

IMPORTANCE OF TECHNOLOGICAL PROCESS OF PLANTING GARLIC IN UZBEKISTAN

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ABSTRACT

The article presents information about the agrotechnology of garlic cultivation and its significance today. In addition, it was noted that the relevance of the process of planting garlic cloves is an important issue.

Keywords: garlic, navel, agriculture, comb, planting scheme, planting depth, technological process, double row, ribbon-like.

Garlic is one of the agricultural products. It has more nutrients than any other vegetable. It contains (on average) 64-66% water, 6.7% nitrogenous substances, 0.06% fats, 26.3% non-nitrogenous extractives, 0.77% fiber, 1.44% ash and 10-12 mg% vitamins. S will be. Volatile essential oils in garlic give it its unique taste and smell. It is for this reason that it is widely used in the field of medicine and pharmaceuticals[1]. Garlic is a plant belonging to the genus *Allium* of the family Liliaceae. In China, India, South Korea, Egypt, North Africa, Central Asia, Central and Southern Europe, the USA, Mexico and Turkey, garlic cultivation is widespread compared to other countries [2]. It existed in Asian countries even before 4000 BC. It first passed through Iran and Afghanistan to Egypt, then Greece and Rome, and was brought to Central Europe in the 5th-6th centuries and to Russia in the 12th-13th centuries. More than 70 percent of the world's garlic harvest is grown in countries such as China, India, USA, Turkey, and Pakistan. In Uzbekistan, 18-20% of the total area of vegetable crops is occupied by simple onions and garlic[3]. Garlic is one of the vegetables that quickly adapts to different climatic conditions, is resistant to cold, and grows even in droughty areas. The garlic plant grows well in light, fertile, muddy soils with a mechanical composition, as well as in loamy and well-fertilized loamy soils with a humus content of 5%..

The decision of the President of the Republic of Uzbekistan No. PQ-4863 of 2020 was announced in order to systematically continue work on the rational use of arable land and people's homesteads, increasing the volume of exportable agricultural products, including garlic, reducing poverty and increasing the material welfare of the

population in our country. . According to the implementation of the decision, in 2021, 366,046 tons of garlic were grown in all categories of farms of our Republic [4]. Only 4.5% of this amount, i.e. 16,658 tons of products, is accounted for by the Bukhara region. This does not satisfy the region’s demand for garlic. One of the main reasons for the low share of garlic and onion cultivation in the territory of Bukhara region is explained by the fact that the agrotechnology of garlic cultivation is not well mastered, in addition, the technological process of garlic planting is not mechanized.

Most varieties of garlic are planted in early, autumn and pre-winter (ninety-five) periods. But there are also (spring) varieties that develop well when planted in spring. Autumn varieties are prolific. Garlic is planted in autumn, in September-early October. If it is planted later than that, it will not have time to get good roots in the fall. Because of this, it is damaged by winter frosts and diseases, and the yield decreases. Garlic is mainly planted from the cuttings. Three to four days before planting, it is divided into sections and sorted, diseased, crushed and small ones are separated. Medium and larger than average cloves of garlic, i.e. weighing not less than 2-6 grams, are planted [5]. It should be said that the larger the plots, the higher the yield has been proven in experiments.

Garlic is planted in a two-three-row ribbon method. The distance between the strips (width of the row) is 70 cm, the distance between the double rows in the strip is 20 cm, in the three-row planting, the spacing is 15 cm, and the distance between the garlic and onion pods in the rows is 7-8 cm. is planted without Thus, the planting scheme of garlic is 5-6 cm and 7-8 cm, 450-600 thousand plants are placed per hectare. The planting depth is 5-8 cm. Planting rate, that is, 1-1.2 tons of garlic and onion bulbs are used per hectare [6].

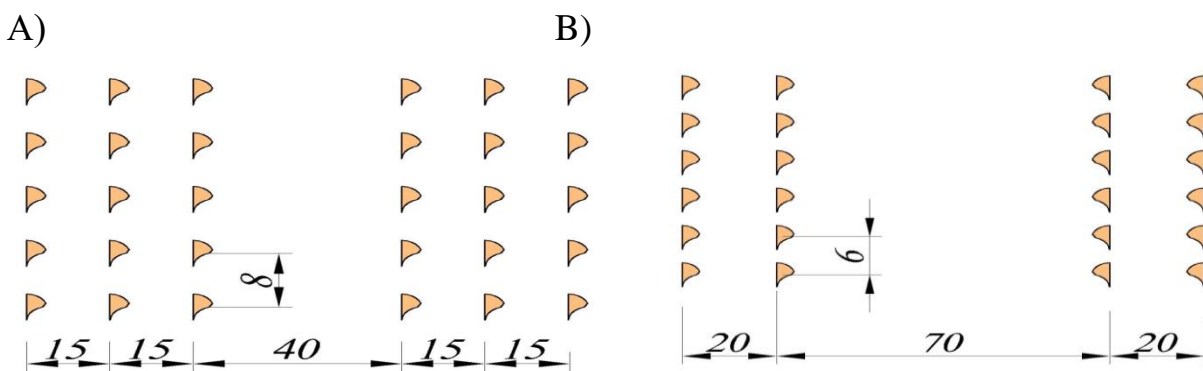


Fig.1 Garlic planting schemes: A)

(40+(15+15))/2*(7-8) scheme

B) (70+(20+20))/2*(5-6) scheme

The area allocated for planting garlic is saturated with water after the first crop is cleared. After watering, all weed seeds will germinate within 7-8 days. Garlic is a plant demanding mineral nutrients in the soil. Fertilizing it correctly increases the plant’s

development and resistance to cold. To improve soil fertility, it is recommended to apply 20-40 tons of rotted manure, 100-200 kg of nitrogen, 140-160 kg of phosphorus and 65-75 kg of potassium per hectare of land during plowing.

Then the soil is plowed with a PN-3-35 brand plug to a depth of 28-30 cm. Before plowing the land, 75% of phosphorus fertilizer and all potash fertilizer are added to the rotted manure and mineral fertilizers, and the land is plowed. After plowing, it is chiseled at a depth of 16-18 cm, and harrow and trowel are pressed [7]. It is advisable to spray herbicides against weeds at the same time as preparing the land for planting. 40 kg per hectare before plowing against perennial weeds. 80% solution of dalapon drug is sprinkled. For one-year weed control, 12 kg of dictol drug is sprayed per hectare (in the amount of active substance). Then, in accordance with the planting scheme, the cuttings are taken and the seeds are prepared for planting garlic and onion.



Today, garlic and onion planting is done by hand in Uzbekistan. This, in turn, leads to increased labor costs and overspending. In addition, it causes a delay in the cultivation of garlic.

Taking into account the above, mechanization of the technological process of garlic planting is one of the important issues.

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