

Drying and storing apricots in home conditions and measures to combat pest infection

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Abstract: *In the article, the results and follow-up of the preparation and storage of dried apricots in plastic dishes are presented. The expediency of preparation for storage of dried apricot in plastic dishes by keeping them for 9 days in places where direct sunlight falls has been substantiated. After such preparation and storage, dried apricots are stored for more than 3 years without being damaged by pests. When apricot dried apricots are placed in plastic containers and stored in direct sunlight for 9 days, the plastic does not kill the worms due to the increased pressure inside the plastic container and high temperatures, killing insect eggs, fungi and bacteria.*

Key words: *apricot, plastic utensils, degradation, storage, larvae.*

Introduction

Fruits are essential food for their nutritional value, sweet taste and medicinal properties. They are an additional source and saturation of the human body with carbohydrates, vitamins and minerals. The nutritional value of the most consumed fruits is 300-500 c / calla. They contain a large amount of biological active substances, drugs, pectins, enzymes, organic acids, essential oils, flavors, so they have a healthy and high taste.

To fully meet the needs of the population in these products throughout the year, it is important to develop modern methods of storage and processing.

According to the Resolutions № 3978 of the President of the Republic of Uzbekistan dated October 17, 2018 "On additional measures to increase efficiency of fruit and vegetable export" and № 4236 dated March 20, 2019 marked the turning point in fruit growing of the Republic, as well as in the field of storage and processing of fruit products.

It is known that apricots are a valuable stone culture. Apricots occupy a special place among fruit crops due to their tenderness and wide range of processing possibilities. Many of its varieties are used to prepare juices, jams, compotes, as well as dry products.

Main part

Apricots, grown in the Republic of Uzbekistan, are notable for their sweetness, nutritional value and rich medicinal properties. Apricot in medicine is the treatment of cardiovascular diseases, consumed apricots act as pistachio coal in the body, absorbing various harmful liquids, turning them into gas and displacing them from the body. People exposed to radiation are also encouraged to consume apricot acid [4].

A tourist from a European country, who came to the Fergana Valley, saw ripe apricots in the valley and said: "These apricots are more valuable than all the gold in Central Asia. [5]

Fresh apricots contain 8.4-19.0% sugar, 0.3-1.7% apple and very small amounts of tartaric acid, 0.1-1.6% pectin, and medicines A and C. Oats contain 80% or more sugar [7].



1 picture. Process of drying apricots.

Most of the apricot bones grown in Uzbekistan are sweet and are eaten like almonds. Contains 45-85% fat and 28-30% protein. These data show that apricot fruit has a rich biochemical content, and therefore it is important for maintaining human health [6].

According to literature data, apricot kernels contain 30-50% fat, which contains oleic and lenolic acids. Fruit pulp contains up to 27% of sugar, C, nutrients and starch. Since apricots contain provitamin A, nicotinic acid, vitamins C and B5, as well as 305 mg /% potassium salts (1717 mg /% in dried fruits), it is a cure for cardiovascular diseases. Also apricots are consumed as a source of vitamins A, PP and B5 [5].

Popular varieties of apricots are: *Jubilee Navoi, Corsadic, Subkhoni, Hurmay, Iskandarium, Mohtobi, Bodomi and others*. Apricots with 22-26% dry matter are selected for drying.

Depending on the drying method, apricots are obtained from apricots. Before drying, pest infested, crushed and raw apricots are separated and cleaned from impurities [5,7]. In some regions, it is smokable with sulfur. Such products are not considered ecologically clean [7].

In our country, apricots have long been used at home in the form of kuraga. But after 2 months, worms from apricot moth fall on currag, making the product completely useless. That is the reason why scientifically and practically the actual processing is the way of preparing curragas without these shortcomings.



2

picture. Storage of curagues at the homemade conditions.

In 2016-2018, experiments were conducted to store apricots at the domestic conditions. In the experiments were studied, made of fruits of apricot varieties Subkhaniya and Jubilee Navoi.

Subkhaniya is a local variety and has been included in the state register of Andijan, Namangan, Ferghana and Tashkent regions since 1959. Trees are high and branches are wide. Type of tree pyramidal, gives a harvest in 8 years. Subhany variety is early-ripening, fruits are wide, oval light orange, loose light pink, the fruit ripens in the first decade of June.

