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The Influence of Different Planting Schemes on the Productivity of the Artichoke Crop of Medium Bayrampasa Varieties

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Abstract: Non-traditional vegetable crop of the medium variety Bayrampasa artichoke, created in Turkey on plots 90x30, 90x50, 90x70, 90x90 cm - 37.0 - 22.2 - 15.8 - 12.3 thousand plants per hectare and plant growth, development, productivity and The economic efficiency of cultivation technology has been studied.

When planting the Bayrampasa variety on an area of 90x50 cm with a density of 22.2 thousand seedlings per hectare, the first fruits ripen 2-6 days earlier compared to all options, on average 576 grams per plant, 182-183 grams 3.2 3, 3 pcs. fruit (baskets) were formed. The yield is 18-52% higher than all options, 1 kg of product is the cheapest (5499 soums), the profitability indicator (263.7%) is 6-177% higher than all options.

Key words: plants per hectare and plant growth, development, productivity, and the economic efficiency of cultivation technology has been studied.

Login. To improve the export safety of agricultural products by the President of the Republic of Uzbekistan, October 23, 2019, PF-5853, "Confirmation of the Strategy for Agricultural Development of the Republic of Uzbekistan for 2020-2030,"Pf-60 of January 28, 2022, "On the Basis of the New Uzbekistan Development Strategy for 2022-2026", "Increase the income of farmers and farmers at least 2 times by intensive scientific development of cheese farming, In bringing the annual growth of agriculture to at least 5%, especially by 2026, the volume of food production is 7.4 million. there is a special emphasis on bringing the recycling rate to 28 percent of the vegetables." To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared.

In recent years , there has been a special emphasis on the culturalization, introduction of traditional vegetables worldwide, the further use of their nutritional and medicinal properties, and the expansion of the production of natural vegetables and medicines based on their raw materials. In 2019 the cultivation of artifacts, one such plant, amounted to 128,000 acres [128,000 ha] of land worldwide, accounting for 13 tons per hectare of crop yields.

Artishokni is also used as a nutritional and food growing plant in England, France, Italy, Hungary, Bulgaria, Sweden, Albania, the United States and Azerbaijan. In Western Tajikistan, the total yield of the green leaf ranges from 800 to 1,500 s/, and in the back of the Caucasus, the green weight of the artishok ranges from 650 to 1,500 s/. Artishok is also used as a scenic plant to decorate areas of tourist organizations, gardens, roads, schools, and other organizations. Artishok is consumed in the form of raw, fried and canned.

Taking into account the nutritional value and healing properties of traditional vegetables, the development and implementation of agro-technologies for their cultivation will be an important factor in expanding scientific research. To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared.

Study of the problem. Traditional vegetable artifacts have long been grown in European countries as food and medicinal plants. S.I.Vavilov and others, L.I.Dranik, to study the ability to culturalize artishok, chemical composition, food and medicinal plants, Scientific research has been conducted by scientists such as

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I.L.Luneva, T.S.Lyubimova, M.A.Panov, N.A.Agafonov, M.P.Prichman, T.A.Rabotnov, S.G.Tamamshyan, A.G.Vasnizki, D.Zohary, R.M.Hammouda, S.Rocchietta. In Azerbaijan, V.S.Radionenko conducted research on the culturalization of artifacts in Tajikistan, the use of food, the introduction, culturalization, and chemical composition of artifacts in the northern Caucasus.

In the 1970's, B.A. Amirov and R.S.Haydarov conducted research on the study of artifacts in the conditions of the republic. A.Torakulov, Z.Nomozova, also conducted scientific research on the bioecology of artifacts, the production of flowers and fruits, the methods and adaptation characteristics of cultivation, the study of medicinal properties, and the evaluation of introduction qualities.

Cultivating thorny artifacts by T.A. Mirrakimova and A.A. Abzalov, Issues such as its chemical composition when feeding them with nutrients, the impact of phosphorus and nitrogen fertilizers on plant development and yields, and the standardization of a medicinal drug with a hepatoprotector and a fire-producing effect based on thorny artishok raw materials have been studied.

When developing technologies for breeding this plant, of course, it is necessary to correctly determine the duration of planting and especially planting schemes, taking into account its biological, characteristics of the farm. Many scientific sources have provided a variety of recommendations in various publications: 90x90 cm, 90x50 cm, 110x90 cm, and 70x40 cm.

