TECHNOLOGY OF GROWING POTATOES IN DIFFERENT PERIODS IN SURKHANDARYA CONDITIONS

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Abstract: In this article, the main purpose of planting and determining the timing of the future potatoes in the conditions of southern Uzbekistan is to supply quality and sufficient quantity of potato products to the population not only in Uzbekistan, but also in other countries.

Key words: potato varieties, planting dates, productivity, cultivation technology

Potatoes are of great importance as food in the national economy. The area where it is cultivated and the gross yield from it are increasing year by year. Today, in our Republic, a number of works are being carried out to ensure the price stability of potatoes, which are among the main types of food products, and to fully satisfy the domestic demand. By the decision of the President of the Republic of Uzbekistan dated 06.05.2020 PQ 4704 "On measures to expand potato cultivation and further development of seed production in the Republic", a number of benefits were granted to the potato industry.Potato-growing clusters and cooperatives were established in Uzbekistan's potato-growing districts. 243 thousand hectares of potatoes were planted in all categories of farms for the 2023 harvest. In addition, seed potatoes imported from abroad until July 1, 2023 were exempted from customs duty. The main goal of this is to start exporting not only to satisfy the demand of our population for potatoes. And in the climate of our country, it is possible to realize this goal. That is, the climate of our country gives the opportunity to plant potatoes in 2 terms and get a harvest.

This is basically the 1st term which is the first decade of February and the 3rd decade of July and the first ten days of August. The soil and climate conditions of Surkhandarya region have the opportunity to produce abundant, high-quality crops of potatoes. For this reason, we conducted an experiment by planting potatoes in the experimental field of the Institute of Agro-Technology and Innovative Development of Termiz District. This is basically the 1st term which is the first decade of February and the 3rd decade of July and the first ten days of August. The soil-climatic conditions of Surkhandarya region have the opportunity to grow abundant, high-quality crops of potatoes. For this reason, we conducted an experiment by planting potatoes in the experimental field of the Institute of Agro-Technology and Innovative Development of Termiz District.

Varietal name	Planting periods	germination		Shonalash		bloom		yellowing of the stem		Harvesting
Sante	I II	10% 11.03.2022 17.03.2022	75% 24.03.2022 26.03. 2022	10% 04.04.2022 10 .04. 2022	75% 10.04.2022 15.04.2022	10% 12.04.2022 24.04.2022	75% 16.04.2022 28.04.2022	*10%* 07.05.2022 17.05.2022	75% 15.05.2022 20.05.2022	 25.05.2022 05.06.2022
Arizona	I II	08.03.2022 15.03.2022	20.03.2022 24.03.2022	03.04.2022 10.04.2022	13.04.2022 11.04.2022	11.04.2022 20.04.2022	17.04.2022 29.04.2022	08.05.2022 15.05.2022	16.05.2022 21.05.2022	24.05.2022 04.06.2022
Kolumba	I II	10.03.2022 16.03.2022	19.03.2022 25.03.2022	11.04.2022 15.04.2022	15.04.2022 18.04.2022	19.04.2022 21.04.2022	23.04.2022 26.04.2022	06.05.2022 12.05.2022	13.05.2022 18.05.2022	20.05.2022 01.06.2022

Sante, Arizona, Columba seed tubers planted on February 10 germinated in 19-25 days. When we observed the Sante variety, 10% germination was observed on March 10-11, 75% germination, i.e. full germination, on March 24. In the Arizona variety, 10% germination occurred on March 6-8, and 75% germination occurred on March 19-20. We found that 10% germination in Columba variety is on March 9-10 and 75% germination is on March 18-19. As a result of experimental monitoring of these varieties, 10% of the Sante variety was harvested on April 4, and 75% of the cultivar was harvested on April 10. In Arizona, it was found that 10% pruning was on April 2-3, and 75% pruning was on April 12-13. It was revealed in our experimental observation that 10% of the Columba variety ripens on April 11, and 75% ripens on April 15. In these varieties, 10% of Sante bloomed on April 12-13, and 75% bloomed on April 16. Arizona variety 10% flowering April 11th 75% flowering April 17th. Columba cultivar had 10% flowering on April 19 and 75% flowering on April 23. Yellowing of leaves in Sante variety 10% on May 7, yellowing of leaves of 75% on May 15. Our observation results showed that the yellowing of leaves of the Arizona variety was 10% on May 6-8 and 75% on May 14-16. In the Columba variety, 10% yellowing of leaves occurred on May 5-6, and 75% yellowing of leaves occurred on May 16-17. Harvesting of Sante variety was done on May 25, Arizona on May 24, Columba variety on May 20. On February 20, i.e., in the second term, when we conducted an observation experiment with a difference of 10 days, we witnessed that the germination of these varieties was 10% on March 17, and 75% on March 26. Arizona had 10% germination March 14-15 with 75% germination March 24. It was studied that 10% germination in Columba variety is on March 16 and 75% is on March 24-25. Shonalashi Sante

10% on April 10, 75%, Shonalashi fell on April 15. In Arizona, 10% fell on April 9-10, 75% on April 12-13, and in the Columba variety, 10% fell on April 15, and 75% fell on April 18. It was found out in the results of our experimental observation that 10% flowering in Sante is on April 24, 75% is on April 28, 10% is on April 20, 75% is on April 29 in Arizona, 10% flowering is on April 21, 75% flowering is on April 26 in Columba variety. We found that the yellowing of the palagi was 10% on May 17, 75% on May 20 in Sante, 10% on May 15, 75% on May 21 in Arizona, 10% on May 12, 75% on May 18. We harvested in Santee on June 5, in Arizona on June 4, and in Columbus on June 1. Seed nodule reproduction of 3 quick-ripening potato varieties Sante, Arizona, Columba and 2nd local variety was planted in the field experiments conducted at the experimental site of the Institute of Agrotechnology and Innovative Development of Termiz district. The medium-fast Columba variety was taken as a standard. The cultivated area is 14m/2. The number of rows is 3-4. Planting was carried out in a 70x20 cm scheme with whole and cut seed nodules weighing 50-60g. Columba seed planted on February 10, Sante, Arizona. lyk nodules fully germinated in 19-25 days.

These varieties are characterized by the formation of a medium-sized, serrated and strong palak. Potato seedlings planted on February 10 were harvested on March 25. Potato seedlings planted on February 20 were harvested on April 1.

During the observation of potato seedlings, we witnessed the presence of insects on the leaves and damage. After that, on April 12, insecticide (Polyethylene) was given in suspension. After a few days, we saw that the condition of the potato seedlings improved as they were freed from insects. After that, on April 15, the potato seedlings were weeded and treated lightly. 12.6-20 t per hectare was obtained in 75-90 days after germination of studied varieties. The highest yield was found in Columba (20t.ha), Sante (17.5t.ha), Arizona (16.8t.ha) varieties. When planted on February 20, Sante (14.5 tons), Arizona (13.6 tons), and Columbus (18 tons) were harvested. Experimental observations revealed that the yield of these varieties planted on February 10 was high. Among these cultivars, Columba yielded higher than Sante Arizona cultivars. It was found that there is a possibility of 20-23 tons of high-quality harvest per hectare of the Columba variety.

In the Surkhan oasis, planting of quick-ripening varieties of potatoes such as Sante, Arizona, Columba in the first ten days of February at a depth of 10-12 cm allows to get 20 tons more per hectare by May 15-25.

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