AJLLSE GLOBAL RESEARCH NETWORK

AMERICAN Journal of Language, Literacy and Learning in STEM Education
Volume 02, Issue 03, 2024 ISSN (E): 2993-2769

Storing Dried Cherrie

Ermakova Jamilaxon Muxammadovna
Teacher of Andijan Institute of Agriculture and Agrotechnologies

Inobiddinov Shukrullo Ismoiljon o‘g‘li
Student of Andijan Institute of Agriculture and Agrotechnologies

Abstract: The article provides information from the literature on picking, transporting, sorting, inspecting, washing, immersing in an alkaline solution (blanching), balancing moisture, drying, and storing dry products. Including, during drying, stoves and furnaces must be built in such a way that they fully meet fire safety requirements. It was also mentioned that those working with caustic soda should be provided with special gowns, shoes, respirators, protective glasses and gloves.

Keywords: cherry, cherry varieties, drying area, harvesting, sorting, drying, dry product, sanitary requirements.

Cherry varieties "Shpanka chernaya", "Chest gubina", "Samarkand", "Podbelskaya", "Lotovaya", "Imperiya" are dried.

Cherries to be dried must be well ripe. For this reason, cherries are cut off when they are fully ripe, when their sugar content, acidity and other substances reach the appropriate level. Varieties with dark color, dense flesh, sour-sweet, dry matter content of 19-23% are suitable for drying.

Timely and correct methods of harvesting, transportation and preparation for drying means obtaining a quality dry product. The crop is harvested only on dry and open days. If cherry fruits are tried during picking, their peel will be damaged and spots will appear on it. In damaged fruits, microbiological processes begin, juice flows, and dry matter decreases significantly. Therefore, it is not recommended to crush the fruits. It should be picked only by hand. Hand-picked fruits are carefully placed in special baskets or boxes.

First, the fruits from the lower and then the upper branches of the tree are cut. Various ladders are used to harvest high branches. Cherry fruits are placed in baskets or boxes. Then they are carefully transported and brought to the drying area. For drying, obdon is cut off with a ripe, unripe, worm-free fruit band and packed into boxes that can hold 16 kilograms of product. They are transported in a car or spring cart.

Cherries stay on the drying floor for up to 12 hours. Therefore, it is necessary to pay close attention to timely delivery of cherry fruits to the drying point.

When sorting, raw, rotten and damaged ones are removed. Bandi is cut by machine or by hand. Then the fruit is washed in a car or in a bath with running water. Then it is immersed in a boiling solution of 0.5% of caustic soda for 3-5 seconds, rinsed in cold water, placed in a row on trays and placed on the drying floor. After standing in the sun for a couple of days, it is placed on stacks in the shade. Drying takes 5-8 days. Another 8-10 days of storage is required to equalize the moisture. 1 ton of dry product is obtained from 3-4 tons of fruit. Its humidity should not exceed 19%.

Along with the sorting of raw materials, at the same time, those that do not meet the condition (rotten, crushed, damaged by diseases or insects) are separated.

The raw materials sorted by size, color, maturity level are then divided into varieties. All kinds of dirt, sand, microorganisms, as well as the remains of toxic substances stuck to cherry fruits are washed away. Production technology consists of harvesting, transportation, storage, sorting, inspection, washing, soaking in alkali solution - blanching, drying, moisture balancing, packing and storage.

In the drying area, sheds will be built for receiving, temporary storage, sorting, placing on pallets. Also, there should be tables, scales, barrels and pots in the shed. In addition, there will be warehouses for temporary storage of finished dry products in the drying area. The fruits brought to the drying area are washed, cleaned, divided into halves, and blanched.

Classification of cherry fruits according to their ripeness, color, shape, and size is called classification. It helps to prevent crushing of the raw materials processed (blanched) in the alkaline solution, to select the correct concentration of the solution and to separate the fruits from the skin with it.

Stoves are built for immersing fruits in a boiling alkaline solution, and 2 cast iron pots are installed in each of them. These pots are used alternately.

