

Pumpkin Storage Methods in the Conditions of Karakalpakstan

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ANNOTACIYA

Etishtirilgan hosilni hudud sharoitida saqlash usullari hamda muddatlari keltirilgan. O'tkazilgan agrotexnik tadbirlarning, qo'llanilgan usullarning, saqlash usullarining tadbir so'ngida iqtisodiy samaradorligi bo'yicha ma'lumotlar keltirilgan. Ilmiy tadqiqotlardan olingan ma'lumotlar asosida xulosa hamda ishlab chiqarishga tavsiyalar berildi.

KALIT SO'ZLAR: *Oshqovoq poliz ekini, botanikasi, navi, kimyoviy tarkibi, ahamiyati, urug'chiligi, agrotexnikasi, ekish sxemasi, maxsuldorligi.*

Currently, in our republic, it is planned to use new technologies in the cultivation of pumpkin crops, to expand the cultivated areas and to obtain a high yield. In Uzbekistan, poliz products are mainly consumed in summer and autumn. In winter and early spring, there is a shortage of polize products. Therefore, planting late-ripening, transportable and well-storable varieties of rice crops and proper organization of their storage ensures the consumption of rice products throughout the year. Vegetables and legumes are an incomparable product that provides the human body with biologically active substances. Fruits and vegetables and pulse crops not only provide a person with various organic substances, but are also one of the main factors in his longevity. Stored varieties of pumpkin are firmer and tend to be smaller and heavier. In the initial period of storage, it contains a lot of starch, after 2-3 months, the starch turns into soluble sugars, and as a result, the taste and nutritional value increase. Ripe pumpkins are hard, have a characteristic color, and the fruit band dries up and shrivels. Those that are well ripe, undamaged, and not affected by diseases and pests are sorted for storage. The pumpkin is temporarily placed under the veranda with straw or other bedding, placed in two or three layers, and straw and hay are left on top. Long-term stored pumpkin is left in the sun for 5-7 days. Due to the high water content of pumpkin, a lot of water loss during its storage leads to a decrease in its quality. When storing pumpkin, it is necessary to cover it with straw or straw after picking each row to prevent its damage. Pumpkin is stored on racks, with a mat under it, and the fruit band of flat varieties is poured with the top facing up. Air temperature in storage warehouses should be 1-14°C and relative humidity should be close to 70%. It is not recommended to use cold and hot rooms to store pumpkin. In the conditions of the Republic of Karakalpakstan, measures for harvesting agricultural crops are organized depending on the type of crop. The fruits of the pumpkin variety grown in the regions are harvested after ripening and from that time they are used for food. The rest is sent for long-term storage or product processing. In our case, pumpkin products can be harvested from the fields in September-October and before frost. Pumpkin fruit can be harvested from tubes, and its full ripening can take 60-80 days. During the ripening of the fruit of the plant, there were changes in its vegetative organs and the fruit. In our study, pumpkin varieties Kashkar-1644 and Ispan-73 were harvested from the second ten days of September, depending on the time of sowing. Ripe fruits were selected during harvesting.

Harvesting of the product from the planting area, where the pumpkin plant is mainly grown, was used by hand or machinery. It was carried out using 2PTS-4793 and large-capacity transporter TShP-25 aggregates. The following measures were implemented in the organization of harvesting and transportation of other agricultural crops. The products collected from the fields are transported by

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various means of transport for storage or to appropriate places. It is necessary to prevent damage to the fruits when unloading the products by touching tractor trailers or car boards. Loading of fruits on transport and the number of their layers depended on the length and breadth of the places to which they were transported. When transporting pumpkin products, dry straw or wood shavings are placed under the trolleys or covered wagons, and pumpkin fruits are placed on top. It is possible to place it in an open wagon with a height of up to 1.5 meters. Pumpkin products are transported in special containers (TKB-90U, its load capacity is 560 kg, length 127 cm, width 90 cm). At the same time, a special SK-3 container can accommodate up to 1700-2000 kg of product. At the same time, a special SK-3 container can accommodate up to 1700-2000 kg of product.

Before storing and processing pumpkin products, it is necessary to study the mechanical composition of fruits. In order to study the mechanical composition of the fruit, the weight of the fruit in its pure form, the weight of the pulp, the flesh and the placenta are measured without moisture.

In Kashkar-1644 variety, the average fruit weight is around 4.0 kg, the weight of the pulp is 1.2 kg, 30.0%, the weight of the flesh is 2.6 kg, 65.8%, the weight of the seed placenta is 0.2 kg, the total 5.0% of the fruit content. Such indicators show that the average weight of the fruit in the Spanish -73 variety is 4.1 kg, the weight of the pulp is 1.2 kg, 29.2%, the weight of the flesh is 2.7 kg, 60.6%, it was found that the seed placenta was 0.2 kg, 4.8% (Table 1).

Table 1 Mechanical composition of the fruit of pumpkin varieties (Nukus district, farm, 2021)

Varieties	Average fruit weight, kg	The weight of the bark		Core weight		Weight of seed with placenta	
		kg	%	kg	%	kg	%
Kashkar 1644	4,0	1,245	30	2,635	65,8	0,224	5,0
Spanish - 73	4,1	1,278	29,2	2,720	60,6	0,204	4,8

In our 2022 research on the mechanical composition of pumpkin fruit, the following information was obtained. The obtained results are presented in Table 2. In this experiment, the average fruit weight of the Kashkar-1644 variety was measured at 4.2 kg, the weight of the pulp was 1.2 kg, 29.5%, the weight of the pulp was 2.6 kg, 65.8%. and the weight of the seed placenta was 0.2 kg, 5.5 percent of the total fruit content.

Table 2 Mechanical composition of the fruit of pumpkin varieties (Nukus ditrict, farm, 2022)

Varieties	Average fruit weight	Weight of bark		Core weight		Weight of seed with placenta	
		kg	%	kg	%	kg	%
Kashkar 1644	4,2	1,245	29,5	2,730	65,0	0,235	5,5
Spanish- 73	4,3	1,278	29,5	2,810	65,3	0,225	5,2

In our research in this direction, the average weight of the fruit in the Ispan-73 variety of pumpkin was 4.3 kg, the weight of the pulp was 1,278 kg, 29.5%, the weight of the flesh of the fruit was measured around 2,810 kg, 65, It was found that 3%, fruit seed placenta was 0.225 kg, 5.2%.

Summary. So, as seen in our research, it shows that the average weight of the fruit of the Spanish-73 variety has a certain degree of variation over the years of research.

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