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Research Article

OBTAINING POWDER (PAROSHOCK) AND CREATING JUICE PRODUCTION TECHNOLOGY BY PROCESSING AND DRYING RED BEETS WITH ASCORBIC AND CITRIC ACID

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ABSTRACT

Dried fruits and vegetables are constantly in great demand among the population and are increasing in extirerity. The purpose of drying beets by processing them with ascorbic and citric acids is to preserve the biologically active substances, organoleptic properties (color, smell, taste and shape) contained in the product and create a technology for the production of multifunctional products at various industrial enterprises.

KEYWORDS

Product, ascorbic acid, citric acid, convective, sublimation, drying, humidity, red beets, organoleptic indication.

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INTRODUCTION

It is known that the demand for dried fruits and vegetables in our country is growing every year. That is, the production of high-quality, low-cost cheap products with high nutritional value and innovative energy-efficient high-sublimation and convective drying technologies are widely used in the food industry today.

Material and Methods. In our research work, two product naunas were used to dry red beets from Root products in a tape drying chamber of a convective drying device. Method 1 for processing samples of products in a solution of ascorbic and citric acids for 10 minutes, a solution was prepared by adding 20 g of ascorbic acid to 250 ml of water, and for 10 minutes the samples of red beets were processed by soaking them in a solution and then dried in a drying chamber for 2 hours at. It was achieved that the total drying period was 2 hours on tape 1 and 1.5 hours on tape 2, and the total drying period was 3.5-4 hours, and that the samples of the product maintained their total organoleptic performance according to the standard, and in Method 2, the samples of the product were allowed to dry for 4 hours without. The main purpose of processing red beet samples with ascorbic acid and citric acid was achieved by the consistency (shape) of the product, its color, taste characteristics and the preservation of vitamins and minerals in the composition of the substance. Samples of red beets selected for drying are considered to be products rich in vitamins and minerals according to the standard. Masalan: B2 vitamini –11.1%, C vitamin –11.1%, kaliy – 69.1%, kalsiy-22.2%, magniy –33%, fosfor –32.3% , temir – 44.4% ni tashkil qiladi.

Results. It was observed that when we put samples of dried sugar beet products in hot water of 60-700c, the product itself restores its condition by 90-95%. The main feature of red beets is color. If we compare the samples of products treated with ascorbic citric acid and dried in a convective drying device in a simple way, it was observed that the samples of products from red beets, which were mainly dried by processing with more ascorbic acid and citric acid, retained their quality indicators more organoleptic properties, and also did not lose their composition much. Another distinctive feature and properties of red beets is that the products are distinguished from samples of dried products in other ways by the property of being able to withstand high temperatures and pressure due to the dense arrangement of the cell tissues.

Technological line of drying sugar beet

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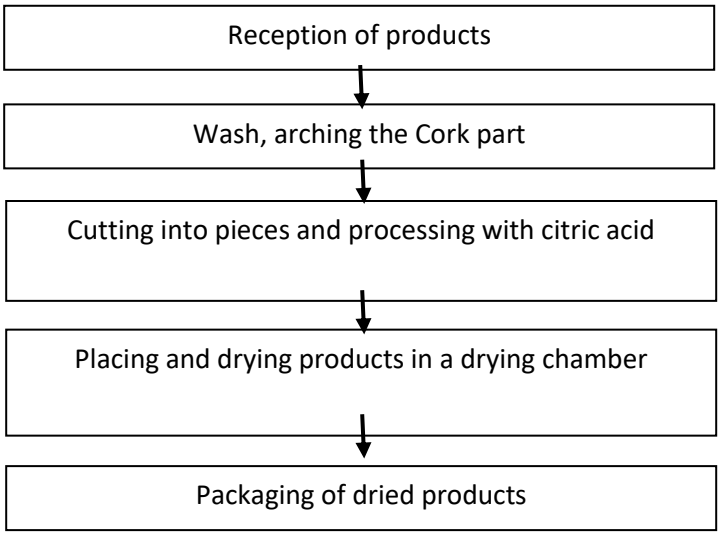

The processing of red beets is achieved by complex tempering and storing it by extracting juice or drying it with the help of a press. Microorganisms cannot develop if they decrease from the standard critical humidity indicators contained in the product for storage. This figure is 30% for bacteria and 15-20% for yeast bacteria.

DISCUSSION

The technology of obtaining healing high-concentration juice was created by obtaining powder (poroshock) products from ready-made dried red beet products. In addition, samples of products from these dried red beets are directed to industrial production enterprises for the production of products, which are presented below.

1. Food industry - (because it is rich in vitamins and minerals) is focused on obtaining dishes, confectionery, healing drinks and producing powder products in the image below as an aromatic substance.



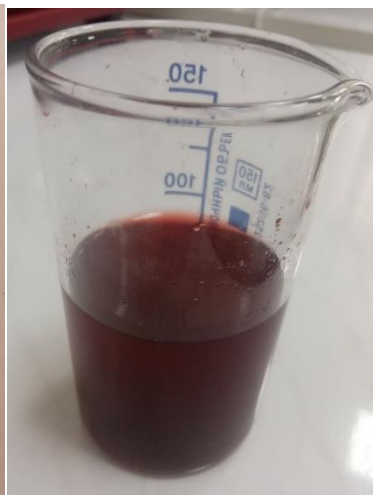

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Figure 1. Products from dried sugar beet samples (powder (paroshock) and juice made from powder)

2. For the pharmaceutical and medical industries, the production of medicinal products rich in natural vitamin minerals is widely focused.

3. At the production enterprises of the construction and textile industry (obtaining natural dye and preserving the consistency of the toughness of fiber yarn products obtained from raw materials of sewing, knitting and cotton.

4. And for the agricultural and livestock industries, the natural nutritional value for livestock is directed to istemol as a product rich in high vitamin and mineral substances.

5. It is used for the production of various natural dye products for the perfume industry.

CONCLUSION

In conclusion, we can say that in the process of drying red beet products, a critical humidity of 13% was achieved by evaporating the moisture content in the time machine. By drying through these methods, we can store the products for a long time. But some changes are observed in the color, shape and size of the product samples.

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