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LOCAL FERTILIZER MACHINE WITH AUGER

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Abstract:

The article mainly deals with the technology of plant fertilizing machines, i.e., the types of organic and mineral fertilizer application machines, such as hay cultivators, fertilizer seeders, and other modern fertilizing machines. Fertilizer The purpose of weeding is to make the plants grow better and produce a positive change. The operation process of the installation of local fertilizer between the proposed rows.

Keywords:

Fertilizer, bunker, mineral, local fertilizer, plant, auger, hydromator, cotton, row, phosphorus, potassium, nitrogen.

The use of local fertilizers in the production of high yields of agricultural crops is considered important in increasing their productivity. The harvest obtained in agriculture is grown due to the assimilation and absorption of various substances contained in the soil by the crop. As a result, the organic and mineral content of the soil decreases year by year. To restore the fertility of the soil, it is necessary to regularly add various fertilizers to it. Fertilizers should contain phosphorus, potassium, nitrogen, carbon and other elements necessary for plant development. According to their chemical composition, fertilizers are divided into such types as mineral, organic and organic-mineral mixture. [1].

Figure 1.1. Mineral fertilizers.

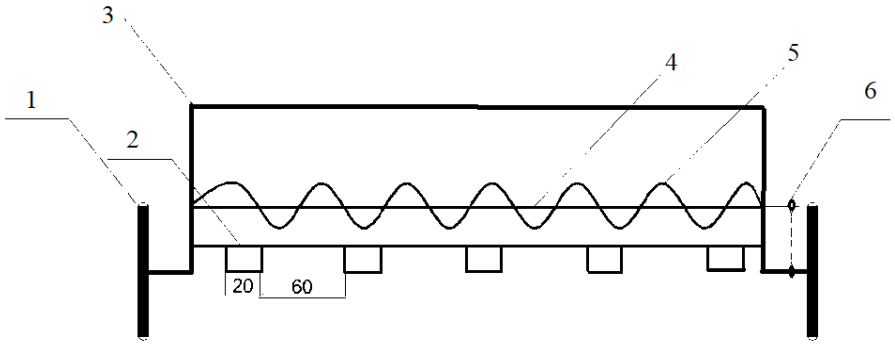
Local fertilizers are divided into solid (manure, peat, compost, etc.), liquid (liquid manure) and sideral (various types of fast-growing green grass) types. If local solid and liquid fertilizers are mainly sprinkled on the soil before plowing, the fast-growing green grasses planted in the fields are crushed and sprinkled on the surface after growing in sufficient quantity, plowed with plows and mixed with the soil.

Figure 1.2. Local fertilizers.

Currently, animal waste (manure) and compost (a mixture of manure, plant stems and various waste) are widely used as the main local fertilizers. Preparation and application of solid local fertilizers are carried out in two ways: directly (farm-field) and in the form of collection (farm-storage place-field). In this case, local fertilizers are mainly loaded from the storage places of livestock farmers to the transport vehicle and they are transported to the storage place prepared at the beginning of the field. Then they are stored in that place until the time of planting and when necessary, they are put into the soil. In non-saline areas, before plowing, solid and liquid local fertilizers are applied to the surface of the land, and then plowing is organized. It is advisable to apply it to the saline areas after washing off their salt during tillage.

Nowadays, only mineral fertilizers are used as feed between the rows after planting crops, which leads to a decrease in the porosity of the soil, and the crops we eat are saturated with harmful chemicals. . In order to prevent these problems, a local fertilizer application device is installed between the rows [2].

This device consists of the following parts (Figure 1.3):



1.3. Kinematic scheme of the local fertilizer introduction device between the rows
1st wheel; 2-fertilizer drop pipe; 3rd bunker; 4-screw axis; 5th screw; 6-chain transmission.

My device is mainly adapted to apply fertilizer to 5 rows. it takes from the tractor's rear drive transmission mechanism, it is connected to the tractor by three points.
The advantage of this device is that it provides the land with the same consistency as the local fertilizer, which is a very low cost and a good harvest in the future..

Summary:
The study of the condition of constructions of technical tools used in the application of local fertilizer between cotton rows, the development perspective and the research conducted on the improvement of their technological work processes showed that It allows to optimize the parameters of the devices used in fermentation, to increase its work quality and productivity.

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