



Selection of Promising Potato Variety Samples for the Next Term

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Annotation: Promising potatoes for the future selection of varietal samples.

For growing vegetables, melons and potatoes at the Research Institute, 36 varieties of potatoes of local and world selection were tested in the soil and climatic conditions of the Tashkent region and a technology for their cultivation was developed.

As a result of the research, it was recommended to selectively obtain varieties suitable for cultivation in the climatic conditions of the Tashkent region.

Keywords: potato, leaf, stem, flower, variety, tuber, selection, productivity.

Introduction

In Uzbekistan, potatoes began to be cultivated as an agricultural crop at the beginning of the second half of the XIX century. At the beginning of the XX century, the potato planting area was 1.4 thousand hectares, in 1940 it was 23.6 thousand hectares, and in 1991 it was 40 thousand hectares.

Currently, potatoes are sold in 138 countries of the world for 20-22 million. planted per hectare, 320-335 mln. tons of gross crops are grown. Potato-growing countries are China, Russia, India, Ukraine, USA, Germany, Poland, Belarus, the Netherlands and France are considered as The average yield is 15-17 t/ga worldwide. [1;3].

Potato productivity depends on many factors, among which the genetic productivity of the variety present in the plant and embodied in the seed is of leading importance. Therefore, one of the main factors for increasing the yield of potatoes is the correct selection of the variety and sowing of quality seeds. It allows for increasing the yield by 1.5-2 times by properly selecting the seed tubers of the variety and quality.[5;6].

In 2022, at the Research Institute of Vegetables, Field Crops, and Potatoes, samples of local and world selection of potato varieties were planted to test the soil and climate conditions of our Republic. The experiments were conducted based on the generally accepted methodical manuals of B.J.Azimov, B.B.Azimov "Methodology of conducting experiments in vegetable, vegetable, and potato growing" (2002), and the statistical analysis of the results was carried out by B.A. Based on Dospekhov's "Metodika polevogo opyta" (1985) dispersion method, it was carried out using Microsoft Excel.[2;4].

Experiments In the experimental areas of the Scientific Research Institute of Vegetables, Field Crops, and Potatoes, the following varieties of potatoes, brought from foreign countries and local varieties, were planted and studied.

Dutch Picasso, Evolution, Royal, Sante, Arizona, Manitou, Kuroda, Saviola, Arielle, Red scarlet German Smena, Adretta, Gala, Russian Kronos, Romance, Mikado, Red bullet Sineglazka, Hungarian Botant, Balatoni rossa, White lady, Demon, Dizera, Spunta of France, as well as lines

№01, №02, №05, №9, №12 local varieties Umid-2, Kuvonch 1656, Tashkent ertagisi, Sarnav, Pskom, are used in Balatoni. In the experimental field of Bogizagon varieties, samples of each variety were planted in a 70×25 cm scheme in 2 rows of 5 m length on March 25 in an experimental field that was prepared in advance. [6;7;9]. Before planting, potato collection samples were placed for germination in a special room with an air temperature of +14-18 C⁰, air humidity of 70-80%, and quality germination in 20-25 days after the day of planting.

In the experimental version, 36 samples of varieties were planted. In the collection of planted potatoes, phenological observation, and biometric measurements were carried out on a variety of samples. After every 10 cultivars, a local cultivar Pskom was planted as a control cultivar. Kronos, Picasso, Evolution, Umid-2, Red Bullet, Romantika, Mikado, Royal, Folva, and Smega varieties were compared with the control variables in the first ten. 10% of the standard Pskom variety germinated in 14 days, 75% germinated in 20 days, while Evolution, Red Bullet, Romantika, Mikado, Simega, and Arizona varieties germinated 1-2 days earlier than the control option.

When the number of plant stems was studied in these 10 varieties, the number of stems in Kronos, Picasso, Evolution, Red Bullet, Romantika, and Mikado varieties was 0.2 more than the control variety; 0.3; 0.5; 0.2; 0.7 times more was found. In the next 20 varieties, Dizera, Sante, Arizona, Manitou, Kuvonch, Spunta, Adretta, Gala, Red Scarlet, and Saviolla have been tested in comparison with the control Pskom variety. It took 14-20 days for 10-75% germination of potato seedlings in the control Pskom variety, while Dizera, Arizona, Spunta, Gala, and Kuroda varieties germinated 1-2 days earlier than the control option. The germination of Adretta Manitou, Joy 1656 varieties was equal to the control option.

In the next 30, Sneglazka, Ariyelle, Red scarlet, Tashkent ertagisi, Sarnav, Botant, Balatoni rossa, White lady, Demon, Balatoni large varieties were compared with the Pskom variety.

It took 13-21 days for 10-75% germination of potato seedlings in the control Pskom variety, while Sneglazka, Tashkent ertagisi, Botant, Balatoni rossa, White lady, Demon, Balatoni large varieties germinated 1-2 days earlier than the control option. Also, it was found that these varieties had 47.9 to 63.6 percent higher values than the control option in terms of weight and yield of tubers per bush.

Potato germination of Sarnav, Red scarlet varieties was equal to the control variant.

When the samples of Bozhigaon, №01, №02, №05, №9, №12 were compared with the Pskom variety, it took 15-23 days for 10-75% germination of potato seedlings in the Control Pskom variety. new lines №01, №02, №05, №9, №12 germinated 1-2 days earlier than the control variant. If the number of stems is 0.1 to 0.5 more, and the stem height is 5.2 to 13.3 cm, the total yield is 58.2 than the control Pskom variety; 58,2; 50,0; 54,5; 33,5; 58,2 percent higher than the control option was reflected in the experiments.

CONCLUSION

To preserve the various samples of the potato collection as a gene pool, 36 varieties of potatoes were planted and studied in the conditions of the Tashkent region in early spring.

Also, when comparing samples of this variety with the local Pskom variety, Evolution, Red Bullet, Romantika, Mikado, Simega, Arizona, Dizera, Arizona, Spunta, Gala, Kuroda, Sneglazka, Tashkent ertagisi, Botant, Balatoni rossa, White lady, Demon, Balatoni saga and in the experiments, the germination, budding, and flowering of seedlings of the new lines №01, №02, №05, №9, №12 were 1-3 days earlier than the control option, the number of stems and the yield of the stem were 40-50% higher than the control option. found its reflection.

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