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Research Article

THE BEST PLANTING SCHEME FOR GROWING ONIONS AS A REPEATED CROP - DETERMINING THE FEEDING AREA

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ABSTRACT

The observations gave the following results, it is known that the number of seedlings per unit area is more or less, the number of ribbons in the tape and the distance between plants in the tape is short (5 cm) or wide (10 cm) caused the error amount to vary. The reason for the decrease in productivity from the small feeding area to the large feeding area was directly related to the number of plants per unit area. If onion sprouts are planted in a two- and three-row tape method, the amount of onion heads in the crop is 92,1% to 93,8%; It was found to be in the range of 86,4 percent to 89,9 percent. Among the studied planting schemes, the highest and highest-quality yield per hectare was obtained from options planted in three rows, the distance between strips was 15 cm, and seedlings were planted in the strip at a distance of 5 and 7,5 cm (44,8; 38,7 t/ha).

KEYWORDS

Onion, variety, seed, plant, planting scheme, harvest, care.

INTRODUCTION

In terms of cultivated area and gross yield, onion ranks second after tomato as one of the main vegetables grown in our republic. Not only the people of the republic and the processing enterprise are provided with the onion harvest, but also a part of its products is exported. One of the important resources for increasing the gross yield of onion is to grow onion seedlings as a repeated crop on the land freed from spiky crops and fairy vegetables.

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The purpose of the experiment is to determine the optimal planting area and feeding area when growing onion from seedlings as a repeated crop, save seed consumption by 2-3 times and water consumption by 1-1,5 times, and get twice the harvest from the same land during the season.

Research work was carried out in the months of June-October 2015-2016 in the area of the scientific educational experimental station of TashSAU.

n the experiment, the onion variety "Istiqbol" was planted based on the current methodical manuals, each planting scheme was 3 meters long in 9 different schemes: ((50+20)/2×5; (50+20)/2× 7,5 ; (50+20)/2×10; (40+15+15)/3×5; (40+15+15)/3×7,5;(40+15+15)/3×10; (40+10+10+10)/4×5; (40+10+10+10)/4×7,5; (40+10+10+10)/4×10) in 2 rows with 20, 15, 10 cm between the ribbons on the ribbon, 5 between the plants on the ribbon; 7,5 and 10 cm were planted. The experiment had 4 replications, the plants to be considered were placed in a plot of 4,2 m2 in each replication. The number of plants in the strip varied from 60 to 120 according to the planting scheme. Onion seedlings were planted in a small area (40 m2) from the edge of the planting area in the second decade of March in a scheme of 4x1 cm, and 50-55-day-old seedlings were planted in their permanent place in the first decade of June according to the schemes indicated above.

According to these planting schemes, the number of seedlings per hectare ranged from 285,7 to 1142,8. Phenological, biometric and other observations were carried out on the experimental site according to the approved plan (since this issue has not been studied before, the average of all parameters of the planting schemes was used as a control).

The observations gave the following results, it was found that the number of seedlings per unit area was more or less, and the number of ribbons in the tape and the distance between the plants in the tape was short (5 cm) or wide (10 cm) caused the amount of error to vary. In the first variant of the experiment, when the spacing between the ribbons was 20 cm and the distance between the seedlings in the ribbon was 5 cm, the error rate was 6,8 percent after 10 days after planting, and in the variants planted with a distance of 7,5 and 10 cm, it was 6 and 5,2 percent. In the three-row tape method, the error rate was found to be 6,1 out of 8,7 percent when the distance between the tapes was 10 cm and 5 cm, 7,5 and 10 cm were left between the seedlings in the tape. It was found that when onion seedlings are planted in a 4-row ribbon method, the error rate is 10,9% to 8,8%. It was found that increasing or decreasing the number of ribbons in the ribbon and increasing the distance between plants in the ribbon from 5 cm to 10 cm have different effects on the viability of onion plants. That is, if onion seedlings were planted in a feeding area of 0,0175 m2, 22,4 percent of the seedlings died during the growing period (before the leaves turn yellow), or 6,8 percent of the plants did not take root after 10 days of planting. It was found that it increased by 15,6 percent. During this period, the number of dead seedlings was 128000 per hectare. In this option, when the distance between the plants on the tape was increased to 7,5 and 10 cm, it was found that the amount of error was reduced by 2,3 and 6,5 percent compared to planting at a distance of 5 cm. This pattern was maintained in subsequent cropping schemes. As the feeding areas of onion seedlings changed from large (0,0175 m2) to small (0,00875 m2), the period of entering the stage of yellowing of the leaves of onion plants was accelerated to a certain extent. That is, it was found out that the leaves of onion seedlings planted in 0,0175 m2 of nutrition area start to turn yellow after 108 days, and those planted

