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SELECTING SUITABLE CABBAGE VARIETIES AND HYBRIDS FOR GROWING IN WEAK SALINITY AREAS

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ABSTRACT

In 2021-2023, 6 varieties and 14 hybrids of white cabbage were studied in order to select promising varieties and hybrids suitable for cultivation in alluvial soil conditions of Karakalpakstan. The standard was the Tashkent 10 variety and the Fresco F1 hybrid.
Among the hybrids studied, the yield of the Magnus F_1 hybrid (92.0%) was 100.2% compared to the standard Fresco F_1 hybrid. For all other hybrids, the yield of the standard hybrid Fresco G'1 was 30.0-70.0% lower. The marketable yield of the Navruz variety (91.0%) was 3.0% higher than the standard Tashkentskaya 10 variety; heads of cabbage were harvested 20 days earlier. Hybrid cabbage Magnus F_1 ripens 6-45 days earlier compared to standard and other varieties.

KUCHSIZ SHO‘RLANGAN MAYDONLARDA YETISHTIRISH UCHUN MOS OQBOSH KARAM NAV VA DURAGAYLARINI TANLASH

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ANNOTATSIYA

2021-2023 yillarda oqbosh karamni kuchsiz sho‘rlangan maydonlarda yetishtirish uchun mos istiqbolli nav va duragaylarini tanlash maqsadida 6 ta navlar va 14 ta duragaylari o‘rganilgan. Tashkentskaya 10 navi va Fresko $G‘_1$ duragayi standart vazifasini bajardi.
O‘rganilgan duragaylar ichida Magnus $G‘_1$ duragayi tovar hosili (92,0%) standart Fresko $G‘_1$ duragayiga nisbatan 100,2% ni tashkil qilgan. Qolgan barcha duragaylarda standart Fresko $G‘_1$ duragayi hosilidan 30,0-70,0 % gacha past bo‘lgan. Navruz navining tovarbop hosili (91,0%) standart Tashkentskaya 10 navi hosildorligidan 3,0 % ga yuqori bo‘lgan, karamboshlari yetilishi 20 kunga erta bo‘ldi. Magnus $G‘_1$ duragayi karamboshlari o‘rganilayotgan barcha nav namunalariga nisbatan 6 kundan 45 kungacha erta yetilgan.

INTRODUCTION

Today's in the day the total volume of cabbage cultivation in the world is more than 82.8 million tons, and for the cultivation of white cabbage: the People's Republic of China, (accordingly, 25.2 kg per capita, the total planted area is 1.0 million ha , productivity per hectare 35.0 ha/t, gross production 35.1 million tons), India (7.2 kg, 388.0 thousand ha, 23.2 ha/t, 9.56 million tons), South Korea (47.9 kg, 68.2 ha/t, 2.47 million tons), Russia (16 kg, 67.9

thousand ha, 34.7 ha/t, 2.35 million tons) and Uzbekistan occupies (20.8 kg, 12.6 thousand ha, 54.0 ha/t, 680,640 tons).[1]

Growing vegetable crops in agriculture is common in China, India, Russia and many other countries with temperate climates. To meet the needs of the population for food products, and to increase the export potential, for farmers, peasant farms and landowners, resistant, flexible, early morning, late spring, and summer Wider implementation of resource-saving technologies of creation, selection, cultivation of rtapishar varieties and hybrids in production, reduction of product costs are among the urgent issues of today.

Relevance of the topic

In recent years, in the Republic of Karakalpakstan, in order to ensure food security, it is necessary to meet the needs of the population for high-quality, low-cost vegetable products. and large-scale measures are being implemented to plant agricultural crops, especially vegetables, which are in high demand in the foreign market, and to use land and water resources more rationally. In the 30th goal of the development strategy of New Uzbekistan for 2022-2026 of the Republic of Uzbekistan, "...growing of exportable products and development of fruit and vegetable growing" [2]is set as one of the priority tasks. Therefore, the selection of white cabbage varieties and hybrids suitable for cultivation in areas with weak salinity and improvement of cultivation technologies is an urgent issue.

