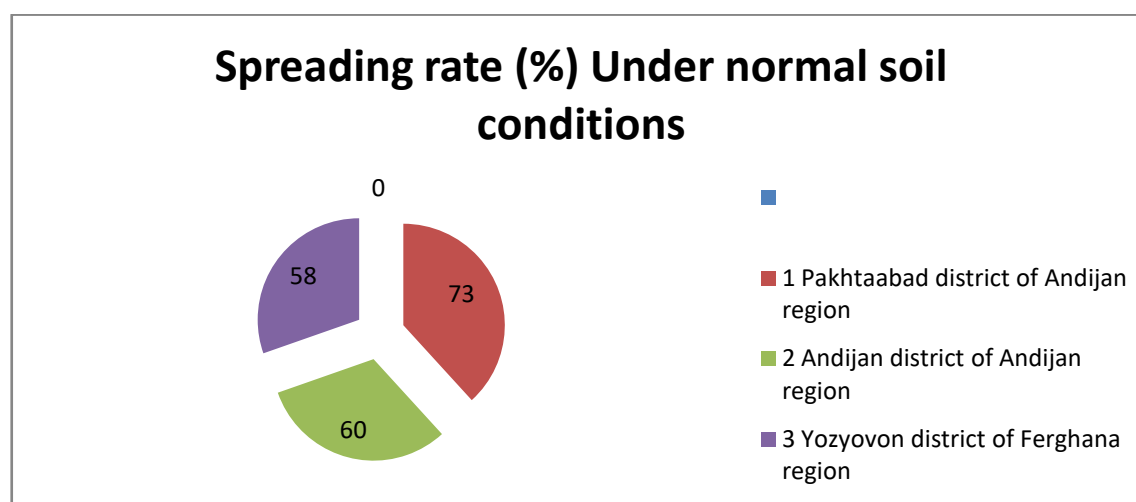


Figure 2; In the experiments, the cuttings were sown. Explanation; 1. Under normal soil conditions (%) 2.In sandy soil conditions (%) 3.Youth balls, sand, local humus and soil conditions (%).

Thanks to the above-mentioned table, effective method of increasing the medicinal lavender efficacy is also effective.

Our analysis of the growth and development of plants, the duration and productivity of the ontogenesis gardens will be discussed in detail in our further work.

Thus, based on the results of the first scientific experiments on introduction of medicinal lavender:

- In the soil and climatic conditions of the Fergana valley, the growth of the medicinal lavender by the calves, the growth and development of the plant for the second year of vegetation is much higher than in the literature sources, in which the introduction of the plant and its enlargement in the next stage will be effective;
- Introduction of medicinal lavender in soil and climatic conditions of Fergana valley and actual planned scientific researches will allow to import substitute in this region and produce export-oriented local raw materials.

Used Literature.

1. *Sh.M.Mirziyoev* .On May 11, 2017, the Decree of the President of the Republic of Uzbekistan "On the Organization of the State Committee for Forestry of the Republic of Uzbekistan" No. PK-2966
2. *Dospexov B.A.* The methodology is polevogo opyta. - M.: Agropromizdat, 1985. - S. 9-23.
3. *Tokhtayev B.Yo.* Intravenous Infectious Diseases in Uzbekistan. Problems and prospects of Plant Intrusion VI Materials of the Republican scientific-practical conference (3-4 July 2009) Tashkent 2009. B 6-9.
4. <http://ogorodsadovod.com/entry/1215-posadka-i-ukhod-za-lavandoi>
5. Uzbekistanaska-drive.com
6. *MoreYanavskaya*.www.google.ru LAVANDA. Lavanda: secretary vyrashchivaniya 3 march 2013, 19:07
7. Avazov, E. X., Saidov, E. I., Khurramov, A., & Rustamov, D. (2020). Investment activities of insurance companies: The role of insurance companies in the financial market. *Journal of Advanced Research in Dynamical and Control Systems*, 12(6), 719-725.doi:10.5373/JARDCS/V12SP6/SP20201086