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The Technology of Growing Cucumbers in the Open Ground in the Conditions of Bukhara

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A B S T R A C T

a technology has been developed for sowing, caring for and harvesting cucumber varieties suitable for this climate in an open field on various types of saline soils of the Bukhara region.

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The climate of the Bukhara region is characterized by a sharply variable continental climate, soils are divided into several types, including irrigated loamy: loamy, light and medium in mechanical composition, with a humus content of 0.6-0.9%. From 1.2 to 1.8% of humus has long been contained in irrigated soils. The total amount of phosphorus ranges from 0.09-0.11%, potassium-1.4-2.0%. The carbonate content is 3-6%. These soils in natural conditions are most often sod-podzolic soils, the upper layers of which are not saline, and the lower ones are saline. The arable layer of brown soils has a different degree of salinity (0.3-0.9%). Sandy-desert soils: humus content 0.5%, total nitrogen 0.04-0.05%, total phosphorus 0.14-0.15%. The waters of the sizot lie below 5 meters. These soils are weak and moderately saline. To prevent wind erosion, it is advisable to carry out special measures, including colmatage, planting of siderate crops, and the introduction of various fertilizers.(1).

Irrigated soils: medium and light loamy in mechanical composition, humus content 0.6-0.8%, nitrogen 0.05-0.07%. These soils are moderately saline. The water level in the sizot rose to 2-3 meters. Irrigation sod-meadow soils: light, medium and heavy loam in mechanical composition, with a 0.5-1.0-meter layer of gravel. The content of humus in the soil is 0.7-0.8%, total nitrogen-0.06-0.07%. The soils are weak and moderately saline. Irrigated meadow-rocky soils: medium in mechanical composition and light loamy. In soils, the humus content is 0.5-1.1%, total nitrogen is 0.04-0.12%. They are slightly salted. The type of salinization is sulfate, in some places there are chloride-sulfate soils.(1).

In such climatic and soil conditions, the cultivation of cucumbers in the open ground and ensuring food security is of great scientific importance. Cucumber is a rather demanding plant for heat and humidity. From him in addition, cucumber is a plant very sensitive to frequent temperature changes. A vegetable product that currently occupies one of the first places among the plants grown on private plots in Uzbekistan - cucumber, would not be mistaken. Cucumber is a nutritious and delicious vegetable that all people eat.(2).

According to the biology of the cucumber plant, its varieties and hybrids are divided into precocious, medium-ripened and late-ripening varieties according to the duration of the growing season. Depending on the use of cucumbers, they are divided into salad, intended for pickling and universal varieties. The main varieties of cucumbers cultivated in Uzbekistan include: Chinese subspecies-long fruit-bearing include Chinese cucumbers and fruit-bearing varieties grown in greenhouses. The West Asian subspecies is cultivated in the countries of Central Asia, in the Caucasus in the jungles of Russia. The European-Asian subspecies includes several varieties of cucumbers that are hybrids.

In the conditions of the Bukhara region in recent years, the area of cultivation of cucumbers in the open ground in the fields of homesteads and farms has decreased, and if one of the main reasons for this is climate change, then this may also be due to a decrease in the number of varieties of cucumbers grown in the open ground and their seeds. Today, it is very important to develop in the regions of primary seed varieties created in the republic and intended for open ground, corresponding to these soils and climate. These varieties include the following: Including:

Uzbekistan 740-medium-ripened variety, seed yield the ripening period is 48-50 days, the yield is 20-33. 8 hectares.tons, and in the summer season-14-15 tons. Seed material matures 50 days after pupation. The tube is cylindrical in shape, the length is medium, the feathers are black, mixed and thick. Blueberries are smooth, shiny, 10-13 cm long, 4.5-5 cm in diameter, light green in color, the fruit is delicious, the pulp is soft, thick, slightly acidic, juicy, the seeds are light brown and small.

Palm of medium length, with a jagged edge. Uzbek firstborn is a medium-ripened variety, after germination, for 48-50 days the first harvest. After 48-50 days after germination, the seed germinates, it will be ready for reception. The yield of fairy tales is 21-37 tons per hectare, and in the summer season-16-18 tons. The fruit is an oblong, 5-lobed triangular capsule, apical, 9-11 cm long, 4-4. 5 cm in diameter, weighing 80-120 grams. The color is lush, the flesh is dense, slightly crispy, the aroma is fragrant. It bears fruit both during canning and after salting high-quality. Contains 4% dry matter and 2.4% sugar. This variety is mainly grown for the canning industry. This variety tolerates heat, dry air well, it is resistant to diseases.

The yield is a hybrid variety, short-fruited, after germination, the first harvest is harvested on day 40-44. Yield 30-35 tons per hectare, fruiting cylindrical, small, bristly, light green, with white veins, weighs 100-110 grams. It is sown for canning, salting and eating.

Margilon 822 is a medium-late variety, 55 days after germination, the first crop is harvested when the crop is sown in the next season 25-43.6 t/ha, in summer 12.6-16 t, tubular cylindrical, feathery mixed, thick and black. The fruit is smooth, shiny, 15-16 cm long, weight 125-140 grams, color is dark green, with white oats, the flesh is juicy, crisp, the aroma is fragrant. The fruit has high commodity and taste characteristics.

Palm trees are strong and crescent-shaped. The rose is medium-ripened, the first harvest is collected on the 46th day after germination. The yield is 20-25 tons per hectare, the fruits are cylindrical, flat, length 14-15 cm, diameter 4-4. 5 cm. Average fruit weight 112 gram.

Fairy Tale 645-Early ripening, 46-48 from the gross shoots to the first harvest the day will pass. The yield is 24-28 tons per hectare. The fruit is cylindrical in shape, length 8-10 cm, weight 100-118 grams. The color is dark green, flesh soft and thick, low-sulfur, juicy, contains 4% dry matter and 2% sugar, the feather is small, black.(3).

Sowing cucumbers in an open field in Bukhara has its own characteristics, firstly, since Bukhara soils have different degrees of salinity, in the autumn-winter period it is necessary to bring 25-30 tons of rotted manure per hectare to these lands, plowing them to a depth of 35-40 cm and washing them with high-quality salt water. In early spring, as soon as the earth is prepared for the arrival of the weather, the surface layer of the earth is first loosened 2-3 times with a zigzag harrow 8-10 cm thick and prepared for drawing. You can plant seeds in April by preparing seedlings in greenhouses in March or directly into the ground when the soil temperature in April will be 12 + 14. Before cutting, the ground is sprinkled with phosphorus and potassium mineral fertilizers, 2-fold harrowing is carried out by cutting and harrowing with a harrower 60 cm wide, 120 cm wide, lightly watered with water and after the ground is treated with

a trace of water, cucumber seeds are sown at a distance of 30 cm between the seeds.

As soon as the sown seeds germinate, the soil is periodically cleared of weeds, measures are taken to combat diseases and insect pests on the basis of established agrotechnical measures. The crops are watered depending on the condition of the plant and on the field moisture capacity of the land. It is also necessary to water cucumbers regularly after harvesting and at this time to apply nitrogen fertilizers.

Summing up, when growing cucumbers in the open ground of the Bukhara region in the conditions of a sharply changing continental climate and different types of soils, it is important to choose cucumber varieties created specifically for open ground, suitable for these conditions, as well as preparation and sowing in the prescribed manner for sowing by washing the soil, which is the key to obtaining high yields.

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