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## ADVANTAGES OF RICE PLANTED BY THE ACHAT METHOD

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### Abstract

Crop rotation of wheat and early-ripening rice in the same field has given good results. If rice seeds are sown in open fields from early spring, a lot of water is used. Therefore, one of the effective ways to save water is to grow rice by seedling method.

**Keywords:** rice varieties, winter wheat, seed, variety, productivity, climatic conditions, water efficiency, pale gray soils

### Introduction

The increasing demand of humanity for food products requires the increase of agricultural products. The main way to increase food production is to improve the variety of crops grown in agriculture and especially to create a strong food base. Year by year, the population's demand for quality products is increasing.

In agriculture, there is no crop that can be compared to rice in terms of its nutritional value and quick cooking. Rice grain is the most nutritious food product for humans. One kilogram of rice contains 75.2% carbohydrates (mainly starch), 7.7% protein, 0.4% oil, 2.2% tissue, 0.5% ash and 14% water. food is digested very quickly and fully absorbed. The absorption coefficient of rice is the highest - 96%, caloric content is 3594, and that of wheat is 6310. Korean people make bread from a special type of rice (glutinous rice). Winter wheat is demanding on predecessor plants. Experiments have shown that chronic two-year intercropping of grain crops, including winter wheat, leads to the increase and accumulation of diseases and pests, weeds, and reduces productivity. . That is why it is good to alternate between wheat and rice..

As in the whole world, the demand for water in Uzbekistan is increasing year by year. If rice seeds are sown in open fields in early spring, a lot of water is used. Therefore, one of the effective ways to save water is to grow rice by seedling method. In this method, a large part of the annual water standard is saved due to the cultivation of rice seedlings in small areas.

We conducted an experiment to study the effect of seedling thickness on the yield of rice planted on land freed from winter wheat. The experiment was conducted in the conditions of the Nursaid farm, Koshtepa district, Fergana region. This farm is located in the desert area of Koshtepa district. The climate of this region is sharply continental, the highest temperature in July is up to +50 °C, the minimum temperature is in January, and in some years it is cold to -24 °C. The average annual rainfall is 200-220 mm. The soils are light gray soils and have been irrigated since ancient times. The depth of underground water is 5.5-8.8 meters. The experiment was carried out in the following system:

Option 1: 30x10-1;

Option 2: 15x10-1;

Chongara and Jaidari varieties of rice were planted in the experiment, and after germination, they will be planted according to the above scheme. The experiment consisted of two options and was conducted in 4 repetitions. The area occupied by one compartment is  $20 \times 4.8 = 96 \text{ m}^2$ . After harvesting the autumn wheat crop, 60 kg of phosphorus and 40 kg of potassium fertilizers per hectare were applied to the experimental field and plowed to a depth of 30 cm. After that, the field was prepared for planting and rice seedlings were planted on June 15. After planting, the experimental field was watered. After the rice seedlings were fully transplanted, they were planted according to the above scheme.

As a repeated crop, seeds are sown in nurseries on May 20-30. We will transplant seedlings to the main area on June 20-30. In this case, 20-22 million rice seeds or 650-750 kg per hectare are sown in the nurseries. In the nursery, rice is ready for planting in 30-40 days. Seedlings are fed with nitrogen fertilizer at the rate of 5 kg/ha at the age of 25-30 days. After a week, the seedlings are transplanted to the main field, that is, it coincides with the beginning of the paddy growing season.

Seedlings are planted 1-2 seedlings per nest in the main area. It is recommended to plant at a distance of 10-15 cm. 65-100 thousand seedlings are used per hectare. The water regime in Sholipoya is carried out on the basis of general agrotechnical requirements. After planting rice seedlings in the main field, the first fertilizer is given 3-5 days later at the rate of 40 kg/ha. After 30 days, when the rice has 7-9 leaves, the second fertilizer is given at the rate of 40 kg/ha. The water regime is carried out on the basis of general agrotechnical requirements until rice ripens.

According to the data obtained from the experiment, it was observed that the height of the stem of the plant increased significantly with the increase in the thickness of the seedlings of Chongara and Jaydari varieties of rice. In option 1, the height of the corn stalk was 195.7 cm, while in option 2 it was 202.2 cm. In option 3, it was 212.4 cm. The number of leaves per plant decreased partially with the increase in seedling thickness.

Depending on the options, the degree of swelling in one bush of rice was 10-16 in 15x10-1 chongara 5-10 in 30x10-1 jaidari variety.

These two varieties of rice, which were planted in the "Nursaid" f/x desert zone of Koshtepa district of Fergana region, were harvested on October 10-15.

The length of the grain of our rice in the first option is 10-16 cm. The weight of one husked rice grain was 24-28 g.

The length of the grain of our rice in the second option is 10-20 cm. The weight of one husked rice grain was 24-32 g.

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