The level of study of the problem

VADenisov, NBPetrov, VVSkorina, VFPivovarov, LKGurkina, IDRajabli, ONVishnevskaya, AFBukharov, LIUrales, MNShapturenko, VNLukyanes, SVKoroleva, GAKostenko, ADDjakhangirov, GFMonakhos VKPuzmishchev on improvement of white cabbage cultivation technologies in different soil and climatic conditions of foreign countries ; scientific researches were carried out in our country by VIZuev, SVSitkinov, O. Kadirkhojaev, BJAZimov, TEOstonakulov, AMAbbasov, MXAramov, AJShokirov, S. Lapasov and many others.

varieties specific to the soil climate of certain regions for late cultivation selection, planting plants in convenient schemes and periods, application of agrotechnics specific to varieties, irrigation, feeding and cultivation in repeated crops, selection of optimal varieties, their optimal planting scheme, determining the period, mineral fertilizers and irrigation recommendations for development and implementation of optimal standards for each variety are given. However, these recommendations were developed for the specific soil-climatic conditions of the researched regions. The soil and climate conditions of the northern region of our republic, the Republic of Karakalpakstan, especially in recent years, weather vagaries, water shortage, soil salinity of cultivated fields are increasing.

The scope of scientifically based research on selection of white cabbage varieties and hybrids suitable for cultivation in low salinity areas of the Republic of Karakalpakstan, planting schemes of varieties according to biological and economic characteristics and determining optimal planting periods cannot be considered sufficient. According to this dissertation

[1] http://surl.li/odnwq

[2] Decree of the President of the Republic of Uzbekistan dated January 28, 2022 No. PF-60 "On the Development Strategy of New Uzbekistan for 2022-2026" .

research, the selection of white cabbage varieties and hybrids in the weakly saline soil-climate conditions of the Republic of Karakalpakstan, the determination of optimal planting periods and schemes, the study of plant growth and development, morphobiological characteristics conducting research is urgent.

METHODS OF RESEARCH

Research B.J.Azimov, B.B.Azimov's "Methodology of conducting experiments in vegetable growing, rice growing and potato growing" (2002), "Metodicheskie ukazaniya po ekologicheskomu ispytaniyu ovoshchnyx kultur v otkrytom grunte" VNIISSOK, M., 1987, Metodika polevogo opyta v ovoshchevodstve. M., VNIIO, 2011. (Under the editorship of SSLitvinova), it was conducted based on the methods presented in VFBelik's "Metodika opytnogo dela v ovoshchevodstve i bakchevodstve" (1992), "Metodicheskie ukazaniya po ekologicheskomu ispytaniyu ovoshchnyx kultur" (1987). Statistical analysis of the research results was carried out using BADospekhov's "Metodika polevogo opyta" (1985) dispersion method in "Excel 2010" and "Statistica 7.0 for Windows" computer programs, with a confidence interval of 0.95%.

the decisive factors in obtaining a high and quality harvest from any vegetable crop, regardless of the period and soil conditions in which it is grown . In the scientific research of many scientists , there are important scientific recommendations about the biological potential of each variety and its maximum expression only under certain conditions . [9; pp. 50–53, 17; pp. 115–119, 11; s-38., 12; -136.].

It has been proven in science that varieties have specific biological characteristics, that is, adaptability to different growth periods, productivity indicators, and soil conditions. Therefore, the selection of varieties for each region, soil conditions and planting period is an important factor in increasing the efficiency of agricultural crop production. Experiences in testing new varieties and hybrids of white cabbage are important. According to the test results, the yield of varieties and hybrids is 100-120 t per hectare "Bomond Agro"; "Cupid" - 90-118 t; "Flibuster" was 75-119 tons, and these hybrids were characterized by disease resistance [18; pp. 130-135].

The scientists of our republic have determined the planting dates of early, mid-early, and late white cabbage varieties by regions: February 10-12, May 10-12, August 1-15 in the southern regions; February 25-March 10 in regions located in the central region; April 15-May 1; June 15-July 1; in the northern regions, it is planted from March 15-30, April 1-15, and from May 25 to June 5. Seedlings should have 6-7 leaves. [15; s- 43-52., 12; s-136.; 11; s-38., 13; pp. 221–228; 19; s-177-185.].

