

Selection Of Melon Varieties For Growing An Early Crop In The Nukus District

Amanjolova Z. M.

Doctoral student of the Karakalpak Institute of Agriculture and Agrotechnologies

Abstract. The article describes the production of small-weight export-oriented melons in the Nukus district, including the Dakaro F1 hybrid (54.1 t/ha), Londa Khandalak No. 25 (44.4 t/ha), Kolkhoznitsa (41.0 t/ha), and Kichkintoy (34.0 t/ha) in the fairy-tale cultivation of the region.

Key words: melon, main stem length, number and length of side branches, total stem length, number of leaves, width, length and surface, number of fruits, width, length, flesh thickness and weight, yield per bush, total and marketable yield.

Nukus Tumanida Ertagi Ekinda Yetishtirishda Qovun Nav Namunalarini Tanlash

Amanjolova Z.M.

Qoraqalpog'iston qishloq xo'jaligi va agrotexnologiyalar instituti tanyach doktoranti

Annotatsiya. Maqolada Nukus tumanida ertagi ekinda yetishtirishda eksportbop kichik vaznli qovunning Dakaro F1 duragayi (54,1 t/ga) hamda Lo'nda xandalak №25 (44,4 t/ga), Kolxoznitsa (41,0 t/ga) va Kichkintoy (34,4 t/ga) yuqori tovarbop hosildorlikni namoyon qilganligi ilmiy asoslangan.

Kalit so'zlar: qovun, asosiy poya uzunligi, yon shoxlar soni va uzunligi, poyaning umumiy uzunligi, barg soni, eni, uzunligi va sathi, meva soni, eni, uzunligi, etining qalinligi va vazni, bir tupdagi hosil, umumiy va tovarbop hosildorlik.

Introduction

Currently, Uzbekistan is implementing a number of plans, including the cultivation of melons for export and seasonal crops, with a strategic approach to fully satisfying the needs of the industry and the population. However, special attention should be paid to the selection of varieties and hybrids suitable for the cultivation of export melons in the soil and climatic conditions of Karakalpakstan, as well as to agricultural techniques to increase productivity in seasonal crops. In recent years, insufficient research has been carried out on the selection of varieties and hybrids of melons suitable for the soil and climatic conditions of Karakalpakstan and the improvement of the technology of their cultivation. In this regard, it was considered urgent to conduct scientific research within the framework of the topic of this dissertation.

Research methodology. In the studies, the varieties "Gurbek mestniy" (st), "Dilkhush," "Kichkintoy," "Oltin vodiy," "Oltin tepa," "Rokhat," "Suyunchi 2" of local selection of melon regionalized in Uzbekistan, the hybrid "Kok mag'iz F1" and the hybrid "Dakaro F1" of Dutch selection, as well as the promising local varieties "Zamcha No 20," "Iftikhor (L-160)," "Lunda khandalak No25," "Malika No28," "Oftob (L-161)," "Khandalak sariq No9/4," "Shirali" and "Ertagi khandalak No24," as well as the variety "Kolkhoznitsa" of Russian selection were obtained.

Melon Varietal samples were collected in 4 replicates, 40 plants per sample, and 10 plants were counted in each sample from an area of 40 m². Melon variety samples in the research were collected using a cm planting scheme, with seeds sown in the first decade of April. $\frac{210+70}{2} \times 70$

Field experiments were conducted based on the methodological manuals "Methodology of conducting experiments in vegetable, melon and potato growing" (BJAzimov, BBAzimov, 2002), "Methodology of field experiments in vegetable and melon growing" (VFBelik, 1992), statistical analysis of the research results was performed in the computer program "Excel 2010" and "Statistica 7.0 for Windows", calculated using the

dispersion method "Methodology of field experiments" (BADospexov, 1985) with a confidence interval of 0.95%.

