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We Select a Variety for Our Republic from Non-Traditional Types of Cabbage to Obtain a High Yield When Planting Kohlrabi Cabbage in Replanting

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Annotation: The article describes the importance of vegetables as a food product and their medicinal properties. Increasing the feeding area has also been reported to have a positive effect on the average weight of pods produced per plant. The advantages of planting technology for kohlrabi cabbage samples according to a 70x25 cm pattern have been scientifically substantiated.

Keywords: seedlings, feeding area, diagram, pod, plant, care.

Relevance of the topic. Consumption of plants from the cabbage family plays an important role in organizing a healthy diet. Among the common types of cabbage, kohlrabi is of great interest in Europe, the USA and some Asian countries. However, this type of cabbage is one of the rare crops for Uzbekistan.

Kohlrabi cabbage is a vegetable crop that is completely different from other cabbages. Kohlrabi is similar in appearance to turnips or rutabaga, but its taste is close to a head of white cabbage and has a softer, sweeter taste in comparison with it (Yurina A.V., 1969).

Kohlrabi cabbage is a biennial plant with a highly developed root system, externally pollinated, in the first year of life it forms a short stem from which pods with a diameter of 10-15 cm are formed. The formation of pods begins from the moment kohlrabi seedlings (with the formation of 2-4 true leaves). The pod thickens and grows simultaneously with the increase in the number of leaves. According to V.S. Dyachenko, the growth (thickening) of pods occurs mainly due to division and increase in the size of stem cells (1979). As a result of the elongation of the base of the leaves on the pods due to the rapid thickening of the pod, a leaf mark (in the form of a scar) remains on the fruit; they are located on the surface of the fruit in a spiral. The edible part of the plant is the shortened, thickened, fleshy, very tasty stem, which is scientifically called the pod. The pods vary in size, shape, color and weight from 100 g to 3 kg.

Results of the experiment. There is no scientifically sound information about growing kohlrabi in our dry, hot summer climate. Therefore, based on the above, in the summer of 2020, on a plot of 70x15 cm, according to the approved program, kohlrabi varieties Amokashi, Vienna White 1350 (name), Violet and Gigant were planted and observed. Phenological, biometric and other observations carried out when growing kohlrabi seedlings in open ground and after planting the seedlings in a permanent place gave the following results.

Observations showed that kohlrabi varieties differed from each other in germination and development at different times after sowing the seeds. The grown seedlings were transplanted to a permanent place in the third decade of July at the age of 45 days.

During the observations, it turned out that the quality indicators of the tested kohlrabi cabbage seedlings were different.

The first (10%) shoots of kohlrabi of the early-ripening variety Vienna white 1350 (name), mid-ripening variety Violet and late-ripening Giganta appeared 6-8 days after sowing, and the complete formation of seedlings (75%) occurred after 9-10 and 11 days, depending from the variety.

Kohlrabi varieties produce 10% and 75% sprouts at different times, which is due to the correlation of their yield with the ripening period. The first sprouts (10%) of the studied kohlrabi variety Violet formed 1 day later than the control and 2 days later than the Amokashi and Gigant varieties. Even at the rate of complete (75%) formation of sprouts, the pattern of formation of the first sprouts was preserved. The first true kohlrabi leaves from the formation of sprouts by variety: formed after 7-8; 10-11 and 12-13 days.

So, we can say that samples of the kohlrabi variety sprout at different times depending on the ripening period. Samples of the kohlrabi variety differed not only in the early or late formation of sprouts and true leaves, but also in the quality indicators of their sprouts.

Before planting kohlrabi seedlings in open ground, it was found that their average length in the Vienna white 1350 variety (control) was 13 cm, and the average stem diameter was 3.0 mm.

For the Violet, Gigant and Amokashi varieties, these quality indicators are respectively: it was 15.7 cm 3.2 mm; 17.7 cm, 4.2 mm; 16.7 cm, 4.1 mm. The length of the height of the seedlings of the Violet variety exceeds the length of the seedlings of the control variety Vienna white 1350 by 2.7 cm, and in the Gigant and Amokashi varieties, respectively: they were higher by 4.7 cm; 3.7 cm.

Before planting, the number of leaves on the plant, the length of the leaf stripe and the size of the leaf blade were also changed.