Large fruit, average weight is about 32 g. Flesh of orange color is juicy on the average, sweet to taste, ripe fruit has 4.5 points [4].

Jubilee of Navoia is a new universal variety. Seedlings begin to bear fruit in 4 years. Fruits ripen in early July, round, large, greenish-yellow part turns red. It is mainly used in freshness. It is dried and canned [5].

In the experiments 5-10-liter plastic vials filled with water were used and tightly closed. 4 different storage options were tested.

In the 1st variant, cornucopia were filled and placed in the basement for storage on the same day. In the 2nd variant, filled plastic jars were placed in storage after they were under sunlight for 3 days. In variant 3, filled plastic jars with currays were placed in a cellar after they were stored in a sunny place for 5 days. In option 4, filled jars with currays were stored in a sunny place for 9 days. During this period plastic jars are opened every 3 days, after 21:00 pm (to prevent insects) for 1 hour. After that they are also placed in the basement for storage.

In the bank which have kept on 1 variant in July 2016, have opened on January 5, 2017 and have examined, curages placed in a container in a cellar, worms each of 3 in 1 have been found. On the 2nd variant at the opening it was observed that of each 6 in 1, and in the 3rd variant worms

were found 1 of 15-20. The variant was not recharged at all (Table 1).

The same situation was observed when stored in plastic banks was checked in January 2018. However, in variants 1, 2 and 3 the number of worms increased by 3-7 times, the color, smell and taste changed. In a variant in which the plastic container and apricot were stored in the sun for 9 days, curages were pasteurized due to increased temperature and internal pressure, and no worm infection was observed (Table 1). This is due to the fact that the pressure inside the container and the formation of high temperatures lead to the death of insect eggs, fungi and bacteria. During the year when stored in plastic containers, their weight, humidity, color, smell did not change. Apricots stored in this way are ecologically pure and clean products.

When the apricots were prepared for storage in plastic containers with this way throughout the year, their weight, humidity, color, smell remained practically the same. We recommend storing kurago in plastic containers. If curagah is stored in plastic containers, thousands of tons will be economical. The population uses ecologically clean.

Table 1
Infection of dried apricot worms stored in plastic containers for a specified period of time

Options	The day when plastic is stored in a container on a sunny day	Number of worms for every 10 pieces after 5 months of storage	Number of worms in 10 years in 1-2 years
1	1	3-4	8-9
2	3	2	6-7
3	5	1	6-7
4	9	0	0

Proper preservation of apricots after drying will be of great benefit to farmers and households, as well as the population. For example, 1 kg of dried apricots can be obtained from 3 kg of apricots. It

can be stored for 2-3 months and sold for an average of 14,000 soums.

When apricots are ripe, 1 kg of apricots costs about 1000 soums and 100 kg of apricots costs 100 000 soums. 30-33 kg of apricot acid is obtained from 100 kg of apricots. 1 kg of apricots costs on average 14 000 soums. 30 kg of apricots is from 14 thousand soums to 420 thousand

soums. Net profit will be about 310 thousand soums.

(Table 2)

Economic efficiency of storage of apricot varieties of Subhoni and Jubilee of Navai in plastic containers

No	Production indicators	Price
1	1 kg apricot purchase price	1000 soum
2	2 pieces 10l plastic containers	20*2000=40000 soum
3	2 pieces 5 l plastic containers	20*1000=20000 soum
4	Cost of the material used for drying apricots	2000*10=20000 soum
5	Price 1000 kg of apricots, received for drying and storage	1000*1000=1000000 soum
6	Trading price of dried kurgan	300*14000=4200000 soum
7	Trading price 1 kg currage	14000 soum
8	Total costs	1080000 soum
9	Net profit	3120000 soum
10	Cost efficiency of apricot drying and storage	28,5 %

Based on the above, we consider it appropriate to prepare apricots in plastic containers, store them in a sunny place for 9 days and keep them in a cool place.

Conclusion

When apricot corn is kept in plastic containers and stored in direct sunlight for 9 days, the plastic does not cause the death of worms due to high pressure inside the plastic container and the formation of high temperatures, killing insect eggs, fungi and bacteria. Salt cucumbers, prepared for storage in this way, can be stored for more than 1-3 years. Therefore, it is recommended to prepare apricot corn in plastic containers for storage, as mentioned above, and store at moderate temperatures.

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