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SELECTION TEST OF PROSPECTIVE CLONES

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created several promising clones of garlic in the following years.

In 2017-2020, promising garlic clones K-89, K-96 were tested.

The period from planting to full germination of garlic bulbs in the selection trial was 25 days in the comparative variety and promising clones.

The period from sprouting to flowering was 163 days, the period from sprouting to yellowing of stems was 212 days, and the technical ripening of bulbs was 217 days. The duration of the growing season in these clones was almost the same.

In the clones of the selection test, the height of the false stem was 27-28 cm, and no significant difference was observed between the clones for this character

(Table 1).

1 Table.

Morphological description of clones in the selection test (2017-2020)

Clones	**False stem height, cm**	**Flower stem length, cm**	**Leaf**		
			quantity, pcs	**length, cm**	**width, cm**
Hardy, comparative	28	40	9,0	46	3,2

ISSN: 2775-5118 VOL. 2 NO. 5 (2023) I.F. 9.1

variety					
K-89	28	34	9,0	47	3,4
K-96	27	37	9,0	47	3,5

The length of the flower stem was 40 cm in the comparative variety and was 3-6 cm higher than the experimental clones.

No significant difference in leaf number and leaf length per plant was observed among the tested clones. However, the leaf width varied among varieties. In resistant varieties, the leaf width was 3.2 cm. It was observed that this indicator was 3.4-3.5 cm in K-89, K-96 clones.

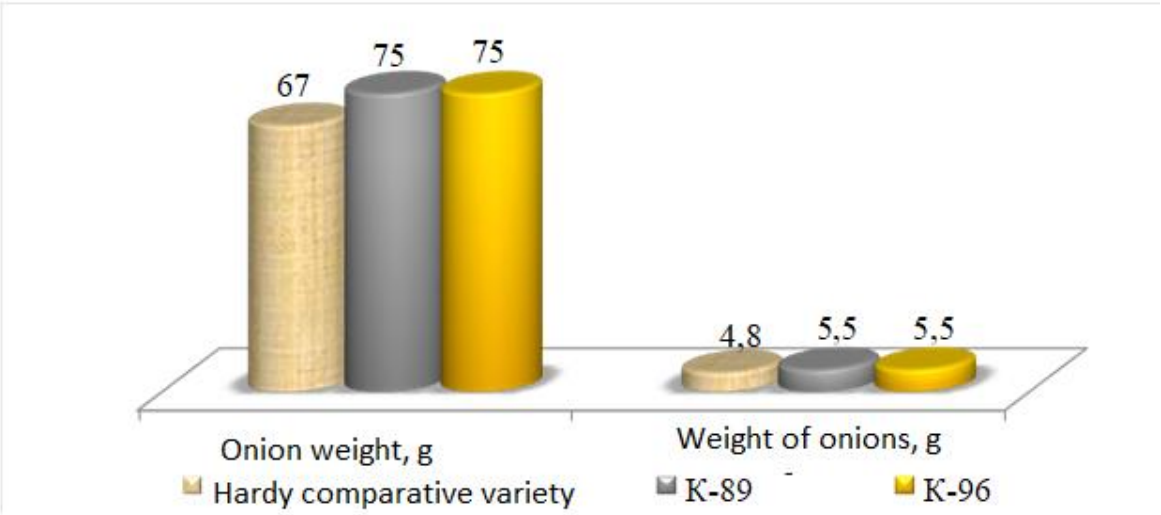


Figure 1. Bulb head and bulb weight of garlic clones in selection test, g (2017-2020)

In the clones in the selection test, the onion head height and diameter were almost the same, the index was 0.66-0.70, and the shape of the onion heads was flat and round (Fig. 1).

One of the most important indicators is the weight of the garlic bulb. In our studies, K-89, and K-96 clones with high index of bulb weight were isolated (pictures 2-3).

In the comparative variety, the weight of the onion head was 67 g. This indicator was 75 g in clones K-89, and K-96, which was 8 g higher than the comparative variety. The average weight of one bulb was 4.8 g in the comparative variety, and 5.5 g in the K-89, and K-96 clones.

