# DETERMINATION OF ECONOMICLY USEFUL CHARACTERISTICS OF NEW COTTON SYSTEMS

### U.Abdumalikov

Andijan Institute of Agriculture and Agrotechnologies q.x.f.f.d., senior teacher **Sh.Soliev** Andijan Institute of Agriculture and Agrotechnologies Assistant

Annotation. In this article, cotton plant species 16, 111, 114, which have profitable household marks between newly created cotton plant species, are selected and they are recommended to test as testing species.

Key words: cotton, yield, experiment, selection, soil, water, boll, fiber, nurseries.

Creation of new cotton varieties is very important in the development of cotton production in our republic. Therefore, it is an urgent task to create new varieties and suitable agro-technologies that provide a competitive, early, highyielding, high-quality cotton crop that meets the requirements of world standards, not only in Andijan region, but also in all regions of the Republic.

Taking this into account, scientists: Saydaliev H., Tojiboev A., Haliqova M. (1). those who have succeeded in creating new varieties by studying the beneficial characteristics of the lines created by individual selection.

It is necessary to create new cotton varieties with 10-15 percent advantages over the previous ones and introduce them into production using the continuous process of selection. Taking this into account, we studied the speed of ripening, productivity and fiber quality of the existing ridges in the years 2021-2023. The experiment was conducted at PSUEAITI Andijan scientific experimental station. The soil of the experimental field is light gray, the mechanical composition is medium old, irrigated, not saline. Sizot waters are located 4-5 m below the surface of the earth. The experiment consisted of 4 returns, 90x20x1 order, 8 options and was systematically placed in one layer in the field. Each option was planted in 4 rows. The following results were obtained from the experiment.

It is known that productivity is one of the main results of the experiment. The data obtained on the productivity of the studied ridges are presented in Table 1. According to the data, the 114th ridge (42.6ts/ha) and 11th ridge (41.4ts/ha) gave the highest yield among the ridges, and the sample yielded 3-4ts/ha more than the variety

Among the ridges, Ridge 16 (37.0 t/ha) and Ridge 18 (36.1 t/ha) showed low yields compared to the model and compared to other ridges.

The rest of the ridges yielded a little more than the model and showed their productivity. According to the conclusions of a number of scientists who have studied the productivity of ridges, the appearance of fertile ridges in the next stages depends on the characteristics of the parent forms that participated in the crossbreeding. Similar results were obtained in our experience. Table 2 provides information on the benefits of the study to the economy.

Table 1

| Variant | Template and ridges      | Returns |      |      |      |         |  |
|---------|--------------------------|---------|------|------|------|---------|--|
|         |                          | 1       | II   | III  | IV   | Average |  |
| 1       | Andijan-35<br>(template) | 36,4    | 38,0 | 36,9 | 36,4 | 37,2    |  |
| 2       | 11                       | 40,4    | 42,3 | 40,9 | 42,0 | 41,4    |  |
| 3       | 13                       | 39,0    | 38,3 | 40,4 | 38,3 | 39,0    |  |
| 4       | 16                       | 35,9    | 38,2 | 37,8 | 36,1 | 37,0    |  |
| 5       | 18                       | 37,0    | 35,8 | 36,3 | 35,3 | 36,1    |  |
| 6       | 111                      | 39,4    | 38,1 | 38,9 | 39,2 | 38,9    |  |
| 7       | 114                      | 43,0    | 41,6 | 40,9 | 44,9 | 42,6    |  |
| 8       | 117                      | 39,2    | 37,9 | 39,1 | 37,8 | 38,5    |  |

Productivity of ridges according to returns, ts/ha.

НСР<sub>05</sub>=1.73ц/га

"Экономика и социум" №5(120) 2024

www.iupr.ru

Based on the data, the 114-Tizma (7.4 g) and 13-Tizma (7.0 g) lines were singled out for having a high index in terms of the weight of one bag of cotton. The 18th Ridge (4.9 g) gave a lower indicator. It was determined that the highest indicator of fiber output was in 16-Tizma (39.2%). A relatively lower rate was in the 13th Ridge (34.9%).

It is known that the length of the fiber is an important feature in the division of fiber into industrial types.