Research results. In the field of melon varieties, the main stem length of the Gurbek mestniy (st) variety was 158.5 cm, and relatively long main stem lengths were determined in the Londa Khandalak No. 25 (203.6 cm), Malika No. 28 (191.4 cm), Suyunchi 2 (190.1 cm), Oltin Vodiy (186.7 cm), Oftob (L-161) (186.5 cm), Shirali (183.3 cm) and the Kok Magiz F1 hybrid (195.5 cm). In this case, the main stem length was 45.1; 37.0; 32.9; 31.6; 28.2; 28.0 and 24.8 cm, respectively. Also, the main stem length was 13.2; 10.0; It was found that the main stem lengths of 9.3 and 4.8 cm were formed in the varieties Zamcha No. 20 (171.7 cm), Khandalak Sarig No. 9/4 (168.5 cm), Oltin Tepa (167.8 cm) and Iftikhor (L-160) (163.3 cm). On the contrary, in the melon variety samples, the main stem lengths of 2.6; 4.9; 7.0; 10.9; 37.5 and 5.4 cm were recorded in the varieties Dilkhush (155.9 cm), Kichkintoy (153.6 cm), Ertagi Khandalak No. 24 (153.1 cm), Rokhat (147.6 cm) and Kolkhoznitsa (121.0 cm) and the hybrid Dakaro F1 (151.5 cm). The main stem length of the melon varieties in the fairy tale crop, when mathematically and statistically processed, was EKF05 - 4.3 cm and Sx% - 2.5%. In the Ertagi crop, according to the number of lateral branches of melon varieties, the Gurbek mestniy (st) variety had 3.3 units, compared to 3.0-2.1 units more lateral branches in the Londa Khandalak No. 25 (6.3 units), Kolkhoznitsa (5.9 units) and Suyunchi 2 (5.4 units), 1.8-1.0 units more lateral branches in the Rokhat (5.1 units), Khandalak sarig No. 9/4 (4.9 units), Ertagi Khandalak No. 24 (4.7 units), Oltin vodiy (4.5 units) and Malika No. 28 (4.3 units) varieties, and 0.9-0.3 units more lateral branches in the Kok mag'iz F1 (4.2 units) and Dakaro F1 (4.2 units) hybrids, as well as in the Oftob (L-161) (4.1 units), Oltin Tepa (4.0 units), Dilkhush (4.0 units), Shirali (3.9 units), Kichkintoy (3.9 units), Zamcha No. 20 (3.6 units) and Iftikhor (L-160) (3.6 units) varieties were found to be formed. When mathematically and statistically processed, the number of lateral branches of the melon variety samples in the fairy tale crop was EKF05 – 0.11 units and Sx% – 2.4 % (Table 1).

In the fairy-tale crop, the length of the lateral branches of the melon varieties Gurbek mestniy (st) was 517.6 cm, compared to 204.7 and 107.8 cm long lateral branches, while the varieties Londa Khandalak No. 25 (722.3 cm) and Suyunchi 2 (625.4 cm), Kolkhoznitsa (599.1 cm), Malika No. 28 (554.5 cm) and Rokhat (549.1 cm) varieties, and the Dakaro F1 (558.5 cm) hybrid formed lateral branches of 81.5; 36.9; 31.5 and 40.9 cm long, respectively. However, the melon varieties Aftob (L-161) (468.2 cm), Oltin vodiy (456.3 cm), Zamcha No. 20 (429.6 cm), Iftikhor (L-160) (428.2 cm) and the Ko'k mag'iz F1 (422.1 cm) hybrid (respectively) showed small lateral branch lengths of 49.4; 61.3; 88.0; 89.4 and 95.5 cm, while the varieties Ertagi Khandalak No. 24 (409.1 cm), Dilkhush (408.9 cm), Khandalak sarig No. 9/4 (392.1 cm), Oltin tepa (386.9 cm), Kichkintoy (373.4 cm) and Shirali (366.1 cm) showed small lateral branch lengths of 108.5; 108.7; 125.5; 130.7; The length of small lateral branches was recorded at 144.2 and 151.5 cm. When the number of lateral branches of melon samples in the fairy tale crop was mathematically and statistically processed, EKF05 was 10.3 cm and Sx% was 2.1%.

Table 1

Main stem length, number and length of lateral branches of melon variety samples in early sowing (2022-2024).

Name of the variety samples	Main stem length, cm	Side branches		Total length of the stem, cm
		number, pieces	length, cm	
Gurbek local (st)	158.5	3.3	517.6	676.1
Happy	155.9	4.0	408.9	564.9
Baby	153.6	3.9	373.4	527.0
Golden Valley	186.7	4.5	456.3	643.0
Golden top	167.8	4.0	386.9	554.8
Rokhat	147.6	5.1	549.1	696.6
Suyunchi 2	190.1	5.4	625.4	815.5
Zamcha No. 20	171.7	3.6	429.6	601.3
Iftikhar (L-160)	163.3	3.6	428.2	591.4
Londa Khandalak No. 25	203.6	6.3	722.3	925.9

