

Technology Of Drying Apricots and Preparing Pastila From Them

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Abstract: Numerous scientific research projects focused on the processing of apricots are being conducted in the Republic of Uzbekistan. Scientific research on apricot fruit processing in the Republic of Karakalpakstan has not been fully studied in a scientifically sound state. Considering that in our region, apricot trees are mainly grown in household plots, it is required to meet the population's year-round demand for this product by producing processed apricot dried apricots, varenets, and other products.

Keywords: Fruit and vegetable, producing pastila, apricots, preparation for drying, sorting, calibration, washing.

Fruit placement methods. Fruit selection and placement are carried out in special buildings. Such buildings are built in bright, clean places.

Usually, apricots should be sorted for 24 hours. After sorting, the fruits are placed in boxes for shipment. Fruit boxes are selected based on the biological properties and storability of the fruits, as well as their grade, commercial grade, degree of ripeness, intended use, and the distance to the cultivated area. Therefore, boxes of various sizes are used when placing fruits.

Apricots are placed in boxes in rows and by pouring. Often, apricots are placed by scattering. Fruits intended for short-distance delivery and quick consumption are also stored in bulk. Fruits are arranged in rows in boxes using chess and diagonal methods.

In our practice, dried apricots consist of gathering, sorting, calibrating, washing, dipping in boiling water, smoking, drying, and placing and storing the variety in containers of uniform size.

Apricots are picked when they have acquired the color and shape characteristic of their variety, and the flesh is sufficiently dense. From the above-mentioned varieties, 23-26% of dry matter should be produced during cultivation. The apricots are chosen and cooked 2-3 times a season. Usually, the apricots remaining 2-3 days before ripening can be harvested for dried apricots, but in such cases, they should be stored for some time before processing. This method sometimes works. As a result, product loss during transportation and storage is somewhat reduced.

In our experiments, apricot varieties Kursodik and Arzami were harvested in three different periods to prepare a dried apricot product (Table 1). In this case, sulfur is not used for the preparation of dried apricots; drying procedures were carried out under normal conditions. As can be seen from our observations, in the third ten days of May, 10 kg of freshly harvested Kursodik variety was placed for drying, over 18 days the product was ready, the product yield was 25%, the product moisture content was 18%. From 10 kg of product collected in the second ten days of June, the product was ready in 17 days, with a yield of 27% and a moisture content of 17.5%, and in the third ten days of June, the product was ready in 17 days, with a yield of 27%, and a moisture content of 16%. As can be seen from this, in our experiments, it was established that the average product maturity is 17.3 days, product yield is 26.3%, and product moisture content is 16%.

Table 1

Effect of apricot fruit harvesting periods on dried apricot yield (treatment with sulfur was not provided). 2024-2025 pp.

Apricot variety	Dial deadline	Dried apricots, kg	Dried period, days	Output, %	Product moisture content, %

Kursodik	May III ten-day	10	18	25,0	18,0
	June I ten-day	10	17	27,0	17,5
	Second ten-day June	10	17	27,0	16,0
moderate		10	17,3	26,3	17,1
Arzami	May III ten-day	10	17	24,5	18,0
	June I ten-day	10	17	26,0	17,0
	Second ten-day June	10	17	27,0	16,0
	moderate	10	17,0	25,8	17,0

Based on the three different harvesting dates of the Arzami apricot variety, the days of product readiness, yield, and product moisture content were determined. In our experiment, from the fruits harvested in the third ten days of May, a finished product was obtained in 17 days, the yield was 24.5%, the moisture content was 18%, in the first ten days of June the product was ready in 17 days, the yield was 26%, the moisture content was 17%, in the second ten days of June the product was ready in 17 days, the yield was 27%, the moisture content was 16%. When studying the average amount of these days, the product is ready in 17 days, the product yield is 25.8%, and the product moisture content is 17.0%.

The process of making apricot puree for pastila. The technology for producing pastila puree is shown, which can serve as the basis for the production of functional pastila. Raw materials are delivered by road in boxes, containers, and other types of transport containers that ensure their quality and safety in accordance with GOST requirements.

All incoming raw materials are accepted in batches. At the time of acceptance, the raw material must meet current standards, technical specifications, medical and biological requirements, have hygienic certificates or quality certificates, and be provided with shipping documents.

Fruit and vegetable raw materials are stored in clean, dry, uncontaminated with agricultural pests, without foreign odors, and in well-ventilated rooms.

During the sorting stage, low-quality fruit and vegetable raw materials and foreign impurities (branches, leaves, stones, etc.) are separated using a sorting conveyor.

In a universal calibrating machine, the raw material is separated into 3 fractions (small, medium, large) for uniform cooking.

Washing is necessary for cleaning impurities from the surface of raw materials.

To prepare puree from the tested raw material, it is necessary to clarify the steam-thermal treatment, cooking, grinding, and cleaning regimes, as well as the amount of puree yield.

Puree for the production of pastila GOST 32742-2014 "Semi-finished products. Aseptically preserved fruit and vegetable purees. Technical specifications."

Mass fraction of soluble dry matter and titratable acids in fruit and vegetable puree

Name of puree Mass percentage, %, not less than:

soluble	dry matter	titratable acids
apple	10,0	0,5
plum	12,0	0,3
eyelids	5,0	-

eyelids	9,0	-
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The main components of soluble dry substances that form fruit juice are sugars, acids, pectins, tannins and dyes, and vitamins. The indicator of soluble dry matter depends on climatic and weather conditions, and temperature and humidity conditions have a great influence, especially during the ripening period of fruits and vegetables. Therefore, it is important to determine this indicator for the preparation of puree.

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