Volume 2, Issue 12, December - 2024
ISSN (E): 2938-3781

Web of Agriculture: Journal of Agriculture and Biological Sciences
webofjournals.com/index.php/8

EVALUATION AND SELECTION OF SEED NUMBER IN THE FRUIT OF CAPPARIS SPINOSA L BASED ON PRODUCTIVITY INDICATORS

Ш. М. Эргашев
к.х.ф.ф.д.(Phd)

Abstract
Of particular importance is the scientific basis for the germination of seeds of the plant Capparis spinosa L.

Keywords: Areas, fruits, seeds, fertility, productivity.

Introduction

The study of the mass of 1000 seeds of the seeds produced in different populations of cowpea showed that this indicator varied from 4.89-5.32 g (average 5.10) to 7.05-7.81 (average 7.36) g in different populations, and the most large seeds were observed in populations growing in Qibray district of Tashkent region and Zomin district of Jizzakh region (Table 1). The size of the seeds is one of the main indicators that determine their planting qualities, and always the large seeds are highly valued, because from the large seeds, strong grass sprouts, which are resistant to external environmental factors and have high viability. The mass of 1,000 seeds of the kovel population distributed in Samarkand region, Samarkand district was 5.10±0.15 g, the coefficient of variation (sv%) was 2.92%, while the mass of 1,000 seeds of the kovol population distributed in Ishtikhon district of Samarkand region, which is relatively well supplied with moisture, 6.74-7.21 g, average 7.00±0.17 g, and the coefficient of variation was found to be 2.41%. Compared to Samarkand region, in Jizzakh (Zomin district) and Tashkent (Qibray district) regions, it was found that the mass of 1000 pieces of seeds is higher as a result of favorable climatic conditions and availability of humidity. In Zomin district, the mass of 1000 seeds was 7.02-7.85 g, the coefficient of variation was 3.22%, while in Kibray district, the values were 7.05-7.81 g and 3.07%, respectively. Therefore, it can be said that the existing ecological environment in Qibray of Tashkent region and Zomin district of Jizzakh region is the ecological optimum for the kovol plant, and it is appropriate to collect seed reserves from these regions in the cultivation of kovol plant.

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1 – Table Caraway seeds The mass of 1000 grains is g , (2024)

No	Kibrai district, Tashkent region	Jizzakh region, Zomin district	Ishtikhan District, Samarkand Region	Kattakurgan District, Samarkand Region	Samarkand Region, Nurabad District	Payarik District, Samarkand Region	Samarkand region, Samarkand district	Samarkand Region Samarkand District 1-Tepakul reproduction
1	7.52	7.02	6.74	6.42	6.12	5.23	4.89	6.84
2	7.64	7.27	7,12	6.15	6.35	5.74	5.11	6.45
3	7.52	7.43	6.98	6.13	6.28	5.16	4.96	6.81
4	7.81	7,85	7,12	6,14	6,14	5,52	5,21	6,68
5	7,32	7,42	6,85	6,54	5,97	5,48	5,32	6,74
6	7,05	7,31	7,21	6,23	5,89	5,32	5,16	6,54
7	7,53	7,34	7,14	6,21	6,42	5,42	5,17	6.43
8	7.64	7.23	6.87	6.32	6.17	5.67	4.95	6.8
∑	60.03	58.87	56.03	50.14	49.34	43.54	40.77	53.29
Lim	7.05-7.81	7.02-7.85	6.74-7.21	6.13-6.54	5.89-6.42	5.16-5.74	4.89-5.32	6.43-6.84
M	7.50	7.36	7,00	6,27	6,17	5,44	5,10	6,66
m	0,23	0,24	0,17	0,15	0,18	0,20	0,15	0,17
V,%	3,07	3,22	2,41	2,37	2,93	3,73	2,92	2,49

The growth of seeds in agricultural conditions indicates that favorable conditions have been created for plants. Plowing the land is one of such convenient conditions for plants, that is, due to the accumulation of moisture in the plowed land, it is preserved longer. The weight of 1000 seeds of the population of Samarkand district of Kovul was 5.10 g in natural conditions, while in cultivated conditions this indicator was 6.66 g, that is, an increase in the absolute weight of seeds by 1.55 g was observed. Therefore, it is appropriate to use cultural fields for obtaining high-quality seeds of corn. Thus, the size of the seeds determines the ecological optimum of the place where the plant grows. The weight of 1,000 grains of the seeds of the kovul populations grown in different parts of the distribution area is different, depending on the growing conditions, this indicator varies from 5.10±0.15 g to 7.50±0.23 g.