In 2007-2014, in the conditions of Tashkent region, those who carried out research on the selection of promising varieties for the cultivation of white cabbage in a repeated crop, on determining convenient planting schemes and planting periods () expressed their opinions [9; pp. 50-53, 10; pp. 562–567, 16; pp. 35-39, 17; s-115-119., 19; s-177-185., 20; pp. 1999-2002.].

Early cabbage seedling in Samarkand, Tashkent and Fergana regions from February 25 to March 15 depending on the arrival of spring, early cabbage in the field with direct seeds on April 1-10, with seedlings in May, evening cabbage seedling It is planted from June 25 to July 25 [13; pp. 221–228. 15; s-43-52.].

It became known from the sources that increasing the agrobiodiversity of white cabbage varieties and hybrids suitable for cultivation in our republic, especially in weakly saline areas of the Republic of Karakalpakstan, studying morpho-biological, valuable economic signs, a promising variety full-fledged scientific studies on the localization of samples, development of cultivation technologies have not been conducted.

Due to the fact that the Republic of Karakalpakstan is located in the northern part of our Republic, the optimal spring temperature starts 20-30 days later than in other regions, soil salt washing activities are carried out twice in winter and in early spring. In the cultivation of white cabbage, the planting event in the spring period is delayed by 30-40 days due to soil salt washing. In the middle and late periods, planting starts earlier. It is effective to sow mid-ripening varieties earlier in spring, as salinity rises to the surface during hot summer days, adversely affecting productivity. When planted relatively early in the spring, plant roots develop strongly and are more resistant to adverse conditions.

As a result of the research carried out by the researchers, recommendations were made for planting different types of white cabbage at different times, including early-ripening varieties in the morning, mid- and late-ripening varieties in the evening. However, the soil and climate conditions of the Republic of Karakalpakstan differ by 20-30 days compared to our Central regions. Cultivation of mid-early and late-early varieties in the late period increases the salinity level in the soil due to excess irrigation due to the increase in temperature in summer. Therefore, relatively early planting of medium-ripening varieties is effective.

Brassica capitata) cultivars in low salinity areas was conducted in 2021-2023 in the experimental field of Karakalpakstan Institute of Agriculture and Agro-Technology located in Nukus District of the Republic of Karakalpakstan and "Alako" z" was conducted on the farm. The Republic of Karakalpakstan differs from other regions in that it has a sharp change in weather and a high level of soil salinity. The soils of the experimental area are meadow alluvial soils, and the salinity level is average . 6 varieties and 14 hybrids of white cabbage were studied in our collection experiment conducted in 2021-2023 on the selection of suitable variety samples for cultivation in weakly saline soil-climate conditions. In the experiment, each variety is planted in one row, the length of the rows is 10 m, the planting pattern is 70x30 cm. The area of the compartments is 0.7 m ^{2} . The total land area is 140 m ^{2} . Tashkentskaya 10 variety and Fresso F $_{1}$ (control) hybrid served as standard .

In our research carried out in 2021-2023, 20 samples of white cabbage were studied in order to select varieties and hybrids suitable for weakly saline soil conditions. Tashkentskaya 10 variety was taken as standard for varieties, and Fresco F $_{1\ hybrid}$ for hybrids .

On March 29-30, 40-day-old seedlings of Aqbosh cabbage varieties and hybrids were planted in an open field in a 70x30 cm scheme, and phenological and biometric observations were made and compared with standard varieties. When the phenological indicators of the growth period of the variety samples were studied, in the standard Tashkentskaya 10 variety, 37 days after the seedlings were planted, the plants began to bear cabbage. In control 2 Fresco G' $_{1}$ hybrid, this process started after 39 days.

