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DIFFERENT CONTAINERS FOR TRANSPORTATION AND STORAGE OF GRAPES, FRUITS, BERRIES, VEGETABLES, METHODS OF PREPARING THEM FOR USE

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Abstract
In this article, the quality of fruits and vegetables is described in terms of food, taste and technological value. They depend on their chemical and mechanical composition, physical properties, external appearance and the ability not to lose these properties during storage. The quality of fruits and vegetables is affected by the type of product, agrotechnics, growing conditions, picking period, transportation equipment, types of containers, and storage methods. the above indicators also change depending on the storage period and conditions.

Keywords: refrigerated warehouse, polythene bags, root vegetables, gas environment, vitamins, durability, early and late ripening varieties.

Introduction

Containers used for storing vegetables. Carrots can also be stored in artificially cooled warehouses. Containers with a product capacity of 30-50 kg or polyethylene bags are used for this. Carrots can be stored refrigerated for a long time (more than 200 days). Its storage in containers allows mechanization of loading and unloading operations [1].

The method of storing carrots in polyethylene bags is a prospective method. As a result of breathing of the product, high humidity conditions (90-95%) are created in the bag and carbon dioxide (3-5%) accumulates in the required micro. When stored in polyethylene bags, the product's rotting, weight loss, and loss of sugar and vitamins are greatly reduced.[3]

Root crops are stored in trenches until April, and in the spring they are taken to vegetable warehouses.

Roots are also stored in boxes in trenches. Only in this case, the trench is made larger, 3-3.5 m wide and 1.5 m high.

Root crops are stored much better in special warehouses. In such warehouses, they are stored in boxes and containers and piled up to 1.5 m thick.[3]

30-40 kg containers can also be used to store cabbage. Keeping cabbage in perforated polythene bags also gives good results.

Tomatoes are stored in crates in warehouses. In this case, the boxes are placed in two rows in width, eight to ten rows on top, and lengthwise as desired. It is recommended to leave a 0.6-1.5 m corridor between the beds, and a 5-10 cm gap between the boxes.

The time of picking cucumbers and the quality of picking are of great importance in its preservation. Violation of picking technology causes it to quickly lose its firmness, turn yellow and become inedible. The seeds and peel of a ripe cucumber thicken, and the flesh becomes rough.

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Cucumbers should usually be picked in the morning, before it starts to get hot. Evening cucumbers can be picked all day long. It is transported in boxes or special baskets [4].

Use of different boxes for transportation and storage of grapes, fruits, berries and vegetables. The shelf life of an apple is determined by its ripening during storage. Early varieties of apples can be stored for a short period, and late varieties can be stored for up to 7-8 months. Apples are placed in boxes for storage. In this case, apples are better stored if wrapped in paper. When apples are placed in boxes, paper or scraps can be placed between them [6].

The boxes with apples are placed in pairs and threes in a checkerboard pattern. Boxes containing products of the same type, variety, quality, and size are placed on the shelves. It should be noted that unripe apples should not be cooked at a low temperature, otherwise they will harden and their taste and aroma will not change. Therefore, it is necessary to change the temperature of the air in the warehouse depending on the ripeness of the apples.

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 efficient use of 1 m3 of warehouse space. In this case, the density of 1 m3 useful volume of fruit stored in boxes is 250-300 kilograms, and 400 kilograms in containers [6].

When storing apples, placing them in polyethylene films is widely used. Polyethylene bags with a capacity of 1-3 kilograms are used for this. In such bags, within 1.5-2 months, the micro level of oxygen reaches 14-16%, and carbon dioxide reaches 5-7%.

After placing polyethylene bags in the warehouse, their mouths are left open for two to three days, after the apples cool down, their mouths are closed. Polythene bags are placed in warehouses in containers.

The use of containers made of polyethylene gives good results when storing apples. Containers with a capacity of 600-800 kg of fruit are used for this. Special holes are placed in polyethylene containers to control the gas environment [1].

Pears are usually plucked before ripening and placed in clean, dry boxes. Paper is spread under the boxes, the other end of the paper is closed over the pear. The pulp is sprinkled on the paper or the cardboard is closed. It is also possible to arrange pears in a checkerboard pattern and sprinkle shavings between the rows. The boxes are stacked like apples.

Pears are stored in 300-350 kg containers in gas controlled warehouses [2].

When quinces are placed in boxes for storage, paper is laid on the bottom and shavings are placed between them. Quince is placed in 35 kg boxes or containers (in warehouses with a controlled gas environment).

Conclusion:

The main task is to test the technology of storing products in different containers and methods and choose the most optimal option. Root crops are stored much better in special warehouses. In such warehouses, they are stored in boxes and containers and piled up to 1.5 m thick. Pears are usually plucked before ripening and placed in clean, dry boxes. Paper is spread under the boxes, the other end of the paper is closed over the pear. The pulp is sprinkled on the paper or the cardboard is closed. It is also possible to arrange pears in a checkerboard pattern and sprinkle shavings between the rows. The boxes are stacked like apples.

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