GENETIC ANALYSIS OF SOME QUANTITATIVE TRAITS OF WINTER SOFT WHEAT VARIETIES DEVELOPED IN DIFFERENT YEARS.

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The influence of genes on such traits as a plant height, a length of the two top internodes and an ear length was studied.

The hybrids F_1 received from incomplete diallel crossings of 9 winter soft wheat varieties developed in different years were used for the analysis. The wheat varieties used were 1.Cooperatorka (1929), 2.Besostaya (1959), 3.Odesskaya 26 (1965), 4. . Odesskaya 51 (1969), 5.Obriy (1983), 6.Albatros odessky (1990), 7.Victoria odesskaya (1997), 8.Khlebodarka 2 (1997), 9.Geleya (1999).

The genetic analysis was made on Heyman 2 and Griffing 2 methods. The results of the analysis have shown that the plant height control and that of the length of the two top internodes are realised by the additive – dominant system and the ear length is controlled by the additive – dominant system of genes with the manifestation of incomplete domination to a high grown.

The negotive average coefficients of correlation (R (Wr + Vr), X)= - 0,0577; - 0,445; -0,680) in high plant trait and in that of two top internodes show that high – growing varieties have more dominant genes. According to the dominant and recessive genes correlation the varieties can be divided into groups. Odesskaya 26, Cooperatorka and Albatros odesshy have more dominant genes for all traits. Khlebodarka 2 has more dominant genes for high plant traits and for that of the two top internodes. Besostaya 1 together with Obriy, Odesskaya 51 and Victoria odesskaya have the greatest quantity of recessive gene on a length of the second internode trait.

The average correlation coefficient of the ear length traits and Wr + Vr is – 0,916. The varieties with long ears have the greatest quantity of dominant genes determing the length of the ear. Odesskaya 26, Cooperatorka, Victoria odesskaya, Albatros odesshy and Khlebodarka 2 carry the realest quantity of dominant genes. Obriy has the maximum number of the recessive genes. Therefore Obriy can be used as a donar for developing of the small ear varieties and Cooperatorka, Victoria odesskaya and Albatros odessky – for long ear varieties.