ISSN: 2775-5118 VOL. 2 NO. 5 (2023) I.F. 9.1

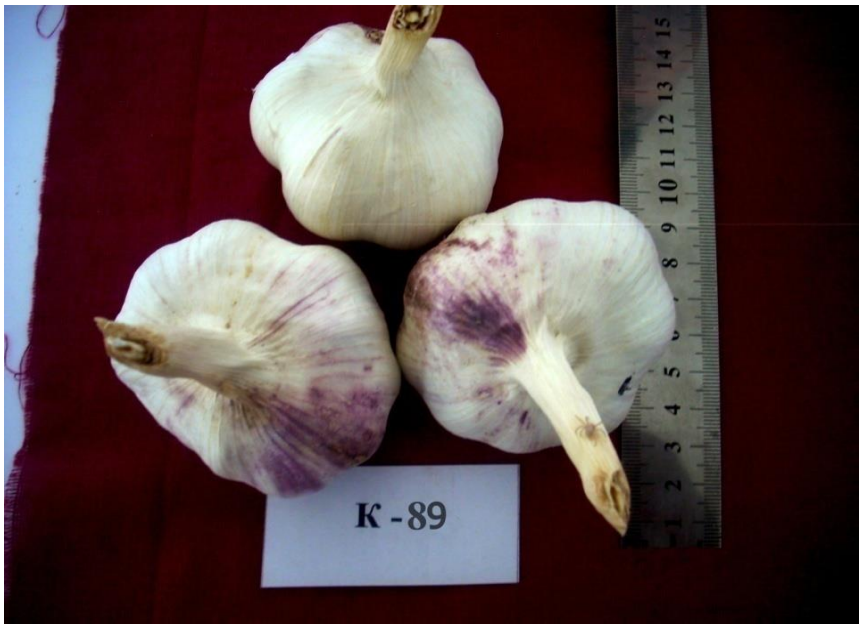
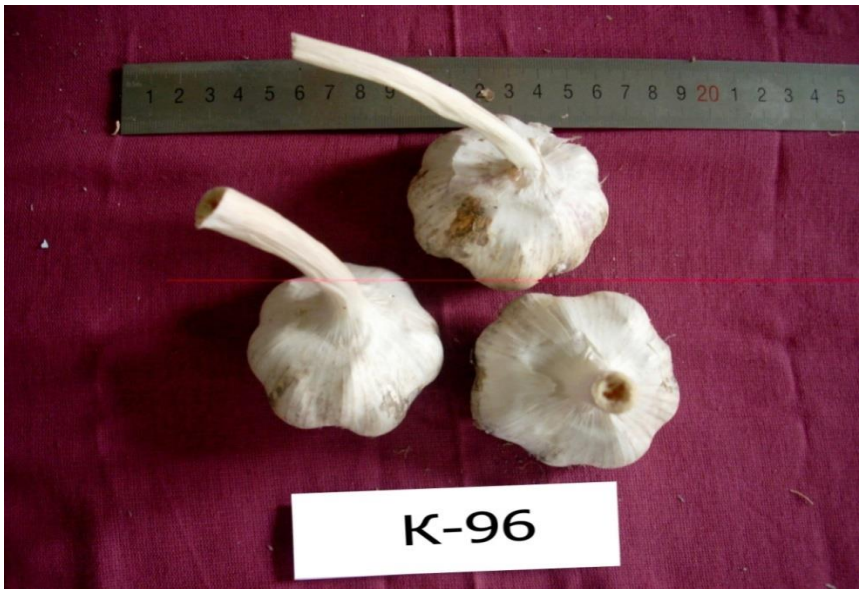


Figure 2.



ISSN: 2775-5118 VOL. 2 NO. 5 (2023) I.F. 9.1

Figure 3

For example, the total productivity of the Chidamli comparative variety was 26.6 t/ha, while this indicator reached 28.7-29.5 t/ha in clones K-89, K-96 (Fig. 4). The productivity of clone K-88 was 95.1% compared to the comparative variety. This clone yielded 1.3 t/ha less than the reference variety.

