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INTRODUCTION, GROWTH AND DEVELOPMENT OF LAVANDULA ANGUSTIFOLIA

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Abstract: Seed biology, growth parameters, flowering dynamics and phenology of *Lavandula angustifolia* were studied in the field. Based on the obtained scientific and practical results, information was provided on the possibility of growing seedlings from seeds and cuttings.

Keywords: *Lamiaceae, Lavandula angustifolia* Mill, seed morphology, seed germination, seedling, growth rate.

Introduction

In the content and essence of the Action Strategy of the President of the Republic of Uzbekistan Sh.M.Mirziyoyev on the five priority areas of development of the Republic of Uzbekistan for 2017-2021, modernization and intensive development of agriculture, further strengthening of food security, export potential of the agricultural sector Paying great attention to the development of the industry, they set a task for specialists in the field. In pursuance of this Decree and directives, great attention is paid in the Republic to the cultivation of medicinal plants belonging to foreign flora in local conditions.

Therefore, it is important to study the introduction, and scientific development of technology for the cultural reproduction, morphological and bioecological properties, chemical composition of plants, which are valuable raw materials in medicine, such as alkaloids, coumarins, glycosides, essential oils and vitamins.

Introduction of medicinal plants - not only reduces the cost of imported raw materials, but also enriches the biodiversity of our local environment and partially meets the demand of the population for medicinal plants has been known in folk medicine and is used as a medicinal plant.

Given the high demand for plants in folk medicine and official medicine, we found it necessary to study them in the context of introduction.

Distribution: Lavender is native to the Mediterranean. In nature lavender grows from the narrow areas of the Mediterranean coast to the Old India. High-quality varieties of lavender grow at altitudes of 700 to 1,400 meters above sea level. Widespread in Europe, North and South Africa, mountainous and tropical regions of Asia, America and Australia. [1]

Botanical classification: True lavender (*lavandula angustifolia*) is a perennial plant belonging to the family of mint. Lavender leaves are lanceolate, narrow or broad, the edges are full or almost round, darkly curved, gray-green. Length 2.5-6.5 cm, width 1.2-5.0 mm. The leaves are always renewed and preserved throughout the year. The inflorescence is spike-shaped. One plant has from 40 to 700 and even 1000 flowers. Inflorescence 4-12 spikes, located opposite each other. Each inflorescence has 7 to 20 flowers. The flowers are small, bisexual. The flower cup is tubular, longitudinally ribbed and covered with many feathers. Deep ribs contain essential oils. Inflorescence purple, tubular, double-lipped, shed after flowering. The flowers do not bloom at the same time, first the lower

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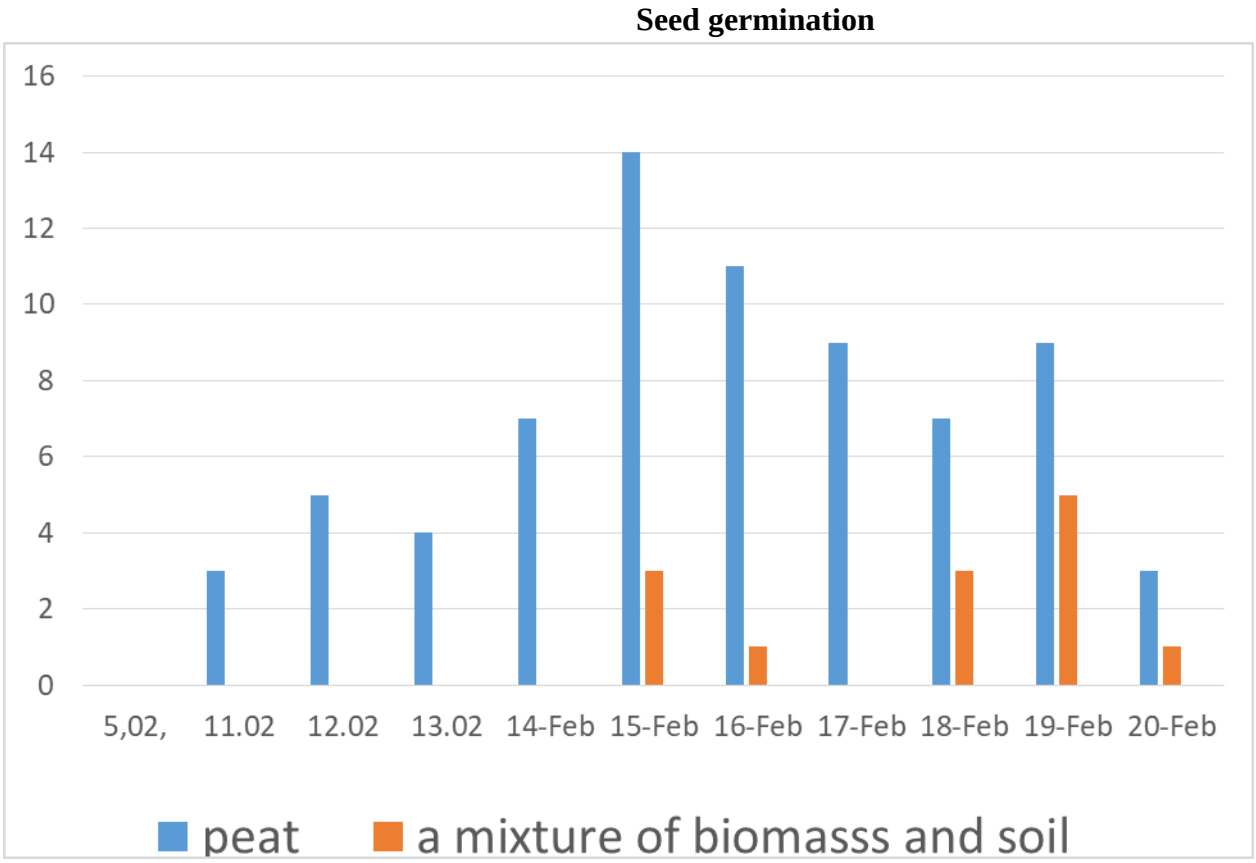
first or second of the spike and finally the upper ones. [2] [31]

