Technological Characteristics of Melon Fruits Intended for Processing

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Abstract: In the article, the results of the research conducted in order to study the technological characteristics of the fruits of melon varieties intended for processing are presented with a deep scientific analysis.

Keywords: melon, varieties, ontogeny, peel, fruit, technological features

Introduction

In order to check in detail the indicators that determine the variability of the quality of studied varieties of melon, the basis of the obtained results was set to a complex indicator - the level of quality, and at the same time, the specific indicators of each variety were shown as a percentage. Using this method of analyzing the quality of melon varieties, it is possible to observe which indicators are stable and which change during the ontogenesis of a specific variety and species.

Melon fruits are widely used both for eating fresh and for processing. The main part of the grown product is used for industrial processing of various cans. Melon fruit mass, pulp mass fraction and thickness are important for the processing industry as well as fresh consumption. The given indicators also describe the technological characteristics of melon fruits.

Technological characteristics of melon are determined by the structure of its fruits. Melon fruits - a multi-seeded pseudofruit - have a placenta and seed cavity consisting of rind, flesh and seeds. The parenchyma of the shell located above it forms the flesh of the fruit. According to the results of the conducted research, it was observed that the melon fruit consists of 17% peel, 73% flesh and 10% seeds. This indicator was found to be in different proportions in types and varieties of melon.

The mass of the fruit and the thickness of the flesh are important technological characteristics. These indicators depend, first of all, on the type and variety of melon, as well as on growing conditions. Large-fruited and thick-skinned varieties are of greatest interest, both for fresh consumption and for processing.

Table 1

Technological composition of studied melon fruits (2016-2018)

Variety name	Fruit weight, kg	Amount of meat, %	The thickness of the meat, cm	Executive level, EL
Kyzil-asani	8,20	77,18	5,0-6,0	0,73
Qora gulabi	3,50	71,33	2,5	0,68
Shakar-palak	13,5	77,26	5,0	0,72
Mestnaya (O‘ITI. 212)	4,80	74,05	5,5	0,66
Bargi	3,45	72,65	3,5-4,5	0,65
Shirin-pechak	10,7	74,69	3,5-4,5	0,68
Talyk-aktila	6,20	77,45	4,0	0,68
Shirintoy	5,32	74,15	3,5-4,0	0,64
Qora-kokcha	4,80	74,18	3,0-3,5	0,64
Kara-kiz	2,93	68,91	2,0-3,0	0,61
Ak-navat	7,59	74,27	5,0-6,5	0,66
Oltin vodiy	1,50	70,02	2,0	0,62
Saxovat	6,30	78,45	4,0	0,73
Suyunchi-2	4,72	74,15	3,5-4,0	0,66
Zargulabi	2,80	74,18	3,0-3,5	0,64
Oltin tepa	3,93	68,91	3,0-3,5	0,61
Dilxush	4,20	74,27	5,0-6,5	0,68

To describe the structural characteristics of the studied varieties of melon, we selected the most important indicators:

- fruit weight;
- amount of meat;
- the thickness of the meat;
- level of maturity (EL)

To determine the indicators of ripeness, it is necessary to measure the height and diameter of the fruit and its chamber. Among these indicators, maturity level is one of the indicators that increase juiciness. The above table shows the technological composition of melon varieties belonging to three cultural types of melon.

The most important technological indicator that determines the use of melon fruit in the processing industry is the amount of waste: peel and seeds. According to technical requirements, the amount of loss and waste at all stages of production should be up to 32%. Therefore, the amount of meat should be close to 70%.

When describing the technological properties of the studied varieties, we consider it appropriate to analyze the sections of those groups that we have determined by orgonoleptic analysis.

According to Table 1, the amount of meat in the Kyzil-asani, Shakar-palak varieties of the first group of excellent quality is 77.18-77.26%. Thus, the yield of melon meat is in the range of 65.21%-79.28%, hard and in varieties with skin, it varied in the range of 68.91%-76.81%.

The yield of meat in Talyk-aktila variety was 72.45% (see Table 1). An important indicator that determines the quality of fruits and vegetables is the size and, in some products, the size determined by mass. Nevertheless, the mass is an important indicator describing the technological and commercial characteristics of melon fruits, in which fruits of the same size of different varieties and varieties can have different amounts of

flesh, as well as different consumption characteristics, respectively.

In our opinion, the thickness of the flesh of the melon fruit is an important indicator that determines both the product and technological characteristics of the melon fruit.

The ripeness index is closely related to the thickness of the flesh and is a quantity that describes its contribution to the total size of the fruit. This indicator is relative and, in our opinion, most clearly defines the technological advantages of the studied varieties.

One of the important features of melon fruits is its technological feature, which determines its suitability for processing. Indicators such as "Amount of meat" and "Thickness of meat" play an important role in this. A high number of these indicators increases the level of usability of fruits for consumption and processing.

Conclusion

1. The thickness of the shell of polys crops is of great importance for long- distance transportation and storage. Among melon varieties, the thickness of the peel was 4-5 cm in Kara Puchak, K-199, Altin Vady and Zargulobi varieties.

2. The studied melon varieties differ in the weight of flesh, pods and seed-placentas, and in the cross-section of the varieties, fruit flesh - 79.7 - 86.0 percent, pod - 9.4 - 16.4 percent, and seed - placenta - 2.4 - 5 .5 percent, the highest meat yield (81.2 - 86.1%) Kokcha - 588, "Kora Gulabi", "Bargi", "Sakhavat", "Shirin-ivechak", "Altin Tepa" - 557, "Talyk" -aktila", Shakarpalak - 554, "Shirali", "Ak-navat", "Zargulabi", "Mestnaya (O'ITI. 212)" varieties were observed.

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