

Morpho-economical Indicators of Some Local and Foreign Soybean Varieties Planted as Main Crops

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Abstract--- *This article examines the number of legumes per plant, which is one of the most important morpho-economical features of soybean varieties grown as the main crop in Samarkand region. According to the data obtained, the highest number of legumes was recorded in foreign varieties Nena R 1 variety from Kazakhstan, Sparta from Russia and Orzu from local varieties.*

Keywords--- *Soybean, Main Crop, Morpho-economy, Legume.*

I. INTRODUCTION

Today in our country, special attention is paid to the development of agrotechnologies for legumes, including the creation, testing and adaptation of new varieties of soybeans to specific soil and climatic conditions, cultivation, storage and production of high-yielding, high-quality, environmentally friendly grain products. [1]

In particular, the Action Strategy of the Republic of Uzbekistan for 2017-2021 states that “Consistent development of agricultural production, further strengthening of food security, expansion of production of environmentally friendly products, placement of oilseeds on vacant lands, intensive methods of agricultural production, First of all, the introduction of modern resource-saving agro-technologies” is one of the important tasks. Therefore, the study of optimal methods of planting soybean varieties, norms and irrigation procedures is an urgent task. [2]. The soil and climatic conditions of our country are very favorable for the cultivation of soybeans, which can be grown as a primary and secondary crop in all regions and in Karakalpakstan. [3]

In the irrigated lands of Samarkand region, 16 varieties of foreign and domestic soybean varieties were planted as the main crop by selecting the most widely cultivated varieties in the vast areas of the republic.

II. OBJECT AND METHOD OF RESEARCH

Our research was conducted in 2019 in Pakhtachi district of Samarkand region. The source of the study was the study of morpho-economical features of local and foreign soybean varieties during the period of legume. The object of research is the selection of Russian varieties Selekt-302, Selekt-301, Selekt-201, Duar, Chara, Arleto, Sparta, Vilona, Amigo and Kazakh selection Nena, Nena-R1 and Eureka-357 varieties, local varieties Genmas-1, Orzu, Selekt-302 Andijan varieties were studied by sowing on May 10 as the main crop.

The biological characteristics of the varieties, irrigation and feeding regimes are also of great importance in the formation of soybean pods. According to H. Atabaeva, 10-15 days after the onset of flowering in the soybean plant,

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Pods begin to form in the lower layers of the stem, and flowering and the formation of pods occur alternately from the lower part of the stem to the upper part. The resulting full pods also gradually turn yellow and go through the ripening phase. [4]

Observations show that the development of a pod in early-maturing varieties of soybean is 14-17 days, in medium-maturing varieties - 20-25 days, and in late-maturing varieties - 25-30 days. The development process of legume depends on varietal characteristics, soil and climatic conditions. [5]

When studying the bioecological and morphophysiological characteristics of various foreign and domestic soybean varieties planted as the main crop in the soil and climatic conditions of Samarkand region, the following indicators were obtained.

Table 1: Number of Foreign and Domestic soybean varieties Planted in Samarkand Region, Pieces

№	Varieties	\bar{x}	G	V
1	Nina (Kazakhstan)	38.7±3	7.81	20.16
2	Evrica 357	30.2±2	6.45	21.33
3	Nena R 1	58.20±10	31.6	54.29
4	Selecta 302(Russia)	31±2	6.03	20
5	Selecta 301	33.6±4	12	36
6	Selecta 201	41.40±9	28.6	69
7	Sparta	59±8	23.7	40.1
8	Vilana	31.5±4	12	37.1
9	Duar	33.40±2	6.47	19.36
10	Amigo	26.3±2	6.8	26
11	Chara	55±7	20	36.01
12	Arleto	57.3±7	21	37
13	Selekta 302 Andijan	72.6±7	21	29
14	Orzu	82±7	23	28
15	Genetic-1	56.5±5	15.2	28
16	Sochilmas	75.9±8	25.22	33.27

Nena R 1 variety (58.20 ± 10 respectively) in foreign Kazakh varieties, Sparta variety in Russian varieties (59 ± 8), Russian Dream variety in local varieties (82 ± 7), and the lowest in foreign varieties are foreign. In the Kazakh varieties, Eureka-357 variety (30.2 ± 2), Russian varieties, Amigo variety (26.3 ± 2), and local Genetic-1 variety (56.5 ± 5) were observed. The reason for the good germination of the dream variety is due to the fact that this variety is adapted to the climatic conditions of Uzbekistan and ripens quickly.



III. CONCLUSION

Thus, when studying the bioecological and morphophysiological characteristics of various foreign and domestic soybean varieties in the soil and climatic conditions of Samarkand region, the plant Nena R 1 in foreign Kazakh varieties, Sparta in Russian varieties and Orzu in local varieties achieved high results.

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