

THE MAIN AGRO-TECHNICAL CONDITIONS FOR THE PRODUCTION OF HIGH-QUALITY COTTON PLANT FROM THE FINE-FIBER VARIETY "SURKHAN-14"

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ABSTARCT:

In this article projected development of basic agrotechnics in the creation and cultivation of fine-fiber "Surkhan 14" cotton plant varieties based on their biological characteristics.

KEYWORDS: fine-grained Surkhan 14 cotton varieties, yield joints, care, fertilization, fecundity, yield length irrigation norm.

INTRODUCTION:

The process of cotton selection and seed production in Uzbekistan created by M.Iksanov, B.Ch.Juraev, H.Khusanov at the Research Institute. The type of "Surkhan-14" belongs to the "genus *Gossypium barbadensis*" varieties. The height of the stem is 125-135 cm, the stem is strong and large, unbranched (nolevoy) type, the elements of the crop are located on the main stem gypsum. 2-3 pieces in each joint, in some cases there are up to 4 formed elements.

The ripening period is 118-122 days. The stem is blue at the beginning and turns reddish in autumn. Stems smooth, not prone to flattening, leaves moderately large, there are 3-5-sides.

The first crop horn starts from the 3-4th joint and in some cases from the 5th joint when good agronomic techniques are used. The cocoons are of medium size with a beak, round and elongated, the cocoons are 3-4 cups, 4 grams of cotton comes out of the four cups. The cotton stays well in the bowls and does not spill even when it is fully open for a long time. Due to the

fact that the variety "Surkhan-14" was planted on 15,475 hectares in 2006-2012 and at the result of positive results, in 2009, this variety was included in the State register and recognized as promising for Surkhandarya region. It is regionalized from the 2020 harvest. In 2006, it was planted on 57 hectares in Termez district, with a yield of 36.2 ts /hec, in 2007-2012, 15,418 hectares of land in Termez, Qizirik, Muzrabat and Sherabad districts were planted individually and in combination, with good results.

In 2017, elite materials are planted on 17 hectares of cotton fields of "Ruziboy Khojanov" elite seed farm enterprises of Termez district and the average cotton yield was 30.8 ts / hec.

In 2019, 30,4 quintals were planted on 48 hectares and the plan was fulfilled by 101,5%.

This variety was planted to 416 in 2018 and yielded 4,6 quintals per hectare more than the fine-fiber Iolatan-14 AI navigator.

In 2018, Termez is in the variety testing network yielding 2 quintals more per hectare than the standard Termez-31 navigation, yielding 37,3 quintals per hectare.

According to the results of experiments on a three-year large variety test seedlings, "Surkhan-14" has a yield of 11% compared to the controlled "Termez-31", showed 30% more fiber yield and 1.7% more fiber yield. Its cotton is white, micronaire indicator 4 (Mic), relative tensile strength stz-39,9 gk /tex, high average tensile strength Len-1.32 inches, the index of

uniformity in length is 83,5-85,4%, the reflection coefficient is 8,9-69,5%.

Technological quality indicators of this variety of fiber correspond to type 1 "A". In order to get a high yield from this variety, it is necessary to carry out autumn plowing to a depth of 40-45 sm. Before plowing, 70% of pure phosphorus and 50% of potassium fertilizers are applied under plowing. Phosphorus fertilizer should be not less than 160-190 kg /hec and potassium fertilizer not less than 130-145 kg /hec, respectively.

The maturation is leveled with the ground and then the pile is taken. The pile should be taken in the form of a trapezoid. That is, the top (edge) of the ridge should be closer to the width of the ridge line. Depending on the weather conditions in the southern districts, depending on the slope and flatness of the land, water is taken to the ridge from 25.02-1.03. In this case, the moisture should rise to the top of the pile, but it is necessary not to overdo it and overheat.

In order to obtain flat seedlings in heavy soils 3-4 hours before planting, the soil is loosened to a depth of 6-8 sm with a zig-zag storm.

Generally, It is advisable to sow the seeds in a 10 sm layer of soil, ie at a depth where the average soil temperature is not less than 14 degrees. The amount of seeds used per hectare of land is 35-40 when using seedless seeds, 60-70 kg in the case of hairy seeds. should not exceed when sowing seeds, the seeds should fall to the same depth, the width of the row should be the same. The period from March 25 to April 10 is the most favorable sowing period.

Planting depth is 3.5-4 cm in all soils, if the day gets hot and the humidity decreases, it should be planted at a depth of 4.5-5 sm.

ЧCX-4, CMX-4 seeders are planted with 8-toothed lopis for 35-36 seeds per 1 p / m when adjusted to the norm of 50 kg of seed per

hectare, with 12 nests per 1 p / m, the distance between the nests is 8.5 cm and 3 seeds fall into each nest.

At a consumption of 60-70 kg, the number of seeds in the hive increases accordingly. Seeds should be sown in this way when the row spacing is 90 sm. When planted with 60 lopis in a 60 sm scheme, 8 nests are formed at 1 p / m, the distance between the nests is 12.5 sm, and 4-5 seeds fall in each nest. If the seeds are sown in rows, it is necessary to ensure that the distance between rows is 30 cm and the distance between rows is 60 cm, in this case in 1 p/m There are 25 seeds in a row and a total of 50 seeds in 2 rows, which means 60 kg of seeds per hectare.

In this case, 16 nests out of 8 nests are formed at 1 p / m in 6 tal lopis. If 1-2 seeds fall in each hive and 1 seedling is left in the end, in 16 x11,000 p/m can be placed 176,000 seedlings.

When planted on a 60 sm scheme in fertile soils, this variety is 1 p/m. 8-9 seedlings and 13-14 seedlings when planted in a 90 cm scheme. In light and sandy, low-fertile soils it is desirable to increase the seedlings by 10-15 percent.

