IMPORTANCE OF SWEET CORN GROWING

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Annotation. The scientific article aims to study the growth, production and yield of sweet corn when it is grown as a permanent crop in various production areas, to select the optimal production, and to give recommendations for further production in the optimal feeding area.

Keywords: sweet corn, variety, hybrid, sowing date, mineral fertilizers, vegetable grain yield, economic efficiency.

Аннотация. Цель научной статьи — изучить рост, продуктивность и урожайность сладкой кукурузы при выращивании в качестве многолетней культуры в различных районах производства, выбрать оптимальный урожай и дать рекомендации по дальнейшему выращиванию в оптимальном районе кормления.

Ключевые слова: сладкая кукуруза, сорт, гибрид, сроки посева, минеральные удобрения, урожайность зерновых культур, экономическая эффективность.

Introduction. The economic production in the economy of our country is currently the economic calculation of the current agricultural sector, its production based on new production, updating the cost of production, attracting new innovative technologies, and increasing the quantity and quality of products to the people. For this, spending less on production and making a large profit is the basis of the economy.

It is known that providing recommendations and suggestions for the production of each plant in agricultural production also ensures high economic efficiency in product production. 2022

January 28, 2022 "On the Development Strategy of New Uzbekistan for 2022-2026" Decree No. PF-60, in its 30th goal: "Through intensive provision of agriculture on a scientific basis, farmers' incomes will increase by at least 2 times, the annual growth of farm production will be at least 5 percent, the consumption of food products, the production of food products, and the supply of food products from 898 to 1,100 varieties through the production of the geography of crop types in the republic. Currently, a number of new vegetable crops are being cultivated in our republic, such as artichoke, okra, sweet potato, Brussels sprouts, medicinal melissa, and sweet corn. Among these new vegetable crops, sweet corn (Zea mays saccharata) is the most common, and its varieties and hybrids are suitable for soil and climatic conditions, and scientific production and agrotechnological production play an important role in their production. [2].

Materials and methods. Field experiments were conducted on the meadow-gray soils of the Tayloq district of Samarkand, which specializes in vegetable growing, to study the economic impact of the Zamon variety and Megaton F1 hybrid on the yield of vegetables with different sowing dates: April 15, April 20-25, and the rates of mineral fertilizers NPK 150:105:78K and N120K; 210:150:105 kg/ha [1].

Results and their analysis. Based on these, the costs of growing high-quality vegetables from sweet corn in the conditions of the meadow gray soils of the Samarkand region, the total income from the sale of the product, and the net profit were calculated based on current market requirements. In the experiment, the average yield of vegetables and grains from the Zamon variety of sweet corn in three years was obtained from 4.68 t/ha to 13.4 t/ha, and from the