Today, there are more than 140 species of artifacts on earth, and more than 40 species are growing culturally. Cultivation of each crop requires, of course, to study the morning or evening of the variety, its movement, and to plant it scientific-based when it is cultivated. The reason why varieties are recommended for planting in different planting schemes for different periods of time is that if strong-growing varieties are planted thickly in the evening, the number of plants per hectare will be small in nutritional space and lack of light. On the contrary, if weak-growing varieties are planted, the number of plants per hectare will decrease, resulting in low yields. Therefore, when planting each variety, taking into account their biological and economic characteristics, the yield will be achieved.

In 2022-2023, we conducted research to study the favorable planting schemes of the imperial star variety, which is the targeted medium-sized vegetable planting crop imported from abroad.

The objective of the study is to identify convenient planting schemes for high yields in the republic.

The main tasks of the study: middle Bayrampasa variety 90x30; Schemes 90x50; 90x70 and 90x90 cm were used to plant 37.0; 22.2; 15.8; 12.3,000 plants and determine their economic efficiency in plant growth, development, crop yields, and cultivation technology.

The object of the study is the Imperial Star variety, seeds, seeds, plants, leaves, fruits, crops, and biochemical features of the Traditional Artishok crop from abroad.

Research was conducted and planting schemes such as 90x30; 90x50; 90x70; 90x90 cm) were used in the country.

Methods of the study. Conducting research: "Metheddia is a member of the Society of Jehovah's Witnesses." M., VINI, 2011. (Pod. S.S.Litvinova). Azimov B.J., Azimov B.B. "Methodology for Experiments in Vegetables, Policing and Potatoes", 2002. Belik V.F. "Methedics of the Research of the World and the Elimination of All Rights" 1992. “Методический указаниия по экологическому испытанию овощных культур” 1987. A.I.Nuriddinov, N.S.Bokiyev, N.S.Bakuras, etc. Spravochnigi of vegetables, policing and potatoes. –T.: Labor, 1987. Yermakov A.I. i dr. "Methyoyo Bichohic Research". 1987. Methodological manuals were used.

The spread of origin corresponds to the cultivation of traditional vegetable artifacts from tropical lands, the duration of cultivation in countries or regions with different soil and climate conditions, and changes in planting schemes. The resulting rise in sea levels from the meltwater could spell disaster for thousands of millions of people. In regions where climate conditions are very cold on a sharp continental day and summer is very hot, this crop is damaged by frost in winter, not growing next year, or low in productivity.

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When planting schemes are recommended, recommendations are made, taking into account the productivity of plants in the second and third years (yields of the number of side branches of plant leaves and hokozas....).

Today, there are more than 140 species of artifacts on earth, and more than 40 species are growing culturally. Cultivation of each crop requires, of course, to study the morning or evening of the variety, its movement, and to plant it scientific-based when it is cultivated. The reason why varieties are recommended for planting in different planting schemes for different periods of time is that if strong-growing varieties are planted thickly in the evening, the number of plants per hectare will be small in nutritional space and lack of light. On the contrary, if weak-growing varieties are planted, the number of plants per hectare will decrease, resulting in low yields. Therefore, when planting each variety, taking into account their biological and economic characteristics, the yield will be achieved.

Research was conducted in the experimental field of the Institute of Scientific Research in Vegetables, Melons And Potatoes in 2022-2023. The middle Bayrampasa variety, which is new to the Republic, is 90x30; 90x50; in schemes 90x70 and 90x90 cm. 47.6 per hectare; 28,5; Planting 20.4 and 15.8 thousand plants, we conducted research to study the growth, development and productivity of plants.

Artishok seeds were planted in special canvases in the instut's greenhouse in the first decade of February, and fenalogic biometric observations were carried out. The sown seeds were fully harvested in 8 to 10 days, and the growing nipples were cared for. In 8-9 days, the slinger would place in this man a mature egg from her, placed it in a close-rounded way. Before the start of the field experiments, work began to prepare the field for planting. The resulting embryo was allowed to develop in nutrients and then inserted into her wowobe, where it implanted. When the seedlings were 60-65 days old, they were planted in an open field on april 10-12.