It is advisable to carry out the first cultivation at an early stage in the cotton fields planted with this variety. It should be noted that after sowing the seeds in years of high humidity, moisture removal measures should be taken first. Given that the lack of aeration in the soil leads to rapid disease of the plant, especially in the following years (1990-2020) alfalfa rotation, siderate exchange increased soil density to 1.2-1.5 g / cm³ as a result of the complete reduction of alfalfa fertilization to almost reduced shrinkage of the system and the absence of manure circulation. The amount of humus has decreased by 1.5-2.0 times compared to the amount in the 70-80s, as a result of which cotton is more damaged by wilt and gommos. To reduce the amount of this, it is

necessary to begin the first processing of cotton seedlings with 60-70 percent germination of seedlings, especially for early aeration of the soil (especially in heavy and loose soils).

At the same time, 38-40 working bodies are installed to the cultivator. The working organs, including the blade, are adjusted to a depth of 5–7 cm, 5 sm from the seedling. After both cultivations it gives better results if it is loosened with a chisel-cultivator at a depth cultivation of 25-27 sm between rows.

With deep work on this variety, ensure that the bullet roots of the cotton go deeper, as a result, cotton will be able to use mineral fertilizers and water more efficiently. This variety is demanding to all types of fertilizers. The annual norm of nitrogen fertilizer for this variety is 250 kg, phosphorus 175 kg, it is advisable to give 125 kg of potassium in moderation.

We recommend the distribution of nitrogen fertilizers as follows. 70-80 kg during the first cultivation, 120 kg during the mowing period, 130-150 kg during the flowering harvest from the remaining 30 percent after plowing the phosphorus fertilizer.

That is, the amount of 55–60 kg, 50% of potassium fertilizers should be applied at the time of plowing, and the rest should be applied deeper, not later than the mowing period.

To further increase the effectiveness of mineral fertilizers, it is important to apply them in combination with local fertilizers. At the same time, if 15-20 tons of manure is applied per hectare, the yield will increase, the quality of fiber will improve, the weight of seeds and the amount of oil will increase.

If the ratio of the annual norm of mineral fertilizers is violated, phosphorus-potassium fertilizers are not given at the required level, and only nitrogen fertilizers are given, that is, if given in excess, the opening of the cocoons is delayed by 14–16 days, and the quality of the fiber decreases.

Seed weight is reduced if fertilization is delayed. Phosphorus fertilizers accelerate plant growth. Potassium is a fiber quality, especially increases its toughness. This increases the resistance of cotton to heat, which is especially important for the southern regions and districts. Irrigation of “Surkhan-14” variety depends on soil and climatic conditions, depth of groundwater level. Groundwater is deep gray, 1: 3: 2 in bare soils, near groundwater, the meadow is irrigated at a rate of 6–7 times less than in sandy, light soils, in a 1: 2: 1 ratio in swampy soils.

It is advisable to irrigate the first and last water evenly. In irrigation, the length of the furrow should not exceed 50-60 meters, the duration of watering in the furrow should not exceed 12-14 hours, and in the period of subsequent growth and development - 18-20 hours.

The timing of watering is determined by the external signs of the plant. At the hottest time of the day before flowering (at 14-15 o'clock in the afternoon), the cotton leaves turn dark green and become duller. At this time the field should be watered, if the leaves do not lose their elasticity, and the middle root does not crack when bent. During the flowering period, the peak of the flower along the stem indicates that the plant is extremely thirsty.

This should not be allowed at all, when the plant appears 6–7 buds should be watered satisfactorily. When cotton is irrigated with excessive thirst, the cocoons become smaller, fiber yield decreases and fiber length is shortened. The yields are declining, so special attention should be paid to the timely irrigation of cotton of this variety. When this variety is planted in a single row, 17-18 crop joints, when planted in pairs, pruning is required when 14-15 crop joints appear.

Experiments show that, then 12–13 harvest joints appear when the “Surkhan-14” variety is planted in pairs, the use of “Pix”

growth regulator at a rate of 1.5 liters per hectare gives good results: cotton worm infestation is reduced, drought resistance is increased.

With an additional yield of 3.2-4.1 ts/hectare compared to manual threshing, the size of the stalks increases, the weight of cotton in a bowl increases by 6-7 grams per 1000 seeds, the opening of the cotton is accelerated. This variety is strongly damaged by thrips during the period of germination of the seed at a young age, that is, during the period of seed germination, and during the period of seed germination. In varieties with zero branching, after thrips damage, cell division at the point of cotton growth slows down and the plant remains at a plant height of no more than 40-50 cm.

Therefore, it is important to treat this type of cotton with systemic drugs such as Mosplan, Donadim, B.I-58, Gaucho, Kruezer, to provide potassium urea nutrients from the leaves to protect against thrips damage in the early stages.

The resistance of this variety to water, drought, heat, as well as the high cost of raw cotton, 4924 hectares of land were planted for the 2019 harvest, taking into account the demand for fiber in the world market and an average of 31.0 ts, planted in 5674 hectares in 2020 and harvested 30 ts. In "Angor Surkhan G'ururi" cluster Limited Liability Company planted on 3694 hectares and harvested 34.5 quintals per hectare. In 2018, 90% of the fiber was sold to the first industrial grade, and 83% to the higher grade. In 2019, this figure was 87.5 and 90.0 percent, respectively. This showed that the local Surkhan-14 variety has a higher quality and yield than the Iolotan-14A1 variety and early ripening. For the harvest of 2021, Surkhan-14 variety is planned to be planted on a total area of 16,000 hectares in the region.

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