

# ECONOMIC EFFICIENCY OF VARIOUS AGROTECHNICAL MEASURES IN WINTER WHEAT

**Andijan Institute of Agriculture and Agrotechnologies, professor  
Jo'raev Akmaljon Normukhamadovich**

**Abstract:** In this article, the economic effectiveness of the results of planting winter wheat in three different seeding rates on typical gray soils of Tashkent region is written.

**Key words:** yield, irrigation erosion, cotton, efficiency, yield winter wheat, typical gray soil, mineral fertilizers, plant height.

In the conditions of typical gray soils of Tashkent region, in 2012, when winter wheat was grown in three different seedling thicknesses, three different soil tillage methods and three different fertilizer standards, the first planting method, i.e., winter wheat was planted between cotton rows for three years in accordance with fertilizer standards and seedling thicknesses. Conditional net profit was worked out by the difference between the income received and the expenses incurred in relation to the average grain yield.

According to the obtained results, cotton was cultivated between the rows, 4 million winter wheat seeds were planted per hectare, mineral fertilizers were applied at the rate of N150P105K75 kg/ha, the conditional net profit was equal to 72323 soums, and the profitability rate was 8.0%. It was found that in the 2-3- options, in which the rate was increased to N200P140K100 and N250P175K125 kg/kg, the conditional net profit was 145123-223843 soums, the profitability level was 14.6-20.7%.

Winter wheat was cultivated between rows of cotton, but the seed sowing rate was set at 5 million pieces per hectare, and the conditional net profit obtained in the 4-5-6 options was 253483-287803-328043 soums, and the level of profitability was 27.6- It was found that it was 28.5-29.9%.

In the 7-8-9 options, where the seed planting standards are set at 6 million pieces per hectare, the conditional net profit is 334003-471923-497363 soums, and the profitability level is 35.7-46.0 according to these options. -44.6%. If we analyze the data obtained above, compared to the 1st option, in the 2nd and 3rd options, a higher grain yield of 5.5-11.2 t/ha was obtained due to the use of excess mineral fertilizers. This ensured a higher level of profitability by 6.6–12.7%.

In the options 7-8-9, where the sowing rate of winter wheat seeds is set at 6 million seeds per hectare, compared to the options 1-2-3, where seeds are planted at the rate of 4 million seeds per hectare, profitability is 27.7-31.4-23 We can see that it has increased by .9%. In this agricultural fund, the conditional net profit was 359,600-423,920-437,520 soums, and the level of profitability was 37.0-41.1-39 An increase of 0% was determined as a result of the data obtained from the studies. In the options where the seed planting rate was increased to 6 million units per hectare, the conditional net profit was 137003-165403-161243 soums in accordance with the norms of three types of mineral fertilizers (N150P105K75, N200P140K100 and N250P175K125 kg/ha), seed Due to the increase in sowing rates, the height of winter wheat grew, the stalks became stunted and lay down, and the yield level decreased, i.e. 14.3–15.8–14.2% (see table 4.1).

If we analyze the results of the experimental field plowed before planting, and then winter wheat is planted, it was found that the conditional net profit and the level of profitability were completely different from the options of winter wheat planted between cotton rows and intercropped, that is, the differences between them were large due to increased costs. The experimental field was plowed and 4 million winter wheat seeds were sown per hectare, and the conditional net profit from the 19th option was 141166 soums, and the rate of profitability was 12.6%. It was noted that due to the increase in mineral fertilizer standards (N200P140K100 and N250P175K125 kg/ha), that is, in options 20-21,

the conditional net profit was 409326-440223 soums, and the profitability level was 33.9-31.6%. If the field soil is plowed to a depth of 28-30 cm and the rate of sowing seeds is increased by 5 million pieces per hectare, the conditional net profit from winter wheat in accordance with the norms of mineral fertilizers in options 22-23-24 is 133043-273243-389163 soums, the profitability and the level was found to be 11.3–22.0–29.1%.

The analysis of the results of the scientific research shows that in the options where the soil of the experimental field was chiseled and plowed in the fall, the agrophysical properties of the soil were good, the germination of seeds, the growth of seedlings was good, the thickness of the seedlings increased, and the height of the winter wheat grew due to the use of mineral fertilizers at high standards. and because of this, its stems become dormant and lie down, which led to a decrease in the number of productive stems of the plant. This, in turn, caused a decrease in productivity.

According to the obtained results, the profitability level was the lowest in options 1–11–27, i.e. 8.0–8.8–6.5%, while the highest profitability level was in option 8, i.e. cotton was cultivated between rows and per hectare It was determined that 6 million seeds were planted, and the rate of mineral fertilizers N200P140K100 kg/ha was 46.0%.

#### List of used literature

Jo'raev A., Hoshimov I., Effect of mineral fertilizers rate and seedling thickness on winter wheat grain yield // "Ecological bulletin" magazine. Tashkent, 2018. No. 5(205. P. 16–17. (06.00.00. No. 2).

Tursunov H., Jo'raeva H., Jo'raev A.N. The effect of rice sowing on the seedling method for different periods planting pattern and the number of seedlings // J. Psychology and education ISSN:00333077 (2021) 58 (1): 5517-5525

Egamov H., Kimsanov I., Rakhimov A., Zhuraev A.N., Kholmurojonov.Zh., Issues of selection methods and combinative ability of

cotton varieties // “Modernization of the sphere of education and science taking into account world scientific and technological trends” collection of scientific works on materials of the international scientific and practical conference. - Belgorod: 2020. 15-18 s.

Joraev A.N, Khoshimov I. The influence of winter wheat agricultural technology on grain fertility // journal: “Current problems of modern science”. Moscow, 2018. No. 4. pp. 166–168. (06.00.00.№5).

Joraev A.N., Mamadaliev Z., Kholmurodzhonov Zh. Basic agrotechnical measures for the cultivation of winter wheat // Science and world international scientific journal. ISSN: 2308-4804. No. 6(82), 2020. 33-b.

Joraev A.N, Optimal elements of agricultural technology for the cultivation of winter wheat //International Center for Scientific Cooperation “Priority Directions for the Development of Science and Education”. Penza. 2018. pp. 69–72.

Joraev A., Mamadaliev Z., Kholmurojonov Zh., Ways to increase soil fertility and winter wheat yield // J. The Way of Science international scientific journal. ISSN: 2311-2158. No. 6(76), 2020. 21-b.

Akmaljon Joraev, Dilnozakhon Kambarova, Ortikali Ismoilov, Burkhonjon Ochilov, The influence of effective agricultural technologies on the growth of winter wheat // SCIENCE AND INNOVATION international scientific journal/ ISSN: 2181-3337. No. 4, 2022. 122-st.