Seed germination: *Lavandula angustifolia* seeds are elongated, smooth brown, 0.03 cm long and 0.02 cm wide, with 1000 seeds weighing 1-1.3 g. Sowing of lavender seeds in spring is recommended to be planted in the open in special boxes or containers at +16, + 21˚C [3]. In a warm room, 100 seeds were planted in a peat container. The seeds germinated on the 8th day after sowing and lasted for 14 days. When 20 seeds were sown in cups in a mixture of humus and gray soil, germination took 11 days and 13 days in 11 days. Seed germination energy in peat was 3.89 and 2.5, respectively (Figure 1).



Growing process: Currently, the narrow-leaved lavender *Lavandula angustifolia* is grown in different environmental conditions of Uzbekistan.

Lavandula angustifolia grows well in Termez. However, the germination, growth and development of its seeds have not been scientifically studied in this area of introduction. Observational research was conducted in Termez. The growth rates of 2-year-old seedlings and seedlings from Tashkent were determined. At the time of planting lavender in Termez conditions (April 10, 2021), the height was 25 cm. The rapid growth of the stem began in the first ten days of May. At the end of July (30.07.2021) it was observed that it reached 43 cm. (Figure 2)

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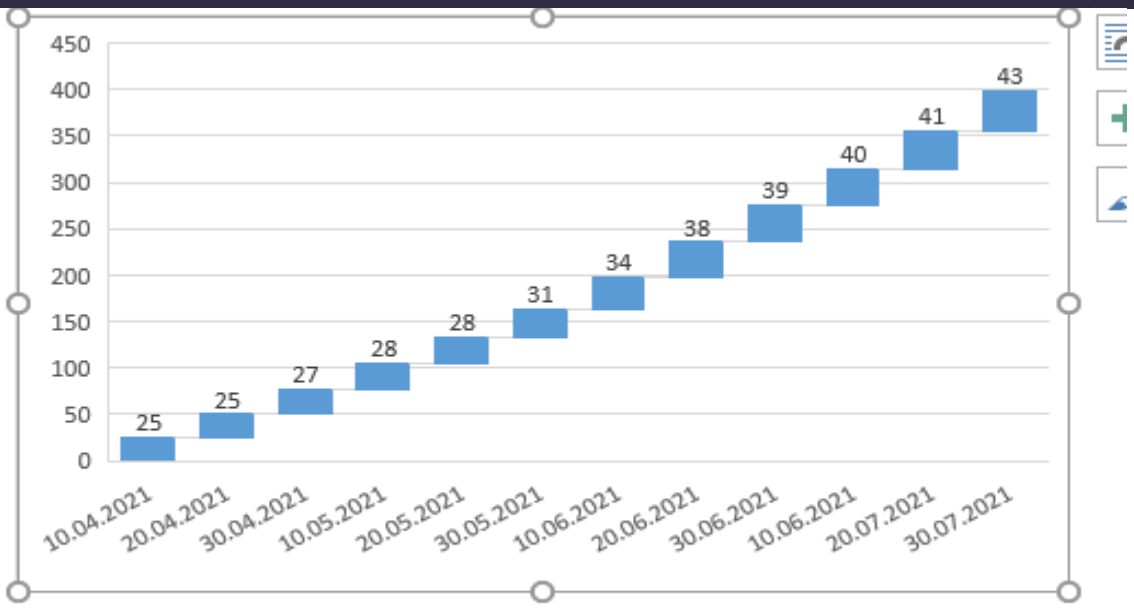

Dynamics of growth of *Lavandula angustifolia*

Phenological observations are one of the most convenient and effective methods in the study of introduced plants. Phenological observations are important not only in determining the transition periods of different phases, but also in determining the durability, productivity, landscape formation of plants, as well as the rhythm of life processes in them. Species from different geographical locations begin the growing season in a specific sequence, which is preserved regardless of how spring arrives. While temperature is a major factor, this process is governed by genotypic traits that are established in the plant's natural habitat. The rhythm of seasonal development of a plant reflects the historical development of the species under the influence of the external environment. Annual meteorological factors (heat, precipitation, relative humidity, etc.) affect the seasonal development of the plant. It has been noted that they are well acclimatized when introduced into the natural habitat of the plant. Different plants start spring vegetation at different times. In many scientific sources we find evidence that the seasonal development of plants of one or another species begins when the total useful temperature reaches a certain level.

CONCLUSIONS AND RECOMMENDATIONS

1. In the city of Termez, *Lavandula angustifolia* begins to germinate, and first the lower first or second of the spike and finally the upper ones bloom.
2. The growth of *lavandula angustifolia* began in April, and the growth was active from May to early June.
3. *Lavandula angustifolia* is recommended to be grown in Surkhandarya region due to its drought tolerance and ability to grow under the conditions of introduction.

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