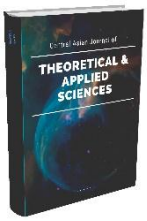

CENTRAL ASIAN JOURNAL OF THEORETICAL AND APPLIED SCIENCES

Volume: 03 Issue: 09 | Sep 2022 ISSN: 2660-5317
https://cajotas.centralasianstudies.org

Technological and Qualitative Properties of Promising Medium Fiber Cotton Lines

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Received 25th Jul 2022, Accepted 24th Aug 2022, Online 26th Sep 2022

Annotation: *The ridges that were built as a result of the selection and work done matched the needed standards in terms of economic and technological excellence. Additionally, these markers of goose kinds grown extensively in the Kashkadarya region have yielded excellent results. Some plants have morphological structures that are compact in shape and conducive to machine picking. In the Test 8-; 32-; 34-; 41- and 49-the yield of the ridges was higher than 40 centners. On additional productivity 8 -; 32 -; 34-; From 41-and 49-ridges, 6,6-12,0 % additional yield was obtained.*

Keywords: *species, ridges, productivity, additive yield, micronutrient, yarn spinning coefficient, fiber index, fiber length uniformity index.*

Introduction. It is crucial that the new maize varieties are developed in the region in question if the region is to reap a large and high-quality harvest from them. Each territory of the Republic is distinct in that if there is an effective temperature in the southern regions, a lack of irrigation water, scorching hot, gamsel, dusty, and Sandy storms hinder the growth of plants. If there is an effective temperature in the northern regions, soil salinity and a lack of fresh water are also present.

Therefore, it is an important task to create and place new varieties suitable for this region with the selection methods in each region itself. In this regard N. G.Simongulyan itself shows how correctly [1] concluded that the placement of a created variety in one agroecological environment into another environment is an incorrect method of introducing a new variety into production.

The results of the environmental test of the newly created varieties of porcine showed that there is a right strong correlation between the yield of each variety and the indicators of their adaptability to the environment [2]. Such tests have been observed in studies to have a negative impact not only on the productivity performance of varieties but also on their quality performance [3].

Each of the Republic's regions has distinct soil and climatic features that set them apart from one another. That is, the amount of precipitation that is generated by the atmosphere and falls into each region, the total

of effective temperatures, wind and solar activity, soil fertility, depth and thickening of the soil layer, supply of irrigation water, the state of the soil and irrigation water after irrigation, the coefficient of erosion, and other factors (1989) [4], (2016) [5].

The experiment carried out over a long period of time (100 years) revealed that it is possible to obtain a crop from the corn crop in an unfertilized variant even without giving any fertilizer, according to the scientific research institute of cotton selection, seed growing, and agrotechnologies of cultivation (formerly Uzpiti). Each hectare of new varieties is collected from at least 30 centners and up to 45-50 centners, depending on the soil type and climate of the Republic's more than 30 state-run variety testing sites.

In order for them to achieve high economic efficiency in the creation of new varieties of husks, their productivity is in the first place. But if the quality of the removable product is low, then its competitiveness will also be low. This in turn will have a strong impact on the export volume of the product. Therefore, at the same time with the productivity of the new varieties to be created, ensuring that its quality is also high, will have a positive impact on the competitiveness and export of the products to be extracted from it in the future.

The place and method of conducting the study. Research q.x.f.d., professor I.M. Rakhmatov creation of thin, medium-fiber varieties of Type I-II, Type IV, suitable for the conditions of the Kashkadarya oasis with encryption “QX-A-QX-2018-208 "under the leadership of Rakhmatov, the selection of prospective families and ranges, as well as the initial grunt control examination was carried out within the framework of the practical project”.

The weather, the temperate soils of the counter-desert, and other environmental factors affect field experience. L.N. Babushkin claims that the desert's climate is drastically changeable Continental, with a scorching summer and a chilly winter. The northern Arctic sends chilly air flows that drastically drop the temperature during the winter. The average air temperature can drop from 0°C to +2°C in January and, in the winter, occasionally from -15°C to -25°C. Summer lasts longer and is hot and dry. The daytime high in July can range from +44°C to +47°C on occasion.

The annual average temperature of the air is constantly higher than +15°C. Warm days during the year are on average 242 days. The sum of useful temperatures is maintained at 4533-4939 degrees per year.

The sum of useful temperatures for plants is very convenient for growing thin-fiber cotton in the opposite desert and planting heat-loving crops, as well as for harvesting from an area of two to three times a year (L.N. Babushkin, 1959) [6].

The dearth of water resources in comparison to the available land options is one of the new characteristics of the Karshi desert.

The primary months for precipitation in the region where the project experience is being done are autumn, winter, and spring, thus the average perennial amount is 237,0 mm, which is 2-3 times less than the indication of the taiga-tailed area.