Nadezhda and Golden Asre varieties and Yubileyniyy 217 G' $_{1}$, Bucharest G' $_{1}$ hybrids, among the variety samples, the cabbage picking stage started at 37-38 days and did not differ much from the standard varieties. In Vestri F $_{1}$ and Mishutka G' $_{1}$ hybrids, this process started 2-4

days earlier than standard varieties, requiring 35 days. Gregorian F 1 , Green presto F 1 , Polka F 1 hybrids enter cabbage packing 32-33 days after planting, 6-7 days earlier than the standard Fresco G' 1 hybrid, 4-5 days earlier than the Tashkentskaya 10 variety. ldi Navruz variety and Green Flash F 1 , Blue Jays F 1 , Amore F 1 hybrids started harvesting cabbage 30-31 days after planting, 6-9 days earlier than standard varieties.

E miliy F 1 , Magnus F 1 , C tart F 1 and Ortus F 1 hybrids were distinguished by early ripening (10-19 days earlier) compared to standard varieties and other samples. Among the samples of the studied variety, Begabadskaya variety plants began to harvest cabbage 46 days after planting, and it was found that it started 7-9 days later than the standard varieties .

weakly saline soil-climate conditions, belonged to the medium-ripening group. Cabbage of the 2nd standard Fresco G' 1 hybrid ripened in 91-92 days, and this hybrid also belonged to the medium group (Table 1).

Table 1 Phenological indicators of white cabbage variety samples grown in low salinity areas (2021-2023).

No	Varieties and hybrids	The name of the created country	40 days after planting , day			Ripening of the crop
			until the cabbage is wrapped	first harvest	growth period	
1.	Tashkentskaya 10 (n)	Uzbekistan	3 7 ±2	105 ± 2	13 5 ±2	medium
2.	Nadezhda	Russia	3 8 ±3	98 ± 3	13 8 ±3	medium
3.	Begabadskaya	Uzbekistan	46±2	96 ± 2	136 ± 2	medium
4.	Nowruz	Uzbekistan	30±3	85 ± 3	12 5 ±3	medium-early.
5.	Golden Acre 1432	Russia	37±2	84 ± 2	1 24 ±2	medium-early.
6.	Fresco F 1 (n)	Netherlands	39±3	9 2 ± 3	1 3 2± 3	medium cooked
7.	Gregorian F 1	Netherlands	32±2	7 6 ± 2	116±2	medium-early.
8.	E mil i y F 1	Netherlands	28±3	6 7 ± 3	107 ± 3	morning
9.	Magnus F 1	Netherlands	27±4	6 0 ± 2	100 ±3	morning
10.	Green flash F 1	Netherlands	30±3	66 ± 3	106 ± 3	morning
11.	Blue Jays F 1	Italy	30±2	70 ± 3	110 ± 3	morning
12.	Green presto F1	Japan	32±3	76 ± 2	116 ± 3	medium-early
13.	Amore F 1	Germany	31±2	75 ± 2	115 ±2	medium-early.
14.	Jubilee 217 F 1	Russia	38±2	98 ± 3	138±2	medium
15.	Polka F1	Ukraine	33±3	80 ± 2	1 2 0± 3	medium-early.
16.	C tart F 1	Russia	28±3	68 ± 2	1 08 ± 2	morning
17.	Ortus F 1	Japan	29±3	6 6 ± 3	106±3	morning
18.	Vestry F 1	Netherlands	35±2	95 ± 2	135±2	medium
19.	Bucharest F 1	Netherlands	38±2	98 ± 3	1 3 8 ± 3	medium
20.	Mishutka F1	Russia	35±3	100 ± 3	140±3	medium

Varieties created in different soil-climate conditions cannot fully show the specific characteristics of the variety when grown in other regions' soil- climate conditions. If the cultivated soil-climate conditions match the biological requirements of the plant, the growth period and productivity of the plants will be higher, on the contrary, if the soil-climate conditions do not match the biological requirements of the plant, the growth period will be partially changed, productivity decrease may not even increase at all.

$_{1\ hybrid}$ among the samples studied ripened in 100 days, 5 days earlier than the standard Tashkentskaya 10 variety, and 9-10 days later than the standard Fresco F $_1$ hybrid and belonged to the medium group. Cabbage of Nadezhda, Begabadskaya varieties and Yubileyny 217 F $_1$, Vestri F $_1$, Bucharest F $_1$ hybrids ripened in 95-98 days, 7-10 days earlier than the standard Tashkentskaya 10 variety, and 4-7 days later than the standard Fresco F $_{1\ hybrid.}$ In Navruz and Golden Asre 1432 varieties, this indicator is 84-85 days, not more than the standard Fresco G' $_1$ hybrid, but 7-8 days earlier and 20-21 days earlier than the standard Tashkentskaya 10 variety.