After the plants were planted in an open field, phenological observations were carried out on all variants, 22-23 days after the seedlings were planted, 10% of the original flowerbeds began to appear, and between 26 and 28 days, 75% of all variants of vegetation flourished. The resulting embryo was allowed to develop in nutrients and then inserted into her womb, where it implanted. If the variants planted in the schemes of 90x30 and 90x90 cm came out for 27 days, the variant planted in the 90x70 cm scheme was planted in 28 days, 90x50 cm in diameter, and 22.2 thousand spit plants per hectare were planted in the chart 1-2 days early in 26 days.1 Table1

Table 1
Duration of the phenological phases of the Bayrampasa variety in the middle of the traditional vegetable plant (2022-2023)

Planting sxmas, cm.	Date, month, planted in the street field.	The formation of gulnovdas in plants, day.		The emergence of flower buds, day	
		10%	75%	10%	75%
90x30	10.04	22	27	44	49
90x50	10.04	22	26	43	47
90x70	10.04	23	28	43	48
90x90	10.04	22	27	44	47

After 43-44 days, the song began to question 10% of the flowers.

Various planting schemes have had an impact on the reach of the first fruit (baskets) of the Bayrampasa variety in the middle of the artishok plant. Variant 1 required 135 days for the variant planted in a scheme of 90x30 cm. 37.0 thousand spit plants per hectare. It took 22-23 days for the first flowers to form and reach the fruits (baskets). In variances planted 15.8-12.3 thousand spit plants per hectare in schemes of 90x70 and 90x90 cm, it took 131 days for its original fruits to be produced, while 90x50 cm per hectare of spit planted occurred in 130 days. In variants 2-3 and 4, the first fruits (baskets) questioned the flowers in the plants and took 19-20 days 3-4 days before the first fruits (baskets) were technically reached. This is due to Table 2, in which the area of nutrition of plants in the early stages of the aquatic period is sufficient for the growth of plants in all variants.

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Table 2
Phenological (duration of fruit phases, 2022-2023)

Planting sxmas are cm.	Date, month, planted in the street field.	Analysis of fruits,day		Fruits biologe ripening, day
		10%	75%	
90x30	10.04	136	159	169-176
90x50	10.04	130	154	164-178
90x70	10.04	131	154	163-177
90x90	10.04	131	153	163-176

The middle Bayrampasa variety of Artishok is 37.0 per hectare of plants; 22,2; With a decrease of 1.5 - 2.3 times between 15.8 and 12.3 thousand, the height of the plant's foundation decreased by 6.5 - 8.2 - 8.4%.

The average height of the plants in the options planted in 90x70 and 90x90 cm. in the schemes are 15.8-12.3 thousand burrows per hectare, the average height of the plants is 79.3-79.1 cm. Unless otherwise indicated, Scripture quotations are from the address noted above or by telephony.

When studying the effect of various planting schemes on the number of leaves in a spit plant during the formation of the Middle Bayrampasa variety, The variant planted in the scheme was 24.3 inches [90x30 cm], and the planted variant in the scheme was 8.6% more than the average of 26.4 gallons [26.4 L]. In one spit plant plant planted in schemes of 90x70 and 90x90 cm, the number of leaves averaged between 28.8 and 29.5 tons, and one spit plant in the scheme was 18.5 to 21.4% more than the number of leaves in the scheme of 90x30 cm.

If an average of 1.9 tablespoons [1.9 tablespoons] of fruits (baskets) were produced in a spit plant, In the scheme of 90x50 cm, the number of fruits (baskets) in a spit plant planted at 22.2 thousand spit/s was 3.2 inches [90x30 cm] on average, 68 percent higher than the variant planted in the scheme. The number of fruits (baskets) in one spit (3.5 pieces) planted in the 90x70 cm scheme was 89.4 percent higher than the variant planted in the chart and 14.2 percent higher than the option in the 90x50 cm scheme. The minimum number of plants per hectare (12.3,000 spit) is 90x90 cm. The scheme was 11.4 percent higher than the planted option and 21.8 percent higher than the option planted in the 90x50 cm scheme, while the most planted plants were 90x30 cm higher than the variant in the scheme 2 times higher than the variant in table 3.

Table 3
The effect of increasing various planting schemes on the productivity of the middle Bayrampasa variety (2022-2023)

Ekish sxemalari,sm	Number of flower branches in plants		The number of carts in a spit,		A dona (savatcha) Fruit medium size,g.		Hosi, g/tup plant in a spit
	lady	Compared to X-1.5 pieces,%	lady	X-compared to 3.1 pieces, %	g.	Compared to X-172.0 g,%	
90x30	1,2	80,0	1,9	60,3	119,0	69,1	226,1
90x50	1,5	100,0	3,2	103,2	182,8	106,2	584,8
90x70	1,7	113,3	3,5	112,9	189,2	110,0	681,1
90x90	1,7	113,3	3,9	125,8	197,0	114,5	778,2

