

Short Communication

## **EFFICIENCY basic processing and leaching of getting high cotton yield**

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### **Summary**

The results of studies under-winter plowing and soil washing on light gray soils of cotton seeds and a brief analysis of the effectiveness of agricultural practices on cotton.

**Keywords:** plowing, cotton, humus, manure, soil washing, drainage

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Areas of cotton seeds vary in the natural, climatic and soil conditions. However, in all the cotton growing areas autumn, autumn plowing has great advantages over the spring plowing. Plowing allows for deep plowing because the water table is deep, and do not lead to soil compaction, which occurs in the spring, with shallow ground water and soil moisture. In the autumn plowing, plow guzapaya time to fully decompose before spring, increase the humus content, improve soil structure, its physical properties permeability, moisture content, reducing the density of the soil, and also contributes to the large accumulation of digestible nutrients.

Early plowing up the soil freezing, allow to deepen the arable horizon of 35-40 cm, which is difficult to achieve in the spring plowing. Advance tillage promotes the elimination of annual and perennial weeds, reduce their numbers by 2-4 times compared with the spring plowing. Plowing also contributes to a significant reduction in the number of pests and diseases of sources. Early autumn plowing allows for, in dry weather, the layout of fields, high quality meats fell to flush salts from the soil, which cannot be achieved by spring plowing. Conducted field tests show a rise in cotton yields of 4-6 tons per hectare in the autumn plowing, spring plowing in comparison with [1].

Therefore, to take all necessary measures to carry out basic soil on which depend all the subsequent agricultural practices in the fields of: a layout of the soil, cutting checks and fell for quality of cleaning, spring planting and sowing of cotton. High-grade cotton seedlings can only be obtained by carrying out qualitative washing saline land and recharge irrigation on land with deep groundwater. For the quality of the autumn, the main plowing should first be leveled bumps and ditches, plows adjust for smooth, firm sealing the soil surface, to provide a complete sealing of guzapai. This is achieved by plowing bunk plows to a depth of 35-40 cm on the little cultivated land, with little humus horizon, the depth of plowing should be increased gradually every year deepening the capacity of the arable

layer of 3-4 cm, 35-40 cm before reaching the On heavily infested fields should be pre-cut, or shallow plowing without skimmers to a depth of 10-12 cm, followed by combing out the weeds and subsequent deep plowing.

Plowing lyutsernikov also be carried out with pre-peeled to a depth of 10-12 cm, for cutting the root collar and lower alfalfa regrowth in the spring. Ploughshare plow should be sharp, otherwise the places, dry and hard areas, plows Breakout to the surface and allow the flaws - small plowing. Tall and early maturing crop is achieved by introducing, the main plowing superphosphate 3-5 quintals per hectare and manure of 10-20 t / ha. The delay in the maturation of the cotton yield in recent years is due not only to the late dates of sowing, but the lack of phosphate fertilizers. Until the nineties, in the field of the main plowing in cotton growing areas, have made 30-40 thousand tons of manure and by 3-5 quintals of superphosphate, 70-80% of the area of cotton. The ratio of nitrogen to phosphorus as equal 1N: 0,5 - 0,6 P2O5.

Unfortunately, for many years, phosphoric tuks in the cotton fields are not made, and thus a violation ratios of nitrogen and phosphate fertilizers, leading to delay ripening of cotton. On the main part of the acreage of cotton soils are affected by salinity, in varying degrees, the presence of salts of chlorine greater than 0.1%, and the solid residue of more than 0.5% lead to thinning of crops, the delay in germination, retarded growth and development of cotton [2] . High-quality soil washing is achieved, and is only possible from December to mid-January, when the water table is at the maximum depth. The lack of drainage wells leads to the rise of ground water in the spring, and actually thwart a soil washing and holding the spring field work. That's why, early autumn plowing is necessary to obtain high yields of cotton.

Experiences and best practices show that good quality is achieved by washing the hand-made article checks the size of 0.3-0.5 m with a height of 40-50 cm fell, with extra nastavkoy on palodelatele PUV-0, 3. The joints must be strengthened checks manually. The water supply must be carried out Cartesian sprinkler, independently in each check, consistently, without recirculation of water from the check to the underlying bill. The wash water rate should be differentiated, depending on the degree of salinity. On the slightly saline areas sufficient rate of 1.5-2.0 million cubic meters. m, at the mid-saline 3.0-3.5 million cubic meters. m and highly saline 4-5 thousand cubic meters. m of water per hectare. We cannot allow so-called "contour" washing, when a bulldozer bollards rise up to 70-80 cm in the area of 10.8 hectares. Such bulky washing, leading to the rise of ground water to the surface and the surrounding massifs to the delay in the spring sowing and late sowing of cotton conduct. Overweight washing particularly dangerous on land close to the ground water and the lack of drainage wells and horizontal drains. Therefore, timely and quality execution of all the fall-winter field work can get is a guarantee of high and early maturing crop.

## Literature

- [1] Umbetaev I. Technology of cultivation of new domestic varieties of cotton in the south of Kazakhstan - Almaty - 2005, 138 p.
- [2] Shuravilin AV Regulation of water-salt regime of soils Hunger Steppe -Moscow – 1990, 65p.