Princess #28	191.4	4.3	554.5	745.9
Sun (L-161)	186.5	4.1	468.2	654.7
Khandalak yellow №9/4	168.5	4.9	392.1	560.6
Juicy	183.3	3.9	366.1	549.4
Fairytale Khandalak No. 24	153.1	4.7	409.1	562.2
Collective Farmer	121.0	5.9	599.1	720.2
Kok magiz F1	195.5	4.2	422.1	617.6
Dakaro F1	151.5	4.2	558.5	710.1
EKF05	4.3	0.11	10.3	13.2
Sx%	2.5	2.4	2.1	2.0

In the fairy tale, the total length of the stem of the melon varieties in the Gurbek mestniy (st) variety was 158.5 cm, compared to the Londa Khandalak No. 25 (203.6 cm), Malika No. 28 (191.4 cm), Suyunchi 2 (190.1 cm) varieties and the Kok Magiz F1 (195.5 cm) hybrid (respectively) - 45.1; 32.9; 31.6 and 37.0 cm, while the Altyn Vodiy (186.7 cm), Aftob (L-161) (186.5 cm) and Shirali (183.3 cm) varieties - 28.2; 28.0 and 24.8 cm, as well as Zamcha No. 20 (171.7 cm), Khandalak Sarig No. 9/4 (168.5 cm), Oltin Tepa (167.8 cm), Iftikhor (L-160) (163.3 cm) varieties formed total stems with a length of 13.2; 10.0; 9.3 and 4.8 cm, respectively. On the contrary, compared to the Gurbek local (st) variety (158.5 cm), the Dilkhush (155.9 cm), Kichkintoy (153.6 cm), Ertagi Khandalak No. 24 (153.1 cm), Rokhat (147.6 cm), Kolkhoznitsa (121.0 cm) varieties and the Dakaro F1 (151.5 cm) hybrid formed total stems with a length of 2.6; 4.9; 5.4; 10.9; The total stem length was 37.5 and 7.0 cm, respectively. The number of lateral branches of the melon varieties in the fairy tale crop was EKF05 – 13.2 cm and Sx% – 2.0 % when mathematically and statistically processed.

In the fairy-tale crop, according to the number of leaves per bush of melon varieties, the Gurbek mestniy (st) variety had 262.2 leaves, compared to 72.9, 71.4 and 23.7 more leaves. The Londa Khandalak No. 25 (335.1 leaves), Suyunchi 2 (333.6 leaves) and Altyn vodiy (285.9 leaves) varieties showed a higher number of leaves than the previous variety. It was found that the Rokhat (270.9 leaves) and Malika No. 28 (270.7 leaves) varieties of melon had 8.7 and 8.5 more leaves, respectively. However, it was found that compared to the Gurbek local (st) melon variety (262.2 pieces), the Kolkhoznitsa variety - 1.3 pieces, the Dakaro F1 hybrid (255.4 pieces) - 6.8 pieces, the Oftob (L-161) variety - 31.4 pieces, the Kok mag'iz F1 hybrid - 39.2 pieces, the Zamcha No. 20 variety - 41.6 pieces, the Iftikhor (L-160) variety - 47.0 pieces, the Dilkhush variety - 55.3 pieces, the Khandalak Sarig No. 9/4 variety - 57.1 pieces, the Ertagi Khandalak No. 24 variety - 58.1 pieces, the Oltin Tepa variety - 60.0 pieces, the Shirali variety - 62.2 pieces, and the Kichkintoy variety - 71.3 pieces. In the fairy tale crop, the number of leaves per bush of melon varieties EKF05, when mathematically and statistically processed, was 6.0 pieces and Sx% was 2.5% (Table 2).

Table 2
Number, size and level of leaves per bush of melon varieties in the fairy tale crop (2022-2024)

Name of the variety samples	Number of leaves per bush, pcs.	Leaf size		Leaf level		
		width, cm	length, cm	one piece, cm ²	in a bush, m ²	per area unit, thousand m ²
Gurbek local (st)	262.2	18.4	16.4	151.3	3.98	40.6
Happy	206.9	14.9	13.4	99.3	2.09	21.3
Baby	190.9	13.4	10.4	70.0	1.35	13.8
Golden Valley	285.9	16.7	14.1	117.3	3.39	34.6
Golden top	202.2	15.0	12.4	92.7	1.90	19.4
Rokhat	270.9	14.7	12.1	88.6	2.39	24.4
Suyunchi 2	333.6	15.1	12.5	94.0	3.15	32.2
Zamcha No. 20	220.6	15.6	13.0	101.7	2.27	23.2