If an average of 1.9 tablespoons [1.9 tablespoons] of fruits (baskets) were produced in a spit plant, In the scheme of 90x50 cm, the number of fruits (baskets) in a spit plant planted at 22.2 thousand spit/s was 3.2

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inches [90x30 cm] on average, 68 percent higher than the variant planted in the scheme. The number of fruits (baskets) in one spit (3.5 tons) planted in a 90x70 cm scheme was 89.4% more than the variant planted in the chart and 14.2% more than the option in the 90x50 cm scheme. The minimum number of plants per hectare (12.3,000 spit) is 90x90 cm. The scheme reported that the variant planted was 11.4 percent higher than the one planted and 21.8 percent higher than the one planted in the 90x50 cm scheme, while the most planted was 90x30 cm.

In the scheme of 90x30 cm, the average weight of a grain of fruit (baskets) was 119.0 g. in the variant planted by 37.0 thousand plants per hectare. In our variant of planting 22.2 thousand plants in a scheme of 90x50 cm, the average weight of one fruit (savtatcha) was 182.8 g. it was 90x30 cm heavier than the variant figure in the scheme by 53.6 percent. The average weight of the fruit (basket) in the 90x70 cm chart was 189.2 g. and was 3.5 percent higher than the variant in the 90x50 cm chart by 58.9 percent.

By cultivating the Bayrampasa variety in various planting schemes and adding an average harvest from one spit in all options in order to identify the most reasonable planting scheme, we determined the average yield (565.3 g) of all options and compared it to all planting schemes. In our plant planted version of 37037 units per hectare in the 90x30 cm scheme, the yield from one spit was 60% lower than the average of all options. In the scheme of 90x50 cm. harvested from one spit in the planted variant of 22222 plants per hectare, the yield of all options was 101.9% if almost no different from the average, Table 4.

Table 4
The middle of the artishok of various planting schemes impact on productivity (2022-2023)

Planting scheme, cm	The number of plants per hectare, thousands of pieces.	A spit yields on the plant,g.		Productivity, ga/t.	
		G/ Tube O'	Compared to X-565.3 g. %	ga/t	Compared to X-10.4 to/t,%
90x30	37,037	226,1	40,0	8,4	80,6
90x50	22,222	575,8	101,9	12,8	123,0
90x70	15,873	681,1	120,4	10,8	103,9
90x90	12,345	778,2	137,7	9,6	92,3

On average, 8.4 tons of crops were harvested from one hectare in the variant planted in the 90x30 cm scheme, which contains the largest number of plants per hectare (37037). In the 90x90 cm chart with a minimum number of plants per hectare (12343 spit), the number of plants was 3 times lower than the first option, but the yield was 14.6 percent higher, even though the yield was 3.4 times higher. The 90x70 cm scheme found that in the variant planted in 15873 spit seedlings per hectare, the yield from one hectare was 10.8 tons, with the largest number of plants and 29.0-12.5% higher than the 1-4 least planted options.

The variant planted from 2222 spit per hectare in a scheme of 90x50 cm per hectare produced an average of 575.8 grams [575.8 grams] per spit plant and harvested 12.8 tons per hectare. This option was 52.3 percent higher than the most planted option in the scheme of 90x30 cm, 90x70 and 90x90 cm. The number of plants per hectare (15873-12345) was 18.5-33.3 percent higher than the spit variants.

1 kg [1 kg] of economic efficiency by planting a traditional vegetable artishok crop in various planting schemes (90x30; 90x50; 90x70 and 90x90 cm). The product was 10736.7 gallons [10736.7 L] in diameter, 90x50 inches [54989.0 cm] in diameter, 90x70 inches [5594.2 cm] in diameter, and 5712.9 gallons [90x90 cm] in diameter. 1 kg according to the schemes of planting. (Matthew 24:14; 28:19, 20) Jehovah's Witnesses would be pleased to discuss these prosper in a close-boned [90x50 cm] scheme.

Net profit from hectares varied from 77811.4 to 185613.0 thousand som under planting schemes. The highest net profit was taken from the varian planted in the scheme of 90x50 cm. 185613.0 thousand soums, at least 77811.4 thousand soums 90x30 cm.

The middle Bayrampasa variety is cultivated in various schemes (90x30 - 90x50 - 90x70 and 90x90

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cm), When the production profitability was determined, it was 86.3%, 90x50 cm in diameter, 263.7%, 90x70 cm in diameter, 257.5% in the chart, and 250.1% in the 70x90 cm scheme. The highest yield indicator for planting schemes was 285.4% in the variant planted in the scheme of 90x50 cm.

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