Selection of Variety Samples with High Valuable Economic Characteristics From Soybean Collection Nursery

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Abstract. This article contains data on 265 local and foreign soybean varieties grown in the conditions of the Tashkent region and the selection of the best varieties from them according to biological and economic characteristics.

Key words: soybean, breeding, population, pollination, soil, crop, protein, amino acids, oil.

The complexity of his work. Soy is a very ancient crop. Studying the diversity of soybean types and forms, scientists believe that it was formed mainly in three centers: Southeast Asia, Australia and East Africa. For many centuries, soy and its products have served as the main source of protein for the people of eastern countries. Soy was cultivated in China 6-7 thousand years ago. Later, it was cultivated in Georgia, Ukraine, the Kuban and the North Caucasus [page 1; 8]. It is considered a big task for scientists to create and grow agrotechnics of early ripening varieties whose pods are resistant to diseases and pests. That is why soybean varieties imported from local and foreign countries are cultivated and studied in the scientific research institute of rice cultivation. In order to create new soybean varieties, among the variety samples in the collection nursery, they are selected according to their important valuable and economic characteristics (growing period, height of the stem, number of pods per plant, location of the lower pods, yield, protein content and fat content of grains, etc.) that is, it is transferred to the breeding nursery. Kh.N. Atabaeva, M.A. Sattarov, R.U. Saitkanovalar stated that the newly created soybean varieties will be selected for submission to the state variety test [2; pp. 5-6].

In the experiments, 265 varieties and varieties brought from different countries of the world were selected in the collection nursery with the best indicators (growing period, height of the stem, number of pods per plant, location of the lower pods, productivity, high protein and fat content of grains, etc.) cultivars and cultivars were planted by hand in the third decade of April and the first decade of May on an area of 1.8 m2, without returns, at the rate of 60 kg/ha, with a row spacing of 60x10-2. In the nursery of the collection, resources were constantly replenished and updated.

In order to compare the samples of the planted variety, as a control, the medium-early soybean variety "Uzbek-2" was planted after every 10 samples.

During the growth period of the plant, all phenological observations were made based on the manual produced by the variety testing commission. Among them, the germination, branching, flowering, podding and ripening periods of the plant were recorded. At maturity, 5 plants were taken from each soybean cultivar sample for biometric analysis. In this analysis, the growth period, height, lower pod position, number of branches, number of pods per plant, grain weight per plant, and 1000 grain weight of the variety samples were determined. During the studies, 10 soybean varieties with the highest economic value were selected and their full description is given in Table 1.

Compared to the data presented in the table, compared to the control in terms of early ripening, the samples of Korean US-80(699), US K-9195, 537071, Australian 530539, Korean I-540202, Soyani ripened 14-20 days earlier and the location of the lower pods in these samples The number of pods in one plant with a height of 3-5 cm was 10-35, the weight of grains in one plant was 2-4 grams, and 1000 grains weighed 1923 grams. In the remaining samples, the vegetative period of plant growth was shortened to 2-5 days. The number of horns did not differ much.

The varieties selected from the soybean collection nursery will be transferred to the selection nursery next year, and research work will be continued.

Table 1

Description of samples selected from the soybean collection nursery.

№	Catalog number	Origin	Growing period, day	Plant height, cm	Location of the lower dukkah	Number, unit		Weight, g		The shape of the stem
						Horn	Number of pods per plant	grain on one plant	1000 grain weight	
1	Uzbek 2	Uzbekistan	132	128	13	2	85	21.6	153.0	An upright grower
2	K-9195	USA	115	130	18	2	110	22,6	176,2	An upright grower
3	US 80(-699)	Korea	112	140	14	3	145	24.5	168,0	An upright grower
4	530539	Australia	115	120	14	2	110	24.5	172.4	An upright grower
5	537071	USA	117	125	15	3	115	23.5	169.2	An upright grower
6	526	USA	124	135	18	2	110	25.5	162.2	An upright grower
7	6439	Icarda	125	130	16	3	108	24.6	181,4	An upright grower
8	9176	Krasnadar	123	110	14	3	125	25.5	177.8	An upright grower
9	9601	Maldives	122	118	15	2	108	28.5	157.2	An upright grower
10	I 540202	Korea	118	143	23	3	112	24.2	158,2	An upright grower
11	Liniya- 3	Uzbekistan	130	125	18	3	98	26.7	184.2	An upright grower

Conclusion. The following conclusions were drawn from the obtained data. Soybean varieties isolated from the collection nursery will be transferred to the selection nursery next year, and research work will be continued.

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