Gregorian F $_1$, Green presto F $_1$, Amore F $_1$ hybrids took 75-76 days to ripen. Cabbage of these hybrids ripened 15-17 days earlier than the standard hybrid Fresco G' $_1$ and belonged to the middle-early group. Emilii F $_1$, Green flash F $_1$, C tart F $_1$, Ortus F $_1$ hybrids required 66-68 days after 40-day-old seedlings to mature. These hybrids also ripened 24-25 days faster than the standard Fresco F $_{1\ hybrid.}$ Among the variety samples, Magnus G' $_1$ hybrid cabbage seedlings matured 60 days after planting, 6 to 45 days earlier than the standard and other varieties, and all varieties were distinguished by their early maturity.

When the number of free leaves formed on the plants of the variety samples was studied during the harvesting period of the carnations, the indicators of all the variety samples fluctuated in the range of 14.5 - 19.7 pieces. In Standard Tashkentskaya 10 varieties, the number of free leaves on the plants during the ripening period was 19.7 pieces. In terms of the number of free leaves per plant among the studied varieties, compared to the standard Tashkentskaya 10 variety, the number of leaves in the plants of the Nadejda and Golden Asre varieties is 6.1 - 4.6 percent less, while the Navruz variety is 7.7 percent and Begabadskaya variety (16.7 units) was 15.3 percent less.

the standard Fresco G' $_1$ hybrid, the number of free leaves on the plants during the harvest period was 17.8 pieces. According to the number of leaves in plants among studied hybrids, Green presto G' $_1$, Vestri G' $_1$ and Bucharest G' $_1$ hybrids at the time of ripening of cabbage, respectively: 17.5 - 17.3 - 17.4 leaves per leaf it was 2.7 - 3.8 percent less than the standard variety indicator. Grigorian G' $_1$, Magnus G' $_1$, Green Flash G' $_1$, Amore G' $_1$, Yubileynyy 217 F $_1$ and Mishutka G' $_1$ hybrids, the number of leaves on the plants during the ripening period is 16.5-16.9 and it was found that standard Fresco G' $_1$ hybrid plants had 7.4 - 5.1 percent less than the number of leaves.

In 2021-2023, the average weight of cabbages in the standard Tashkentskaya 10 variety was 1249.5 g. Compared to the standard, the cabbage weight of the studied varieties is 31.6-65.5% lower in Nadejda (430.5 g), Golden Asre 1432 (853.0 g), and 15.6% lower in Begabadskaya (1056.3 g) it has been. It was found that the average weight of one piece of cabbage in Navruz variety was 1162.8 g and was close to the standard variety index (93.0%).

When hybrids were analyzed, the weight of carnations in the standard Fresco G' $_1$ hybrid was

1379.0 g on average, and the carnation weight of the fastest Magnus F $_1$ hybrid (1260.0 g) was close to the standard indicator (91.3%). ldi Grigorian G' $_1$, Emilii G' $_1$, Green presto G' $_1$ hybrids are 30.4 - 32.8% higher than standard Fresco G' $_{1 \text{ indicators, Vestri G' } 1}$, Bucharest G' $_1$, Mishutka G' $_1$ hybrids 36.8 - 42.9 % low, while all other hybrids were observed to be low 36.9 - 83.1 % compared to the control.

When the weight indicators of cabbage samples of the variety were analyzed, the difference of EKF $_{05}$ was equal to 25.8 g on average. The Sx $_{\% \text{ accuracy}}$ of the experiment was 3.2 percent.