Iftikhar (L-160)	215.2	16.3	14.1	115.2	2.51	25.6
Londa Khandalak No. 25	335.1	15.7	13.1	103.2	3.48	35.6
Princess #28	270.7	15.2	12.6	95.4	2.61	26.7
Sun (L-161)	230.8	14.9	12.7	94.2	2.20	22.4
Khandalak yellow №9/4	205.1	16.4	14.3	117.6	2.45	25.0
Juicy	200.0	15.9	13.5	107.6	2.18	22.3
Fairytale Khandalak No. 24	204.1	16.9	14.5	122.1	2.52	25.7
Collective Farmer	260.9	13.1	9.4	62.0	1.63	16.6
Kok magiz F1	223.0	16.1	14.6	117.8	2.65	27.0
Dakaro F1	255.4	12.3	11.0	67.8	1.74	17.7
EKF05	6.0	0.31	0.27	2.6	0.05	0.5
Sx%	2.5	2.0	2.1	2.6	2.2	2.2

According to the leaf width of the melon varieties in the Ertagi crop, it was found that the Gurbek local (st) variety had 18.4 cm, compared to which all melon varieties had narrow leaves. In this case, compared to the Gurbek local (st) variety (18.4 cm), the varieties Ertagi Khandalak No. 24 (16.9 cm), Oltin Vodiy (16.7 cm), Khandalak Sarig No. 9/4 (16.4 cm), Iftikhor (L-160) (16.3 cm), Shirali (15.9 cm), Londa Khandalak No. 25 (15.7 cm), Zamcha No. 20 (15.6 cm), Malika No. 28 (15.2 cm), Suyunchi 2 (15.1 cm), Oltin Tepe (15.0 cm), Oftob (L-161) (14.9 cm), Dilkhush (14.9 cm), Rokhat (14.7 cm), Kichkintoy (13.4 cm) and Kolkhoznitsa (13.1 cm) are 1.5; 1.7; 2.0; 2.1; 2.5; 2.7; 2.8; 3.2; 3.3; 3.4; 3.5; 3.5; 3.7; 5.0 and 5.3 cm, as well as the melon hybrids Ko'k mag'iz F1 (16.1 cm) and Dakaro F1 (12.3 cm) - 2.3 and 6.1 cm, respectively. In the fairy tale crop, the leaf width of the melon variety samples, when mathematically and statistically processed, was EKF05 - 0.31 cm and Sx% - 2.0 %.

When analyzing the leaf length of melon samples in the Ertagi field, the Gurbek local (st) variety was 16.4 cm, while the Ko'k mag'iz F1 (14.6 cm) and Dakaro F1 (11.0 cm) hybrids of melons were 1.8 and 5.4 cm, as well as Ertagi Khandalak No. 24 (14.5 cm), Khandalak sarig No. 9/4 (14.3 cm), Oltin vodiy (14.1 cm), Iftikhor (L-160) (14.1 cm), Shirali (13.5 cm), Dilkhush (13.4 cm), L'nda Khandalak No. 25 (13.1 cm), Zamcha No. 20 (13.0 cm), Oftob (L-161) (12.7 cm), Malika No. 28 (12.6 cm), Suyunchi 2 (12.5 cm), Oltin tepe (12.4 cm), Rokhat (12.1 cm), Kichkintoy (10.4 cm) and Kolkhoznitsa (9.4 cm) varieties showed a small leaf length of 1.9-7.0 cm. In the fairy tale crop, the leaf length of the melon variety samples, when mathematically and statistically processed, was EKF05 - 0.27 cm and Sx% - 2.1 %.

In the Ertagi crop, the leaf area of the melon varieties Gurbek mestniy (st) is 151.3 cm², compared to which the smaller leaf area of 29.2-36.1 cm² is Ertagi Khandalak No. 24 (122.1 cm²), Khandalak Sarig No. 9/4 (117.6 cm²), Oltin Vodiy (117.3 cm²), Iftikhor (L-160) (115.2 cm²) and the K'k Mag'iz F1 (117.8 cm²) hybrid, Shirali (107.6 cm²), L'nda Khandalak No. 25 (103.2 cm²) and Zamcha No. 20 (101.7 cm²) varieties have 43.7-49.6 cm², Dilkhush (99.3 cm²), Malika No. 28 (95.4 cm²), Aftob (L-161) (94.2 cm²), Suyunchi 2 (94.0 cm²) and Oltin tepe (92.7 cm²) varieties – 52.0-58.6 cm², Rokhat variety (88.6 cm²) – 62.7 cm², as well as Kichkintoy (70.0 cm²) and Kolkhoznitsa (62.0 cm²) varieties and Dakaro F1 (67.8 cm²) hybrid (respectively) – 81.3; 89.3 and 83.5 cm². In the fairy tale crop, the leaf area of one melon variety samples, when mathematically and statistically processed, was EKF05 – 0.26 cm² and Sx% – 2.6 %.