The soil is heavy in terms of granularity, slightly coarse-grained, and not too salty. Irrigated for 35–40 years and used for agricultural; rather recent assimilation. Depending on the irrigation seasons, the depth of the leaking water will be between 2-4 m.

For 2019-2021 years, in the laboratory “selection and seedling of Goose” in the production field under the scientific-experimental direction of Kashkadarya Scientific Research Institute of Agrotechnologies of cotton selection, seed growing and cultivation, a competitive test of the middle-fiber cotton Ridge created over the past years was carried out in the sort test seedlings.

To estimate the weight and fiber quality of cotton in one breast, cotton samples were taken prior to each harvest. processing of productivity data mathematically. The B. A. Dospexov method was used to complete it. All observations were made in accordance with the "methods of conducting field experiments" (2007y) [10]. They are based on the "method of cotton field experiments" (1981) [8], "methods of cotton field experiments in field and laboratory in irrigated conditions" (1962) [7], and "Genetics, breeding, and seed production of cotton" (1987) [9].

The main purpose of the study is to create medium-and long-fiber varieties of porcine, which are superior in quality and yield of zoned porcine, which is suitable for the area of water scarcity, extreme weather, which is located in the south of the Republic of Kashkadarya region, and which is planted in large areas in the region, and hand them over to Technological quality analysis of the fiber of samples collected from medium and thin fiber ridges tested in the experimental area was carried out in the Oster HVI 1000 jig, owned by Sultan Tex Group HQ.

Results of the study. 28 ranges of large sort test seedlings were examined between the study's years (2018 and 2020), and they were compared to the template sort (Buxoro-8). The average values for the three-year test ranges are shown in Table 1.

The opening period of the first flowers on the plants of 50% of the ridges was between 71 and 74 days, according to data on the blooming period determined on the ridges in the test. For the template Variety, this value was equal to 1110,2 degrees if an effective temperature sum of 1041,9–1099,7 degrees was required for the opening of the first flowers in 50% of the plants on the ridges.

This stage on the ridges was observed on days 114–125, and on the template Variety on days 125, in the observations on the assessment of the duration of the opening of the initial bushes on 50% of the geese plant. When the first Burrows were opened during this time period, the ridge plant required an effective temperature range of 1989,3-2118,3 degrees. However, the template sort opened the first Burrows at an effective temperature of 2126,7 degrees. These findings demonstrated that the main part of the selected ridges had higher flowering and ripening rates than the template grade.

In the experimental seedlings, the thickness of the seedlings is 56,5 58,9 thousand / ha, the weight of cotton in one breast is equal to 5,0 Gram (32-Ridge) 6,9 gram (49-Ridge), especially 41-; 43-; 44-; 46-; 48-; 49- and in 51-th ridges it turned out that this figure is 5,7-6,5 grams. The gross harvest from the ridges is equal to 37,1-42,8 Centner, from the template variety harvest (38,2 TS/ha), especially 8-; 32-; 34-; 41- and the additional yield on 49 - th ridges was higher by 6,8-12,0 %.

Table 1.Yield and quality indicators of medium-fiber Ridge

Template sorts and ranges	Seedlings thick-Ligi, thousand / ga	Weight of cotton in one breast, G	Productivity, TS/Ga			Extra yield, %	fiber yield, TS / ga	1000 PCs seeds heavy-weight, g	fiber output, %	fiber length, mm
			1-cotton seed 30.09		In total					
			ts/ga	%						
Buxoro-8 (template)	58,8	6,2	21,1	55,0	38,2		13,6	118	35,7	33,9
7- range	58,0	5,1	24,4	64,1	38,1		13,9	107	36,6	34,5
8- range	57,5	5,5	24,7	57,9	42,6	11,0	15,5	114	36,3	35,2
28- range	57,8	5,2	24,6	64,3	38,3	0,3	13,9	111	36,3	35,0
32- range	58,0	5,0	26,0	60,8	42,8	12,0	15,6	109	36,5	34,0
34- range	58,2	5,3	26,7	63,3	42,2	10,5	14,5	111	34,4	34,6
35- range	58,1	5,4	24,4	61,4	39,8	4,2	14,4	120	36,1	35,4
36- range	57,7	5,3	24,8	64,4	38,5	0,8	14,1	113	36,4	34,9
37- range	58,2	5,3	25,7	65,0	39,5	3,4	14,8	109	37,6	35,7

