

Study of Influence of Different Plantation Schemes for Pumpkin Growing on Productivity (In the Conditions of Khorazm Region)

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Abstract: In this article, we will study how to plant pumpkin in local conditions in different planting schemes and varieties of Ispanskaya 73, pumpkin Tyoshchin pie, pumpkin Yaponskaya. Phenological observations were made during the vegetation period of pumpkin variety samples planted in different planting schemes. (2022-2023) Experimental selection of optimal planting scheme for Ispanskaya 73, pumpkin Tyoshchin pie, pumpkin Yaponskaya varieties.

Keywords: pumpkin, planting scheme, paternal flower, maternal flower, fruit, harvest, collection, measurement.

Introduction. Cucurbita family. representatives of these are annual and perennial creeping plants, the leaves are large, the stems are hollow and tubular. flowers are bell-shaped, and the mother and father flowers are yellow. The homeland of pumpkins is South America. Pumpkins grown in Uzbekistan belong to 3 types with morphological and economic-biological characteristics:

Large-fruited pumpkin - Cucurbita maxima Duch. The leaves are creeping. Palagi and fruit band are the largest fruits in the world, weighing 60-80 kg and more. Varieties of this species are used as fodder, food and ornamental plants.[7]

Hard-skinned or common pumpkin - Cucurbita Pepo L. The leaves and fruits are sharp-edged. Varieties of this species are used as food and ornamental plants. Bush varieties of ordinary pumpkin do not grow in the ground. Fruits with oval-spherical shape are called zucchini, and fruits with a somewhat leaf-star shape are called patisson.[8,9]

Nutmeg pumpkin (Cucurbita moschata). The palagi is long and impenetrable, and the fruit band is also pointed. This type of plant is cultivated in the CIS, in the south of Europe, in the Far East, beyond the Caucasus and in the countries of Central Asia.[10,11]

Varieties for planting. More than 140 varieties of pumpkins can be found on farms and private plots of our republic, of which 40-45% are nutmeg pumpkins, 30-35% are large-fruited pumpkins, and 25-30% are hard-skinned pumpkins.[1,2]

In the republic, Butler F1, Bakhodir, Ispanskaya 73, Kashgarskaya 1644, Non kadi, Palov kadu 268, Stofuntovaya, Ferro F1, Shirintoy varieties are included in the state register and zoned. It is divided into rtapishar and kechpishar types.[5,6]

Currently, more than 30 samples of foreign varieties are being studied in the framework of scientific work in 2022-2023 in Khorezm region. Of these, 6 varieties are being distinguished as

promising varieties. These varieties such as Tyoshchin pirogue, Zimnaya sladkaya tykva, Estamp tykva, Japanskaya tykva, Arabatskaya tykva muskatnaya tykva were extracted with a higher result than the other varieties.[7,8]

Research results. In our field experiment, it took 67, 47, and 41 days before the appearance of male flowers, and 74, 55, and 65 days before the appearance of female flowers. days, 84, 72 and 75 days to fruiting, 122, 119 and 114 days to biological ripening of fruits, plants planted in the planting scheme of 180*70 cm earlier compared to the control planting scheme, i.e., father flowers 66, 43 and in 40 days, the appearance of female flowers was 73, 53 and 64 days, 83, 70, 68 days until fruit bearing, 120, 116, 106 days until biological ripening of fruits. In the 180*120 cm planting scheme, on the contrary, a low indicator was observed compared to the control planting scheme

Control of varieties of pumpkin "Ispaniskaya 73, тыква Тёщин пирог, тыква Японская" planted in different planting schemes, in the control 270+90/2*90 cm planting scheme, the length of the main stem was 423, 272.2, 251 cm, compared to 180*90 cm (440, 280, 253 cm) in the planting scheme, the length of the main stem was found to be 17, 8, 2 cm long. On the contrary, it was found that 13, 42.2, 41 cm shorter stems were formed in the 140*120 cm planting scheme, and 25, 26, -3 cm longer stems were formed in the 180*120 cm planting scheme.

Choosing convenient planting schemes for growing pumpkins. (2022-2023 year).

