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Formation Of Indicators Of The Growth Period And The First Harvest Horn In Fiber F_3plants

N.A. Narimanov, B.K. Madartov, F.R. Abdiev
Tashkent branch of Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology

Abstract: In this article, the positive results of the family obtained on the basis of cross-breeding of large-skinned ridges and varieties belonging to the type of G.barbadense L. were noted. In particular, the most positive result for the period of 50% pod opening was observed in the population Family-19/1, which showed that the model was 4.0 days earlier than the variety Surkhan-14. In addition, a positive result on the location of the first harvest branch was determined in the population of Family-19/1 (3.9±0.23), and it was found that the model was superior to the variety Surkhan-14 by 0.6 difference (4.5±0.22).
Key words: growth period, rapidity, first harvest branch, population, variety, line, valuable economic characters, pattern, combination, hybrid, generation, recombinant form.

INTRODUCTION

Currently, the cotton plant is considered the most important object in meeting the demand of the national economy in the global era. This, in turn, will require the introduction of high-quality cotton varieties that meet the requirements of the world market, as well as being resistant to drought, salinity and various diseases and pests, as well as valuable economic characteristics: early ripening, productivity. The early maturing character in cotton is a complex polygenic character, and the length of its defining periods is variable to varying degrees. The sign of early maturity is one of the economic and important structural signs, and it is determined by the sequence of transition from the beginning of seed sowing and plant development to the formation of seed in the plant and the opening of the bud [2; 4; 5].S.T. Khajjidoni, K.G. Hiremath, S.N. Kadapa, J.W. Goud [8] crossed 10 cultivars of G.herbaceum L. with 2 cultivars of G.arboreum L. that differed from each other in terms of 2 valuable economic traits and produced 20 F1 hybrid combinations with parent plants 3 they planted and grew in return. A 50% bud opening sign has been studied in plants. According to the results of the experiment, the hybrids showed a positive heterosis state, which was close to the parents according to the day sign before bud opening.

One of the main disadvantages of fine fiber cotton varieties is their low productivity and late ripening. In recent years, on the basis of different methods of domestic and interspecies hybridization (simple, double, complex hybridization, molecular genetics), great progress has been made in the selection of fine fiber cotton [3].Abd-El-Haleem et al.

[6] noted that the analysis of 50% flowering and 50% boll opening phases of thin fiber cotton plants. They discovered that non-allelic genes interact in controlling genetic variation. In addition, it has been shown that the heritability of the studied traits is controlled by additive and non-additive genetic effects, but the dominant gene effect is greater in controlling the genetic variation of the most studied traits. For both traits, first flower opening and pod ripening for each plant were found to be heritable in significant negative heterosis with respect to the initial sources in both cases.One of the morphological characteristics of cotton, the location of the first harvest branch in the lower joint is considered a sign of early ripening for varieties [10]. It has been noted that there is a strong relationship between early ripening and heat tolerance in cotton plants with the location of the lower branches [7].Yield elements of genotypes CCB-5, CCB-11, CCB-17, CCB-26, CCB-27, CCB-28, CCB-29, CCB-30, CCB-33 and CCB-36 of cotton G.barbadense L. those who evaluated their signs according to the sign of haste. In the studied 3 promising samples CCB-5, CCB-29 and CCB-36, the genotypes of the first harvest branch below, the first flower opening and the short period to the first pod ripening were determined, and the variability and heredity of the characters were analyzed in the hybrids [8].B.Kh. Amanov [1] In F1 reciprocal hybrids of G. barbadense L. turichi variety and hybridization with wild G. darwinii species, it was observed that the growth period sign is inherited in the case of positive and negative extreme dominance and incomplete dominance, depending on the characteristics of the maternal form.

As a result of left-sided transgressive variation in F2 combinations, recombinant forms with a growth period of 105.0-124.0 days were isolated.

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Based on our experiments, the recombinant forms isolated as a result of increasing their stability in F_3plants, which are considered as valuable economic traits, were studied for the formation of parameters such as the height of the first harvest branch, early maturity (Table 1-2).

Research on the creation of early varieties for fine fiber cotton is always one of the main directions.

