



Studying the Collection of Varietal Samples of Khandalyak Melons

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Annotation: The scientific article examines samples and hybrids of khandalak melon imported from abroad, compares them with local varieties, how they differ from each other, resistance to diseases, adverse external factors, growing period and yields on farms. Based on the results of the research, we can say that **Obinovvot bonka, Handalak pochka, Handalak 5000, Big yellow khandalak, Early ripening small khandalak** are high-yielding, i.e. 60-70 percent above standard.

Keywords: seeds, khandalyak melons, variety, hybrid, footstalk, fruit, peel, harvest.

Introduction

Today, the world's population of more than 8.0 billion ensures the stability of the food problem. Ensuring food security means not only increasing the amount of vegetable products, but also identifying types of crops with unique content and including them in the daily diet.

The theory of "Vegetables is the health of the nation" scientifically justifies this necessity. The quality, quantity and duration of harvest of any agricultural crops depends on the variety. The weight of the variety in the production of agricultural products is 30-50%. At the present time, many foreign and domestic selection seed companies are working in our Republic. Each of them can recommend a whole collection of Khandalak melon variety samples for vegetable growers, meeting different requirements. In order for us to choose a good sample among such many samples, it is necessary to get acquainted with the characteristics of the variety and hybrid.

Melon products are of great importance in human life and occupy an important place in the diet. Its composition is rich in useful substances. Melons grown in our country contain 85-92% water, 8-15% dry matter, 0.8% protein, 1.8% fiber, 6.2% other carbohydrates, 0.9% oil, 0.6% ash, 20-30 mg% of ascorbic acid, 0.03-0.07 mg% of other drugs, micro-elements such as phosphorus, sulfur, manganese, zinc, bromine, iron, calcium, magnesium, potassium, pectin, organic and mineral salts. The amount of sugar content in the fruits of Uzbek melon varieties reaches 14-16%. Melon pith is sweet when there is a large amount of fructose, and when there is more glucose, it has a sweet taste.

In recent years, several Decrees and Decisions have been adopted by the President of the Republic of Uzbekistan and the Cabinet of Ministers regarding the expansion of the area of vegetable and vegetable crops and the cultivation of high-quality exportable products, and many practical works are being carried out on the development of this field. Currently, cultivation of vegetables and fruit crops in protected areas is becoming popular in our country.

Khandalak melon varieties and hybrids according to economic characteristics

1. Edible (the fruit of which is eaten fresh);
2. Universal type (in the period of the first harvest, the fruit is eaten fresh, and the late harvest is suitable for processing and canning).

Edible varieties and hybrids produce from small to large surface smooth, rough, uneven, slicing, wrinkled, deep slicing, skin is hard, and flesh is soft or hard. The fruit is usually white hairy, keeps its green color for a long time, and does not turn yellow. Fresh edible varieties and hybrids attracts with the absence of bitterness in its genetic fruit composition. Good varieties and hybrids of khandalak melon, the flesh of the fruit is crispy, has a unique pleasant smell and taste.

That's why varieties and hybrids of khandalak melon differ from each other in terms of their resistance to disease, unfavorable external factors, as well as trying to grow as many varieties and hybrids as possible in farms, yield period and other characteristics. This prolongs consumption in fresh and processed form, and increases the possibility of obtaining a high yield and increasing the product. This is especially important in our hot and dry climate.

Methods of experiment. Field experiments were conducted in 2024 at the Tashkent State Agrarian University's educational experiment field. In the experiment, the length of the field was 6 m and the width was 210 cm. There are 30 plants in each field.

Research results. By comparing 13 hybrids and 5 local varieties of Khandalak melon imported from abroad, 5 varieties with good yield when planted in the open field in early spring were selected.

**Table 1. Yield indicators of Khandalak melon variety samples
(2023-2024 yy)**

Varieties samples	Harvest period, days	Harvest, t/ga	
		average	in % relative to standard
Obinovvot bonka	55	22,7	100
Handalak pochka	57	21,2	93
Big yellow khandalak	59	25,0	110
Khandalak 5000	54	23,3	103
Early ripening small khandalak	57	28,0	123

It was noted in the studies that these selected samples had 1-4% higher results compared to the

standard in terms of simultaneous ripening and marketability of plants. The marketability of Khandalak's "Obinovvot bonka" variety was 92% of the total harvest. The marketability of Khandalak variety "Obinovvot bonka" made 92% of the total harvest, "Early ripening small khandalak" sample 92.2%, "Khandalak 5000" 95%, "Big yellow khandalak" 92.3%, "Khandalak pochka" variety 92.2%. Among the variety samples, the period of yielding of early varieties was extended, that is, it lasted 60-61 days. But the samples of late-harvested varieties had a shorter period of 53-55 days.

Conclusions. The following conclusions can be made based on the above experimental results. As a result of studying the samples of the collection of Khandalak melon, the highest results in terms of productivity were observed in the samples of "Big yellow khandalak" and "Early ripening small khandalak" varieties, and it was observed that the model gave a higher yield compared to the "Obinovvot bonka" variety.

Used literature

1. Decree of the President of the Republic of Uzbekistan PP-4246 of March 20, 2019 "On measures to further develop horticulture and greenhouses in the Republic of Uzbekistan".
2. Zuev V.I., Kadirkhojaev O., Yunusov S.A. Technology of growing vegetable seedlings for open ground. Tashkent-2013. Pages 8-86.
3. Zuev V.I., Buriev Kh.Ch., Yunusov S.A. Breeding achievements of the Tashkent State Agrarian University for cucumber culture. // "Bulletin of Agrarian Science of Uzbekistan". Tashkent 2013. No. 2 (52), p. 61-65.
4. Litvinov S.S. Vegetable growing in Russia and its scientific support. // Potatoes and vegetables. Moscow, 2003. No.1, p.2-4.