

Influence of Past Crops on Winter Wheat Yield

Buriev Abduvahob Abdirazzakovich¹, Oripov Razzok Oripovich²

¹Independent Researchers, Department of Agriculture and Melioration of Agronomy faculty, Samarkand State Agricultural Institute, M.Ulugbek str., 77, Samarkand, Uzbekistan

²Professor, Department of Agriculture and Melioration of Agronomy faculty, Samarkand State Agricultural Institute

Abstract: After getting the Independence of our Republic the improving the efficiency of cultivation of crops in the modern short-term rotation of cotton, feeding the crops through crops, has become one of the pressing issues of increasing the efficiency of the soil fertility. The growth of grain production in our country is of great importance for the use of potential grain crops, such as winter wheat yields.

Keywords: Winter wheat, short-term varieties, sideration, soil properties, pasture crops, mass fraction, specific mass, agrochemical characteristics, herbaceous vegetation, crop shrubs, ponds, nutrition regimes, soil type.

1. Introduction

Growing of grain production in our country is of great importance for the use of potential grain crops, such as autumn wheat varieties, in the field of cultivation and increase of grain quality in the field of transplantation [2].

Maintaining and increasing the amount of organic matter in soil is of great practical importance in the system of dehkanization (gardening). Because the amount of organic matter determines soil fertility, its physical, chemical and biological properties, which, in turn, positively impact crop cultivation [3].

2. Methods of research

Field and laboratory experiments are being conducted to determine the type of pasture crops that are suitable for winter wheat cultivation and their impact on soil properties under typical gray soils of the Kashkadarya region.

Field experiments were carried out in the conditions of typical rugged irrigated soils of Razzak ota Meliyev farm (Yakkabog district).

3. Results and discussion

The experiments in the field which were conducted in 6 variants 4 repetitions. In the experiment, the length of the field was 60 m, and the width was 7.2 m, with each of the field 432 m², including 360 m². The experimental options were systematically placed in one half.

In the 0-30 cm layer of typical rugged irrigation of irrigated soil, the topsoil content is about 1.26% in the 30-60 cm layer and about 0.8%, the nitrogen content of soil varies from 0.12 to 0.067% phosphorus content was found to be 0.18 - 0.0996% and potassium - 2.41% - 1.8%.

Field soil area has been poorly matched with phosphorus, which has a moderate potassium content of 21.3 - 18.4 mg / kg, with a median of 235 - Was found to be 217 mg / kg.

Impacts of Pastures on Grain Preconditions and Quality of Wheat Grown on Typical Ground Soil Tests and Field Experiments In 2015-2017, Field and Laboratory Experiments (Table 1).

Field experiments were carried out in the conditions of typical irrigated soils of Yakkabag district of Kashkadarya region. Experiments have been made in the following system to investigate the impact of past crops on wheat grains and quality in the conditions of typical rugged soils of the Kashkadarya region.

Table 1: The agrochemical character of the field of experimental field

Soil layer	Common formats,%				Active forms, mg/kg	Exchange forms, mg/kg
	topsoil	Nitrogen	Phosphorus	Potassium	P ₂ O ₅	K ₂ O
0-30	1,26	0,12	0,18	2,41	21,3	235
30-50	0,8	0,067	0,096	1,8	18,4	217

Table 2: Field Experience System (Scheme)

№	Experience options
1	From autumn wheat (control)
2	Cotton
3	Corn
4	Peas
5	Bean
6	Raps

Past-growing crops have had a considerable impact on the overall number of winter wheat stocks. In the control (winter wheat) version, the total wheat was harvested (526,1 units) and the number of shrubs (387 units), whereas in the experimental pastoral crops, rape crops were sown in general and productive strains The number was 584,9-587,4 and 435-452 units respectively. It has been observed that the growth of the stem in the plant is accelerated by favorable

predecessors. This phenomenon is characterized by a positive influence on the soil properties of the predecessors (Table 3).

Table 3: The height of the winter wheat after past crops, total and productive number of stems, and productivity

№	Experience options	The height of the plant height, cm	The number of total stem, m ² /pcs	The number of productive stem, m ² /pcs	Fertileness, centner/ha
1	From autumn wheat (control)	90,7	526,1	387	49,7
2	Cotton	93,5	548,6	403	55,3
3	Corn	89,0	535,3	394	53,1
4	Peas	94,5	545,5	421	60,0
5	Bean	98,1	584,9	435	62,3
6	Raps	97,9	587,4	452	65,1

In the field experiments, the number of cereals in the 1m² was 387 units in the autumn winter wheat, and the highest figure was 452 after the rape was harvested in the past. The positive effects of past crops are reflected not only in the accumulation of winter wheat, but also on the number of cereals in 1 square meter. The highest incidence of mushroom and rape crops, as well as the overall number of stools, was observed.

In the study, the height of the plant during the harvest period was highest in the influence of past crops, as well as autumn and rape crops, which were sown in the winter wheat, with the fall wheat, corn, and cotton in the past was slightly lower.

According to the information obtained, winter wheat planted with a total number of stems of 1 sq. m. 526,1 pcs., And after sowing in autumn sowing, the total number of stems was 1 sq. m. 548,6 units, which is characterized by a relatively small difference with regard to control, the most susceptible to the past crop, and after the rape season, the number of sown wheat was 548,9-587,4 units per 1 m² compared to 58.8-61.3 units per 1 m².

4. Conclusions

In accordance with the above-mentioned indicators, the yields of winter wheat were 49.7 centner/ha, whereas the pre-harvest crop was 62.3 centner/ha and was followed up by 12,6 tons per hectare, and the highest figure was 65,1 centner/ha after the pre-planted rape, which was higher than control the yield of winter wheat was 15,4 centner/ha.

References

- [1] Methods of field experiments. Tashkent, 2007, 146 p.
- [2] Mirziyoyev Sh.M. The Priority of law and human interests are the key to progress and prosperity of the country. Tashkent, Uzbekistan, Publishing House, 2017.
- [3] Xalikov B. Soil Fertility // Agricultural Journal of Uzbekistan, 2005, №4. p. 16.
- [4] Xalilov N., Bobomirzaev P.X. Conditions for improving the technology of winter wheat cultivation. //journal of Agricultural Journal of Uzbekistan, 1998 №5-6, p.35-37.