

THE METHODS OF HARVESTING AND STORAGE OF MELONS PRODUCTS

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ABSTRACT

The article describes the methods of harvesting and storage of ripe melons by varieties. The good preservation of melons depends on the chemical composition of the flesh and other factors. Fruit flesh is high in pectin, and if the flesh is dense, such fruits can be stored for a long time.

KEYWORDS: *Melon Crops, Main Varieties, Soil Climatic Conditions, Biological Properties, Storage Methods, Humidity, Ripening Time, Vitamins, Storage.*

INTRODUCTION

The maturity of melons, watermelons and melons in Uzbekistan, depending on their varieties, lasts from mid-July to autumn until the first frost. Ordinary watermelons and melons ripen in September and October. So they can be stored for a long time [1,2,3]. A high level is required to determine the ripeness of melons. It is especially difficult to choose a ripe watermelon. When the watermelon ripens in the pan, the fruit band and the curl near the fruit dry out, the surface of the fruit shines. When the fruit is tapped with a finger, it suffocates, and when it is crushed between the palms, the flesh of the fruit is squeezed and squeaks. However, these symptoms are not limited to the ripening of the fruit, but in other cases, the above symptoms are repeated [4,5,6,7]. For example, a curly plant that is close to the fruit on the stalk may dry out under unfavourable conditions for growth. The thick-skinned, unripe autumn watermelon is also suitable for finger-clicking. Squeezing the watermelon between the palms reduces its ability to be stored in the winter [8,9,10].

MATERIALS AND METHODS

Fruits of winter melons, watermelons and melons are harvested and stored during the period of technical ripeness, ie during the period when they are available for consumption, and melons and watermelons are harvested and stored during the period of biological ripening.

On the surface of ripe melons are smooth and intermittent lines and spots of different order and type, which are clearly distinguished from the colour of the skin. In some varieties, the surface of

the fruit is covered with a fine dark grey mesh. When the melons are ripe, they smell fragrant. When ripe melons and flesh are ripe, the fruit bands separate from the fruit on their own or break very easily [11, 12, 13]. The ripening of melons varies depending on the variety. For example, large fruit melons (*C. maxima*) ripen when ripe, while hard-skinned melons (*C. repo*) ripen brownish-yellow. And when the fruits of the Muscat melon (*C. moshata*) ripen, the fruit peel softens a little.

Depending on the purpose of cultivation, melons are harvested at different rates of ripening. For example, if a melon is planted to be transported over long distances, the fruit will be cut off 10-15 days before it is fully ripe. When planted locally for consumption, the fruits are cut off when fully ripe [14,15].

The fruits of winter melons, watermelons and melons are harvested during the period of technical ripeness, ie during the period when they are available for consumption, and the fruits of melons and watermelons are harvested during the period of biological ripening [16,17].

Melons are harvested several times (4-6 times) as the fruits ripen. As the days get colder, the fruits are all harvested at once. Timely harvesting of the first ripe fruits allows the remaining fruits of the plant to ripen faster, which slightly increases the yield.

In irrigated lands, melons, watermelons and melons are watered for the last time 10-15 days before harvest. This makes the fruit sweeter and better stored in the winter, reducing waste when transporting long distances [18,19,20].

Special conditions are required to transport the fruits of harvested melons to short and long distances. Early maturing and short-lived varieties are shipped for short distances. Varieties sent over long distances should have good storage properties and be resistant to mechanical shocks.

Experiments have shown that melons that are sent over long distances should be cut with a piece of fruit if possible. Cut fruits are left in the field for 2-4 days to dry out in bulk and then transported. This prevents the fruit from cracking. Ripe fruits are not sent long distances. In order to send melons over long distances, they must be cut before they are fully ripe, as melons have the ability to ripen even after they have been cut.

When the fruit is transported over long distances, it cracks under the influence of mechanical impulses (during loading and unloading), and the volume is slightly reduced. To prevent this, melons should be shipped in containers. The temperature between the fruits in the container should be 6-10 degrees. According to the results, watermelon varieties Hayit Kara, Kozivoy 30, Melitopolskiy 122, Bokovski 22, Astrakhan, and Central Asian melons Umirboki, Karapochok, Beshek, Koybosh, Argani and Qalaysan have long distances. was found to be fit to go [11-17].

Good preservation of melons depends on the chemical composition of the flesh and other factors. Fruit floods are plenty of pectins, and the flesh is stored long for a long time.

Watermelon fruits are 3-5 months, melon fruits 5-6 months and the fruits of melon fruits are not broken up to a year. Since early ripening varieties do not have long-term storage properties, medium and late-ripening varieties are selected for storage. Melons are long-lasting fruits that do not spoil the taste. During storage, biochemical changes take place in the fruit, which improves the taste of the fruit, especially in the melon, increases the sugar content and softens the flesh.

Long-term storage of melons in special vegetable warehouses, covered rooms of various structures (basement, attic, special rooms) is called long-term storage. In such places, fruits are stored in three to four-story seats, where the fruits are straw or sawn, sand or straw. The seats are 40-50 cm apart and 1 m high. The fruit is placed in rows on such benches.

Before the storage of fruits, the warehouses are sprayed with sulfur at the rate of 100 g per 1 m² of land, in addition, the ceiling and walls of the warehouse, the top and bottom of the benches are disinfected with a 40% solution of formalin. In this case, stored fruits do not get sick. The fruits in the warehouses are inspected twice a month during storage, the spoiled fruits are removed, and the rest are dumped on the spot.

In the warehouses, air temperature should be 1-3 degrees, relative humidity is 80-85%. From ancient times the best way to store melons was to hang them separately. Currently, this method is used only on private farms. Large quantities of melons should be stored in thick-walled, windbreaks, where the temperature should be 10-15 degrees in autumn and 4-7 degrees in winter. In recent years, special refrigerated rooms are being built for winter storage of melons. The melons are placed in the net bags or lazards. The temperature is 0-2 degrees, while air humidity is 80-85%, melons are well preserved in such places. If the above is not available for messels or warehouses, melons should be stored in special trenches. The width of such trends are dumped from 6 to 40 meters long, where the width is accumulated on the slope, humid low collection. Depth should be 1-1.5 m. Melons are placed in 7-8 rows in ditches, covered with 10-20 cm of soil, and then covered with plant debris. Pipes will be installed for ventilation.

RESULTS AND DISCUSSION

In melons, melons have a very long shelf life. Melons can be stored everywhere: in warehouses, sheds, basements and attics.

Containers and crates are used to store large quantities of melons. Depending on the height of the warehouse, they are stacked in several rows. The convenience of storage in such containers is that they allow the use of mechanization, various lifting carts and cranes for stacking and unloading products inside the warehouse. Storage in pods - this method, depending on the structure of the warehouse, 2-3 rows of melons are collected on them.

Melon, well preserved. If the melon is stored for a short time, it is harvested in 4-5 rows and 2-3 rows in the long term. Melons should be kept under control during storage and should be removed immediately if they show signs of nausea. Alternative storage conditions for melons are 6-10 °C and relative humidity is 73-75%. It was found that in order for melon storage to be effective, it is necessary to try to keep the temperature as low as possible, close the warehouse on rainy and humid days and try not to raise the temperature below 3 and above 12 °C.

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