

Analysis of the Significance of Mechanization in Growing Root Plants

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Abstract:

It is known that root crops are considered the most important food for human health. The importance of technology in the cultivation of high-quality and inexpensive crops, i.e. in cultivation, processing and harvesting, is inestimable.

Keywords: rootstock, cultivator, planting, processing, seeder, softener.

Introduction. Improving the efficiency of agricultural production, uninterrupted supply of food to the population is one of the most pressing issues today. Particular attention should be paid to the provision of the population with fruits, vegetables, melons and root crops throughout the year. Because quality cultivation of products is necessary for human health. As production increases, there is a need to use and improve techniques [1].

Main part: Root crops are one of the oldest main and leading industries in world agriculture. Carrots, turnips, garlic, beets have been cultivated for 2,000 years, and cabbage, cucumbers and onions for 4,000 years. In Central Asia, that is, in our country, melons were grown even before BC. At present, vegetable crops are grown in all countries of the world.

In 2010, vegetable crops were planted on 130.4 thousand hectares of land in the country and 2362 thousand tons of products were produced, while in farms and dehqan farms this figure was 5.3 thousand tons per hectare and 80.2 thousand tons of products were produced. Uzbekistan produced 691,000 tons of fruit in 2010, of which 21.1 tons were produced by farmers and 20.5 thousand tons in 2001.

Each person should consume an average of 400 g of various vegetables per day. An average of 125-165 kg of vegetables are consumed per year, but their amount varies depending on soil climatic conditions. Their approximate norms are as follows: melons 20-30 kg, cabbage 30-40 kg, cauliflower 3-5 kg, tomatoes 25-30 kg, carrots 10-12 kg, cucumbers 10-13 kg, beets 3-6 kg should be 6-10 kg of onions, 2-5 kg of eggplant and zucchini, 5-8 kg of sweet peppers, 2-3 kg of cooked peas, 3-5 kg of green vegetables, 12 kg of fragrant vegetables.

Carrots are rich in carbohydrates (up to 8%) and carotene, the amount of which goes up to 20 mg%. Therefore, vitamin A is the main raw material for obtaining. Rich in minerals. Carrots have long been used in the treatment of diseases of the liver, kidneys, gastrointestinal tract, anemia. Daucarin is obtained from carrot seeds, which is used in the treatment of heart disease [2].

Properties of root crops. Juicy, juicy, thick root crops of root vegetables: carrots, beets, radishes, turnips, radishes (root vegetables are consumed, but in terms of importance, use and technology of cultivation - green vegetables), parsnips, celery, parsley, etc. enters. These include carrots, parsley, parsnips, celery soybeans (Umbelliferae) or celery (Apiaceae); radishes, turnips, radishes (Brassicaceae); beetroot belongs to the family Chenopo-diaceae.

Beetroot contains up to 14% dry matter in the fruit and retains a lot of sugar. It is rich in anthocyanins and is reddish-purple in color, which gives the food made from it a unique color. Beet

juice contains up to 0.15% betaine, in addition to vitamins and additives, reduces the accumulation of cholesterol in the blood.

Radish, turnip and radish improve digestion by preserving carbohydrates, quality vegetable oil in addition to vitamins, physiological alkaline salts and prevent the accumulation of harmful salts in the body. It is also rich in minerals and phytoncides. A mixture of honey with radish juice is an antitussive, a good help in relieving rheumatic pains. In general, the importance of many root vegetables in treatment has long been known.

In this case, the primary skin of the shoot cracks and dries. Any root consists of three parts:

- head; - neck; -true root.

The first mass tillage is carried out two to three weeks after planting. In this case, the row spacing is cultivated with a cultivator KRN - 4.2 to a depth of 15-16 cm, the plant environment is softened, fed with fertilizers and irrigated. After 20 - 25 days, the mass is processed again. Cabbage is fed 25-30 tons of manure, 200 kg of nitrogen, 150 kg of phosphorus and 75 kg of potassium per hectare..

Onion seeds consume 12-15 kg per hectare in the spring, up to 20 kg in the summer - autumn and ninety. Onions are planted in four rows using SKON-4,2, SMM-4 seed drills with row spacing of 70-90 cm, depending on the slope of the soil. Seeds are buried in the ground to a depth of 1.5 - 2.0 cm. Onions are pruned two or three times, initially when the plants reach a height of 6 - 8 cm. The weeds between the rows are tilled to a depth of 15-16 cm with a cultivator KRN-2.8 A. Carrot seeds are sown in the scheme 52x8, 62x8 cm to a depth of 1.5-2.0 cm with seeders SKON-4.2, SMM-4. Seed consumption is 5-6 kg per hectare. One of the most important issues in the process of caring for carrots is to get the seeds flat from the ground. Carrot seedlings appear in 5-7 days when the soil is always moist and germinate in 10 days [3].

Preparation of land for early cultivation of potatoes, preparation of land for planting potatoes in early spring is carried out during the second half of October or the first 15 days of November. In this case, the plant residues in the fields are first removed using a softener type ChKU-4A and harrows, or crushed using a grinder type KIR-1,5B. The uneven part of the areas is then leveled with leveling devices. Phosphorus and potassium fertilizers are applied to the leveled areas in 70% of the annual norm and at least 25-30 tons of local fertilizers per hectare with a ROU-6 fertilizer spreader. After sowing, the fields are plowed to a depth of 30-35 cm on a PLN-3-35 plow and chisel ChKU-4A, ChK-4/6 to a depth of 18-20 cm, and then KRN-2,8A, KON -2,8A, with the help of cultivator KXO-4, irrigation furrows are taken at a distance of 70 cm or 90 cm and prepared for planting.

Sowing of potatoes is carried out on the pre-prepared area with the help of SN-4B, KS-4 potato seeders and in small areas with manual hoeing. Planting scheme 70 x 30 or 90 x 25 cm. After sowing, there is a lot of rainfall until the seeds germinate, and the areas where the seeds are formed on the field are treated once or twice with light mesh storms to ensure a smooth, complete germination of seeds. If this work is done on a small plot of land, on the farmer's fields, the weeds will be lost. When the seed potatoes are fully germinated from the ground, they are softened to a depth of 14-16 cm with a cultivator KRN-2,8A, KON-2,8A, KXO-4 in order to eliminate weeds between the rows. This leaves a protective area of 10-12 cm. To get a high yield from tomorrow's potatoes, it is recommended to water the plants 4-6 times during the growing season in grassy soils and 5-7 times in gray soils. In both watering intervals row spacing is loosened to a depth of 10-12 cm. This measure is carried out with a cultivator KRN-2,8A, KON-2,8A, KXO-4 until the plants are dry.

In short, root crops are rich in various minerals and vitamins, and are loved and consumed by our people. For this reason, it is necessary to further develop the proper organization of the effective use of techniques of land preparation and planting process in its planting.

References:

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