

Melon Fruit Drying Technology by Helio-Drying Method

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Annotation: This article provides information about natural (cloudless, cloudless drying for several days using sunlight), that is, drying of melon fruits by the helio-drying method, organic and inorganic substances and vitamins necessary for human health in the melon fruit. Information on the drying technology of the method of helio-drying is given in detail.

Keywords: Melon, drying, storage, peel, helio-drying method, chemical composition, natural drying.

The field of agriculture that studies the cultivation of melons, watermelons and pumpkins is called horticulture. In addition to studying the morphological and biological characteristics of melons, watermelons and pumpkins as a science, policing also develops ways of producing high yields from them.

One of the main tasks of polizei is to satisfy the population's demand for polize fruits throughout the year, using high technologies, mechanization, and reducing costs.

For centuries, our country has been considered a region with a wide development of policing, and in recent years, scientific research has been conducted on the introduction of new technologies in this field. The purpose of this is to introduce new technology and mechanization, without expanding the existing cultivated areas, to produce high quality products.

Experts in the field are faced with the important issue of increasing the potential yield of poliza crops in Uzbekistan, providing the population with poliza fruits for as long as possible, and for this, creating early-early and long-storable varieties.

In recent years, a number of new varieties have been created, their agrotechnics have been developed, and as a result of the practical application of the achievements in the field of science, productivity has increased somewhat. Gone their restoration and implementation is one of the urgent tasks before the experts of today's science.

Citrus fruits are one of the favorite foods of the population in many countries. The reason for consumption of citrus fruits is that these fruits are dietary products and can be used for food both fresh and processed. In addition, the fruits of the mulberry have healing properties and have been used in medicine since ancient times.

The staff of the Institute of Medicine of the Academy of Sciences of the Republic of Uzbekistan recommends that the population of our country consume 98 kg of fruits per year, including 54.5 kg of melon, 36.5 kg of watermelon and 7 kg of pumpkin products.

Melon and watermelon are eaten fresh and processed. Melon honey (bakmes), watermelon honey (nardek), molasses, watermelon sukat is prepared from them, and they are eaten pickled (watermelon) and pickled (melon). [4,]

Melon fruit contains 11-20% dry matter, including 5-18% sugar, 0.6% protein, 0.8% fiber, 0.2% fat, 0.6% ash. Melon fruit is rich in vitamin C (30-40 mg), carotene (1.5-2 mg %), PP (1-2 mg %), potassium, calcium, phosphorus, sulfur, iron, cobalt salts. Folic acid in melon is necessary for the development of blood in the body. Melon fruit is used in the treatment of bronchitis, tuberculosis, rheumatism, heart and kidney diseases.

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Melons can be dried in the open air or in drying equipment. The quality of dried melon fruit depends on the drying process and the quality of the fruit [1, 2].

Drying is carried out in two ways (natural and artificial). We use the first method of drying, i.e., natural drying (dehydration in the open air) to prepare melon rind. This process takes a long time. In the industry, artificial drying method is used for drying (dehydration) of melon, this process is carried out in special drying devices [3].

We know that on hot summer days, melons, along with other citrus products, ripen in our orchards. Some of the melons are sent for export and some for sale to the population. Melons are sorted and cut from the field. In order not to waste melons that have been sorted, i.e. crushed, slightly rotten and cracked melons, drying them in sunlight (helio-drying) is the most effective method. The helio-drying method does not use any drying equipment, and the cost of drying melons is also low.

Depending on the weather conditions and the thickness of the melon slices, drying of the melon takes 6-12 days. Method of preparation: cut the melon in half and remove the seeds. Pallas are cut into 3-4 parts, separated from the skin with a knife and hung in a pair without cutting the middle to the end. 4.5-5.5% of medium-sweet varieties, 7.5-10.1% (average 7%) of very sweet varieties. However, depending on the density of the meat, it is recommended to choose a different method of trimming and drying it. [5], [6]

Different varieties of melons are then trimmed in a simple way, spread out on the stalks, first dried for 2-3 days, and then hung on wires for good drying. Depending on the weather conditions and the thickness of the cut melon slices, the drying period lasts 6-12 days. Whole, healthy melons are separated and washed or wiped with a wet cloth. After that, it is divided into two equal pieces, sliced 3-4 cm thick, and the skin is cleaned and hung to dry in a pair. Since the flesh of the melon varieties ("Kokcha", "Ichkizil") breaks during slicing, they must first be dried and softened by spreading them on straws. The output of dried finished product is different in different varieties, the amount of sugar in the melon, the seed It is determined by the thickness of the melon skin and the yield of the flesh. The readiness of the dried product is determined by the state of the cut melon pieces, the melon rind is flexible, when squeezed in the palm, juice does not flow from it, and the moisture content must not exceed 20 percent. [5]

Summary

Processing and drying of fruit and vegetables and fruit products is of particular importance in the development and improvement of agriculture and agrarian sector, ensuring the safety of food products for the population and growing and delivering high-quality marketable and exportable agricultural products. Especially when we dry the melon fruit in a natural way, that is, by drying it using the sun's rays (helio-drying), all its useful and healing properties are preserved. In addition, it allows to eat melon fruit throughout the year in seasons other than summer.

List of used fabiots.

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