With this in mind, our research focused on the precociousness trait and analyzed sheep according to the 50% time to bud opening, which is the main component of precociousness in isolated families.

It should be noted that early varieties involved in the origin had a positive effect on the separation of these families.

In plants, the period until 50% bud opening was in the range of 119.5 to 125.3 days typical for families, and this indicator was 1.2-4.0 days earlier than the indicator of the model Surkhan-14 variety.

The most positive result for the period of 50% of the analyzed plants to the opening of buds was observed in the population Family-19/1, which showed that the model was 4.0 days earlier than the variety Surkhan-14.

It was found that some of the remaining families are superior to the model Surkhan-14 variety and some families are late.

Table 1

Families separated by time of 50% bud opening in F_3plants, days

Families	**Origin of families**	**Growth period, day**		**To the template relatively ± difference**
		$\bar{x} \pm S_{\bar{x}}$	**V %**	
Family-19/1	Angor x Surxon-14	119,5±1,3	5,3	4,0
Family-19/2	Surxon-14 x Angor	122,1±1,9	7,2	1,4
Family -19/3	T-1985 x Surxon-14	125,3±1,4	5,4	-1,8
Family-19/4	Surxon-14 x T-1985	120,9±1,6	5,6	2,6
Family-19/5	Termez-31 x Angor	124,9±1,7	5,7	-1,4
Family-19/6	T-2006 x Iloton	124,4±1,8	6,2	-0,9
Family-19/7	T-2017-2 x Iloton	122,3±1,7	5,9	1,2
Family-19/8	T-2017-2 x Surxon-14	121,3±1,9	7,3	2,2
Surxon-14	**Model variety**	**123,5±1,0**	**4,7**	±

It was determined that the ripening of the bolls in the cotton plant is related to the joint where the first crop branch is located. That is, the higher the first harvest branch is located on the main stem, the later the tillering period begins in plants. In the wild, semi-wild and standing varieties of cotton, the first crop branch is located on the 10-22 joint of the main stem. As a result, for varieties or samples, this sign shows lateness.It can be said that as a result of the selections, the hybrids analyzed in the next generation can be directly sampled according to the joint where the first harvest branch is located, as well as a number of valuable economic indicators.In our research, the indicators of the location of the first harvest branch in the joints of hybrid and

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large-stemmed plants were studied. In the families obtained on the basis of cross-breeding of thin-fiber ridges and varieties, the height of the first harvest branch was observed to be 0.1-0.6 joints higher than the model variety, and the obtained results were equal to 4.1-5.0. The most positive result of the studied families regarding the location of the first harvest branch was determined in the population Family-19/1, and it was found that the model was superior to the variety Surkhan-14 by 0.6 differences (Table 2).

Table 2

Families separated by the height of the location of the first crop branch in F_3 plants, joint

Families	**Origin of families**	**Placement height of the first harvest horn, joint**			**To the template relatively ± difference**
		$\bar{x} \pm S_{\bar{x}}$	**Limit**	**V %**	
Family-19/1	Angor x Surxon-14	3,9±0,23	3-6	18,9	0,6
Family-19/2	Surxon-14 x Angor	4,9±0,30	3-6	19,2	-0,4
Family-19/3	T-1985 x Surxon-14	4,2±0,47	3-7	35,1	0,3
Family-19/4	Surxon-14 x T-1985	4,6±0,34	3-6	23,3	-0,1
Family-19/5	Termez-31 xAngor	4,1±0,28	3-5	21,3	0,4
Family-19/6	T-2006 x Iloton	5,0±0,42	3-7	26,6	-0,5
Family-19/7	T-2017-2 x Iloton	4,4±0,43	3-7	30,6	0,1
Family-8	T-2017-2 x Surxon-14	4,3±0,37	3-6	26,9	0,2
Сурхон-14	**Model variety**	**4,5±0,22**	**3-5**	**15,7**	±

The results of the research showed that the families obtained by cross-breeding the large-bag lines and varieties of the G. barbadense L. species have a positive precociousness sign, and it is valuable to continue research in the isolated families and to create genetically enriched genotypes for the early-ripening character, new early-ripening lines and varieties. can be a source.

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