It is stated in scientific sources that when soil fertility and climatic conditions are optimal, and when high agrotechnology is used, the productivity of all types and varieties of crops can increase by 40-65% or, on the contrary, decrease. Varieties of white cabbage are divided into groups according to the size of the cabbage : small - 0.5-1.5 kg.; average – 1.5–2.5 kg. and large - 2.5 kg. more than

Among the studied variety samples, except Nadejda (430.5g) and Amore G' $_1$ (233.5g), Yubileynyy 217 G' $_1$ (321.0g) hybrids, all the varieties have small carnations (0.5-1.5 kg) joined the group.

Based on the cabbage weight of the samples of Aqbosh cabbage variety, the average yield per hectare was determined. When determining productivity, according to the VIR method, all the plants on the site were collected and weighed, and immature and unripened cabbage heads were divided into goods and non-goods. When the productivity of variety samples was calculated by years, the regularity of cabbage weight indicators was repeated. Average yield of variety samples in 2021 was 40.5 ha/t, 36.0 ha/t in 2022 and 37.6 ha/t in 2023. The difference between the yield of variety samples by year was 4.3 - 12.0 percent.

In 2021-2023, the average yield per hectare fluctuated between 11.1 and 65.6 ha/t. Some cultivars grew very slowly in areas with weak salinity, and their productivity has been low over the years.

The average yield of standard Tashkentskaya 10 variety was 59.5 ha/t. The yield of the Nadezhda variety is 20.5 ha/t, which is 65.6% lower than the standard, while the Golden Asre 1432 (40.6 ha/t) variety is 31.8%, Begabadskaya (50.3 ha /t) was 15.5% lower. The yield per hectare of Navruz variety was 55.4 ha/t, close to the standard variety yield (93.1%). (See Table 3.9).

When calculating the yield obtained from hybrids, the highest yield was obtained from the standard Fresco F $_1$ hybrid (65.6 ha/t), the lowest yield was obtained from Amore F $_1$ (11.1 ha/t) and Yubileynyy 217 F $_1$ (15.3 ha /t) was obtained from hybrids . Green flash G' $_1$ (27.4 ha/t), Polka G'1 (27.7 ha/t), Start G'1 (26.3 ha/t), Blue jays G' $_1$ (25.4 ha /t) and Ortus G' $_{1 \text{ (24.0 ha/t) hybrids, the total yield}}$ was 57.8 - 64.4% lower than the standard Fresco G' $_{1 \text{ yield, while Vestri G' } 1}$ (39, 2 ha/t) and Mishutka G' $_1$ (37.4 ha/t) hybrids decreased to 40.3 - 42.9%. Gregorian G' $_1$ (44.6 ha/t), Emilii G' $_1$ (45.7 ha/t), Green presto G' $_1$ (44.1 ha/t) and Bucharest G' $_1$ (41.5 ha/t) hybrids are standard 30.4 - 36.8% lower than the indicator.

the Magnus G' $_1$ hybrid was 60.0 tons per hectare, which was close to the total yield of the standard Fresco G' $_1$ hybrid (91.3%) (Table 2).

Table 2 Productivity of white cabbage cultivars grown in areas with low salinity (2021-2023)

Variety samples	Total yield, ha/t.		Commercial yield, ha/t.		Crop failure, %
	average	vs. St , %	t/ha	vs. St , %	
Tashkentskaya 10 (st.)	59.5	100.0	48.9	100.0	18.0
Nadezhda	20.5	34.4	10.6	21.7	48.0
Begabadskaya	50.3	84.5	38.7	79.1	23.0
Nowruz	55.4	93.1	50.4	103.0	9.0
Golden Acre 1432	40.6	68.2	30.8	62.9	24.0
Fresco F_1 (st)	65.6	100.0	55.1	100.0	16.0
Gregorian F_1	44.6	67.9	37.4	67.8	16.0
E shaft y F_1	45.7	69.6	38.8	70.4	15.0
Magnus F_1	60.0	91.3	55.2	100.2	8.0
Green flash F_1	27.4	41.7	17.8	32.3	35.0
Blue Jays F_1	25.4	38.7	15.4	27.9	39.0
Green presto F1	44.1	67.2	34.4	62.4	22.0
Amore F_1	11.1	16.9	5.6	10.2	50.0
Jubilee 217 F_1	15.3	23.2	7.7	14.0	50.0
Polka F1	27.7	42.2	18.1	32.8	34.5
C tart F_1	26.3	40.1	16.9	30.7	35.6
Ortus F_1	24.0	36.6	15.3	27.7	36.0
Vestry F_1	39.2	59.7	30.0	54.4	23.5
Bucharest F_1	41.5	63.2	33.6	61.0	19.0
Mishutka F1	37.4	57.1	27.6	50.0	26.0
EKF_{05}	1.2	-	1.2	-	-
Sx %	3.2	-	4.2	-	-