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in 0,035 m2 of nutrition area begin to turn yellow after 114 days. In the experiment, the yellowing of the leaves of seedlings planted in a three-row tape method was observed on days 106-115 according to the change of the distance between the plants in the tapes (5...10 cm). It was found that this indicator occurs on days 96..101 in seedlings sown in a four-row tape method.

Planting scheme and feeding area had an effect on the number, length and yield of true leaves formed on each bush, as well as on the quality of the crop (table - 1).

From the figures presented in Table 1, it is known that among the tested planting schemes, in almost all of them, the number of plant leaves is large and relatively long in the variants planted leaving 7,5 and 10 cm between the plants in the ribbon. The average number of leaves per bush of onion seedlings planted in a two-row tape method is 1,4 and 1,2 when planted at a distance of 7,5 and 10 cm, and 0.7...1,4 in three rows, compared to when seedlings in a tape are planted at a distance of 5 cm. it was determined that there is a lot of yield per grain. In the variant of the experiment planted in a four-row tape method, the number of leaves of seedlings was significantly less (7.9...8.1 pieces) according to the distance between the seedlings in the tape. Planting pattern also affected the length of leaves produced per plant. In the tested planting schemes, the length of the leaves of the variant plants planted in four rows (regardless of whether the distance between plants in the strip was large or small) was significantly shorter than the length of the leaves of seedlings planted in two and three rows. The number of leaves produced in each bush, their length and the large or small size of the feeding area also affected the onion yield and flour quality.

31,5 t/ha when planted in a 0,0175 m2 feeding area in a two-layer tape method, 5 cm between plants in the tape, 1,7 and 7,7 t/ha higher yield than when planted with 7,5 and 10 cm distance between seedlings it was found that the yield was 2,1 t/ha less than the control.

Even when planting in a three- and four-row tape method, the law of planting in a two-row tape method was preserved in terms of productivity. That is, when the distance between the plants in the tape was increased from 5 cm to 10 cm, and the feeding area was increased from 0,01166 m2 to 0,0233 m2, it was found that the yield decreased from 44,8 t/ha to 31,7 t/ha.

The reason for the decrease in productivity from the small feeding area to the large feeding area was directly related to the number of plants per unit area. If onion sprouts are planted in a two- and three-row tape method, the amount of onion heads in the crop is 92,1% to 93,8%; It was found to be in the range of 86,4 percent to 89,9 percent. The average weight of onion heads was 71.0...90.0 g in the first three variants of the experiment, and 69,0...91,0 g in the second three variants.

The productivity of the four-row planting scheme ranged from 41,5 t/ha to 29,4 t/ha depending on the area of seedling nutrition (0,00875...0,0175 m2). However, the yield did not exceed 86,8 percent, and the average weight of onion heads was found to be between 54,0 and 69,0 g.

Among the studied planting schemes, the highest and quality crop per hectare is three rows, the distance between the strips is 15 cm, and the number of seedlings in the strip is 5; (44.8; 38,7 t/ha) were obtained from variants planted at a spacing of 7,5 cm. The average weight of the onion heads in the harvest of these options is 72; It was in the range of 81 gr.

Conclusion. So, when growing Istikbol varieties of onion as a repeated crop from seedlings (40+15+15)/3×5 cm and the distance between plants in

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the strip is 7,5 cm, the highest quality yield (44.8; 38,7 t) per hectare is obtained.

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