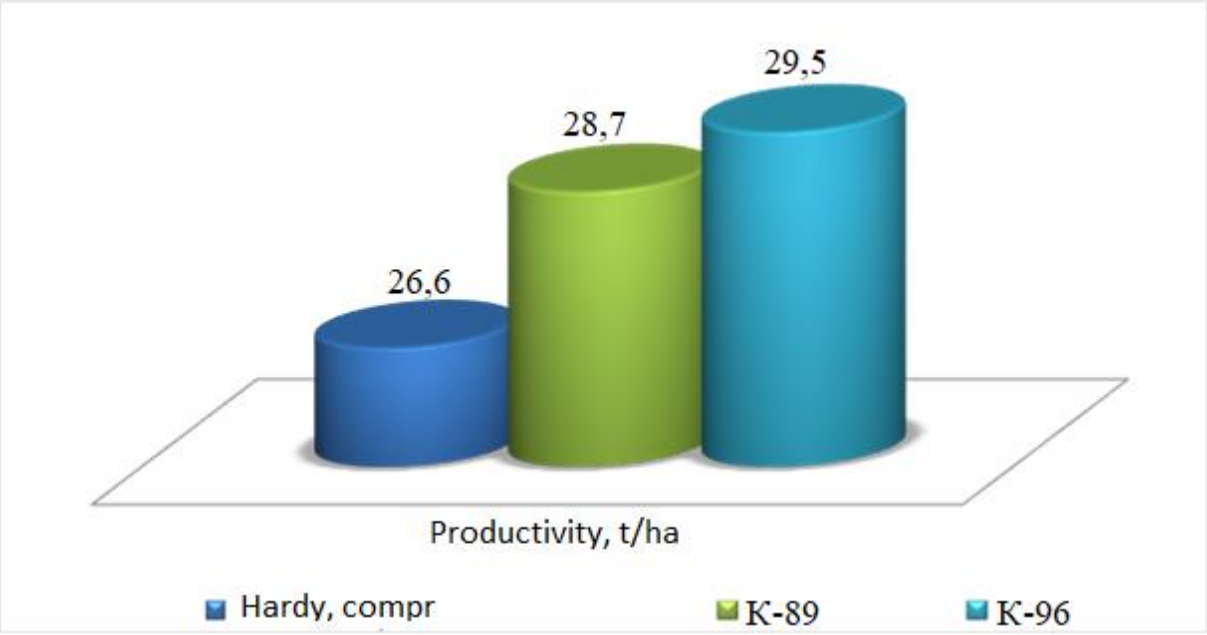


Figure 4. Productivity of garlic clones in a selection trial

(2017-2020)

G.F. Khodjaev (1969), N.S. Bacuras (1973), P.F. According to Sokol (1978), bulbs with a diameter of less than 2.5 cm are considered unproductive crops. In our research, the non-standard commercial harvest included onions that were not diseased, had dry skins that were not opened, and bulbs that were not torn and were edible, but the diameter of the bulb was less than 2.5 cm.

The total yield of clones K-89, and K-96 was 7.9-10.9% higher than the comparative variety. The highest marketable productivity was also observed in clones K-89, and K-96 and it was 28.4-29.2 t/ha. In these promising clones, 98.9% of the total yield was considered marketable (Table 2).

Table 2.

Productivity of garlic clones in a selection trial

(2017-2020)

Clones	**Productivity, t/ha**				
	Common	**compared to the comparative variety, %**	**goods**	**compared to the comparative variety, %**	**non-standard, expensive**
Hardy, comparative variety	26,6	100	26,2	100	0,04
K-89	28,7	107,9	28,4	108,3	0,03
K-96	29,5	110,9	29,2	111,4	0,02
EKTF 05 t/ha	2.26				
Sx,%	2,0				

According to the results of the selection test, K-89, and K-96 clones were found to be promising in terms of important economic characteristics, and general and marketable productivity. In these clones, the average weight of the bulb was 75 g, the average weight of bulbs was 5.5 g, and the number of bulbs was 13. The highest total (28.7-29.5 t/ha) and marketable (28.4-29.2 t/ha) yields were also observed in these clones.

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