

EVALUATION OF THE YIELD OF POTATO VARIETIES AND SELECTION SAMPLES REPLANTED WITH NEWLY DUG TUBERS IN THE SUMMER

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Аннотация: Ўзбекистонда тупроқ-иқлим шароити учун картошка селекциясининг ана шундай специфик хусусиятларидан бири-бу навларнинг бир йилда икки ҳосил беришга яроқлилиги ҳисобланади.

Калит сўзлар: Ҳосилдорлик, селекцион намуна, биокимёвий таркиб, қайта ишлаш, баҳолаш натижалари, нав.

Abstract: One of the specific features of potato selection for soil and climate conditions in Uzbekistan is the ability of these varieties to produce two crops in one year.

Key words: Productivity, selection sample, biochemical composition, processing, evaluation results, variety.

There are many advantages of twice-a-year harvesting of quick-cooking potato varieties, and to take advantage of such advantages, the varieties must be suitable for this crop. In addition, in the following chapters of this dissertation, information is given about the effect of cultivation periods on the growth, development and productivity of potato varieties, as well as on the biochemical composition of tubers, and therefore on the yield and quality of chips made from them. That's why determining the indicators of suitability of tubers for making chips for planting varieties in different growing periods is one of the urgent issues of potato growing.

Material and methods. Field and laboratory tests of new varieties of agricultural crops were conducted on the basis of the "Methodology of conducting

experiments in vegetable, vegetable and potato growing" developed by the scientists of the State Variety Testing Commission [2], Scientific Research Institute of Vegetables, Potatoes and Potatoes [1].

Taking into account the above information, we conducted separate laboratory experiments to evaluate the suitability of our studied samples for obtaining two harvests in one year.

The content of the literature shows that in order to be suitable for two harvests in one year, potato varieties should be quick-ripening, have a short dormancy period, and should be quick and strong awakeners under the influence of growth stimulants [3].

For the experiments, samples of each variety were taken and processed under the influence of growth stimulants, and the germination energy was determined by counting the awakened nodules every 5 days in laboratory conditions. In field conditions, field germination of the samples was determined 30 days after planting.

The results of the experiments show that the nodules of the Surkhan-1 and Kuvonch-16/56m varieties showed fast and high fertility [4].

It was found that 85.3-97.5% of the newly dug tubers in the summer, treated in the solution of growth stimulants, formed shoots after 7 days in the newly evaluated method of evaluation of these varieties in laboratory conditions. When evaluated by the laboratory method, the lowest fertility indicators were observed in the digital selection sample 18a selection sample (82.3 %) and Bahro-30 variety (90.1 %). This indicator was 92% in the Sante variety, which served as a standard.

It should also be noted that selection sample 18a also showed signs of suitability for two harvests in one year in terms of bud viability in the digital selection sample. That is, 83.6% of the total treated buds germinated. However, the germination energy was much lower in this sample. That is, 58.0% of buds formed tumors on 5 days after treatment with growth stimulants in laboratory conditions. (Table-1).

Table 1

**Productivity of potato varieties replanted with newly dug tubers in summer
(2018-2020).**

№	The name of the variety and selection samples	Productivity by years t/ha			Average yield, t/ha
		2018	2019	2020	
1	Surkhan-1	23,1	26,0	25,0	24,7
2	Romano	24,3	27,1	26,6	26,0
3	18a selection sample	23,2	22,9	20,5	22,2
4	Feruza	27,8	28,2	26,8	27,6
5.	Kuvonch-16/56m	19,9	22,0	21,4	21,1
6.	Bahro-30	26,7	27,3	26,4	26,8
7.	Sante (st)	22,8	24,3	23,4	23,5

Conclusion. In our research, Surkhan-1, Romano, Feruza, and Bahro-30 varieties, replanted with newly dug tubers in the summer, obtained a higher yield than the standard variety. The yield of these varieties was on average 24.7-27.6 t/ha per unit area, while this indicator was 23.8 t/ha in the Sante variety studied as a standard. It was found that the selection sample 18a, grown in this way, had a lower productivity index (19.7-22.2 t/ha) than the standard variety.

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