The safety rules are as follows: a certain amount of clean water is poured into the pot and boiled so that the baskets containing the fruit are not spilled during boiling. Blanching and sulfiting requires strict adherence to sanitary requirements and safety rules. Accidents must be prevented at fruit drying stations.

Stoves and ovens must be built in a manner that fully meets fire safety requirements. Workers working with caustic soda should be provided with special gowns and shoes, respirators, protective glasses and gloves. Eating and smoking are prohibited at the workplace. Before eating, you should take off your work clothes, wash your hands and face thoroughly, and rinse your mouth.

The quality of the dry product largely depends on the raw materials. It is appropriate to dry only fruits that meet standard requirements. The fruits must not be ripe, not rotten, and contain all necessary substances, especially acidity and sugar content.

Dried cherries are placed in special boxes or kraft bags for storage. The mouth is tightly closed and placed on clean dry shelves. The first shelf will be 10 cm above the ground. A 0.5-meter path is left between the walls and shelves, and one central 1.5-1.8-meter side path is left between the rows.

Shelves should be no higher than 2.5 meters so that the delivered product is easy to place and retrieve. The product is divided into lots and varieties on the shelves. Each product batch must have a label. It should contain the name of the product, type of product, weight, dates of manufacture and acceptance. On average, 600 kg of cherry pulp can be placed in $1m^3$.

The dry product received for storage must be thoroughly checked. Dried products infested with diseases, pests or their eggs are not accepted for storage.

Storage rooms should have electric lights, fire extinguishers. Shelves and rooms where the product is kept should be clean, frequently aired and dusted, but it is forbidden to clean the floor and walls with wet rags.

During the storage period of dried cherries, it is necessary to monitor the temperature and relative humidity of the air in the rooms. For this, thermometers and psychrometers should be placed in the room at a height of 1.3-1.5 meters. To store dried cherries, the temperature should be +10-12o C and the relative humidity should be 65-70%.

If the fruits are overdried, the quality of the product will decrease.Inadequately dried fruits are not suitable for storage and spoil quickly. Therefore, it is necessary to take the finished product

from the drying area on time. The readiness of the cherry tree is determined by catching it in the morning.

A fruit that is not well dried cannot be stored for a long time, because it quickly becomes moldy and rots, which causes its consumption value to decrease. The color of overdried fruits fades, the taste deteriorates, and vitamins are reduced. The dried product is put in the warehouse for 10-12 days so that the moisture content is the same. After this period, dry fruits are sorted according to their quality, cleaned of various impurities and placed in containers to protect them from pests.

References:

1. Shoumarov X.B., Islamov S.Ya. Qishloq xo‘jaligi mahsulotlarini saqlash va birlamchi qayta ishlash texnologiyasi. – Toshkent, 2011.
2. R.Oripov, I.Sulaymonov, E.Umurzaqov “Qishloq xo‘jalik mahsulotlarini saqlash va qayta ishlash texnologiyasi”. Toshkent, “Mehnat”, 1991.
3. M.M.Mirzaev, V.V.Kuznesov “Pomologiya Uzbekistana”. Uzbekistan, 1983.
4. X.Bo‘riev, R.Rizaev. “Meva-uzum mahsulotlari biokimyosi va texnologiyasi”. Toshkent, 1966.
5. X. Bo‘riev, R. Jo‘raev, O. Alimov “Meva sabzavotlarni saqlash va ularga dastlabki ishlov berish”. Toshkent, 2002.
6. R.J.Jo‘raev, M.M.Adilov “Qishloq xo‘jalik mahsulotlarini saqlash va qayta ishlash texnologisi”. Toshkent, 1999.
7. Ostonaqulov T.E., Narzieva X. va B.G‘ulomov “Mevachilik asoslari” Toshkent, 2011.
8. J.M. Ermakova, F.T. Turdieva "Drying and storage of cherries". International scientific and technical conference on the topic "Effective use of resource-saving innovative technologies in the prospective development of the agricultural sector". Andijan, 2019.