It was established that the average number of leaves on a plant of the control variety Vienna white 1350 was 5.5 pieces, and in comparison with it, the number of leaves on the bushes of the studied varieties Violet, Gigant and Amokashi was 0.8...0.9 pieces of leaves less. The fact that the number of leaves of the control variety on each bush is 0.8-0.9 more than the number of leaves of the next three varieties is one of the signs of its precocity. The number of Amokashi leaves was 2.2 times greater than that of the control variety.

The studied kohlrabi varieties also differed in the length of the leaf stripe at the germination stage, and in the Gigant variety, long stripe (3.1 cm) leaves were formed at this stage. It was 47.6% longer than the length of the leaf strip of the control variety. Amokashi had the shortest striped leaves (1.5 cm). When planting seedlings, the leaf length of the control variety is 6.2; width 3.4 cm, index 1.8 cm. For the Violet variety, these indicators are 5.8; 3.1 cm, and the index was 1.9. For the Giant variety, the length and width of the leaves are 6.3; 4.2 cm. For the Amokashi variety, these figures are 3.1 cm; 3.2 cm, index was 1.6.

So, when kohlrabi cabbage varieties reach the stage of planting seedlings in open ground, they differ from each other in the number of leaves, the length of the leaf and strip of leaves, and the width of the leaf: wide or narrow.

Kohlrabi cabbage continued to grow from the pod formation stage to the harvest stage along with the formation of leaves, their branches and leaf growth continued. The control variety Vienna white 1350 at the pod formation stage produced an average of 12.4 leaves per bush. It has been established that the number of leaves (11.4 pcs.) formed by this stage increases by 0.6 pcs./bush and by the time of harvesting reaches 55,200 pcs./ha.

It was found that in the varieties Violet, Gigant and Amokashi, the number of leaves

increased by 0.7...2.6 pcs. on the bush. The number of additional leaves produced by these varieties per hectare before harvest is: 82114 and 83057; 86420 units.

Kohlrabi varietal samples differed from each other in the viability of stems, pods, weight and yield (Table 1).

Table 1 Viability of seedlings and yield of kohlrabi varietal samples

Sample varieties	per hectare			**Hosil, t/ga**	Pod			
	Error amount, %	Number of dead plants, thousand/pcs.	Actual number of plants, thousand pcs.		Average weight, g	Height, cm.	Diameter, cm	index
Vienna white 1350 (name)	2,9	2760	92478	18,1	195,8	7,8	8,3	0,9
Violet	3,4	3238	92000	21,9	238,2	10,9	7,4	1,5
Giant	2,8	2666	92570	30,5	330,0	13,1	12,2	1,1
Amokashi	3,0	2857	92380	26,8	290,1	11,2	10,1	1,1

It is known (Table 1) that after transplanting kohlrabi sprouts to a permanent place, a certain number of seedlings (2.8...3.4) died under the influence of external environmental factors.

It was found that 3.4 percent of the shoots of the Violet variety died in the tested kohlrabi varieties. It was found that the error rate of this variety is 0.5% higher than that of the control variety. Of the kohlrabi varieties studied, it was found that the seedlings of the Gigant variety were more viable than other varieties, the number of dead sprouts did not exceed 2.8%. For the Amokashi variety this figure was 3.0%.

Varietal samples of kohlrabi differed from each other in the mass of pods formed on each bush and in yield per hectare. Among the tested samples of the kohlrabi variety, the average weight of pods of the Gigant variety per bush was 330 g, which was 134.2 g or 68.5% higher than the weight of fruits of the control variety.

The weight of formed pods in our tested second and fourth varieties is 42.4 g compared to the Vienna white 1350 variety; It amounted to more than 94.3 g. High or low pod weight also affected gross yield per hectare.

The highest yield (30.5 t/ha) compared to the control variety Vienna white 1350 was obtained from the Gigant variety. It was found that the gross yield of this variety is 12.4 t/ha or 68.5% higher than the yield of the control variety.

The yield of the Violet and Amokashi varieties was 21.0...48.1% higher than the yield of the control variety.

The studied samples of kohlrabi cabbage differed from each other not only in the number of leaves formed on each bush, large or small pods, but also in the shape of the pods.

It has been established that the Vienna white variety 1350 has flat-rounded pods, the Violet variety has oblong pods, and the Gigant and Amokashi varieties are closer to round in shape.

In conclusion, we can say that in order to obtain a high and high-quality harvest of cabbage, Gigant and Amokashi kohlrabi varieties, it is advisable to plant them in the second half of July according to the 70x15 cm pattern.

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