сокоадаптивных сортов плодовых культур и винограда, а также для межгосударственного обмена коллекционными образцами.

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AGROBIOLOGICAL EVALUATION OF CUCUMBER HYBRIDS FOR OPEN GROUND

Belavus O. A., Kravchik E. G.
EE «Grodno State Agrarian University»
Grodno, Republic of Belarus

In the modern world, vegetable growing uses an intensive technology for the production of vegetables, the purpose of which is to obtain maximum yields using both high doses of organic and mineral fertilizers, means of protection, and high-yielding zoned varieties. With the introduction of new, better varieties into production, productivity increases, plant adaptability to adverse environmental conditions, resistance to pests and diseases increase, yield increases and product quality improves, the possibilities of mechanizing sowing, caring for cultivated crops and harvesting expand. Varieties from an economic point of view differ primarily in that under the same conditions they can produce different yields. The use of high-quality seeds of the best zoned varieties is one of the most accessible and cost-effective ways to increase the yield and gross harvest of agricultural products [1, 2].

Cucumber is one of the most common vegetable crops, which is cultivated both in open ground and in various protected ground conditions.

The purpose of our work is to conduct an agrobiological assessment of the productivity of cucumber hybrids grown in the open field in the Republican Unitary Enterprise "Grodno Vegetable Factory".

Studies on the comparative evaluation of cucumber hybrids were carried out in RUAE "Grodno vegetable factory" in 2019-2020. in open ground. According to the scheme of the experiment, the following hybrids were studied: 1. Spring F1, 2. Pasalimo F1, 3. La Bella F1, 4. Nadezhda F1. The hybrid Rodnichok F1 was used as a control. The studied hybrids belong to the early ripening group. Sowing was carried out in the third decade of

May. The experiment was laid according to the methodology of the All-Russian Research Institute of Vegetable Growing [3, 4].

During the growing season of cucumbers, using the appropriate methods [4], we determined the thickness and length of the stem (the average of 20 measurements at the end of the harvesting period), the number of flowers and ovaries per node in cucumber plants (by counting from 20 plants), as well as the crop yield. The main experimental data in the studies were subjected to statistical processing using analysis of variance in the EXCEL program [4].

Research results and discussion. Morphological features of vegetable plants have a significant impact on the yield and quality of the products. So, the stem is the axial part of the shoot of the plant. It conducts nutrients and brings the leaves to the light. Reserve nutrients are deposited in the stem, leaves, flowers, fruits with seeds develop on it [5, 6]. In our studies, it was found that by the end of the growing season, the length of the stems of the studied cucumber hybrids ranged from 1.85 to 3.00 m, while the maximum indicator was in the control variant (Rodnichok hybrid). Considering the extreme values of the stem length indicator, we note that they were minimal in the Pasalimo hybrid and amounted to 1.7-1.9 m (1.1-1.2 m shorter than the control variant). The stem length of La Bella and Nadezhda hybrids was also shorter than the control variant and amounted to 1.8-2.0 m on average over 2 years. The thickness of the stem, as well as its length, are essential during the period of growth and development of a vegetable crop. In this case, by the end of the growing season, the stem thickness was 1.40-1.65 cm. With a maximum stem length (3.0 m) in the Rodnichok hybrid, the stem thickness averaged 1.55 cm over 2 years. The stem of the Nadezhda hybrid turned out to be the strongest and its thickness was 1.65 cm, which is 0.10 cm more than in the control variant.

Cucumber flowering is a very important stage in the growth and development of vegetable crops. The type of flowering determines not only the appearance of the bush of cucumber plants, but also the time for which the fruit ripens. It is from him that the yield of a vegetable crop will depend.

As a result of the research, it was revealed that the number of flowers on cucumber plants ranged from 2-4 to 7-9, while the number of ovaries ranged from 2-3 to 5-6. The Pasalimo hybrid had the most flowers – an average of 9.4 pcs. during the study period, which is 5.2 times more than in the control variant. At the same time, the number of ovaries in this hybrid was 5.0 pcs, which is also 3.5 times more than the control variant.

As it was found, even the abundant flowering of cucumbers does not guarantee a rich harvest, because. a large number of cucumber flowers often turn out to be empty flowers and, after withering, fall off without forming an

ovary. For this reason, morphological features have a significant impact on crop yield.

As a result of the research, it was noted that the Pasalimo hybrid stood out with a maximum yield of 104.2 c/ha. At the same time, the yield increase in relation to the control variant was 10.6 c/ha or 11.3 %. The yield of other cucumber hybrids was somewhat lower and amounted to 97.2 c/ha (Nadezhda), 99.9 c/ha (La Bella), while the increase was 3.8 and 6.7 %, respectively.

From the results of the research, it follows that for cultivation in open ground, the Pasalimo F1 cucumber hybrid can be recommended as the main one, and La Bella and Nadezhda F1 hybrids for expanding the range.

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