$_{05}$ in terms of productivity in years is 1.9 - 1.6 - 1.5 tons, the average is 1.2 tons, experimental accuracy Sx $_{\%}$ - 4.8 - 4.3 - 4.1 %, o' 3.2% in average yield was reliable.

weakly saline areas, we sorted the cabbages and divided them into non-productive ones and determined the amount of non-productive yield (in %) in each sample. The commercial yield was determined by subtracting the non-productive yield (%) from the total yield.

When 18.0% of the non-marketable yield was deducted from the 59.5 tons of the yield of Standard Tashkentskaya 10 variety, the marketable yield was 48.9 tons per hectare. Cabbage in the Nadezhda variety was 430.5 g on average, the amount of non-product yield was more than 48.0%, and the product yield was 10.6 ha/t, 78.3% lower than the standard indicator. it has been. In Begabadskaya and Golden Asre 1432 varieties, the non-commercial yield is 23.0-24.0%, and the commercial yield is 38.7-30.8 ha/t, 20.9-37.1% lower than the yield of the standard variety. It's done. Although the total yield obtained from the Navruz variety is 6.9% less than the yield of the standard variety, the commodity yield per hectare is 3.0% higher (50.4 ha/t) due to the lower amount of non-productive crops (9.0%). was.

When the amount of non-productive yield was separated from the total yield in the studied hybrids, the yield (86.0%) of the standard Fresco G' $_1$ hybrid was 55.1 ha/t. Compared to the standard, the total yield of the hybrid Magnus G' $_1$ is 8.7% or 5.6 tons less, but due to the lower yield (8.0%), the commodity yield is 55.2 ha/t standard Fresco G' $_1$ was equal to the hybrid.

Emilii G' $_1$ (45.7–15%=38.8ha/t), Grigorian G'1 (44.6–16%=37.4ha/t), Green presto G'1 (44.1–22, 0%=34.4ha/t) Bucharest G'1 (41.5–19.0%=33.6ha/t) and Vestri G'1 (39.2–23.5%=30.0ha/t)

when the amount of unproductive yield was subtracted from the total yield of hybrids, the standart Fresco G'1 hybrid was 30.0-39.0% less than the yield of the hybrid. It was found that the yield of all other hybrids was 40.0-70.0% lower than the standard Fresco G'1 hybrid.

Early, mid-early and mid-early varieties and hybrids of white cabbage were grown in the spring period in areas with low salinity, and the following conclusions were reached after analyzing the indicators of productivity and productivity. Among the studied varieties and hybrids, the total yield of the Navruz variety was 6.9% less than the standard Tashkentskaya 10 variety, but the marketable yield (91.0%) was 3.0% higher. Cabbage ripened 20 days early. Among the studied hybrids, the Magnus G' $_1$ hybrid was found to be less resistant to saline soil conditions than other hybrids. Although the total yield is 8.7% lower than the yield of the standard variety, due to the higher yield (92.0%), the yield per hectare was 100.2% compared to the standard Fresco G' $_{1\ \text{hybrid.}}$

Magnus G' $_1$ hybrid cabbage showed early ripening from 6 to 45 days compared to all studied varieties.

Based on the results of research on the selection of white cabbage varieties suitable for cultivation in areas with low salinity, an early and high yield of white cabbage - Magnus G' $_1$ hybrid, We recommend planting Navruz variety and medium-sized Tashkentskaya 10 variety, Fresco G' $_{1\ \text{hybrids.}}$ These varieties and hybrids were distinguished by their resistance to weakly saline soil-climate conditions compared to other varieties.

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