When analyzing the leaf area per bush of melon varieties in the Ertagi crop, it was found that compared to the Gurbek local (st) variety (3.98 m²), the varieties L'nda Khandalak No. 25 (3.48 m²), Oltin Vodiy (3.39 m²) and Suyunchi 2 (3.15 m²) had a leaf area of 0.5-0.8 m² per bush, and the hybrids K'ok Mag'iz F1 (2.65 m²) and Malika No. 28 (2.61 m²), Ertagi Khandalak No. 24 (2.52 m²), Iftikhor (L-160) (2.51 m²), Khandalak Sarig No. 9/4 (2.45 m²), Rokhat (2.39 m²), Zamcha No. 20 (2.27 m²), Oftob (L-161) had a leaf area of 1.3-1.9 m² per bush. (2.2 m²), Shirali (2.18 m²) and Dilkhush (2.09 m²) varieties, as well as a small leaf area of 2.1-2.6 m² per bush was formed in the Oltin Tepe (1.9 m²), Kolkhoznitsa (1.63 m²), Kichkintoy (1.35 m²)

varieties and the Dakaro F1 (1.74 m²) hybrid. In the fairy tale crop, the leaf area per bush of melon varieties samples was mathematically and statistically processed, EKF05 – 0.05 m² and Sx% – 2.2 %.

According to the leaf area of the melon varieties in the fairy-tale field, compared to the Gurbek local (st) variety (40.6 thousand m²), the Londa Khandalak No. 25 (35.6 thousand m²), Altyn Vodi (34.6 thousand m²) and Suyunchi 2 (32.2 thousand m²) varieties had a leaf area of 5.0, respectively; 6.0 and 8.4 thousand m², melon hybrids Ko'k mag'iz F1 (27.0 thousand m²) and varieties Malika No. 28 (26.7 thousand m²), Ertagi Khandalak No. 24 (25.7 thousand m²), Iftikhor (L-160) (25.6 thousand m²), Khandalak sarig No. 9/4 (25.0 thousand m²), Rokhat (24.4 thousand m²), Zamcha No. 20 (23.2 thousand m²), Aftob (L-161) (22.4 thousand m²), Shirali (22.3 thousand m²), Dilkhush (21.3 thousand m²) - 13.6-19.3 thousand m², as well as varieties Oltin tepa (19.4 thousand m²), Kolkhoznitsa (16.6 thousand m²), Kichkintoy (13.8 thousand m²) and Dakaro F1 (17.7 thousand m²) It was determined that the hybrid had a small leaf area of 21.2; 24.0; 26.8 and 22.9 thousand m², respectively. The leaf area per unit area of the melon variety samples in the fairy tale crop was EKF05 - 0.5 thousand m² and Sx% - 2.2 % when mathematically and statistically processed.

In the fairy tale planting, according to the number of fruits per bush of melon varieties, it was found that the Gurbek mestny (st) variety had 2.0 fruits, while the Kolkhoznitsa (4.5 fruits), Zamcha No. 20 (3.5 fruits), Kichkintoy (3.4 fruits) and Rokhat (3.2 fruits) varieties had 2.5; 1.5; 1.4 and 1.2 fruits more per bush (respectively). It was found that the varieties of melon Malika No. 28 (2.8 pieces), Ertagi Khandalak No. 24 (2.7 pieces), Lo'nda Khandalak No. 25 (2.6 pieces), Iftikhor (L-160) (2.4 pieces), Shirali (2.4 pieces), Suyunchi 2 (2.3 pieces), Khandalak Sarig No. 9/4 (2.3 pieces) and the hybrid Dakaro F1 (2.2 pieces) formed fruits in the range of 0.8...0.2 pieces compared to the Gurbek local (st) variety (2.0 pieces). On the contrary, it was found that the number of fruits per bush was 0.8...0.2 pieces less than the Gurbek local (st) variety (2.0 pieces) in the varieties Dilkhush (1.7 pieces), Oltin Vodi (1.5 pieces), Oltin Tepa (1.5 pieces) and the hybrid Ko'k Mag'iz F1 (1.4 pieces). The number of fruits per bush of melon samples in the fairy tale crop, when mathematically and statistically processed, was EKF05 - 0.05 pieces and Sx% - 2.1% (Table 3).

