

**EFFECT OF PLANTING PERIOD ON GROWTH AND
DEVELOPMENT OF LEAF LETTUCE (LACTUCA SATIVA
VAR.CRISPA) PLANT**

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Annotation. This scientific article examines the effect of planting times of leaf lettuce (*lactuca sativa var.crispa*) on the duration of vegetation, plant height, leaf bladder diameter, length, width and leaf bladder mass in the Andijan region.

Key words: leafy salad, duration of vegetation, leaf set, leaf set mass.

Introduction. Vegetable growing is one of the oldest and leading industries in world agriculture. A characteristic feature of vegetable crops is that they can be grown on small areas, the growing season is short (in most crops), and their economic efficiency is high. Lettuce is one of our vegetable crops. Currently, different forms of lettuce are grown in different regions of the world, both in open fields and in sheltered areas. However, the selection of varieties of leaf lettuce (*lactuca sativa var.crispa*) and the development of elements of cultivation technology in the Marquis region of Uzbekistan have not been fully studied [2, 3, 5].

Research methods. Research in field and laboratory conditions “Guidelines for the environmental testing of vegetable crops in open ground” (M., VNISSOK), “Guidelines for the selection of green, spicy-flavoring and perennial crops”, “Guidelines for the study of a collection of cabbage and leafy green crops (lettuce, spinach, dill)”, "Methodology of the State variety testing of agricultural crops", "Methodology of experimental work in vegetable and melon growing" [1] was carried out on the basis of such methodological manuals. The statistical analysis of the data was carried out using the Microsoft Excel program based on the dispersion

method (B.A. Dospekhov) [4].

Research results. Researches were conducted by sowing the seeds of lettuce varieties directly in the ground. February 20 was accepted as a control option for the southern conditions of Andijan region.

The period from sowing to germination in lettuce cultivar Lollo Rossa varied from 6 to 10 days at different planting dates (Table 1). In 2020, the shortest period from planting to germination (7 days) was observed on the planting date of March 10. In 2021, there was no significant difference between this period for all planting periods.

In 2020-2021, it was observed that the period from germination to technical maturity was 46 to 50 days. The shortest period (46) in 2020 and 2021 was recorded at the March 10 planting date, which was 4 days less than the control option, respectively.

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Effect of planting dates on growth and development of leaf lettuce, variety Lollo Rossa (2020-2021 year)

Planting period	Lifetime				Period, days					
	Mass germination		Technical maturity		From planting to seedlings			From germination to technical ripening		
	2020	2021	2020	2021	2020	2021	o'rtacha	2020	2021	average
01.02.	10.02.	09.02.	28.03	29.03	10	9	9±	47	49	48
10.02.	18.02.	19.02.	04. 04.	06. 04.	9	10	9±	46	48	47
20.02. (control)	27.02.	28.02.	16.04	19.04	8	9	8±	49	51	50
01.03.	07.03.	08.03.	25.04	24.04	7	8	7±	49	47	48
10.03.	06.03.	05.03.	21.04	23.04	7	6	6±	45	47	46

This was due to the acceleration of growth and the rapid transition to the reproductive stage of development, which was observed due to the fact that the air temperature was higher than in other planting periods.

With the studied planting dates in 2020, the period from planting to seedlings (almost the same as in 2007) and the period from seedlings to technical ripening (up to $2\pm$ days) had a tendency to increase.

The shortest period from sowing to germination (6 days) was observed during planting on March 10, and the period from germination to maturity (45 days) was also observed in this variant.

Table-2

**Morphological indicators of lettuce plants, variety Lollo Rossa
(2020-2021)**

Planting period	Plant height, cm	The diameter of the leaf set, cm	Leaf			Mass of leaf bundle, kg		Productivity, %
			number, piece	Length, cm	Width, cm	On a plant	A penny in meters	
01.02.	16	14	12	10	7	0,185	1,85	96
10.02.	18	16	12	11	8	0,191	1,91	94
20.02. (control)	19	17	11	10	8	0,198	1,98	87
01.03.	20	18	10	14	9	0,220	2,20	80
10.03.	21	19	12	13	10	0,217	2,17	77
Ekf ₀₅	-	-	-	-	-	-	0,8	-
S ^x	-	-	-	-	-	-	0,5	-

Based on the data of Table 2, the highest indicators of morphological characters were observed in variants with planting dates - March 1 and 10, compared to the control planting date - March 20. During these planting periods, plant height was 20-21 cm, rosette diameter was 18-19 cm, number of leaves was 10-12 and rosette weight was 0.019-0.022 kg more compared to the control planting period (0.198 kg). we can see.

In 2020 and 2021, the highest yield of leaves was observed in the variant planted on March 1 and was 2.20 kg/m², which was 0.22 kg/m² more than the planting period in the control period, but the yield of the product was 7% less. It's done.

Average daily temperatures during the study years were higher than the observed multiyear temperatures, which led to faster tillering of the lettuce plant, resulting in higher yields of the lettuce plants planted on March 1 and 10 (80-77%) was significantly lower than other options.

When analyzing the effect of planting dates on the yield and quality of lettuce, it was found that plants have high biochemical indicators on the planting dates of February 1 and 10. Also, 96-94% of the harvest obtained from these options was suitable for consumption, and this indicator was 7-9% higher than the control option.

For many varieties of lettuce, the upper temperature limit during seed germination varies from +20°C to +25°C. At high temperatures, the seeds go into a state of forced dormancy, they can germinate later under the influence of low temperatures.

As a result of the study of the effect of different planting dates on the yield and quality of lettuce heads, it can be concluded that the yield obtained from the varieties planted in the planting dates of March 1 and 10 was higher than the other varieties, but it was observed that the yield was very low. . The harvest obtained from February 1 and 10 planting dates had high biochemical indicators and marketability. Based on the above indicators, it was determined that February 1 and 10 are the most favorable planting dates for the cultivation of leaf lettuce in the conditions of the Fergana Valley.

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