41- range	58,9	5,7	26,7	63,6	42,0	9,9	15,3	119	36,5	34,8
43- range	56,5	6,0	22,7	63,0	36,0		12,5	129	34,7	34,2
44- range	58,1	5,8	22,4	58,5	38,3		14,1	120	36,9	35,2
46- range	57,9	5,8	22,6	58,8	38,5	0,5	14,3	119	37,2	33,7
47- range	57,6	5,5	22,2	63,9	34,8		12,6	121	36,1	35,6
48- range	58,1	6,5	22,5	59,1	38,0		13,6	125	35,7	33,5
49- range	58,0	6,9	24,2	59,4	40,8	6,8	13,6	129	33,3	35,1
51- range	57,3	5,8	24,2	65,3	37,1		13,1	122	35,3	35,6
To the thickness of the seedling		0,03			0,45		0,49	-0,30	0,24	-0,13
On the weight of one breast cotton					-0,18		-0,43	0,84	-0,58	-0,25
Productivity							0,89	-0,38	-0,04	-0,05
Fibre cane								-0,59	0,43	-0,02
Weighing 1000 pieces of seeds									-0,56	-0,08
Fiber output										0,05

2018 year: HCR $_{05}$ 3,72 ts/ga; HCP $_{05\%}$ 2,9%,

2019 year: HCR_{05} 1,40 ts/ga; $HCP_{05\%}$ 2,9%; 2020 year: HCR05% 2,26 ts/ga; HCR05% 2,8%.

The calculations showed that the share of September yield of the ranges was 55,0% higher than the figure of the template variety (7-28%)-34-36-37-41-47-51 - 8,3% in the ranges.

Calculations show that the fiber yield from each hectare in the ridges is 12,5-15,6 Centner, while the template grade is equal to 13,6 Centner this figure, 8-; 32-; 34-; 35-; 37-; 41- and it was determined that from 46 - ridges 14,3-15,6 Centner or 0,7 Centner (46-ridges) to 2,0 Centner (32-ridges) additional fiber yield was obtained.

As determined in the laboratory analysis, 35-; 41-; 43-; 44-; 46-; 47-; 48-; 49- and 51-1000 pieces of grass weight of ridges 119-129 G, 7-; 32-; 37-; 41-; 44- and in 46-ridges, the fiber output was 36,5-37,6 %, while the fiber length was 46 - and 48 - ridges in all other ridges were equal to 34,0-35,7 mm (Table 1).

The results of the mathematical processing of the data obtained (Table 1) show that the weight of cotton in one breast compared to **the seedling thickness is correct octave,** yield, fiber yield is correct average, 1000 units of seedling weight is reverse octave, fiber output is correct octave, and fiber length is reverse octave, fiber yield and **fiber output are reverse octave**, fiber yield 1000 pieces seed weight reverse average, fiber output and fiber length reverse octave, 1000 pieces seed weight reverse average compared to fiber yield, fiber output and **fiber length reverse octave,** 1000 pieces seed weight reverse octave average and fiber length reverse octave average and **fiber length reverse octave show**ed that fiber length has a proper octave correlation link.

Table 2. Technological quality indicators of medium-fiber systems (2018-2021 years)

template, ridges	Yarn spinning-coefficient of elasticity-tsienti (SCI Grade)	Mic-Ro-neuro (Mic)	Ripened-lik coef-Fisi-enti (mat)	High average length, UHML (in)	Uniformity index UI by length (%)	Short fiber index (SFI (%)	Packing-tensile tensile strength Str (g /tex)	Disruption-in-the-mill (fiber-ELAs-steep Elg (%)	Light re-scan coefficient-tsienti Rd	Degree of jaundice + b	Number of impurities TrCnt	Dirty impurities area TrAr	Amt
Template (Buxoro-8)	151	4,84	0,87	1,172	84,2	6,1	32,9	6,8	81,1	8,4	9	0,14	627
41-range	155	4,78	0,87	1,216	84,9	5,9	33,0	6,7	81,8	7,9	7	0,09	464
43-range	158	4,94	0,89	1,200	84,8	6,3	34,7	5,2	82,5	8,0	6	0,08	483

44-range	155	4,81	0,89	1,205	84,4	6,5	34,0	4,7	82,6	7,8	9	0,14	559
47-range	163	4,76	0,88	1,235	86,0	5,6	33,7	6,2	82,4	7,4	7	0,09	562
48-range	168	4,62	0,88	1,236	85,3	5,8	36,0	5,6	82,0	8,1	8	0,08	560
49-range	167	4,71	0,88	1,234	86,5	5,6	34,0	5,7	81,2	8,4	4	0,07	568
51-range	150	4,77	0,88	1,225	84,1	6,3	32,3	4,9	82,4	8,3	8	0,10	628
75-range	142	4,39	0,86	1,168	83,3	6,6	30,5	7,2	82,5	8,1	8	0,11	624
81-range	155	4,98	0,87	1,212	85,4	5,5	33,1	8,0	81,2	8,3	15	0,20	598
82-Range	154	4,08	0,85	1,221	84,0	6,3	31,6	7,7	82,9	7,7	14	0,18	607
83-range	158	4,82	0,87	1,274	85,2	4,9	32,5	7,0	83,3	7,8	10	0,13	657
86-range	155	4,81	0,87	1,218	85,0	6,4	32,9	7,4	82,0	7,9	10	0,10	600
89-range	146	4,74	0,87	1,175	84,1	7,3	31,6	6,5	82,6	8,2	7	0,08	490
90-range	161	4,61	0,87	1,203	85,7	6,0	33,7	6,7	80,7	8,7	7	0,09	753
91-range	152	4,89	0,86	1,233	85,2	5,4	31,7	8,5	81,5	8,0	9	0,12	802