Table 3

Number, size and weight of melon varieties in the fairy tale crop (2022-2024)

Name of the variety samples	Number of fruits per bush, pcs.	Fruit			
		width, cm	length, cm	thickness of the meat, cm	weight, g
Gurbek local (st)	2.0	17.7	21.1	5.5	3926.7
Happy	1.7	19.2	36.6	3.3	1553.3
Baby	3.4	13.0	13.1	3.3	1013.7
Golden Valley	1.5	19.5	29.9	3.5	2216.7
Golden top	1.5	18.0	31.5	3.5	1998.3
Rokhat	3.2	15.1	20.9	3.3	1389.0
Suyunchi 2	2.3	14.8	22.9	3.4	1620.0
Zamcha No. 20	3.5	13.0	16.4	3.5	1316.7
Iftikhar (L-160)	2.4	15.7	20.8	3.9	1585.0
Londa Khandalak No. 25	2.6	12.7	14.6	3.7	1723.3
Princess #28	2.8	13.2	14.4	3.1	1380.0
Sun (L-161)	2.0	12.2	13.8	3.7	1614.3
Khandalak yellow №9/4	2.3	15.4	18.8	2.9	719.3
Juicy	2.4	17.4	30.7	4.2	1876.7
Fairytale Khandalak No. 24	2.7	15.8	16.8	3.2	1226.7
Collective Farmer	4.5	12.1	12.0	3.3	1004.7
Kok magiz F1	1.4	18.0	30.5	4.6	2972.7
Dakaro F1	2.2	16.0	26.1	4.6	2388.7
EKF05	0.05	0.3	0.6	0.09	54.2
Sx%	2.1	2.2	2.7	2.4	3.1

When analyzing the fruit width of melon varieties in the Ertagi crop, the varieties Altin vodiya (19.5 cm) and Dilkhush (19.2 cm) showed wide fruits, while the varieties Dakaro F1 (16.0 cm) hybrid and Ertagi Khandalak No. 24 (15.8 cm) had a fruit width that was 1.7-1.9 cm smaller than the Gurbek local (st) variety (17.7 cm), the varieties Iftikhor (L-160) (15.7 cm), Khandalak sarig No. 9/4 (15.4 cm), Rokhat (15.1 cm), Suyunchi 2 (14.8 cm) of melons were 2.0; 2.3; 2.6 and 2.9 cm, respectively, the varieties Malika No. 28 (13.2 cm), Zamcha No. 20 (13.0 cm), Kichkintoy (13.0 cm) - 4.5; It was found that the melon varieties Lo'nda Khandalak No. 25 (12.7 cm), Oftob (L-161) (12.2 cm), Kolkhoznitsa (12.1 cm) had a small fruit width of 5.0; 5.5 and 5.6 cm. In the fairy tale, the fruit width of the melon variety samples, when mathematically and statistically processed, was EKF05 - 0.3 cm and Sx% - 2.2 %.

When analyzing the fruit length of melon samples in the fairy tale crop, it was found that the longest fruits were formed by Dilkhush (36.6 cm) and Oltin Tapa (31.5 cm), while the Gurbek local (st) variety (21.1 cm) was found to be 15.5 and 10.4 cm larger, respectively. Also, the Shirali (30.7 cm), Oltin Vodiya (29.9 cm), Suyunchi 2 (22.9 cm) varieties and the Ko'k Mag'iz F1 (30.5 cm), Dakaro F1 (26.1 cm) hybrids formed fruits that were 9.6; 8.8; 1.8; 9.4 and 5.0 cm longer, respectively, compared to the Gurbek local (st) variety (21.1 cm). When mathematically and statistically processed, the fruit length of melon samples in the fairy tale crop was EKF05 - 0.6 cm and Sx% - 2.7 %.

It was found that the most fleshy fruits of the melon varieties in the Ertagi crop were the Gurbek mestniy (st) variety (5.5 cm), while the melon hybrids Kok Magiz F1 and Dakaro F1 had a fruit flesh thickness of 4.6 cm, Shirali variety had a fruit flesh thickness of 4.2 cm, Iftikhor (L-160) variety had a fruit flesh thickness of 3.9 cm, Lo'nda Khandalak No. 25 and Oftob (L-161) varieties had a fruit flesh thickness of 3.7 cm, Oltin Tapa, Oltin Vodiya and Zamcha No. 20 had a fruit flesh thickness of 3.5 cm, Suyunchi 2 had a fruit flesh thickness of 3.4 cm, Dilkhush, Rokhat, Kichkintoy and Kolkhoznitsa had a fruit flesh thickness of 3.3 cm, Ertagi Khandalak No. 24 had a fruit flesh thickness of 3.2 cm, Malika No. 28 had a fruit flesh thickness of 3.1 cm, and Khandalak Sarig No. 9/4 had a fruit flesh thickness of 2.9 cm. The thickness of the flesh of the fruit of the melon variety samples in the fairy tale crop, when mathematically and statistically processed, was EKF05 - 0.09 cm and Sx% - 2.4%.

