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APPLICATION OF MINERAL FERTILIZERS TO COTTON IN THE EXPERIMENTAL FIELD AS WELL AS METHODS OF IMPLEMENTING AGROTECHNICAL ACTIVITIES

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Abstract

Experiments were conducted in the cotton field where developments are introduced by the farm "Qasim-karvon", Kuva district, Fergana region. All agricultural activities carried out in the experimental field, including land preparation, planting seeds, harvesting cotton, installing new water-saving irrigation equipment for irrigation, fertilizing, processing between cotton rows, chilpish, control of cotton pests, defoliation and harvesting were carried out.

Keywords: Agrotechnics, cotton, soil, volume mass, density, field moisture capacity, water permeability.

Introduction

Types of mineral fertilizers used in the research. We found it necessary to provide brief information about the types of mineral fertilizers used in our experiments and their composition. Ammophos is a gray or white powdery or granular complex fertilizer containing 46 percent phosphoric acid and 11-12 percent nitrogen. The salts ammonium and phosphate that make up this fertilizer are well absorbed by all plants and are effective in all soils. Fertilizer rates are mainly applied in physical form.

Ammonium nitrate contains 33-34% nitrogen in the form of nitrate and ammonia. This fertilizer is granular, light pink and yellowish in color. Granular ammonium nitrate has good physical properties. It is soluble in water good melts, sprinkles, low moisture pulls and scribe q can't. These fertilizer standards are mainly used in physical hair.

Urea contains 46 percent nitrogen in the amide form. It is a concentrated white fertilizer with good physical properties and is produced in granular form.

Potassium chloride - contains 60-62% potassium oxide, is a crystalline, dispersible substance, reddish or white to brown in color. It hardens if stored in a damp place. It is slightly soluble in water. Fertilizer rates are mainly used in physical terms.

Microelements such as boron, molybdenum, copper, zinc, cobalt, manganese, and iron are essential for plant life. One element cannot be replaced by another, since each of them performs specific functions in plants. Other elements, such as silicon, sodium, chlorine, and others, can also

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be present in plants and soil. However, the presence of these or other elements is not essential for plant life. The main elements that green plants receive from the atmosphere are carbon, oxygen, and hydrogen. The proportion of these elements is 93.5% of the dry mass of the plant, including 45% carbon, 42% oxygen, and 6.5% hydrogen.

For a plant to grow and develop normally, it must be provided with sufficient amounts of nutrients. Nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, and iron are the main nutrients for plants. The amounts of these elements in plants range from one hundredth to several percent and are called macronutrients. In addition, plants need a number of other substances that are present in the plant and soil in the amount of one thousandth of a percent, such as boron, molybdenum, copper, manganese, zinc, and others.

Carrying out the first cultivation between the rows using a milling cultivator.

Since cotton roots are not well developed during the first cultivation, they can be moved along with the soil during inter-row cultivation and die. Therefore, it is recommended to install the working bodies so that they do not sink deeply into the soil during the first cultivation.

At the Kasym Karvon farm, where the experiments were conducted, the first cultivations were carried out qualitatively with the help of a milling cultivator, as soon as the seeds began to germinate by 75-80%. The soil became soft, which created the conditions for faster germination of ungerminated seeds and accelerated plant growth and development.

Thinning in cotton fields is one of the main agricultural measures, and thinning is carried out after the seedlings are fully harvested, depending on soil conditions and the biological characteristics of the cotton varieties. The most optimal time for thinning is when 1-2 cotyledons appear on the plant. Scientists from the PSUEAITI Institute have determined that delaying this important event by 3-5 days reduces the cotton yield by 2-3 centners, and if it is delayed by 4-5 centners/ha. If thinning is delayed until the combing period, it is determined that the yield decreases by 6-8 centners/ha. When thinning is carried out poorly, the seedling density is high or sparse, and the water and nutrient utilization of cotton decreases, resulting in a 15-20% lower cotton yield.

In areas where harvesting is carried out at the appropriate time, the growth and development of cotton plants is accelerated, the supply of nutrients increases, and a fabulous, abundant and high-quality cotton harvest is obtained.

In field experiments at the Kasym Karvon farm, seedlings that were weak, damaged by insects and diseases, and slow to develop were first removed, leaving only healthy seedlings for the planting. Measuring sticks (templates) were used to plant cotton in the experimental field, and this gave good results.

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