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THE INFLUENCE OF FERTILIZER STANDARDS ON THE GRAIN QUALITY OF FRESH AND PERSPECTIVE WHEAT SORTS

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АННОТАЦИЯ. Кузги буздор бозилга минерал ўгитлар межерларининг таъсирли ўрганилди. Маъданли ўгит межери N-200; P-120; K-120кг бўлган вариантда кузги буздор навларининг биометрик кўрсаткичлари юқори бўлгани аниқланди.

KALIT SO’ZLAR. Kuzgibug’doynavlari, mineral o’g‘itlar, biometric korsatkich, naychalash, gullash, hosil.

АННОТАЦИЯ. В этой статье подчеркивается влияние минеральных удобрений на урожайность озимой пшеницы. Установлено, что биометрические
данные сортов озимой пшеницы были высокими, когда нормы минеральных удобрений были в вариантах N-200; P-120; K-120кг.

**КЛЮЧЕВЫЕ СЛОВА.** Сорта озимой пшеницы, минеральные удобрения, биометрические показатели, дренаж, цветение, урожайность.

**ANNOTATION.** In this article the influence of mineral fertilizers on the winter wheat yields is highlighted. It was determined that biometric data of winter wheat sorts were high when the norms of mineral fertilizers were in variantsof N-200; P-120; K-120kg.

**KEY WORDS.** Fall wheat varieties, mineral fertilizers, biometric indicators, tubing, flowering, yield.

**Introduction** In today’s fast space of time, a considerable attention is being paid to the increase of grain yields and grain quality in irrigated lands of our Republic. Different sorts of new and perspective winter wheat are being regionalized in diversified districts of the country. Crucial factors of obtaining stable, abundant and high quality grains from new and perspective wheat sorts in irrigated lands includesowing period, sowing norm, the order of irrigation, amount of mineral fertilizers, and implementation of high-agrotechnologies. Agrotechnical measures used in the cultivated fields of are among the main factors of high yield and high quality grain harvesting. In order to obtain high quality harvest of winter wheat, high agrotechnologies should be used to maximize its potentially productive yield.

**LITERATURE REVIEW.** R. Siddikov writes about the importance of grainy plants in cultivating quality and high yields in Uzbekistan. The information given by V.F.Sanko, A.V.Pukorskiy, V.N.Remeslo.E.D.Adinyayev, N.Hamidov and others, the scientists of the Krasnodar grainy plants Institution, N.Kh.Khalilov, T.Khujakulov and others, N.R.Shonov, N.G.Malyuga, Kh.SHeraliyev and others,
I.Najmiddionov, J.Khudoykulov, R.Siddikov and other specialists shows that in order to yield high quality crops, we should create, sow and care for grain sorts taking into the consideration the soil-climate conditions and their biologic peculiarities[1].

The quality of grain yield depends on soil fertility, applied fertilizer and water regime. According to A.A.Sozinov, I.A. Maximov and other prominent physiologists, high-quality grains can be grown only when there is sufficient nitrogen, phosphorus and potassium in the content of the soil. Scientists G. Jeleeva and V.N Nesteretst stated that in their experiments they could not obtain high quality yields by using phosphorus and potassium, and only the additional usage of nitrogen increased protein in the grain content[3].

Z.Ziyadillayev, G. Uzakov and Sh.Ismatov have written about the effect of irrigation norms to the quality of winter wheat seeds, as follows: We can produce 40.3 c/ha yield with IDK 111 from “Tanya” sort if we irrigate them 3 times, on average 1100m3/ha. In Jayhun sort, the result was much higher- 47,3 c/ha IDK – 94,5 ha; the best variant is produced when we irrigate Jayhun sort 5 times, on average 810 m3/ha water. We can produce 59 c/ha harvest with IDK-99[10].

K.Sidarov and T.Mukimov have researched the importance of grainy and legume crops in irrigated lands, when they are sown in a mixed way[5].

T.Jalolov and A.Mansurov have written about the effect of winter wheat sowing norms to the seed quality and high yields. Dj.Umarov and Kh.Adilov, N. Isroilovahave written about the state of the hard wheat in the hybrid. Scientific researchers have been carried about the influence of wet irrigation on the wheat harvest, the effect of repeatedly sown plants and mineral fertilizers to the harvest of winter wheat[7].
B. Jurakulov and A. Z. Ortikov have developed the way of economical irrigation in order to produce high quality yields from winter wheat in Surkhandarya[4].

R. Siddikov have concluded his scientific researches as follows:

1. The sort is considered as the main factor in producing high quality crops from winter wheat.

2. It is important to irrigate Kroshka and Polovchanka sorts 4 times in practice, totally 2600-2650 m$^3$/ha and Mars sorts 3 times, totally 2210-2240 m$^3$/ha

3. The winter wheat fields should be fertilized as N-180, P-90, K-60 in grassy soils, N-210, P-90, K-6kg/ha in brown soils; phosphorus and potassium fertilizers should be applied before sowing and nitrogen fertilizers should be used 15% in autumn, 25% in early spring, 45% in branching period and 15% in graining period. All of them have conducted researches on irrigational agriculture[6].

