CULTIVATION OF MELON SEEDLINGS AND THEIR PLANTING IN AN OPEN FIELD

Axmedov Otabek
Assistant of the Karakalpak Institute of Agriculture and Agrotechnologies
Seilbekov Ruslan
Assistant of the Karakalpak Institute of Agriculture and Agrotechnologies, Doctor of Philosophy (PhD) in Agricultural Sciences

Importance and methods of seedling preparation

Annotation; *Methods of sowing melons and their advantages, as well as methods for increasing their yield using new methods.*

Keywords. *Methods of sowing melons, sowing dates, their effective use, ensuring food security, and improving soil structure.*

The purpose of this graduation qualification work experience is to study the growth, development, yield, and economic efficiency of early-ripening melon varieties by pre-planting melon seedlings under certain conditions and selecting their prospects. For this purpose, the following tasks were set for the research: Studying the growth, development, and yield of early-ripening melon varieties on irrigated light gray soils.When growing crops under film tunnels using the seedling method, the growing season (from seedling formation to the ripening of the first fruit) in melons is extended by 18-20 days compared to when sowing seeds directly into the soil. However, considering the age of the seedlings (25-30 days) and the time required for seed germination (8-10 days), when both seedlings and seeds are planted simultaneously, the fruits of plants planted with seedlings ripen 9-12 days earlier. Melon crops have a high susceptibility to damage to the root system, therefore they are practically unaffected during transplantation. Taking this into account, melon seedlings are grown in pots and nutrient cubes, similar to cucumber seedlings.

In the conditions of the regions around the city of Tashkent, the minimum soil temperature for the germination of melon seeds and the growth of seedlings under film tunnels occurs in the first five days of April, and in open areas - in mid-April. Therefore, sowing melon seeds and planting seedlings under film tunnels before the last five days of March is not advisable. Planting seedlings under the tunnels on April 10 provides additional income compared to sowing seeds in the open field on April 15. Our main goal in growing early melon seedlings is to obtain an early harvest. First, we prepare the soil. Soil is prepared at a rate of 40 percent, rotted manure at a rate of 40 percent, and sawdust or apricots at a rate of 20 percent.In the conditions of Karakalpakstan, the planting of melon seedlings begins in the first ten days of February. When planting seedlings in a greenhouse, we sow the seeds in pots or cups.

Mainly, we need to pay very close attention to the air temperature. Melon seeds begin to germinate 5-6 days after planting. Melons begin to germinate at a soil temperature of 14-15°C. If it is below 13°C, the seeds decompose.After the melon sprouts germinate, the temperature should not be lower than 20°C. Melon seedlings are ready in 30 days.When the seedling is one month old, it forms two large buds.2-3 days before the seedling is ready, we reduce the seedling to a steric state. How is this done? We release the seedlings into the external environment, but the seedlings should not exceed 3-4 hours. If the air temperature is somewhat cool, it can stay for 1-2 hours. The advantage of this is that the seedling grows in the greenhouse at an average temperature of 20-23°C, and if we suddenly plant it in the external environment, the seedling will become weak, unable to adapt to the external

environment. Therefore, after passing through the steric state, the seedling gradually begins to adapt to the external environment. In this case, the stems of the seedling begin to grow larger, and the stems thicken. Then we can transplant it to an open field, if we apply this measure, the seedlings will grow better. The Republic of Karakalpakstan is classified as a warm subtropical region in terms of climate. This region belongs to the Central Asian province of the subtropical desert. The following soils are mainly developed in the Republic.

1.Irrigated meadow-desert sandy soils with an area of more than 28 thousand hectares.

2 Irrigated meadow-alluvial oasis soils cover more than 227 thousand hectares. 3.Approximately 30,000 hectares of irrigated meadow-bog soils.

4. The area of salt marshes is about 7 thousand hectares. The experiments were conducted in the conditions of meadow-alluvial soils, that is, the main land area of the region, where irrigated agriculture is carried out. These soils have long been irrigated, occupying agricultural lands, forming the basis of cotton-growing lands, and have developed in the alluvium of the ancient Daudan, Daryalik, and the present-day Amu Darya. Soil description The farm's soils are mainly long-irrigated light gray soils. The soils of agricultural fields have been irrigated since ancient times and have formed a thick agro-irrigation layer (up to 3-3.5 meters) and are highly fertile, heavily cultivated. These soils have medium and heavy loamy mechanical composition, medium fertility, low humus and phosphorus content, and medium potassium content. The normal growth and development of melons and gourds are considered effective in farming on these soils. **Climatic Conditions:** The farm's climate in the plain zone is dry, continental, and hot year-round, with relatively mild and warm wintersThe main factors determining the climate of the district are the temperature regime, relative humidity, annual precipitation, as well as rivers located nearby. To adequately characterize the climatic conditions of the region, the following data from the Amudarya meteorological station are presented in Table 2. Table 2 Meteorological conditions of the district Data from the "Karakalpakstan" weather station Months Average monthly temperature Amount of precipitation, mm Relative air humidity, In general, taking into account the soil and climatic conditions of the region, taking into account the experience of science, technology, and advanced scientists, it is possible to grow vegetable and melon crops for consumption and seeds, obtaining a rich and high-quality harvest.

References

1.Zuev V.I., Asatov. Sh.I.O. Kadirkhodjaev, Ataxadjaev A. A. "Protected Ground Vegetable Growing" T-2018

2.Zuev V.I., Asatov. Sh.I.O. Kadirkhodjaev, Ataxadjaev A.A. "Vegetable Growing" Tashkent-2008

3. G.T. Erejepova, A.S. Abdigapbarov, N.N. Ismailova "Vegetable Growing"N., "Bilim"2024. Study Guide.