

New, High Yielding, Quality Fiber Type Iv Grade Cotton S- 6577

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This article presents the economic, biological, agrotechnical and technological characteristics of the new variety of cotton S-6577 and its advantage.

Keywords: variety, S-6577, early maturity, fiber length and yield, microneur, cotton.

Cotton variety S-6577 was created at the Cotton Breeding, Seed Production and Agrotechnologies research institute (CBSPARI) as part of the KXA-KX-2019-135 project funded by the Ministry of Innovative Development of the Republic of Uzbekistan. The variety was bred using the synthetic selection method, based on the inter-variety hybrid combination F₈ [F₄ (L-105 x L-106) x L-106].

Morphological description of variety S-6577. A bush of conical shape, 110-115 cm. The stem is green, slightly pubescent by the autumn tan and has 0-2 monopods. Sympodial branches 1.0-2.0 of type, pubescence is weak. The first fruit branch is laid on the 5-6 node. The leaf is hand-shaped, green, 3-5 lobed. Flower petals are yellow, anther color is yellow. Boll rounded, green, grooves small intermittent, spout medium. Seeds are medium, oval, dense, grayish. White fiber.

On competitive test in the field CBSPARI, the new variety of cotton S-6577 showed a stable excess of cotton yields over standard variety by an average of 4.3 c/ha (Table 1).

In crops of competitive testing, on average for the period from 2012 to 2014, the average yield of raw cotton in the fields of the CBSPARI experimental site was 44.6 centners per hectare.

In 2018, the variety S-6577 was sown in the Surkhondarya region on an area of 27.6 hectares.

Seed work on a new variety of cotton S-6577 in 2018 is conducted in an elite seed-growing farm of preliminary reproduction of new varieties of cotton "Orifjon" located in Zharkurgan district, Surkhondarya region.

In 2018, in the aforementioned elite seed-growing farm was harvested, including: individual selections of 700 pieces, trial and family fees of 176 pieces, elite 8.4 tons. The precocity of the S-6577 variety in the conditions of the Zharkurgan district, Surkhondarya region is 104 112 days, which makes it possible,

under optimal agrotechnology of cultivation, to complete the full harvest of raw cotton before October 10.

Grade S-6577 has better quality of type IV fiber than the widely sown variety S-6524. According to the results of the technological analysis of the quality of SIFAT fiber in the Surkhandara region, the 2018 harvest grade S-6577

№	indicators	unit of measurement	variety S-6577	variety S-6524	Crop varieties in % to the standard,
			Years	Years	

fiber meets the quality parameters of type IV fiber, the staple fiber length is 34.6-35.9 mm, 4.1-4.4 micron, relative breaking load 33.7-35.2 s / tex .

Table 1. Economic, biological and technological properties of the new variety of cotton S-6577

			2015	2016	2017	Average	2015	2016	2017	Average	the remaining indicators in absolute deviations
1.	Total yield of raw cotton	c/h	38.1	36.2	47.5	40.6	35.1	33.0	40.7	36.3	111.8%
2.	Fiber output	%	38.6	37.7	37.2	37.8	37.7	35.9	35.9	36.5	+1.3
3	fiber crop	c/h	12.9	12.0	15.4	13.4	12.1	10.9	12.4	11.8	113.6%
4.	fiber crop of all fees	c/h	14.7	13.6	17.7	15.3	13.2	11.8	14.6	13.2	115.9%
5.	Physical and mechanical properties of fiber										
	a) fiber length	In.	1.10	1.16	1.07	1.11	1.11	1.22	1.10	1.14	-0.03
6.	The number of days from full germination to maturity	days	111	116	110	112	117	122	110	116	-4
7	weight of raw 1 box		5.6	6.6	5.4	5.9	5.5	5.9	5.8	5.7	+0.2
8	Weight 1000 seeds	gr	120.0	119.0	119.0	119.3	123.0	124.0	123.0	123.3	-4
9	Microneir		4.4	4.4	4.9	4.6	4.5	4.4	5.0	4.6	0
10	Specific breaking load	gs/tex	31.2	29.9	29.0	30.0	37.1	33.4	38.0	36.2	-6.2

With the timely implementation of all the necessary agrotechnical measures, the S-6577 variety during the growing season tolerates reduced irrigation rates, and also has a high resistance for 2015-2017 yy to *v.dahliae* during the formation and maturation of the crop of raw cotton, with an average in the period from 2015 to 2017. overall, he was struck by *V.dahliae* by 8.9%, including to a large extent the S-6577 variety was amazed at 2.1%, and the S-6524 variety by 7.6%.

Cotton variety S-6577 is characterized by an increased yield of high-quality raw cotton and fiber. In 2018, with the planned yield of raw cotton in the Surkhandarya preliminary breeding farm, which is located in the Surkhandarya region, Zharkurgan district, the actual yield of raw cotton from an area of 27.6 hectares was 39.1 centners per hectare instead of the planned 32.2 centners per hectare.

Agricultural cultivation used in the aforementioned economy indicates that it is necessary to carry out the plowing of the plow to a depth of 35-40 cm, if the field is littered with perennial weeds, then to a depth of 60 cm and it is desirable to complete it no later than 1 December. The optimal term for sowing cotton varieties S-6577 under the conditions of 2015 is the period from 5 to 15 April, when the soil

temperature at a depth of 10 cm warms to 12-14°C. The seeding rate of pubescent seeds 50 kg / ha, bare 22-25 kg / ha. The depth of embedding of seeds is 4-5 cm. The maximum set and preservation of fruit elements should be noted when placing plants according to the 60x15-1 scheme or per meter 7 plants, when placing plants according to the 90x10-1 scheme or per meter 10 plants, which allows to obtain standing density plants 110-120 thousand plants / hectare on fields with high soil quality. When sowing on low-fertile soils, the density of standing plants per 1 ha should be increased to 120-140 thousand, with two-line sowing, the density of standing plants per 1 hectare should be at least 150-160 thousand plants / hectare. Thinning should be carried out in 2 terms: the first in the phase of 2-3 true leaves, the second and last in the phase of formation on the plant 4-6 of these leaves.

Grade S-6577 highly sensitive to early feeding. The annual rate of fertilizers, depending on the agrochemical cartogram of the cultivation area in the active substance, including nitrogen 160-180 kg, phosphorus 80-100 kg, potassium 60-80 kg / ha. The first dressing is carried out in the budding phase, at the rate of 100-150 kg / ha, the second during the flowering period and mass fructification, no later than July 10 at the rate of 250-280 kg / ha of ammonium nitrate per 1 ha.

Phosphorus and potash fertilizers are applied at the rate of 50% for autumn plowing, the rest during the growing season, at the same time combining nitrogenous with phosphate fertilizers in the first dressing, and nitrogenous fertilizers to the second.

Watering is carried out according to schemes 0-3-1, 1-2-1, depending on the type of soil and the depth of groundwater. The optimal length of irrigated furrows is 80-100m. The last watering should be carried out in the conditions of the Surkhondara district, Zharkurgan region at the end of August . The variety performs well in areas with low irrigation water supply.

Defoliation must be completed before September 1.

Based on the analysis of research results, the following conclusions should be made:

The timely and benign conduct of all the proposed agro-activities for the cultivation of the new variety S-6577 allows you to get a full-fledged, high-quality, early crop of raw cotton, complete the cotton-picking before October 1, and hand over all the harvested material to the cotton-cleaning plants. The higher yield (5-7 centners per hectare) of the new variety S-6577 and the quality of type IV fiber allows each farm to receive up to 50-60% of the additional profit from its cultivation.