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FEATURES OF PREFILLED USING OF THE FERTILIZING MACHINES

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ABSTRACT

There are given some information about the ways of fertilizing and its importance for increasing and regeneration of the soil yield.

On the basis of the research works in this field, there are afforded analytical data about using of local and chemical types of fertilizers in accordance with the kind of soil, and information about effective using of the fertilizing machines.

The authors signify the idea of fields preparation on the fertilizing technology and choosing of the motion way of the outfits.

Key words

local and chemical fertilizers, fertilizer, fertilizer quantity, fertilizing machines, preparation of fields to the fertilizing process.

The principles and system of using mineral and local fertilizers in cotton cultivation have been developed by the Cotton Research Institute of Uzbekistan and other scientific institutions. Fertilizers are a decisive factor in the system of restoring and increasing soil fertility. Science and best practices show that effective use of fertilizers can increase crop productivity.

In particular, before sowing, fertilizers are applied together with tillage before autumn plowing and before planting. It is recommended to apply local fertilizer (rotted manure) mainly before plowing.

It is recommended to apply phosphorus fertilizer and potash fertilizer before plowing in non-saline fields. Fertilizer is applied to saline areas before planting after the soil has been washed off. Here too, 60-70 percent of the annual rate of phosphorus fertilizer, 50 percent of potassium fertilizer, and 25-30 percent of the annual rate of nitrogen fertilizer is 200 kg or more. percentage is recommended.

However, chemical or local fertilizers are not equally beneficial in different soil conditions. For example, it is appropriate to apply 25% of the annual amount of nitrogenous fertilizers to the surface grassland soils before sowing the seeds, and the rest during the development period.

Nitrogenous, phosphorus and potassium fertilizers are mainly used in cotton cultivation. As a result of the microbiological action of the soil, all nitrogen fertilizers applied to the soil quickly change to nitrate, a higher form of nitrogen oxide, which is characterized by good solubility.

When nitrogen is used in large quantities, the plant becomes sick, it pollutes the

underground water, and the fertility of the soil decreases more and more. Therefore, in the future, applying fertilizers at the prescribed rate will not only increase the yield of cotton and even save 50% of the costs of fertilizers, which are wasted.

The effect of fertilizer on the development of sprout roots and the rate varies depending on the root placement system, placement method, and duration. Therefore, the method of localizing fertilizer shows a number of specific requirements. Fertilizer localization efficiency determines the location of the fertilizer in the soil.

Before plowing the land, mineral and local fertilizers are added to the soil by spreading them on the surface of the field. In this, mainly NRU-0.5, 1-RMG-4 and ROU-6 machines are used. Technical specifications of these fertilizing machines are as follows:

Indicators	Model of cars		
	NRU-0,5	I-RMG-4	ROU-6
Type	Suspension	Do not trailer	Do not trailer
Body volume, m ³	0,5	4,0	4-6
Ish kamrovi, m	10-12	11-14	4-8
Speed of movement, km/h	7-12	12 up to	6-8
Mass, kg	300	1460	1940
Fertilizer application rate, kg/ha (range)	40-2000	100-6000	20000-50000
Productivity, ha/h	6-12	12 up to	8-10

Preparation of fertilizer spreaders for work, their completeness, correct assembly of nodes, technical condition of fertilizer spreader working bodies and driving systems, check of tire pressure and electrical system, installation of lanterns and stencils consists of installation, lubrication of machine parts, connecting it to the power take-off shaft of the tractor and performing technological adjustments.

In order for this fertilization to meet the agrotechnical requirements of the machines and ensure smooth operation of the machines, the fields must be clear of all kinds of obstacles, they must be cleared of plant residues and deep irrigation ditches, water washing the left areas should be leveled.

As mentioned above, in order to ensure the smooth operation of the machine, before fertilizing, the fields should be cleared of all kinds of obstacles and plant debris that interfere with the movement of the machine, and irrigation ditches and washed-out fields should be leveled.

When preparing the field, following the fertilizer spraying technology, its configuration, size and technical characteristics of the aggregates, the turning path, the amount of fertilizer to be sprinkled, and the mode of operation of the aggregates are selected.

In large areas, it is necessary to use suspended fertilizer spreaders equipped with devices for spreading fertilizers by centrifugal force. In this case, using them in the shuttle method increases productivity. In small areas, it is recommended to operate the machines in a slow motion. In this case, the turning path of the aggregate is reduced compared to the shuttle method. The direction of sowing fertilizer should be in accordance with the direction of plowing the field.

In the process of work, it is necessary to monitor that the fertilizer is not spilled. Only tractor drivers with appropriate training and safety instructions, as well as workers familiar with the rules of fertilizing, are allowed to work on the unit.

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