



# STUDY OF MORPHOLOGICAL AND ECONOMIC-VALUABLE FEATURES OF NEW VARIETIES OF COTTON IN THE CONDITIONS OF THE ANDIJAN REGION

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## -----ANNOTATION-----

The article presents the studied 6 varieties of cotton in the soil and climatic conditions of the Andijan region grow well and give a high-quality and high yield varieties UzPITI-201 and Uzpiti-202. The oil content of seeds is 18.0-23.1%

**KEYWORDS:** variety, phase, yield, height, climate, germination, maturation, budding, oil content, seeds.

## DISCUSSION

The increase in oil production in our country is mainly due to an increase in the gross harvest of raw cotton.

In industrial use for the production of oil, cotton seeds are of the same importance as the seeds of a high – oil crop- sunflower. If we take into account that even the waste of oil factories is a valuable feed for animals, then directed breeding work on oilseeds is one of the important conditions for the implementation of the food program [1].

Grade is the main factor in increasing oil production.

The difference in oil content in the seed of different varieties reaches up to 8%.

The influence of agro technical measures and climatic conditions on oil accumulation is not so pronounced and does not exceed 1-3 % [2].

Experimental data show that cotton varieties differ in seed weight, core yield, and fat content.

Materials for the analysis were prepared from the parent nursery of the breeding Department of the Andijan research and experimental station of the Research Institute of breeding, seed production and growing technology cotton production. Samples were taken from the middle zone of the Bush from the first places of 3-4 sympodia according to the generally accepted instructions for determining the technological quality of fiber.

For this purpose Andijan scientific-experimental station of Scientific research Institute of breeding, seed production and technology breeding various varieties of cotton were tested in the period 2015-2017. The soils of the experimental site are light gray soils of long-standing irrigation, unpopulated, medium-loamy mechanical composition, poorly drained, with a depth of groundwater below 5 m. the probability of the experiment is 4-fold. The arrangement of plots is one-tiered. The plot area is 160 m<sup>2</sup>.

Agro technics are generally accepted for breeding crops of scientific experimental stations. We applied 250 kg / ha of nitrogen, 175 of phosphorus, 125 of potassium. During the growing season, 6 watering operations were carried out according to the 1-4 -1 scheme. Fertilizers were applied in accordance with the norm adopted at the branch. Part of the annual rate of phosphorus (60 kg of P<sub>2</sub>O<sub>5</sub>) was added for the winter, nitrogen, the rest of



the phosphorus and potassium-B1 top dressing. Baiting was carried out in the phase of 3-4 real leaves, in budding and flowering.

The objectives of the study were to determine the growth rates of plants, interphase and vegetation periods, yield and determination of oilseeds of cotton varieties.

The objects of study are the new upland varieties of cotton –Andndian-35(standard),Andijan-36,Andijan-37, Ospiti-201,Ospiti-ispiti 202-203

The height of the main stem is an important morphological feature in cotton. The analysis of the results showed that in cotton varieties, depending on their biological characteristics and climatic conditions of the year, this feature has different values, although in General, the ranking of varieties by the average height of the main stem is maintained.

In this regard, we determined the duration of interphase periods in new varieties of cotton under the conditions of Indians region. The received data is shown in table 1.

The studied varieties butonisation differed significantly little from each other in the duration of the period from sowing to budding **МАЛО**, i.e. the value of this indicator was 33,6,0 -39,6 39,6 days.

The period from budding to flowering in all the studied varieties was the shortest and amounted to 5,72,5,76,-2,6,0 days.

The interphase period from flowering to maturation was the largest in comparison with the other interphase periods and was 56,0-58,0 days.

The duration of interphase periods of the studied cotton varieties did not differ significantly, their total vegetation period of plants in the conditions of the Andijan valley was also almost the same and amounted to 1,19,1-12,22,.5 days , and in the standard Andijan variety-35,122. 6 days.

Thus, the studied new varieties of cotton in the conditions of Andijan’s valley belong to the group of medium-early varieties with a similar rate of growth and development of plants.

The obtained data on the yield of varieties are also shown in table 1.



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Table 1

Varieties	Height of the main stem, 10.08.2015-2017, sm				The interphase periods, days				Yield, C / ha
	2015 g	2016 g	2017	Average	from seedling to budding	from budding to flowering	from flowering to maturation- ния	from seedling to maturation	
Andijan-35	94,7	92,1	91,8	92,9	39,6	26,1	56,8	122,6	35,6
Andijan -36	100,3	103,1	100,4	101,3	38,6	26,0	58,0	122,5	37,4
Andijan -37	89,7	94,1	91,6	91,8	39,0	25,7	56,0	120,7	36,9
UzPITI-201	90,1	94,1	91,2	91,8	36,3	27,0	56,3	120,6	42,3
UzPITI -202	88,1	91,6	88,4	89,4	36,0	26,2	56,9	119,1	40,2
UzPITI -203	77,5	78,0	80,3	78,6	36,9	27,3	56,1	120,3	38,7

The height of the main stem, phase periods and productivity.

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Among the costudied varieties, the highest yield was obtained from the varieties Uzpiti-201 (42.3 C/ ha) and Uzpiti-202 (40.2 C/ha). The rest of the varieties on yield weighed 2-3 C /ha more than the standard.

**Table 2**  
**Oilseeds of new varieties of cotton in the conditions of Andijan city Council, %**

Varieties , Years.	Andijan-35	Andijan-36	Andijan-37	Uzpiti-201	Uzpiti-202	Uzpiti-203
2015	18,1	18,6	20,0	22,9	21,4	22,0
2016	19,0	19,4	21,1	23,0	20,2	21,6
2017	18,0	18,0	20,2	23,4	19,3	20,9
average	18.4	18.6	20.4	23.1	20.3	21.5

Oil content of seeds is one of the important physiological and economic signs of cotton, which are great importance both for the food industry, and for the processes of growth, development of plants, and their resistance to adverse environmental factors. Based on this, we have studied the oil content of seeds of new varieties of cotton (table 2).

According to the average value of oil content of seeds, the variety Uzpiti-201 is significantly superior (to the standard variety (by 4.7%) standard Andijan-35, while the other varieties were either at the level of the standard or somewhat inferior to it. Thus, it was found that depending on the biological characteristics of varieties and climatic conditions of the year of cultivation, the oil content of seeds can vary to a certain extent.

From the obtained data, it is proposed that breeders use Uzpiti-201 as the primary material for breeding *ороспелый*-as a high-yield and high-oilseed crop for creating a new variety of cotton.

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