



EVALUATION OF WINTER BREAD WHEAT VARIETIES AND LINES ON COMPLEX VALUABLE TRAITS

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ABSTRACT

Scientists are faced with the task of creating new highly productive, resistant to different types of diseases and pests of winter wheat varieties. The article presents the study of kantant forms of various origin in the southern region of the Republic.

Increasing the yield of cereals requires the creation of varieties with a yield of 5-10 c / ha higher than the existing bread wheat varieties and grain quality indicators that fully meet the requirements of a strong wheat class [3, 11, 15, 20, 25, 31].

The importance of intensive varieties is further enhanced by the use of accelerated technology in wheat cultivation. The potential yield and quality of the variety depends on the genetic characteristics as well as the growing conditions and agronomic techniques [5, 8, 18, 22, 28, 32].

High yields are achieved when the conditions of cultivation, including agronomic techniques, are compatible with the biological and ecological characteristics of the variety [6, 12, 16, 21, 29, 35].

In order to create a variety that meets the production requirements, it is advisable to spend more time during the drought years. Selection of plants with a grain weight of 1000 grains to create a high-yielding variety

gives good results [2, 9, 17, 24, 30, 33].

In determining the yield of winter wheat, the ripening period plays an important role. The germination period is important in determining early maturity, which depends on the biological characteristics of the variety [1, 7, 13, 19, 26, 34].

For this purpose, the evaluation of hybrid lines, which have remained unchanged as a result of selection work, in different soil climatic conditions, on the basis of selection indicators and the selection of the most productive lines and their introduction into production is an urgent task [4, 10, 14, 23, 27].

The experiment was carried out in the central experimental area of the Kashkadarya branch of RIGLC, located in the territory of Ya. Omonov, using 30 lines with constant state. The object of the study was experiments using 10 lines of bread wheat from RIGLC, 10 from Gallaorol branch RIGLC, and 10 lines of Dashchi Kashkadarya branch. The



experiments were performed on a 15 m² cropland, in the 3rd row, by the randomized method.

By the method of phenological observation, calculation and analysis during the placement and experiment (All-Union Institute of Botany VIR, 1984) and biometric analysis by the method of the State Variety Testing Commission of Agricultural Crops

(1985, 1989), statistical analysis by the method of B.A. Dospekhov (1985) was carried out on the basis of. The coefficient of interdependence of characters is calculated on the basis of the method of P.V. Terentev (1959). The field experimental scheme in the study was based on the Complete block design and Alpha lattice design of the Genestat 3 program.

Table 1

Selection indicators of bread wheat varieties and lines

№	Name	Heading date	Days to heading date	Maturity date	Days to maturity date	Plant height, cm	Peduncle length, cm	Spike length, cm	Number of spikelets of per spike	Grain yield, c/ha
1	Kesh-2016	16 апр	164	30 май	208	101,3	34,3	9,7	19	88,4
2	Shukrona	14 апр	162	31 май	208	101,0	38,7	9,3	18	90,8
3	KR-12-18	20 апр	168	31 май	209	91,7	34,0	9,3	18	90,5
4	KR15-Fawwon-irr-52	14 апр	161	2 июн	210	103,0	37,3	10,0	20	84,6
5	KR15-PYT13-970	13 апр	161	3 июн	212	96,7	40,7	10,3	19	90,3
6	GCB-7/2017-1	16 апр	164	31 май	209	90,0	32,0	8,0	16	90,6
7	GCB-8/2017-2	17 апр	165	1 июн	209	91,3	33,7	9,0	17	85,2
8	GCB-9/2017-3	22 апр	170	1 июн	210	93,7	35,0	10,0	19	97,4
9	GCB-10/2017-4	13 апр	161	29 май	207	99,3	34,0	11,3	19	89,2
10	GCB-16/2017-9	9 апр	157	31 май	209	90,0	37,0	9,0	17	91,0
11	GCB-17/2017-10	16 апр	164	30 май	207	94,3	39,3	8,0	15	95,9
12	AC-2006-Д-20	22 апр	170	4 июн	212	88,3	33,7	9,0	19	96,8

LSD₀₅ %

4,05

Cv %

2,4

The experimental planting was carried out on 22 October. It was noted that the germination period was November 3-4, the accumulation period was December 1-6, and the germination period was February 25-March 10.

Variety and hybrid lines are one of the important features of the ripening period. The mating season ran from 9 to 22 April. The germination period lasted 157-170 days. The GCB-16 / 2017-9 ridge was observed to be in the early stages on April 9, the KR15-9808, GCB-10 / 2017-4, KR15-PYT13-970 lines on

April 13. The transition of the lines to the full ripening phase took place between 28 May and 5 June. The full growth period ranged from 205 to 214 days.

Measurements were carried out on biometric indicators of the studied lines, such as plant height, final joint length, spike length, number of spikes.

According to the results of the study, the height of the varieties ranged from 85.7 to 105.3 cm. The number of short-stemmed hybrid lines with plant height less than 90 cm was found to be 7. It was noted that the



number of hybrid lines with a plant height of 90-100 cm was 18, and the number of 100-105.3 cm was 5.

During the study, it was observed that the length of the last joint of the lines ranged from 31.0 to 44.7 cm. It was found that the number of the last joints of the lines with a length of 35 cm and less was 11, the number of those with a distance of 35 - 40 cm was 16, the number of those with a length of 40 cm and above was 3.

The study found that the average yield of the studied lines was 80.9 c / ha. One of the main reasons for the high productivity is the selection of the lines with the highest

productivity selected in the selection work. According to the results obtained, it was found that there were 12 lines showing yields above 85 c / ha. The highest yield was 97.4 c / ha on the GCB-9 / 2017-3 ridge, 96.8 c / ha on the AC-2006-D-20 ridge, 95.9 c / ha on the GCB-17 / 2017-10 ridge, KR- 90.5 c / ha was observed in the 12-18 ridge and 90.3 c / ha in the KR15-PYT13-970 ridge.

In conclusion, it should be noted that 12 lines with high productivity were isolated from the studied lines. It was recommended that the selected lines be transferred to a competitive variety testing nursery next year.

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