Kovul is a wonderful plant that provides a large amount of nectar, which allows for a sharp increase in the efficiency of the use of hilly land, provides a valuable medicinal, exportable product, and is a source of nutritious food for livestock. In addition to these valuable properties, it is not picky, grows easily in arid, low-fertility areas and produces high yields. Heat-loving, drought-resistant. By establishing its plantations in the hilly conditions, it is possible to provide the local population with jobs and, importantly, an additional source of income alternative to cattle breeding. High temperature and humidity are necessary for the germination of seeds. Such conditions are in the hills not always, when the humidity is sufficient, the temperature is insufficient, and when the temperature is sufficient, the humidity is insufficient. Therefore, the seeds of the safflower lie in

Volume 2, Issue 12, December - 2024
ISSN (E): 2938-3781

the soil without germinating, that is, its seeds belong to the group of macrobiotic seeds. Therefore, it is one of the urgent tasks to find and apply methods of increasing the germination of seeds. For this, it was felt necessary to determine the productivity of the seed.

The research source was seeds collected from wild populations of yams in the Samarkand, Jizzakh, and Tashkent regions, as well as plants growing in natural conditions.

In the study of the seed productivity of the cowpea, the fruits of 120 (15*8) pieces of almost the same size were collected from different populations, and the average number of seeds in the fruits was determined (Table 2).

Table 2 The number of seeds in the fruit of kovul, in pieces, (2024)

No.	Kibrai district, Tashkent region	Jizzakh region, Zomin district	Ishtikhan District, Samarkand Region	Kattakurgan District, Samarkand Region	Samarkand Region, Nurabad District	Payarik District, Samarkand Region	Samarkand region, Samarkand district
1	302.3	297.5	213.4	174.6	74.1	245.4	172.3
2	291.8	288.3	246.5	174.8	76,6	241,3	213,8
3	292,5	297,7	212,8	222,4	94,7	213,7	168,7
4	287,8	287,4	251,2	176,4	98,3	214,7	167,9
5	289,5	291,6	243,4	184,6	99,0	213,6	213,4
6	284,1	323,4	211,5	186,7	74,5	212,4	211,7
7	301,4	289,7	234,7	211,6	87,4	241,3	217,8
8	284,2	297,1	215,6	217,3	85,6	216,2	219,4
∑	2333,6	2372,7	1829,1	1548,4	690,2	1798,6	1585
lim	284,1-302,3	287,4-323,4	211,5-251,2	174,6-222,4	74,1-99,0	212,4-245,4	167,9-219,4
M	291,7	296,6	228,6	193,6	86,3	224,8	198,1
m	6,98	11,63	17,03	20,19	10,42	14,87	23,75
V,%	2,39	3,92	7,45	10,43	12,08	6,61	11,99

As can be seen from the table, the populations distributed in the Kibray district of Tashkent region and the Zamin district of Jizzakh region were distinguished by the highest seed productivity, with an average of 291.7±6.98 and 296.6±22.69 seeds per fruit, respectively, while in the population distributed in the Nurabad district of Samarkand region this indicator was 86.3±5.30 seeds. In the natural population of kuul distributed in the Samarkand region, Samarkand district, it was found that one bush of adult plants produced an average of 463 fruits. Thus, it was found that one bush of kuul produced an average of 91674 seeds, which is 458.3 g.

Summary

Thus, it was found that the seed productivity of the mullein is different in different populations, and the number of seeds formed in one fruit varies from 86.3 to 296.6 on average in geographical and ecological regions. The highest seed productivity (296.6 pieces) was observed in the population of Zomin district of Jizzakh region.

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webofjournals.com/index.php/8

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