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TECHNOLOGICAL PROPERTIES OF OF MAIZE HYBRID PR39B58

Indexes of grain properties can be divided into two groups: the properties that are characteristic of this grain and properties that vary within the same grain. In the cereals sector the technological processing of grain should be improved towards obtaining maximum endosperm, increasing the yield of cereals of higher grades and improving their quality.

The aim of the research is to establish technological suitability of maize hybrid ПР39Б58 to produce polished grains (groats).

The research was conducted at the Department of Technology of storing and processing of grain at Uman National University of Horticulture and Production complex farm "Prolisok+" in Graniv village, Haisyn district, Vinnytsa region in 2014. Conventional methods were used to determine the properties of maize.

According to the research of geometrical, physical and mechanical properties it was found out the technological suitability for the production of grain for groats.

The quality of the finished product directly depends on the quality of raw materials. Thus, further research of maize quality indicators showed that the sample has a fresh smell which is peculiar to grain without odors. Thus, we can state that the grain was stored under conditions that have a positive effect on its quality.

Defining the maize color, it was determined its compliance with this variety that is a marigold yellow, smooth and bright grain with white rounded tip. Taking into account the color and shape of grain, we can include the sample that was investigated to the III type – a yellow flint maize.

Indicators of weight by volume (740 g /l) and weight of 1000 grains (238 g) make it possible to obtain a high yield of maize groats. Thus, the actual yield of rubbed maize groats from grain hybrid ПР39Б58 is 37%, which is close to the basic norm of output (40%).

Grain corresponds to typical composition [GOST (Stat Standard) 10940 – 64] confirming the suitability of maize hybrid ПР39Б58 for processing into groats.

Maize groats of excellent quality is with typical taste and pleasant characteristic odor, without other unpleasant tastes and odors.

Grains should be thoroughly cleaned to improve the quality of maize groats to reduce the amount of waste impurities in compliance with the standard requirements.

Key words: maize, groats, quality, technological properties.