According to the fruit weight of melon varieties in the fairy tale, the Gurbek local (st) variety had a weight of 3926.7 g, compared to which a smaller fruit weight of 954.0 and 1538.0 g was determined in the Kok Magiz F1 (2972.7 g) and Dakaro F1 (2388.7 g) hybrids, and a smaller fruit weight of 1710.0 and 1928.4 g was determined in the Altyn Vodiya (2216.7 g) and Altyn Tapa (1998.3 g) varieties. Also, a smaller fruit weight of 2050.0-3207.4 g compared to the Gurbek local (st) variety (3926.7 g) was recorded in the varieties Shirali (1876.7 g), Lo'nda Khandalak No. 25 (1723.3 g), Suyunchi 2 (1620.0 g), Oftob (L-161) (1614.3 g), Iftikhor (L-160) (1585.0 g), Dilkhush (1553.3 g), Rokhat (1389.0 g), Malika No. 28 (1380.0 g), Zamcha No. 20 (1316.7 g), Ertagi Khandalak No. 24 (1226.7 g), Kichkintoy (1013.7 g), Kolkhoznitsa (1004.7 g) and Khandalak Sarig No. 9/4 (719.3 g). The fruit weight of the melon varieties in the Ertagi crop, when mathematically and statistically processed, was EKF05 - 54.2 g and Sx% - 3.1%.

Among the melon varieties in the Ertagi crop, the highest yield per bush was obtained from the Gurbek local (st) variety - 5.74 kg, compared to the Dakaro F1 hybrid - 0.4 kg, Zamcha No. 20 variety - 1.1 kg, Shirali variety - 1.2 kg, Lo'nda Khandalak No. 25 variety - 1.3 kg, Rokhat variety - 1.3 kg, Ko'k Mag'iz F1 variety - 1.5 kg, Kolkhoznitsa variety - 1.6 kg, Malika No. 28 variety - 1.9 kg, Suyunchi 2 variety and Iftikhor variety (L-160) varieties - 2.0 kg, Kichkintoy variety - 2.3 kg, Oltin Vodiya variety - 2.4 kg, Oftob (L-161) variety - 2.5 kg, Ertagi Khandalak No. 24 variety - 2.5 kg, Oltin Tapa variety - 2.8 kg, It was found that the Dilkhush variety - 3.1 kg and the Khandalak Sarig No. 9/4 variety - 4.1 kg formed a low yield. When mathematically and statistically processed, the yield per bush of the melon variety samples in the fairy tale crop was EKF05 - 0.09 kg and Sx% - 2.5 % (Table 4).

Table 4
Yield of melon varieties in the fairy tale crop (2022-2024)

Field of melon varieties in the early late crop (2022-2024)						
Name of the sample	Yield per bush, kg	Productivity, t/ha				The share of marketable crops in the total crop, %
		general	commodity			
			2022	2023	2024	

Gurbek local (st)	5.74	58.6	50.8	61.9	57.5	56.7	96.7
Happy	2.66	27.1	32.0	21.9	24.1	26.0	96.0
Baby	3.41	34.8	34.1	31.3	37.7	34.4	98.9
Golden Valley	3.39	34.6	31.4	32.6	36.3	33.4	96.6
Golden hill	2.90	29.6	27.2	26.5	32.5	28.7	97.0
Rokhat	4.42	45.1	40.5	42.9	49.5	44.3	98.3
Suyunchi 2	3.78	38.6	33.6	42.3	38.3	38.0	98.6
Zamcha No. 20	4.65	47.4	52.0	39.4	48.7	46.7	98.5
Iftikhar (L-160)	3.76	38.4	42.8	37.6	33.0	37.8	98.5
Londa Khandalak #25	4.45	45.4	34.7	49.6	48.7	44.4	97.9
Princess #28	3.84	39.2	41.5	39.2	34.9	38.5	98.3
Sun (L-161)	3.29	33.6	20.4	42.3	36.4	33.1	98.2
Khandalak yellow №9/4	1.68	17.1	14.9	17.6	18.1	16.9	98.6
Juicy	4.52	46.2	55.2	40.5	40.5	45.4	98.4
Fairytale castle #24	3.29	33.6	25.7	35.9	36.7	32.7	97.6
Collective Farmer	4.15	42.4	43.5	35.4	44.1	41.0	96.8
Kok magiz F1	4.27	43.6	37.1	48.2	41.5	42.3	97.1
Dakaro F1	5.35	54.6	63.1	47.9	51.2	54.1	99.0
EKF05	0.09	1.0	1.5	1.6	1.5	1.0	-
Sx%	2.5	2.5	3.9	4.1	3.9	2.5	-