**RESEARCH METHODOLOGY.** Nowadays farmers in different regions are cultivating winter wheat varieties that meet various climatic conditions. However, while fertilizing winter wheat sorts with minerals, the same principle of fertilizers is used without considering that the autumn wheat varieties are an independent genotype and they have diverse demands for substances. This leads to excessive consumption of mineral fertilizers or less than required, resulting in lower economic efficiency.

Taking into the consideration that today’s demand for for grains and the increase in their productivity, in our scientific researches for 2017-2018, we have examined the new and perspective wheat varieties imported from Russiato the Khorezm region in terms of soil fertility and water supply requirements, and our main task is to recommend distinguishing features between the reciprocal and optimal soft wheat varieties and produce high yields with good quality.
We have studied the effect of mineral fertilizers in different ratios and norms on the productivity of new and promising varieties of wheat varieties in irrigated meadow aluvial soils of the Khorezm region. In particular, the effect of 3 fertilizer backgrounds: N-150; P-90; K-90kg, N-200; P-120; K-120kg, N-250; P-140; K-140kg to the yield structure of the winter wheat varieties was investigated.

Experiments were conducted at the Gulistan Farmers Association of Urgench district, in 2017-2018 on a series of new and promising winter wheat varieties "Krasnodar-99", "Pamyat", "Tanya", "Polovchanka".

In field experiments 4 repeated 120 square meters margins were placed in the same yarus. The new and promising wheat varieties were irrigated 3-5 times during the growth period. In our research, the moisture content of the soil before irrigation was kept average 70-70-70 percent according to the wetness capacity of bordered field of the feeding variants. This process, as usual, involves leaving, spitting, tubing, graining, flowering and ripening (milk, wax, fully ripening) periods.

Before the plowing of the land, mineral fertilizers were given in the amount of 100% of potassium fertilizers, 60% of phosphorus fertilizers, during the spitting period 40% of phosphorus fertilizers, 60% of nitrogen fertilizers, during the tubing period 20% of nitrogen fertilizers, during the graining period 10%, and during the ripening period 10%. Feeding of nitrogen fertilizers during graining and ripening periods is also done through the leaves, together with roots.

However, it should be noted that excess application of nitrogen fertilizer has led to the reduction of starch in the grain.

Table1 below describes the technological parameters of new and perspective wheat varieties in terms of the amount of fertilizer.
In our experiments, the fertilizer level and the refractometer index in the "Polovchanka" type is studied according to the phase of wheat growth. According to this, the irrigation, which is done when the sweet concentration on the leaves reach 7.5 to 9%, leads to an increase in grain yield. The same situation was repeated in "Krasnodar-99", "Pamyat" and "Tanya" wheat varieties. In this way, the grain's transparency, protein content and gluten has also increased. It should be noted that the "Krasnodar-99" wheat grade is the first in terms of transparency of grain and protein content. The high concentration of fertilizer of "Pamyat" sorts was also high in protein and gluten content.

"Polovchanka" wheat varieties are of the 2nd grade, while the second and third variants of "Krasnodar-99" wheat will meet the first grade.

In the "Tanya" wheat sorts, this can be observed in the second variant of the experiment. Thus, the highest quality and most reliable crop is grown on "Krasnodar-99" wheat (Table-1). (This table is defined on page 117).

CONCLUSION. In summary, under the conditions of grassy alluvial soils of the Khorezm region, annual norms of fertilizers should be N-200; P-120; K-120kg. This provides a yield of 70.4t in "Krasnodar-99", 65.5t in "Pamyat", and 60, 2t in "Tanya" sorts. It is possible to get abundant and high yields and achieve high economic efficiency by accurately identifying the harvesting principle.

REFERENCES


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<tr>
<th>№</th>
<th>The standards of mineral fertilizers, kg/ha</th>
<th>The nature of the grain, g/l</th>
<th>Transparencу, %</th>
<th>The mount of protein</th>
<th>Gluten amount %</th>
<th>Quality group (IDK)</th>
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<td></td>
<td>The control Polovchanka</td>
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<tr>
<td>1</td>
<td>N150 P90 K90</td>
<td>727</td>
<td>58,5</td>
<td>11,8</td>
<td>26,6</td>
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<tr>
<td>2</td>
<td>N200 P120 K120</td>
<td>755</td>
<td>60,2</td>
<td>12,0</td>
<td>27,3</td>
<td>II</td>
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<tr>
<td>3</td>
<td>N250 P140 K140</td>
<td>757</td>
<td>64,8</td>
<td>13,0</td>
<td>28,6</td>
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<td>4</td>
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<td>6</td>
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<td>765</td>
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