# International Journal of Biological Engineering and Agriculture

ISSN: 2833-5376 Volume 2 | No 11 | Nov -2023



## Advantages and Productivity Indicators of Onion Planting in the Conditions of Karakalpakstan

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Annotation: Advantages of planting onions and yield indicators. It is possible to get a very high yield when planting onions. Methods and importance of seedling cultivation, the importance of the effect of planting on productivity. Planted onions give a high yield, but since it requires a lot of work, this method is rarely used But before planting onions, it is advisable to thoroughly clean the crop residues from the land, add rotted manure and mineral fertilizers, plow the land deeply, and level the land before planting.

**Keywords:** Periods and methods of planting onions, the importance of the sowing method, the productivity of planting seedlings, the growing season, the time of flowering, varieties of onions.

Introduction. Today, 60% of vegetables are planted in open ground and 90% in sheltered land. In our republic, vegetable crops are planted in half of the fields of peasants, farmers and homestead farms and on protected lands in full seedling method. Currently, the seedling method has several advantages. First: the seedling outgrows the field plant by 30-40 days in development, which allows early harvest. Second: seedlings can grow heat-loving vegetables and crops in temperate climates. Third: resistance to diseases and pests is high. Fourthly: the seed (3-7 times compared to sowing directly in the field) is saved and there is no need to fight against sprouting, weeds and weeds. Of course, at the same time, this method has already become popular in most of the main vegetables. In the conditions of the Republic of Karakalpakstan, we will widely use this method to conduct scientific research to obtain a high yield from agricultural crops.

Research methods. Of course, in our research work, we made onion cultivation method one of our main tasks.

We should add that; In Karakalpakstan, onions are mainly planted in three periods: in spring, in early March; and in the summer-autumn seasons, it is planted in August-September, and before the winter season, in late October-early November. Onions planted in early spring are better stored in unfavorable winter conditions than onions planted before summer-autumn and winter.

That is why onions planted in early spring are more effective than others when stored in winter.

But in our complex soil and climate conditions, if onions are planted in early spring, the time of onion germination will be extended, as a result, the field where onions are planted will be overrun by weeds. This means that the number of onion seedlings will be small, which will cause a decrease in the yield. In the conditions of Karakalpakstan, it is better to plant onions through seedlings in order to get an early harvest, because it prevents the above negative consequences.

Cultivation of onions by seedlings. Late varieties of onions are sometimes grown from seedlings. For this purpose, one and a half to two months before planting, onion seeds are sown in special nurseries, 20-25 grams per square meter, warmed and germinated. In this case, onion seeds should be



large, not diseased and not damaged.

Lawns are cared for by keeping the temperature in the nursery at 20-25°C during the day and 8-10°C at night, and by fertilizing and watering. Seedlings are ready to be transplanted when they have 2-3 leaves. Onion seedlings are transplanted to the field in 20x15 rows, not like when they were grown from seeds, then they are watered. Watering should be carried out in the evening, when the plant quickly recovers its height. Planted onions give a high yield, but since it requires a lot of work, this method is rarely used.

Onions can be replanted only after three years. Onions are planted in early spring or late autumn. But before planting onions, it is advisable to thoroughly clean the crop residues from the land, add rotted manure and mineral fertilizers, plow the land deeply, and level the land before planting. In order to reduce the amount of weeds in the areas where onions will be planted next spring, after collecting the residues of the previous crop, the land is plowed, the egates are removed and the area is well watered. After 9-11 days, the area where the grass is sprouting is chiseled and weeds are removed. It comes ready to plant onions.

#### Productivity indicators of onions planted by sowing and seedling methods

Varieties	The total	The total yield	When sown by	When planted,	Total yield in (%)
	productivity	when planted	sprinkler method	1 onion weighs,	when planted in
	when sowing	as a seedling is,	The weight of 1	gr	both ways
	in the sowing	t	onion is, gr		
	method, t				
Kaba-132 (st)	23,8	28	92	130	86
Karatol	26,6	29,8	98	143	88
Oqdur	25,4	28,6	116	170	86
Lione F <sub>1</sub>	21,8	24	78	112	76
Volf F <sub>1</sub>	20	23	72	100	74
Red onion	22	26	91	149	83

In our experiments on growing onions from seedlings, we selected 5 varieties of onions, including Kaba - 132, Karatol, White Dur, Lione and Wolf onions, and at the end of March, in the third ten days, on March 25 passed through the chat.

A week later, after the seedlings were fully grown, mineral fertilizer was given and watered according to soil moisture.

Comparing the plant height among varieties, the tallest plants are 58.1 cm in Karatol variety, 48.9 cm in Kaba plants, 55.4 cm in average height plants, and the lowest in Aqdur variety. 44 cm in Lione and 41 cm in Wolf.

It can be seen from the data of the results of our researched experiments that the phenmorphological indicators of onion cultivars depend on the cultivar. The best thing about transplanting is that the product ripens earlier than sowing and you can get a higher yield. When onions are planted in seedlings, there are no weeds and they require very little water.

In addition, we know that the onions grown in the scattering method are not the same. For example, we divide them into small, medium and large ones. The largest part of cultivated onions is 40 percent, and medium onions are 30 percent, the remaining part is very small onions. Large onions have a higher yield. Of course, there is a great demand for such onions in the market, and the export share is also high.

Medium onions can be exported to local markets, but there is no demand for small ones in the market, so the remaining onions are wasted. Taking into account this information, it is possible to get a high yield in onions planted as seedlings.

#### Conclusion.

1. As you can see in the above table, the productivity index of onions planted by the seedling



method is much higher and you can see a big difference in quality.

- 2. In the conditions of Karagakhstan, it is possible to get a high yield from onions. As a result of this, it will be possible to fully satisfy the needs of the population for onion products and additionally export them.
- 3. Seedlings develop 30-40 days ahead of field plants, which allows early harvest.
- 4. Saves seed (3-7 times compared to sowing directly in the field) and there is no need to fight against weeds, weeds and weeds.

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