The seedling thickness in the seedlings is 58,9 thousand grains per hectare, the weight of cotton in one breast is 5,7 grams, the September crop is 26,7 TS/ha, the gross yield is 42,0 TS/ga, the additional yield in relation to copy is 9,9 percent, the weight of 1000, and from 2022 began testing in the Autonomous Republic of Karakalpakstan and the state sort denim offices in all regions.

The maturity, fertility, plant shape, compatibility with machine picking, and other distinguishing characteristics of the new hemp types that are being developed should make them stand out. At the same time, the fiber, ribbon and product sold for export should be competitive. To do this, the technological quality indicators of the fiber of new hemp varieties should also meet the requirements of world copy.

The yarn spinning coefficient (SCI), which should never be less than 150 on demand, is one of the factors that determines the quality of fiber. Table 2 data show that this coefficient was equal to 161-168 in 47, 48, and 49, as well as 150 and above in all other ridges, including 75, 48, and 89. The yarn spinning coefficient must be more than 150 in order to meet the standards of the technological-quality indicator.

The fiber micronutrient (Mic) indication shows how thin and ripe the fiber is. Ten of the 16 ranges in the test on this indicated that the micronutrient index was thinner than the copy, being lower than the template sort index (4,84). (ointment).

On the indicator of high average length (UHML), it was determined that the indicator obtained from the 75 - and 89-ridges was equal to the IV type requirement, while on the other ridges it was equal to the III Type Indicator.

Of particular importance is the uniformity index of the length of the fiber, so that the spinning thread is velvety and elegant. In this regard, only 75-th range has an index higher than the middle (82,0-83,9), while in all other ranges this indicator has a higher index (84,0-85,9). Even two (47-and 49-ridges) ridges had a very high (above 86,0) index.

On demand, the hip fiber index (SFI) will range from 2 to 20 percent. This number equated to 4,9 to 7,3 percent in the test ranges. This percentage ranged from 4,9 to 6,0 in 8 out of the 16 test ranges, which was less than the template grade (6,1).

In the test ridges, the comparative elongation strength (Str), a measure of how ripe cotton fibers are, ranged from 30,5 to 36,0 G/strength. The strength of the ridge fiber was shown by these indicators to range from the intermediate (29,0-30,9) to the extremely strong (33,0 higher) degrees. That is, five pieces (51-; 82-; 83-; 86-; 89- and 91-ridges) are at a solid level, one ridge (75-Ridge) is at a level above the center, and it turned out that the remaining ridges are at a level below the middle.

In the test ranges, the index of (Elg) in terms of fiber failure or its elasticity was 4,7-8,5%. Of the ridges, 2 indicated that the elasticity was very low, 3, that it was modest, 3, that it was medium, 4, that it was high, and 3, that it was extremely high. It was discovered that the 6 Ridge's degree of elasticity in the test was greater than the template sort index (6,8 percent). Indicators in the remaining 9 units indicated that the fiber has a high light return coefficient if the light return coefficient of the fiber or the light return coefficient in 7 of the 16 ranges in the test on its whiteness level was moderate. In the test, it was found that this indicator of the 15 Ridge was higher than the template sort indicator (81,1%).

Conclusions. Statistics show that the ridges developed as a consequence of the field-based seed work and selection process met the standards at the necessary level in terms of economic and technological quality. Additionally, this indication of crop kinds grown in significant quantities throughout the Kashkadarya region has shown excellent results.

The compact shape and suitability for machine picking are two characteristics that set apart the morphological structure of some new species of plants.

1. In the Test 8-; 32-; 34-; 41- and 49-the yield of the ridges was higher than 40 centners.
2. On additional productivity 8-; 32-; 34-; 41- and from 49-th ridges received an additional yield of 6,6-12,0%.
3. In the test 41-; 44-; 47-; 48-; 49-; 51-; 82-; 83-; 86- and it turned out that the quality indicators of 90-th ridges are higher than the template grade and correspond to the required norms.

The project manager and the executors like to thank Sultan Tex Group's management for their close, selfless help with the Oster HVI 1000's fiber analysis of the samples they took from the experimental sections.

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