Megaton F1 hybrid from 5.54 t/ha to 16.5 t/ha. The purchase price of 1 kg of the cultivated vegetable and grain crop was 3,000 soums, the income from the Zamon variety was 14,040,000 soums to 40,200,000 soums, the total expenses were 8,885,000 soums to 14,624,098 soums, the income from the Megaton F1 hybrid was 16,620,000 soums to 49,620,000 soums, the total expenses were 10,550,000 to 17,081,328 soums. According to calculations, the highest economic efficiency in the experiment was achieved with the sweet corn variety and hybrid planted on April 10-15, and mineral fertilizers were applied at the rate of NPK 180:125:90 kg/ha, the Zamon variety in option 7, the Megaton F1 hybrid in option 19 determined, in which the conditional net profit for the variety and hybrid was 26252158 and 33020477 soums/ha, respectively, the cost of production per kilogram of product was 1040.8 and 1003.5 soums, and the profitability rate was 188.2 and 198.9%. In variants 6 and 18, where mineral fertilizers were applied at an increased rate of NPK210:150:105 kg/ha, these indicators were 23835902 and 31158672 soums/ha, 1140.7 and 1062.2 soums/kg, respectively; 163.0 and 182.4%, and in variants 8 and 20, where mineral fertilizers were applied at a reduced rate of NPK 150:105:75 kg/ha, these indicators were 19942950 and 25135400 soums/ha; 1195.2 and 1143.6 soums/kg; 151.0 and 162.3%. In the control options 5 and 17, where no fertilizer was used, the conditional net profit was the lowest 9336150 and 9474500 soums/ha, the highest cost of one kilogram of product was 1555.2 and 1588.0 soums, and the lowest profitability rate was 188.2 and 198.9%. In options 1 and 13, where sweet corn varieties and hybrids were sown early, from April 1 to 5, and maintained without fertilizer, the net profit was 5155000 and 6070000 soums/ha, the cost of 1 kg of product was 1898.5 and 1904.3 soums, the profitability rate was 58.0 and 57.5%, at the NPK ratio of 210:150:105 kg/ha. In variants 2 and 14, fertilizers were applied at a rate of 15,133,050 and 21,904,800 soums/ha, respectively; 1,454.2 and 1,265.6 soums/kg; 106.3 and 137.0%, in variants 3 and 15, fertilizers were applied at a rate of 180:125:90 kg/ha, respectively; 1,636,3494 and 2,398,0269 soums/ha, respectively; 1,365.2 and 1,175.0 soums/kg; 119.7 and 155.3%, and in variants 4 and 16, where fertilizer was applied at the rate of NPK 150:105:75 kg/ha, it was 11285080 and 16990150 soums/ha; 1592.8 and 1381.8 soums/kg; 88.3 and 117.1%. It was determined during the calculations that these indicators are the lowest indicators in the experiment. When sweet corn varieties and hybrids were planted in the evening of April 20-25, the net profit obtained in the control options 9 and 21, where no fertilizer was applied, was 6784617 and 7463310 soums/ha, the cost of 1 kg of product was 1712.6 and 1768.4 soums, the profitability rate was 75.2 and 69.6%, in the options 10 and 22, where fertilizers were applied at the rate of NPK 210:150:105 kg/ha, respectively, 19769282 and 24356240 soums/ha; 1273.4 and 1232.7 soums/kg; It was noted that in variants 11 and 23 with NPK 180:125:90 kg/ha, 21404613 and 25994445.8 soums/ha; 1178.3 and 1161.6 soums/kg; 154.6 and 158.3 %, in variants 12 and 24 with NPK 150:105:75 kg/ha, 16243397 and 19275675 soums/ha; 1332.3 and 1320.9 soums/kg; 125.2 and 127.1 %, respectively.

In the experiment, the lowest economic efficiency was determined in variants 1 and 13, when sweet corn varieties and hybrids were sown early, from April 1 to 5, and fertilizers were not applied, with a net profit of 5,155,000 and 6,070,000 soums/ha, a cost of 1 kg of product of 1,898.5 and 1,904.3 soums, and a profitability ratio of 58.0 and 57.5%. In general, in the conditions of the meadow gray soils of the Samarkand region, planting sweet corn of the Zamon variety and the Megaton F1 hybrid on April 10-15 increased the yield by 3,181,150 and

3,404,500 soums/ha compared to planting it 10 days earlier (April 1-5) to 9,888,664 and 9,040,208 soums/ha, 10 days later (April 20-25) compared to sowing from 1551533 and 2011190 soums/ha to 4847545 and 7026032 soums/ha, compared to applying mineral fertilizers per hectare at the rate of NPK 180:125:90 kg/ha, compared to applying NPK 210:150:105 kg/ha, from 1230444 and 2075469 soums/ha to 1861805 and 2416256 soums/ha, compared to applying NPK 150:105:75 kg/ha, from 5078414 and 6718770 soums/ha to 6309208 and 7885077 soums/ha A large amount of net profit is obtained.

Conclusion. According to the obtained economic analysis, the highest economic efficiency was achieved when sweet corn varieties and hybrids were sown on April 10-15 and fertilized with mineral fertilizers at the rate of NPK 180:125:90 kg/ha. In the Zamon variety, the conditional net profit was 26252158 soums/ha, the cost of production per kilogram of product was 1040.8 soums, and the profitability rate was 188.2%, and in the Megaton F1 hybrid, the corresponding figures were 33020477 soums/ha, 1003.5 soums/kg, and the profitability rate was 198.9%.

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