T/p	Planting schemes	Germination		The appearance of the first true leaf		The emergence of paternal flowers		Appearance of maternity flowers		Fruit bearing		Biological ripening of fruits	
		10 %	75 %	10 %	75 %	10 %	75 %	10 %	75 %	10 %	75 %	10 %	75 %
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
Ispaniskaya 73													
1	270+90/2*90 (s/t)	6	7	11	12	63	67	68	74	76	84	112	122
2	180*70sm	6	7	11	12	62	66	69	73	75	83	111	120
3	180*90 sm	6	7	11	12	63	67	69	75	77	85	110	118
4	180*120sm	6	7	11	12	64	68	70	76	78	87	115	124
5	140*80 sm	6	8	11	12	62	67	70	71	74	76	100	126
6	140*100 sm	6	7	11	12	63	67	71	72	75	77	101	128
7	140*120 sm	6	7	11	12	58	66	71	73	75	78	103	130
тыква Тёщин пирог													
1	270+90/2*90 (s/t)	7	8	11	12	45	47	54	55	70	72	116	119
2	180*70sm	7	8	11	12	42	43	52	53	68	70	111	116
3	180*90 sm	7	8	11	12	38	39	49	51	60	61	98	108
4	180*120sm	7	8	11	12	40	42	56	58	71	73	115	124
5	140*80 sm	7	8	11	12	47	49	60	63	72	74	115	121
6	140*100 sm	7	8	10	11	50	52	58	62	73	75	117	124
7	140*120 sm	7	8	10	11	58	60	64	67	75	78	118	126
тыква Японская													
1	270+90/2*90 (s/t)	6	7	10	12	37	41	63	64	65	75	112	114
2	180*70sm	6	7	10	12	38	40	59	62	64	68	99	106
3	180*90 sm	6	7	10	12	35	37	62	65	66	72	100	114
4	180*120sm	6	7	10	12	40	43	62	63	68	87	115	124
5	140*80	6	7	10	12	41	42	64	66	69	74	104	114
6	140*100	6	7	10	11	42	44	65	68	70	75	107	115
7	140*120	6	7	10	11	41	45	64	67	72	78	108	117

The number of side branches in the control 270+90/2*90 cm planting scheme of pumpkin varieties "Ispaniskaya 73, тыква Тёщин пирог, тыква Японская" was 4.9, 3.2, 3.9 respectively, compared to 0.2 in the 180*90 cm planting scheme. It was found that 0.3-0.2 more lateral branches were formed, and on the contrary, 0.6-0.1-0.8 less lateral branches were formed in the planting scheme of 140*120 cm.

The number of leaves per plant in "Ispaniskaya 73, тыква Тёщин пирог, тыква Японская" planted in different planting schemes of pumpkin is more in the 180*120 cm planting scheme than in the control 270+90/2*90 cm planting scheme, on the contrary, it is 140* It was found that there were few leaves in the 120 cm planting scheme

Conclusions. In the "Ispaniskaya 73, тыква Тёщин пирог, тыква Японская" variety of pumpkin planted in different planting schemes, the heaviest fruit weight is 4.6-4.1-2.3 kg in the 180*90 cm planting scheme, and the least number of fruits is 140 *It was determined that in the 120 cm planting scheme (2.4-2.6-1.4 kg). Also, in the control (270+90)/2*90 cm planting scheme - 3.9-3.6-2 kg

In the Khorezm region, when the varieties of pumpkin "Ispaniskaya 73, тыква Тёщин пирог, тыква Японская" were planted in different schemes and the yield of one bush was determined, the highest yield was 9.2-12.3-9.43 kg in the scheme of planting 180*90 cm, on the contrary, 140*120 cm it was found that it gave the least yield in the planting scheme (4.56-5.46-4.76 kg). It was found that control (270+90)/2*90 cm had a yield of 5.07-9.72-7 kg per bush.

When the varieties of pumpkin "Ispaniskaya 73, тыква Тёщин пирог, тыква Японская" are grown in different planting schemes, the total yield per hectare is calculated in 2022-2023, in the control (270+90)/2*90 cm planting scheme, it is 31.3-60-43.2 t/ha compared to it, the planting scheme of 180*90 cm showed a higher total productivity of 25.5-15.9-15 t/ha. On the contrary, it was found that 180*120 cm and 140*120 cm planting schemes have low productivity compared to the control (270+90)/2*90 cm planting scheme.

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