

PRIOR TO PLANTING THE SOIL AND GARDEN WORK, THE BASICS OF CREATING A PUMP UNIT

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Annotation: The article presents the basics of creating a universal unit with an active working body that meets the current agrotechnical requirements, and its laboratory test option, which is necessary for preparing the plow for planting in a high-quality way and for working in garden beds.

Keywords: aggregate, device, technology, construction, plow, relief, conductor, reducer, planch, key, marker, tape, harrow, efficiency.

The main part of the agricultural products grown in our republic belongs to farmers. It is known that the high productivity depends primarily on the quality of planting and inter-row cultivation in horticulture. It is impossible to do these things without reliable techniques and equipment. The lack of equipment and technical tools, especially gear harrows, universal active working parts for cultivating garden plots, necessary for quality preparation of the plow for planting and cultivation of garden plots, remains an urgent problem today. The main reason for this is the lack and high cost of components imported from Russia in the production enterprises of such working parts. As a result, there are interruptions in production. For example, the cost of traditional harrows is burdening farmers. In addition, the currently used harrow is not very good in tillage. It is impossible to cultivate the garden with these storms. Therefore, the creation and introduction into production of a universal aggregate with an active working body and its corresponding devices, with high work quality and low price, remains one of the urgent problems of today.

The construction of the unit consists of a section mounted on a frame with toothed harrows rotating around a vertical axis, an agate opener and similar working parts. , softening the field area at the specified depth consists in leveling it uniformly and creating the most necessary agrotechnical conditions for the uniform germination of the sown seeds.

Pre-planting tillage is a labor- and energy-intensive process in agricultural crop production. If the soil is not properly treated before planting, that is, if the soil is friable

without soft composition, the seeds of agricultural crops cannot be sown at the level of agrotechnical requirements, and the sown seeds will not germinate evenly and simultaneously. Also, due to the possibility of changing working parts and changing their size, it can be widely used in gardening.

For farmers, the use of combined aggregates is of great importance, as they treat the aggregate to the soil in one pass and prepare it for planting. Because when such aggregates are used, due to the small number of passes, the soil is less compacted, and this creates the basis for the good development of the root system of the future crops and the abundance of the harvest.

The proposed pre-sowing pre-sowing soil treatment technological processes are carried out in one pass, while the crushing of lumps can reach 90-100%, the construction of a combined unit that cleans foreign plants from root residues is created mainly using secondary metal scrap and local raw materials [1].

Figure 1. The principle of operation of the pre-planting tillage and cotton harvesting unit is as follows. The main active working body of the unit 5, the harrow tooth is mounted on the plank and fixed to the axle 8. The axle drives the tractor from the QOV through the reducer 4 and belt transmissions 7, crushing the soil and cuttings in a layer of $12 \div 14$ cm, creating the ground for the good development of the root system of the future crops.

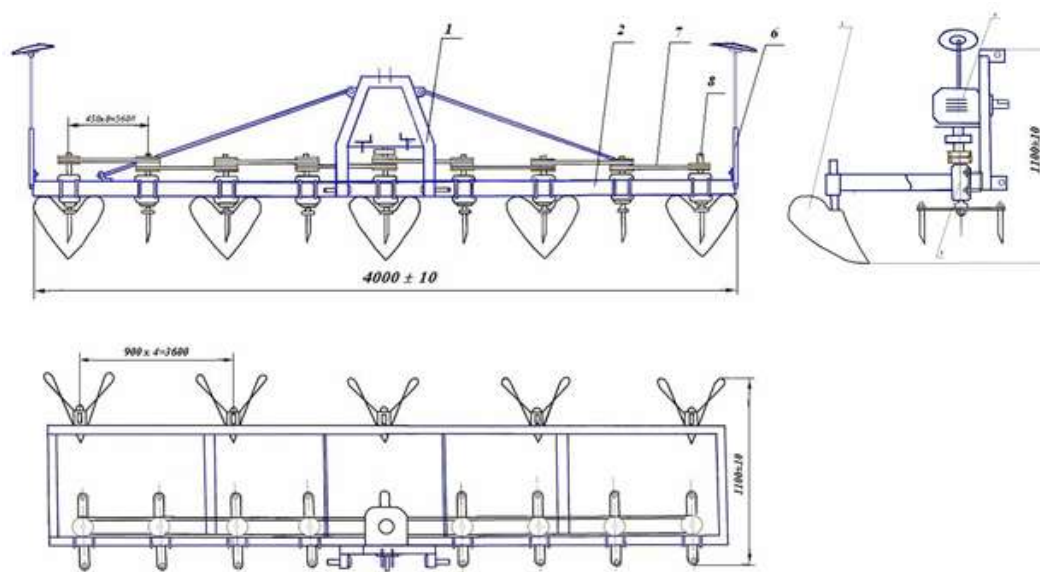


Figure 1. Pre-planting rationing unit in the open field

Agates are taken to the required depth with the help of keys 3 on the treated ground. By making it possible to narrow the frame on the basis of this unit, taking into account the distance between fruit trees in gardening work, the working parts can be moved to the left or right on frame 2 and placed with a working width of 60, 70, 90 cm. Depending on the development of the root system of trees, the depth of cultivation of tillage bodies can be shallow in places close to the tree and deep at a distance.

The proposed soil pre-planting and cotton harvesting unit allows to reduce fuel and labor costs per hectare by 2-3 times, reduces soil compaction, ensures full planting process in optimal agro-terms, inter-tree processing in gardens, reduces evaporation of natural moisture and It creates the most necessary conditions for the uniform germination of the planted seeds, and when working between the gardens, the root system is well nourished and the tree is well nourished due to the maintenance of moisture and softening.

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