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RESEARCH OF NEW VEGETABLE DRYING TECHNOLOGIES

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ANNOTATION
This article talks about the technology of high-quality storage and processing of fruits and vegetables, special attention to the storage and processing of agricultural products in the conditions of Uzbekistan.

Keywords: microbiology, moisture content, extragon, technological methods, refrigerator transport, containers

INTRODUCTION

The technology of storage and processing of agricultural products, including fruits and vegetables, is a science that teaches the storage and preliminary processing of raw materials. Before reading this subject for agronomy majors, the following subjects were studied in the program: plant physiology and biochemistry, agrochemistry, general farming, microbiology, entomology, phytopathology, agricultural machinery, meteorology, plant science, fruit growing, viticulture, vegetable growing. and based on others. The main task of the science of storage and preliminary processing of fruits and vegetables is to warn and stop the decrease of raw materials and to obtain high-quality and large quantities of products from them. Technology teaches the more productive use of raw materials, as well as the use of waste products after their processing in the development of plant science and animal husbandry. The harvester must know for what purpose the product he grows is used.Knowledge of this science serves to obtain a high and quality harvest. Also, for the development of the sector, all directions in agriculture should strengthen the connection between agricultural science and production, directly with processing enterprises of farms, trade and public nutrition systems. development of relations, increasing mutual responsibility in the execution of contracts between training organizations and farms. Improving the quality of products during production processes and realization and preventing them from decreasing, improving the location of processing plants, bringing them closer to the base of raw materials, using and developing new refrigeration techniques, refrigerating transport and containers for the transportation and storage of products. It is necessary to fully provide with. In the farms of the Republic, it is necessary to organize vegetable salting points, compote and juice making enterprises, and fruit and grape drying areas on a large scale.

MAIN PART

High-quality storage and processing of fruits and vegetables largely depends on harvesters, economists and zoo engineers. They and other agricultural workers are subject to the following requirements when storing products:

1 To preserve products and seed stock as much as possible without losing them and without reducing their quality;

2 Using appropriate technological methods and regimes when storing products further increase their quality;

3 Increased profitability in product storage by spending own labor and expenses save without.

The last issue is very important, because the costs of storing some products (potatoes, cabbage, etc.) exceed the cost of production. Since the beginning of the consumption of agricultural products, people have been engaged in their storage and processing. preserving and effectively using the cultivated product without quickly dying and without reducing its quality has been one of the human needs since ancient times. Nomadic tribes used natural warehouses - caves, holes of trees - to store the collected fruits and seeds, and later they built special cellars. When tribes began to settle down, they began to learn how to store surplus products and protect them from pests.

In the conditions of Uzbekistan, special attention has been paid to the storage and processing of agricultural products. Due to the fact that the weather in our region changes throughout the year and overnight, products such as meat, oil, milk, fish, and eggs spoil quickly in hot weather, and vegetables and fruits freeze in extreme cold. Among the oldest methods of storage and processing of agricultural products in Uzbekistan, such as burying or hanging, and drying during harvesting are widely used. In the storage of products, burying vegetables, grains, fruits, meat, eggs and eggs, hanging fruit products, removing skins from various fruits, melons, pomildori, drying grapes, basil, cilantro, jambil and red pepper are widely used. including Basically, dry products are considered non-perishable, and they are stored in a dry place, in glass, porcelain or ceramic containers, in closed paper and wooden boxes, and in chests.

In the republics of Central Asia, the convenience of natural conditions allows vegetables to be ventilated and dried in the sun. The purpose of drying vegetables is to avoid their moisture and prevent the development of microorganisms and any biological processes.There is such a rate of drying that microorganisms cannot develop if the moisture content drops below that level. This is a minimum of 30% for bacteria and 15-20% for yeast. So, if the humidity of dried vegetables is 15-25%, they can be stored in good quality without rotting. In order to obtain quality vegetable products, it is necessary to create conditions that ensure their quick and good drying. In Central Asia, vegetables are mainly spread out to dry in the sun. In order to obtain a cheap and high-quality product under these conditions, it is necessary to correctly select and organize drying points, to follow the specified technology, and to use advanced methods in the preparation of raw materials. In addition to drying in the sun,

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vegetables are also dried using artificial heat. Drying cabinets, tunnels, continuous dryers are used for this purpose.

Vegetable drying consists of two steps: preparation for drying and drying. The first stage includes: size calibration, washing, quality selection, cleaning, grinding, blanching or boiling. The second stage consists of drying the vegetable.

CONCLUSION

Drying vegetables involves complex physiological and biochemical processes, not just removing moisture from them. The duration of the drying process depends on many factors, namely the nature of the drying object, the form and degree of crushing of raw materials, its thickness on the drying floor, the method of preparation for drying, drying temperature, air exchange rate, humidity and a number of other factors. Continuous tape lines such as PKS-20, KSA-80, KPS-20, KPS-lO are used in the drying industry. From the greens, dill, tarragon, basil, parsley and celery are cut into small pieces and dried in special dryers at a temperature of 40-50 C0 for 2.5-3.5 hours. Dried greens are stored well for a long time in special containers (tight containers are very convenient), at low temperature (at 0-10 C0) and 60-65% relative humidity.

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