The total yield of melon varieties in the Ertagi field was 58.6 t/ha for the Gurbek local (st) variety, compared to 41.5 t/ha for the Khandalak Sarig No. 9/4 variety with a fruit weight of 0.5<1.0 kg, 23.8 t/ha for the Kichkintoy variety and 16.2 t/ha for the Kolkhoznitsa variety, 11.2 t/ha for the Zamcha No. 20 variety with a fruit weight of 1.1<1.5 kg, 13.5 t/ha for the Rokhat variety, 19.4 t/ha for the Malika No. 28 variety, 20.2 t/ha for the Iftikhor (L-160) variety, 31.5 t/ha for the Dilkhush variety and 25.0 t/ha for the Ertagi Khandalak No. 24 variety, 1.6<2.0 kg, 12.4 t/ha for the Shirali variety, 1.6<2.0 kg The Khandalak No. 25 variety showed a low total yield of 13.2 t/ha, the Suyunchi 2 variety - 20.0 t/ha, the Oftob (L-161) variety - 25.0 t/ha and the Oltin Tapa variety - 29.0 t/ha, the Oltin Vodiya variety with fruits weighing 2.1<3.0 kg - 24.0 t/ha, the Ko'k Mag'iz F1 hybrid - 15.0 t/ha and the Dakaro F1 hybrid - 4.0 t/ha. The total yield of melon varieties in the Ertagi crop, when mathematically and statistically processed, was EKF05 - 1.0 t/ha and Sx% - 2.5 %.

According to the marketable yield of melon varieties in the Ertagi field, for 2022-2024, the average weight of the fruits is 0.5<1.0 kg for the Khandalak Sarig No. 9/4 variety - 16.9 t/ha, the Dilkhush variety - 26.0 t/ha, the Oltin Tapa variety - 28.7 t/ha, the Ertagi Khandalak No. 24 variety - 32.7 t/ha, the Oftob (L-161) variety - 33.1 t/ha, the Oltin Vodiya variety - 33.4 t/ha, the Kichkintoy variety - 34.4 t/ha, the Iftikhor (L-160) variety - 37.8 t/ha, the Suyunchi 2 variety - 38.0 t/ha, the Malika No. 28 variety - 38.5 t/ha, Kolkhoznitsa variety - 41.0 t/ha, Kok magiz F1 hybrid - 42.3 t/ha, Rokhat variety - 44.3 t/ha, Lo'nda Khandalak No. 25 variety - 44.4 t/ha, fruit weight 2.1<3.0 kg Shirali variety - 45.4 t/ha, Zamcha No. 20 variety - 46.7 t/ha, Dakaro F1 hybrid - 54.1 t/ha and Gurbek mestniy (st) variety - 56.7 t/ha.

In terms of the share of marketable yield in the total yield, the Gurbek mestniy (st) variety showed 96.7%, the Dakaro F1 hybrid of melons - 99.0%, the Kichkintoy variety - 98.9%, the Khandalak sarig №9/4 and Suyunchi 2 varieties - 98.6%, the Iftikhor (L-160) and Zamcha № 20 varieties - 98.5%, the Shirali variety - 98.4%, the Malika №28 and Rokhat varieties - 98.3%, the Oftob (L-161) variety - 98.2%, the Lo'nda Khandalak №25 variety - 97.9%, the Ertagi Khandalak №24 variety - 97.6%, the Ko'k mag'iz F1 hybrid - 97.1%, the Oltin teta variety - 97.0%, the Kolkhoznitsa variety - It was found that the yield of the variety was 96.8%, the variety of the Golden Valley was 96.6%, and the variety of the Dilkhush was 96.0%.

Conclusion. In the Nukus district, the export-oriented small-weight melon hybrid Dakaro F1 (54.1 t/ha), as well as the Lo'nda Khandalak No. 25 (44.4 t/ha), Kolkhoznitsa (41.0 t/ha), and Kichkintoy (34.4 t/ha) showed high marketable yields when grown in a fairy-tale crop.

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