



IMPROVE THE QUALITY OF LEVELING BY IMPROVING THE BASE GROUND LEVERS

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Abstract:

This article Heights the experiments on the study of the technological process of Workman's softening discs, the shape of a drawing prism, changes in hardware, volumetric weight, soil aggregate composition, field surface alignment and change in traction resistance of the unit at different speeds of its movement.

Keywords: grader, spherical disc, speed, tensile strength, soil size, fraction, leveling quality.

Annotation

In this paper, based on the experimental results of the application of softening discs device in front of the straightener shovel, the results of the study of changes in the shape, hardness , volume weight, aggregate composition, level of leveling and tensile resistance in front of the shovel are described, depending on the speed of the aggregate.

Base phrases: tequila, spherical disc, speed, tensile resistance, soil volume, fraction, leveling quality.

Annotation: v State predstavleni rezultati laboratorixix eksperimentov po opredeleniyu proizvoditelnosti i nekotorig drugix parametrov rabochego Organa disk, rabotayutshogo s Junction planirovtshika s tselyu sovershenstvovaniya prosessa viravnivaniya poley, otvechayutshix agrotexnicheskim trebovaniyam predposevnogo Fona.

Today, the main problem of Agriculture is low energy consumption and high yields. And the increased demand for energy means that this problem needs to be solved more quickly. Therefore, it is desirable to make productive use of the power of the techniques, improve the work schedule and reduce as much as possible the negative effects that are generated from the work to be performed.

The development of agro-economic activity of the Republic of Uzbekistan is based on all branches of Agriculture: leases, farms, associations of farmer and farmer farms. The current development of agricultural production is planned on the basis of general management, intensive and industrial



methods of production. The production of small-capacity energy and working machinery for farmer farms and rental contracts is aimed at positively solving the issues of bringing them from abroad.

In order to properly process the Earth, it is necessary to know its physical, mechanical and technological properties. The soil is a multi-phase Muhit, consisting of a mixture of solid particles, water, air and living organisms. The technological property of the soil depends on the ratio of the above phases. Physiologically treated optimal moisture soil is well crumbled, does not stick to the working bodies, requires less energy when plowing. The hardness of the soil represents its mechanical uniformity, that is, how much resistance it has to the immersion of the solid body. One of them is the qualitative leveling of irrigated lands. As a result of qualitative leveling, agricultural machines work with high yields, the soil is well washed, the seeds fall to the same depth, the germination is also complete in one plane, 6-7 percent water is saved. The current leveling is conducted in two stages. In the first place, the marzas are leveled, the rags and the rags are buried, the work is carried out only in the autumn. At this first stage, it is absolutely impossible to leave the land leveling work to be done in the spring, because in the spring, when a large amount of moisture accumulates in the soil, the soil becomes denser if the lands are leveled. In the second place, the seeds are flattened to the surface of the entire field before planting the seeds. In the first stage of the leveling work, graders of type GN-2,8 and GN-4, in the second stage it is necessary to apply with VP-8, VP-5, KZU-0,3 type rollers, MV-6,0 type rollers-molars.

It is worth noting that one of the main factors in the improvement of the melioration of irrigated crop areas in agriculture is its leveling. In the leveled areas, the yield of agricultural crops increases by 40-45 percent compared to the non – leveled areas, water consumption decreases in irrigation and the working conditions of the next exportable agricultural machinery increase and the environmental impact is reduced [2].

It is known that the current and export leveling of lands in irrigated fields is 35 from the total land area of farms for a short period of time each year...Before planting 40 percent in autumn and spring, the long base is leveled with P-2,8 A, P-4, Pa-3, PPA-3,1 and other types of land levers [3]. Leveling of irrigated lands.-it provides conditions for increasing the yield of agricultural crops, preventing labor consumption and abundant wastage of water during irrigation of Fields, high-quality implementation of quality processing and harvesting by machine to a number of ranges.

As a result of processing and irrigation of the soil several times, various irregularities are formed in the areas: long rags and rakes are formed in the process of plowing, highs and residual irregularities in the past year after irrigation. In addition, it is observed that in certain parts of the area, from repeated watering, the soil sits and drowns. All such inaccuracies can be eliminated by the practical application of the current (exclamation) leveling in the process of preparing the fields for planting. It is necessary to conduct the current (operational) leveling process in the short agrotechnical period. At present, the shortage of long-base leveling machines in existing farms, as well as the change in the geometrical shape of existing leveling smoothing machines, makes it difficult to timely perform the current leveling.

Such a problem can be solved not only by improving the softening device of long-base land leveling machines, but also by increasing the productivity of work.



Studies have shown that when the speed of movement is increased to 8,5 km/h, the passage of movement in the norm of the leveler and the same crushing of the kesak pellets increases the level of leveling, ensuring the quality of the terrain plane. If the speed of movement of the leveler increases from 8,5 km/h, the machine RAM will vibrate, which will begin to negatively affect the quality of the leveler's work. Such a situation increases the resistance to falls and rises more than the standard of the working body. This results in greater variation in traction resistance. This situation leads to a large change in the size of the prism, which is driven by a crossbar. As a result, the quality of the plane of the area is disturbed, unevenness is formed on this place [3]. A lot of scientific research work has been carried out in Central Asia in order to base the technology of rational operation on improving the softening device of tall rollers. This is revealed in the scientific research work that as a result of the passage of the levers more than once in one place, the upper layer of the Earth becomes denser and tighter, the work productivity of the aggregate decreases. These drawbacks, especially in small contoured landsraydi this process is much tripled. Proceeding from the above points of view and a number of scientific research work, it can be said that it is necessary to improve the working efficiency of the long-base leveler and to further improve the quality of its land levelling, as well as to improve its softening device to reduce its resistance to gravity.

For this it is possible to achieve a softening drive support the device. The main task of the disc device is to reduce the resistance of the scraper blade to scraping in pre-softened and large-cut areas, the technique of making the surface plane of the area in accordance with the agrotechnical requirement in 1-2 transitions along the surface of the field. Qualitative leveling of the fields and improvement of the soil fraction is carried out by installing a softening disc device in front of the levelling bucket. If the disc device installed in the tall ground Leveler is applied in practice, the ecological essence and physical properties of the natural structure of the soil are improved, soil fertility increases. It provides an opportunity to reduce the costs and cost of agricultural work and leveling processes and the cost of products by a certain percentage. Mexaniz in the leveling of irrigation and improved agriculture, the quality of the work carried out in the leveling of irrigated lands will be improved, the costs incurred in irrigation will be reduced. For plant development, the composition of the soil improves, increasing the yield. It can be concluded that this is the result of an improvement in the quality of the work of the leveler, as well as a positive impact on the soil ecology.

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