GROWTH AND DEVELOPMENT OF COTTON RIDGES DURING THE GROWING SEASON STUDY THE CHARACTERISTICS

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Annotation. This article praeidis information about fertile created cotton which praedes type IV like febri and creating new typer of cotton.

Key words: Fiber, system, model, type fiber, fiber hardness, fiber quality.

The growth and development of cotton differs from other plants in its unique characteristics. Growth is a quantitative change in plant organs, while development is a qualitative change in the plant, the transition of the ontogenesis process from one period to the next. It is known from the literature that the cotton plant girdle grows very slowly in the initial phases, but starting from the budding period, its growth and development accelerates. Characteristics such as stem height, strength, leaf number, ratio of vegetative and generative organs on the stem can vary depending on the density of plants in the field, their location, agricultural techniques of cultivation, and day length. However, the type of branching, the color of the corolla, the number of antral spots on it, and the internodal spacing of the fruiting branches remain almost unchanged.

The stem usually consists of two parts: the lower short part this is the part of the stem above the cotyledon, which is called the hypocotyl, and the upper part this is the part of the stem above the cotyledon. This is called the epicotyl.

When observing the growth and development of cotton, the height of the main stem was also measured. The height of the plants was measured on 10 plants in a row, usually 3 times - in June, July, and August. In June, labels were attached to certain plants. The height of the main stem was measured from the root collar to the tip of the cotton.

When the height of the main stem was measured on June 2 in the experimental cotton plants, it was found that the Sultan cotton variety had grown

by an average of 27 cm. All lines were superior to the standard in terms of stem height as of June 2. However, the longest stem height was observed in line 1, i.e. the main stem height was 33 cm (6 cm higher than the standard). The stem height of line 2 was 31 cm (4 cm higher than the standard), and the main stem height of line 3 was 29 cm (2 cm higher than the standard).

When the main stem height was measured on July 2, the height of the standard variety reached 70 cm, that is, this variety grew by 43 cm in one month. Calculations showed that the row that grew the most in one month was row 1. This row grew by 61 cm in one month, reaching a height of 94 cm. When the stem height of row 2 was measured, it was found that it was 76 cm, showing a growth of 45 cm in one month. Row 3 also grew faster than the standard variety. Row 3 grew by 44 cm in one month, and the main stem height reached 73 cm. When the main stem height of the cotton plants in the experimental variants was measured on August 2, it was found that the standard variety grew very rapidly (28 cm) in one month, reaching a stem height of 98 cm. The fastest growing row during this period was row 3, which grew even faster than the standard variety. This row grew by 29 cm this month, and the main stem height reached 102 cm. Rows 1 and 2 grew more slowly than the standard variety during this period. Row 1 grew by 16 cm in a month, and the main stem height reached 110 cm. Row 2 also grew more slowly than the standard variety. When the main stem height was measured on August 2, it was found that it had reached 95 cm, and had grown by 19 cm in a month.

If we look at the growth of the standard varieties and rows obtained in June, July, and August, it was found that there was a peculiarity in the growth of the cotton. It was found that the 1st row grew very rapidly between June 2 and July 2, that is, during the budding and flowering phases. However, it was found that this row grew very slowly between July 2 and August 2, especially during the ripening phase at the end of the flowering phase.

The experimental variants showed the following indicators in terms of the number of yield branches as of August 2. The average number of yield

branches in the Andoza Sultan cotton variety was 13.5. The highest number of yield branches was observed in the 3rd row with 14.1 (0.6 more than the norm). It was found from observations that the lowest yield branches were in the 1st row with 13 (0.5 less than the norm). The number of yield branches in the 2nd row was 14. There was no significant difference in the yield branches.

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Table 1

Growth and development of cotton during the growing season

№	Types and ranges	Main stem height, cm			The number of harvested branches, pcs August 2	The number of pods in one plant, pcs				Wilt infection, %
		June 2	July 2	August 2		July 25	2August 4			
							opened	raw	total	
1	Султон	33,7	77,8	100,4	13,5	11,8	5,3	6,5	11,8	11,0
2	1-тизма	34,7	88,0	106,3	13,0	12,5	6,4	8,2	14,6	10,8
3	2-тизма	29,5	74,0	96,9	14,0	11,3	5,3	7,2	12,5	12,5
4	3-тизма	30,5	80,5	101,0	14,1	11,0	5,1	8,4	13,5	11,5

The 3rd row grew and developed faster than the Sultan cotton variety during the initial combing and flowering period (June 2 and July 2). The 3rd row also grew faster than the Sultan cotton variety and other rows during the following months. The 1st and 2nd rows grew by 16 cm respectively between July 2 and August 2; this variety grew by 19 cm during this period by 28 cm, and the 3rd row grew by 29 cm. The Sultan cotton variety developed very quickly at the beginning of the initial combing and flowering phases (June 2 and July 2), and this speed was maintained during the following months (July 2 to August 2). Usually, two types of branches grow in cotton: vegetative and reproductive, that is, monopodial and sympodial, or sympodial. The vegetative branch grows from the lower part of the stem, and the reproductive branch grows from the upper part of the vegetative branch, usually from all subsequent leaf axils of the main stem. The monopodial branch grows from the main leaf axil bud at an acute angle to the main stem and grows continuously in length due to the development of the terminal vegetative bud. Since this branch grows from only one bud, "monopodial" is called a "single-stemmed" branch in Greek. The reproductive branch grows from several buds that appear in succession. Since the reproductive branch develops in this order, it is called a "sympodial" branch. Sympodial is a Greek word meaning "many-stemmed". The number of yield branches was counted from the first yield branch that appeared on the stem to the growth point.

We know that in some cotton varieties, the number of yield branches on the stem increases with increasing stem height. This pattern was not very pronounced in the rows we observed. While the stem height of the 1st row row was 110 cm as of August 2, the average number of yield branches on the stem was 13, in the 2nd row row the stem height was 95 cm, and the number of yield branches was 14, in the 3rd row row the stem height was 102 cm, and the number of yield branches was 14.1.

LIST OF USED LITERATURE

1. Ахмедов Ж.Х. ва б. “Қишлоқ хўжалик экинларининг генетикаси, селекцияси, уруғчилиги ва етиштириш агротехнологияларининг долзарб муаммолари хамда ривожлантириш истиқболлари” мавзусида халқаро илмий-амалий конференция тўплами. – Тошкент, 2018 йил (18-19 декабр). –Б. 114–116.

2. Абдурахимова А.Р. Ғўзанинг янги яратилган тизмалари орасида толаси бўйича технологик кўрсаткичларининг фаркланиши //Агро кимё ва ўсимликлар карантини журнали. – Тошкент, 2(180) сон. – 2024. - Б. 126.