

EFFECT OF FEEDING IN DIFFERENT WAYS ON THE GROWTH, DEVELOPMENT AND GRAIN YIELD OF CORN VARIETIES AND HYBRIDS

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Abstract. *The article is devoted to the procedure of determining agricultural technology of growing corn varieties and hybrids as the main repeated crop in the soil and climate conditions on irrigated lands of Bukhara region.*

Keywords: *main crop, repeated crop, corn, variety, hybrid, root and leaf feeding in different ways, power of silicon.*

This dissertation is based on the implementation of the tasks defined in the decree of the President of the Republic of February 26, 2021 "On measures for the implementation of the tasks defined in the strategy of the development of agriculture of the Republic of Uzbekistan for 2020-2030 in 2021" and other regulatory and legal documents related to this activity. research serves to a certain extent.

Corn is grown on 37% of the United States and 21% of the People's Republic of China, and these countries account for the world's largest corn production. 5 million annually in 27 countries of the European Union. per hectare of corn is planted for silage.

As a result of the continuous increase in the yield of corn for grain and silage in world agriculture, the creation of new hybrids and varieties, the rapid introduction of their production, and the improvement of grain and silage technologies, in recent years, ordinary hybrids of corn are grown mainly for grain and silage mass in the countries of the world. Planting of new hybrids and agrotechnics of their cultivation are carried out taking into account the soil and climate conditions of the region.

In this era, when the market economy is rapidly developing, in order to improve the supply of the country's population with food products, including livestock products, a number of decisions by the President of the Republic of Uzbekistan and the government of the Republic of Uzbekistan on the development of animal husbandry, the organization of farms specializing in animal husbandry, and the creation of a solid food base for livestock accepted.

Relevance and necessity of the topic. Maize is one of the main crops in world agriculture. Among grain crops, special attention is paid to the cultivation of corn. Along with mineral fertilizers, the application of a mixture of various ecologically clean biologically active substances by suspending them from plant leaves is becoming the main method of feeding in corn cultivation.

Mostly corn is grown in USA and China, and these countries account for 37% and 21% of world corn production respectively. Annually 5 million per hectare of corn is planted for silage in 27 countries of European Union.

Because of continuous increase in the yield of corn for grain and silage in world of agriculture, the creation of new hybrids and varieties, the rapid introduction of their production and the improvement of grain and silage technologies ordinary hybrids of corn are grown mainly

for grain and silage mass in many countries. The planting rate of new hybrids, the thickness of the bush and their agricultural technologies were carried out taking into account the soil and climate conditions of the region.

By taking into account the purpose of planting and its use in certain soil and climate conditions, the introduction of innovative technologies into the field of plant science, the use of mineral fertilizers at a high rate, the creation of new high-yielding varieties and hybrids of corn, the implementation of new methods of cultivation and continuous scientific research on determining the optimal nutrition of the plant are required to be studied.

Leading countries such as the USA, China, India, Canada, France, Germany, which grow the most corn, are getting a high and quality corn harvest due to the use of a mixture of various environmentally friendly biologically active substances from plant leaves along with mineral fertilizers.

Relevance and necessity of the topic of research work. Maize is one of the main crops in the world of agriculture. Among grain crops, special attention is paid to the cultivation of corn. According to the World Trade Organization, the demand for corn grain used for consumption in the countries of the world is increasing by 1.6-1.8% per year. Mineral fertilizers are the main tool in corn cultivation. It has been proven in the world experience that there is no possibility of obtaining a high-quality crop without mineral fertilizers. Leading countries such as the USA, China, India, Canada, France and Germany which grow the biggest amount of corn are getting a high-quality corn crop due to the effective use of mineral fertilizers.

It is essential to determine the effect of feeding, growing and developing varieties of grain yield maize and its hybrids in different methods in the condition of irrigated lands of Bukhara region during the spring (main) and repeated (summer sowing) planting periods of newly created varieties and hybrids of corn.

Different varieties and hybrids of corn during the growing season demands different requirements for light, moisture and other external factors. Different hybrids and varieties have their own growth and development speed. They require certain compatibility in terms of nutrition because of their sharp differences in height, root system development and other morpho-biological characteristics

The purpose of the study is selection of suitable varieties and hybrids of corn for the soil-climatic conditions of Bukhara region, as well as giving recommendations by improving and introducing some elements of the technology of feeding (root and leaf) in different ways, when they are grown as a main and repeated crop.

The object of the research is different planting periods of corn varieties, namely, in Uzbekistan 300 MV (control), Termo, Uzbekistan 400 DR, Moldavsky 215 AMV, Maxima, and Donana G'1 Borja G'1 (control), Miami G'1, Sagunto G'1, P 1241 G'1 hybrids (as main and repeated crops), root and foliar feeding methods were selected.

The subject of the research is the germination, growth, development, formation of leaves, stalks, pods and grains, grain quality and yield, when corn varieties and hybrids are grown in different growing periods and feeding methods.

Research methods. The research work is conducted based on methods of the manuals such as Methodological recommendations for conducting field experiments with corn (Dnepropetrovsk, 1980), Methodology of field experiments for the study of agrotechnical practices for the cultivation of corn and Methodology of the state variety testing of agricultural crops.

The statistical analysis of research results is carried out by using manual which is Field experiment methodology by B.A. Dosphehov through dispersion method on the basis of Excel 2010 and Statistisa 7.0 for Windows computer programs.

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