

Effect of Harvesting Period on Keeping Quality of Fruits

Khatamova Hamidakhan Komiljonovna

Andijan Institute of Agriculture and Agrotechnologies, Senior Lecturer of the Department
"Technologies of Storage, Processing and Packaging of Agricultural Products"

Umarova is Shodiyakhan Kozimjon's

"Storage and processing of agricultural products" educational direction 2 - 36 group students

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ABSTRACT

In order to satisfy the population's demand for fruits and vegetables, it is necessary to pick fruits without perishing and deliver them to storage warehouses on time.

High-quality harvested fruits are well stored. Even in the winter season, it fully supplies the population with the need for various fruits.

Apple. The period of harvesting of fruits is determined depending on their type and variety characteristics, the demand for the product and the purposes for which they are used. The ripening period of apple varieties starts from the end of May and lasts until the beginning of October. Usually, fairy apples are stored for a short time, they are harvested in one harvest. In middle and late varieties, the harvest is carried out several times. Each variety has its own color and tone when ripe. This should be taken into account when picking the crop.

Peach. The peach picking process involves efficient transportation of the fruit to the packing area, reducing unnecessary work that damages the quality of the fruit. The less the fruit is caught and the faster it is packed, the higher its quality.

Gardeners need to prepare all tools necessary for harvesting. This includes harvesting baskets or bags, ladders, harvest carts, sorting tables, scales, packaging materials, etc. Preparing these implements in advance increases the efficiency of the harvest.

Picking baskets or bags with shoulder straps make the work of pickers easier and reduce the risk of working on a ladder. Harvest carts or other vehicles are useful in quickly transporting the harvested fruit to the packing area.

During harvesting, the work should go smoothly at all stages. Taking into account that the quality of peach fruits deteriorates quickly, it is not recommended to place them on top of each other during picking. If the fruits are picked in a row, their shelf life increases.

Quince fruit. The quince crop begins to ripen mainly in September. For consumption, depending on the variety, it is made during storage after cutting. Harvesting is mainly carried out from the second half of October to November. The period of fruit picking is determined depending on the color of the main variety of the fruit and the change in the flesh of the fruit. When the fruit is hard, it is carefully cut when the weather is dry, because the fruit rots early if it is slightly hit or crushed. Depending on the appearance of the fruit and the characteristics of the variety, the order of picking the fruit is determined.

Picked fruits are carefully placed in 25-30 kg boxes with paper on the bottom and gently removed from the field. Do not make sudden and rough movements when loading and unloading, because the quince fruit will be crushed and the storage period will be shortened. Different kinds of fruits should be cut for sorting, storage, and sale. During sorting, fruits are divided into separate groups, in which the size, color, and purity of the fruit are important.

Summer and autumn varieties that are sent to distant places are picked when they are not too ripe. Fruits intended for drying, processing and fresh consumption are suitable for consumption and are picked when they are ripe, that is, when the taste and color of the fruit are characteristic of this variety.

Storage of apples. The shelf life of an apple is determined by its ripening characteristics. Early ripening varieties of apples can be stored for a short period, and late varieties can be stored for up to 7-8 months. Apples are usually placed in boxes for storage. In this case, apples are better stored if wrapped in paper. When apples are placed in boxes, paper or shavings can be placed between them.

The boxes are placed in the warehouse 25-30 centimeters from the wall, leaving a two-meter path between the boxes. There will be 7-8 cells in one bed. There should be a space of 50-60 centimeters between the uppermost box and the warehouse ceiling. When storing apples, the relative humidity of the air is 85-95%. Storage cooling is achieved by intensive mixing until the air reaches storage temperature. In this case, it is recommended that the speed of the air flow between the floors is 0.2-0.3 meters/second. Before storing apples, they are stored in special compartments.

Every day, 10-15% of the capacity of the fruit storage unit is filled with apples. The unit will be completely filled in 7-10 days. The air in the compartments is gradually cooled to +4+6 0C. Then it is left at the temperature level required for the variety. High and first grade apples are stored for a long time, and second and third grade apples are stored for 2-3 months. They are stored in boxes, cardboard boxes and containers. Storage of fruits in containers ensures effective use of each useful cubic meter of the warehouse. In this case, the density of 1 m³ useful volume of fruits stored in boxes is 250-300 kilograms, and 400 kilograms in containers.

Storing peaches. As we know, fruits are not stored for a long time. Ripe peaches can be stored at room temperature for several days. When choosing a place for storage, it is dark and as cool as possible places must be chosen. If the peach is soft or shows the first signs of rotting, then after some time it will start to rot. A similar situation occurs with damaged fruits.

The optimal temperature regime for peach storage is considered to be 0 0C degrees. This regime is presented in compartments for storing fruits in refrigerators and is created in trenches or cellars. The higher the temperature, the shorter the shelf life of peaches. At 0 0C, fruits are stored for several weeks depending on the degree of ripening.

Quince storage technology. Organization of proper storage of quince products will eliminate the seasonality in providing the population with fresh fruit, and the amount of perishability will decrease when they are stored for a long time.

Fruit products are stored in cellars, warehouses or warehouses and refrigerators built according to special projects, where from several tens to hundreds of tons of fruit can be stored.

The best conditions for fruit storage are keeping the air temperature and relative humidity at a well-defined level. When storing fruits for a long time, their best qualities are achieved at a temperature close to 4-7 0C.

The most important conditions for good storage of quince fruits are their timely picking and processing (sorting, sorting by size, and packing).

When the fruits are harvested, they should be carefully picked when the weather is dry, because if the fruit is slightly hit or crushed, it is microbiologically damaged and starts to rot early.

Picked fruits for storage are divided into varieties according to the level of maturity, and they are sorted by size, rotten and damaged ones are separated, and then they are placed in boxes, placed on top of each other, leaving a distance of 50-60 cm to the ceiling of the warehouse. Between some rows of cells, a 10 cm gap is left for air circulation and a 60-70 cm path is left for walking.

The best conditions for keeping behi for up to 4-5 months are air temperature of 5-6 0C and relative humidity of 80-85%, while it is necessary to constantly monitor their quality.

Of course, it is difficult to achieve such conditions in ordinary cellars, then it is necessary to strive for the above conditions, that is, it is necessary to ventilate the air, sprinkle with water, smoke with sulfur, and monitor the quality of the fruits.

The stored product is checked once or twice and the warehouse is fumigated with sulfur. For this, firewood is lit in a container outside, when coals are formed, the containers are brought into the warehouse (they are placed at a distance of 3-4 m) and sulfur is thrown on the coals. Sulfur is added 100-150 g per 1 m³.

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