

# DEPENDENCE OF MATURING PERIOD ON SPEED OF COTTON VARIETIES

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**Annotation.** The paper presents materials related to investigation of maturation intensity of F<sub>1</sub>-F<sub>3</sub> hybrids which created by crossing ultra-early maturing lines with upland varieties in the period of growth stages.

It is known that early ripening of cotton is one of the important problems, and it is one of the main factors determining the yield. Usually, quick ripening is the period from planting cotton to ripening of bolls.

N.G.Simongulya said that signs of early ripening are biologically different signs of plants, due to their non-uniform genetic nature, so it is appropriate to see them separately. In recent years, a number of researchers (V.P.Senoedov; G.R.Kholmurodova, etc.; A.E.Egamberdiev, etc.) in the F<sub>1</sub>-F<sub>2</sub> hybrid generations have shown the development phases, inheritance patterns, dominance (extreme and complete) valuable information about the differences between the characteristics, the duration and duration of the flowering and ripening phases was obtained.

In our research, very fast (100 days), fast (110-115 days) and medium (120-125 days) cotton varieties were used as starting sources. According to the data obtained on the periods of F<sub>1</sub>-F<sub>3</sub> hybrids until 50% flowering (table-1), the period of 50% ripening of hybrids in the first year biological nursery was 52-56 days. and the 50% flowering period in the hybrid generations was 5, 6, and 7 days faster in the medium-growing Bukhoro-102, Bukhoro-8 and Bukhoro-6 varieties, and in the hybrid generations in which the fast-growing UzPITI-103 and UzPITI-102 varieties participated. it was observed that it started 1 and 3

days earlier, respectively. This indicates the beginning of alternation of these signs in the forms of motherhood. Also, the comparative analysis of ultra-quick varieties taken as fathers shows that the medium-quick Bukhoro-102, Bukhoro-8 and Bukhoro-6 varieties were used for 4-6 days in F<sub>1</sub> hybrids, and 2-4 days when the quick-quick varieties UzPITI-102 and UzPITI-103 were used. more closely, the stabilization of the transmission of these signs of rapidity from generation to generation is continuing from a genetic point of view. Compared to the control S-6524 variety (59 days), F<sub>1</sub> hybrids were 3 days earlier in the Bukhara-6x010888 hybrid, 4 days in the Bukhara-8x010941 hybrid, 5 days earlier in the Bukhara-102x010941 hybrid, especially 4 days in the UzPITI-103x010738 hybrid. In the UzPITI-102x010797 hybrid generation, it was observed that it accelerated to 5 days and in the UzPITI-102x010941 hybrid generation to 7 days.

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The above-mentioned characteristics of 50% flowering period were genetically transferred to F<sub>2</sub>-F<sub>3</sub> hybrid generations from generation to generation, and were preserved in the second and third year biological nurseries. In particular, with the 50% flowering period of hybrid offspring in the third year biological nursery (F<sub>3</sub>) being 53-56 days, these traits are genetically stabilized compared to the paternal and maternal forms, as a result, in these hybrid offspring, compared to the control S-6524 variety, Bukhara-6x010888 hybrid offspring 3 per day, 4 days in the Bukhara-6x010941 hybrid, 5 days in the Bukhara-102x010941 and UzPITI-103x010738 hybrids, and up to 6 days in the UzPITI-102x010941, UzPITI-102x010953 and UzPITI-102x010797 hybrids it was observed that it was in longer periods.

According to the data obtained on the study of the maturation period of 50% of the F<sub>1</sub>-F<sub>3</sub> hybrid offspring, it was calculated that it was 109-114 days in the first-year biological seedlings (F<sub>1</sub>). When the 50% ripening periods of these F<sub>1</sub> hybrids were compared to the varieties obtained as maternal forms, it was 11 days earlier when the medium Bukhara-102, Bukhara-8 and Bukhara-6 varieties participated, and the early UzPITI-103 and UzPITI-102 varieties participated. and in the hybrid generations, it was observed that it accelerated up to 8 and 12 days, respectively. This is the fact that the signs of pregnancy are embodied in the forms taken as motherhood. According to the comparative analysis of the super-quick varieties obtained as paternal forms, in hybrids with the participation of the medium-quick Bukhoro-102, Bukhoro-8 and Bukhoro-6 varieties, respectively, 11, 12 and 14 days, and with the participation of the quick-quick UzPITI-102 and UzPITI-103 varieties. closer to 9-12 days, respectively, it was observed that the stabilization of these characters continues genetically.

As a result of the research, it was observed that in the second and third year (F<sub>2</sub>-F<sub>3</sub>) biological nurseries, the laws of genetic inheritance of signs of quick ripening were preserved. In particular, with the 50% ripening period of the hybrid offspring in the third-year biological nursery (F<sub>3</sub>) being 110-113 days, the genetic stabilization of these traits compared to the paternal and maternal forms, as a result, in these hybrid offspring, compared to the control variety S-6524, Bukhara-6x010888 and Bukhara -8x010941 hybrids for 8 days, for 10 days for Bukhara-102x010941 and UzPITI-103x010738 hybrids, and for 11 days for UzPITI-102x010941, UzPITI-102x010953 and UzPITI-102x010797 hybrids it was observed that the pace accelerated.

From the above data, it can be concluded that in the F<sub>1</sub>-F<sub>3</sub> hybrid generations obtained from medium-ripening forms as mother (Bukhoro-6, Bukhoro-8, Bukhoro-102 varieties) and extremely fast-ripening samples

(010941 and 010888) as father The 50% ripening interval was on average 62 days in the control S-6524 cotton variety, 57-58 days in the Bukhara-6x010888 hybrid, and 57 days in the Bukhara-8x010941 and Bukhara-102x010941 hybrids. Compared to the S-6524 variety, it was observed that it accelerated up to 4-5 days. Also, the time interval from 50% flowering to 50% ripening in the F<sub>1</sub>-F<sub>3</sub> hybrids obtained from quick-ripening forms as maternal (UzPITI-102 and UzPITI-103 varieties) and ultra-quick samples (010941, 010953, 010797, 010738) in the control variety S-6524 with an average of 62 days, UzPITI-102x010941, UzPITI-102x010953, UzPITI-102x010797 and UzPITI-103x010738 hybrids had an average of 57 days, that is, the rate of ripening of these hybrids compared to the sample S-6524 Succeeded in speeding up to 5 days. This makes it possible to further accelerate the future selection processes, as a result, to select new selection materials with a high 1st harvest weight and to evaluate them comprehensively according to their general economic value characteristics.

## REFERENCES

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