Table-2

| Variant | Template and ridges   | Weight of 1<br>cotton bag, g | Fiber<br>output,<br>percentage | Fiber length,<br>mm |  |
|---------|-----------------------|------------------------------|--------------------------------|---------------------|--|
| 1       | Andijan-35 (template) | 6,6                          | 36,1                           | 32,7                |  |
| 2       | 11                    | 6,2                          | 38,8                           | 34,0                |  |
| 3       | 13                    | 7,0                          | 34,9                           | 32,9                |  |
| 4       | 16                    | 7,0                          | 39,2                           | 33,6                |  |
| 5       | 18                    | 4,9                          | 37,5                           | 32,9                |  |
| 6       | 111                   | 5,8                          | 36,7                           | 34,2                |  |
| 7       | 114                   | 7,4                          | 37,9                           | 35,3                |  |
| 8       | 117                   | 6,1                          | 38,2                           | 32,8                |  |

## Useful signs of ridges to the farm

When determining the fiber length of the ridges, the longest fiber was the 114th Ridge (35.3 mm). It was found that the 117th Line (32.8 mm) has a lower indicator on this mark.

We analyzed the fiber quality of the ridges. The obtained data are presented in Table 3. Analyzing the technological properties of Tizma fibers, it was found that 111-Tizma, 16-Tizma and 114-Tizma have high fiber quality.

In the future, the 16-Tizma, 111-Tizma and 114-Tizma, which have embodied signs of useful traits for the farm, were selected for study in the field of variety testing because of their special importance. Those who have studied for three years at the selection variety testing nursery and have a high indicator of useful characteristics for the economy compared to the model variety are submitted to the State variety test. It was found that 16-Tizma (4.1) and 18-Tizma (4.2) have high fiber quality according to the microneur index.

Table-3

| Varian<br>t | Template and<br>ridges | Metric<br>number | Fiber<br>cooked gi<br>g/force | Fiber<br>maturity,<br>coefficien<br>t. | Толани<br>нисбий<br>узулиш<br>узунлиги,<br>г.к./текс | Fiber<br>type | Micro<br>wave |
|-------------|------------------------|------------------|-------------------------------|--|--|---------------|---------------|
| 1           | Андижон-35<br>(андоза) | 5620             | 4,7                           | 214                                    | 26,9   | V             | 4,6           |
| 2           | 11                     | 5860             | 4,6                           | 212                                    | 27,6   | IV            | 4,4           |
| 3           | 13                     | 5600             | 4,5                           | 206                                    | 25,8   | V             | 4,5           |
| 4           | 16                     | 5920             | 4,7                           | 216                                    | 28,5   | IV            | 4,1           |
| 5           | 18                     | 5590             | 4,5                           | 215                                    | 25,8   | V             | 4,2           |
| 6           | 111                    | 6010             | 4,4                           | 211                                    | 27,1   | IV            | 4,4           |
| 7           | 114                    | 6000             | 4,6                           | 213                                    | 28,3   | IV            | 4,3           |
| 8           | 117                    | 5590             | 4,5                           | 206                                    | 25,7   | V             | 4,2           |

# Technological characteristics of the fibers of the ridges

### **References:**

1. Кимсанов И.Х, Кодиров О.А, Рахимов А.Д, Абдумаликов У.З. Изучение морфологических и хозяйственно-ценных признаков новых сортов хлопчатника в условиях андижанского вилоята// Приоритеты инновационнотехнологического развития в условиях глобализации, Белгород, 2019. С. 24-27.

2. Эгамов Х, Запаров З, Абдумаликов У, Мирхамидова Г, Тўйчиев Х. Гўза тола узунлигининг хўжаликка фойдали белгилари билан коррелятив боғланиши. // "Агро илм", 2019 йил, май-июнь, 3(59), 10-11-б.

**3**. Мирахмедов Ф.Ш., Абдумаликов У.З., Абдумаликов И., Тиллабоев А. Минеральные удобрения и их рациональное применение на орошаемых

землях Узбекистана // Интеграционные процессы мирового научнотехнологического развития, Белгород, 2017. С. 19-21.