

**REPUBLIC OF KORAKALPAGISTAN SOIL CLIMATE CONDITIONS SPRING
BEET GROWN IN PERIODS BIOCHEMICAL ROOT VALUATION**

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***Abstract:** This article provides information on the study of new varieties of beetroot in the Republic of Karakalpakstan in the soil and climate conditions and the selection of promising varieties of local varieties and new varieties brought from Russia, Holland and other foreign countries.*

***Аннотация:** В данной статье представлены сведения об изучении местных сортов, созданных учеными нашей республики, и сортовых образцов, привезенных из России, Голландии и других зарубежных стран в весенний период с целью комплексного изучения сортовых образцов свеклы в почвенно-климатических условиях. Республики Каракалпакстан и выбрать перспективные сорта.*

***Аннотация:** Ушбу мақолада Қорақалпоғистон Республикасида тупроқ иқлим шароитида ош лавлагининг нав намуналарини ҳар томонлама ўрганиши ва истиқболли навларини танлаш мақсадида республикаимиз олимлари томонидан яратилган маҳаллий навлар ва Россия, Голландия ва бошқа чет давлатлардан келтирилган нав намуналари баҳорги муддатларда ўрганиши бўйича маълумотлар келтирилган.*

ENTER. Introduction In the Republic of Karakalpakstan, it is possible to increase the productivity by choosing the right varieties based on climate and soil conditions for growing a high quality crop from vegetable crops. This, in turn, satisfies the demand of the population for vegetable crops and expands the assortment of vegetables, not only satisfying the growing needs

of the population, but also satisfying the demand of foreigners who come to visit our country and live here, and expands the potential network.

The main part. In 2019-2021, local varieties created by the scientists of our republic and varieties imported from Russia, the Netherlands and other foreign countries were studied in the spring term in order to comprehensively study beet varieties and select promising varieties.

In the rest of the studied varieties and hybrids, it was observed that the root height and diameter were lower than the control variety by 3.8% to 30.9%.

In the studied cultivars during the spring planting period, the weight of root and fruit was related to the length of the leaf (from $r=0.76\pm 0.24$ to $r=0.84\pm 0.19$), the number of leaves per plant to the average weight of root and fruit (from $r=0.63\pm 0.27$ to $r=0.70\pm 0.25$), the number of leaves per plant to leaf length ($r=0.74\pm 0.24$ to $r=0.70\pm 0.25$), and the number of leaves per plant to leaf width ($r=0.91\pm 0.15$ to $r=0.71\pm 0.25$) was observed to have a strong correlation.

It was found that the samples of the studied variety are different in terms of productivity and quality of the crop. The highest yield was observed in the single variety in both terms, and the three-year average total yield in the spring term was 36.3 t/ha..

This is 11.0% more than the control. Some Diyor, Detroit, Bicores, Egyptian flat Boro F1, varieties and hybrids had almost the same overall yield indicators as the control variety.

The total productivity of the remaining varieties was 28.2-21.6 t/ha. This means 13.8-34 percent less than the standard.

The varieties and hybrids of Yagona, Diyor, Detroit, Bikores, Egyptian flat Boro F1, varieties and hybrids, which are being studied for their productivity, achieved good results and the total yield was 95.7-96.8%.

The average root weight varied between cultivars and was 137 g in the standard cultivar. It was observed that the average weight of the tubers of single, Diyor, Detroit, Bikores, Egipetskaya ploskaya, Boro F1, varieties and hybrids was 138-144 g, which was 1-7 g more than the control variety.

Among the studied varieties, the weight of root and fruit was slightly higher than the control variety. Errors between experiments (EKTF05 t/ha) for determining spring yield of beet variety samples were 1.48 t/ha or the difference between variants ($S_x, \%$) was 0.14%.

Beetroot is a dietary product, not only its root, but also its young leaves are eaten. However, there is no information about the biochemical composition in the conditions of Karakalpakstan in the literature.

Therefore, for the first time in the conditions of Karakalpakstan, a biochemical analysis of beet roots was conducted. Studies have shown that the biochemical composition of beet roots

depends on the variety, the season and period of its cultivation. Biochemical composition of beet roots planted during spring planting is presented in Table 1. According to the data presented in the table, in the spring term, the dry matter content of the root fruit of the control Bordo- 237 variety was 12.6%, sugar content was 6.1%, vitamin S was 14.2 mg/%, and nitrates were 198 mg/kg.

Among the variety samples, the highest indicators of biochemical composition were observed in the single variety, dry matter content was 12.6%, sugar content was 13.1%, vitamin S was 13.3 mg/%, and nitrates were 1 mg/kg less than the control variety. We believe that this situation is due to the fact that the single variety is very well adapted to local conditions.

1- if possible

Biochemical quality indicators of the root fruit of new samples of beetroot planted during the spring planting period, 2019-2021.

	Name new samples	Dry matter, %	Compared to new control, %	Sugar content, %	Compared to the new control, %	Vitamin S, mg/%	Compared to new control, %	Nitrate s, mg/kg	Compared to new control, %
1.	Bordo- 237 st.	12,6	100.0	6,1	100.0	14,2	100.0	198	100.0
2.	Diyar	11,3	89.6	4,5	73.7	12,8	90.1	218	110.1
3.	Yagona	14.2	112.6	6.9	113.1	16.1	113.3	197	99.4
4.	Detroit	11,4	90.4	4,6	75.4	12,9	90.8	214	108.0
5.	Boro F1	11,1	88.0	4,4	72.1	12,2	85.9	209	105.5
6.	Bicores	9,3	73.8	2,8	45.9	10,8	76.0	204	103.0
7.	Khavskaya	9,4	74.6	2,9	47.5	12,4	87.3	206	104.0
8.	Egyptian flat	9,8	77.7	3,5	57.3	12,7	89.4	211	106.5
9.	Ceppo F1	8.1	64.2	3.1	50.8	11.8	83.0	171	86.3
10.	Bond F1	7.2	57.1	2.8	45.9	10.2	71.8	156	78.7
11.	Akela F1	8.9	70.6	2.9	47.5	10.8	76.0	178	89.8
12.	PCM-025026	8.8	69.8	3.1	50.8	9.8	69.0	168	84.8

In the remaining varieties and hybrids, on the contrary, the biochemical composition of the root fruit decreased compared to the control variety. For example, the amount of dry matter was 8.1% in the Ceppo F1 hybrid in the spring period, and its amount was 4.5% less compared to the control variety.

1. Conclusions

1 For the first time in the conditions of Karakalpakstan, new beetroot samples were studied and promising ones were identified.

2. According to the results of a comprehensive study of beet variety samples during the spring planting period, the highest yield of 36.3 t/ha was observed in the Single beet variety created in our Republic. This means 3.1 t/ha or 11.0% more than the standard.

3. The single variety of beetroot was distinguished from the control Bordeaux 237 variety not only by its yield, but also by the firmness of its flesh, the richness of its biochemical composition, and its long-term shelf life.

4. Egyptian flat, Boro F1, varieties and hybrids have the same productivity as the control variety. Among studied beetroot varieties, Diyor, Detroit, Bicores, indicators were almost the same.

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