The Influence of the Flowering Period Before the Second Harvest on the Productivity of Beda Collection Samples

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Annotation. The research work was carried out at the Research Institute of Agrotechnologies of breeding, seed production and cotton cultivation. The alfalfa collection presents the results obtained by studying the economic characteristics of alfalfa samples stored for 1 year, on the effect of the flowering period before the second harvest on productivity. The collection of samples collected from different continents and countries contains about 6 thousand samples of alfalfa. The creation and selection of new starting materials and varieties by studying the main valuable economic characteristics of alfalfa samples for recommendations for planting in agricultural areas is important for animal husbandry and crop rotation. In the course of the research work carried out, it will be necessary to conduct a study on the unit of feed, hay yield, flowering time and other valuable features of the farm that are important. In the course of our research, 45 varieties and samples were planted and studied, which have been preserved in the alfalfa collection, but have not been studied to this day. As a result of the study, 18 samples showed a negative result, of which 27 out of 45 samples that bloom faster than the template variety Toshkent1 and, in turn, can affect the number of harvests over the calendar year period.

Keywords. Alfalfa, collection, seedlings, variety, sample, livestock, green mass, valuable agricultural attribute, productivity, productivity, template

Introduction. Alfalfa is the most important and widespread type of crop in animal husbandry and crop rotation. In this case, the cost of livestock products produced is determined by the price of consumed feed. The basis of the cultivation of cheap livestock products is the correct organization of the feed base, which does not only develops the industry.

Alfalfa also, accumulates free nitrogen in the soil with the aid of nitrogen-fixing bacteria, because it is a plant that resists to cold, heat and drought. Alfalfa–Medicago sativa, a perennial plant belonging to the Medicago family, has a well-developed root system, upright stems, herbaceous, well crowned.

It was observed that the moisture capacity of the alfalfa field before irrigation increases from 60% to 80%, and it has a positive impact on the leafing of the alfalfa in the second and next year, that is, the enlargement of the leaf surface. This has a direct positive effect on increasing the productivity of alfalfa and improving land reclamation. [1] (Abdurakhmanov, et al. 2012).

An effective method in alfalfa breeding is to involve samples of geographically distant origin in crossbreeding, which leads to the creation of very promising heterosis hybrids. As a consequence of using this method, it was possible to create a number of favourable hybrid populations in the alfalfa breeding and breeding laboratory. [2] (Joraev et al. 2007).

The yield of hybrid seeds depends on the selection of parental forms, and when creating hybrids, the selected variety or samples should give a generation that is superior to the zoned variety in terms of blue mass and nutrients. For this reason, when selecting parental forms, it is vital to take into account their adaptation to the soil and climate conditions of this region, disease resistance, differences in reproduction and geographical origin. That is, high heterosis hybrids obtained as a result of long environmental breeding and creating new varieties based on them will bear fruit in alfalfa selection.[3] (Sabirov et al. 2018).

Materials and styles. 45 alfalfa heterogeneities and samples from the PSUEAITI alfalfa collection were used as research objects. Experiments which carried out in the field were done by the Dospekhov method and according to the method in the "Primary materials" section of the book "Metodika seleksii

mnogoletnix trav" written by the scientists of the All-Union Scientific Research Institute of Fodder Crops named after V.R. Williams A.M. Konstantinov and others in 1969. (3) Konstantinov

The main part: The table indicates the results of the study on the blooming time of alfalfa varieties and samples. The results were obtained at the end of July this year.

Table 1
Flowering period before the second harvest

Order number №	Model name or collection name	Number of plants	Flowering date (02.07.2022 previous harvest date)	Days between first and second flowering (average) (70%)
1	Маҳаллий 1	29	28.07.2022	26
2	Маҳаллий 2	11	27.07.2022	25,3
3	Маҳаллий 3	26	27.07.2022	25
4	Баренбург	21	25.07.2022	23
5	Банат	24	27.07.2022	25
6	Емиляна	25	26.07.2022	24
7	к-6194	2	23.07.2022	21
8	к-6220	3	26.07.2022	23
9	к-6105	2	24.07.2022	22
10	к-6197	3	24.07.2022	22
11	к-6804	16	26.07.2022	24,5
12	к-6719	1	27.07.2022	25
13	к-6682	1	30.07.2022	28
14	к-6204	12	30.07.2022	28
15	к-6571	20	24.07.2022	24
16	к-6100	1	24.07.2022	22
17	к-6171	2	26.07.2022	24
18	к-6735	4	28.07.2022	26,5
19	к-6218	1	26.07.2022	24
20	к-6172	2	24.07.2022	22
21	к-6637	1	24.07.2022	22
22	к-6163	2	28.07.2022	26
23	к-6186	2	24.07.2022	22
24	к-6224	2	25.07.2022	23
25	к-6200	1	28.07.2022	26
26	к-6750	3	24.07.2022	22
27	к-6771	1	30.07.2022	28
28	к-6660	1	27.07.2022	25
29	к-6227	7	28.07.2022	26
30	XXX	16	26.07.2022	24
31	к-6181	2	27.07.2022	25
32	к-6649	4	24.07.2022	22
33	к-6629	1	24.07.2022	22
34	к-6650	3	24.07.2022	22
35	к-6219	1	24.07.2022	22
36	к-6535	1	24.07.2022	22
37	к-6662	2	26.07.2022	24
38	к-6638	2	30.07.2022	28

39	к-6643	1	26.07.2022	24
40	к-6656	8	24.07.2022	22
41	к-6633	1	25.07.2022	23
42	к-6640	1	26.07.2022	24
43	к-6756	1	27.07.2022	25
44	к-6753	1	30.07.2022	28
45	к-6757	1	24.07.2022	22
46	Тошкент 1	82	26.07.2022	24,3

As can be marked in this table, the date of flowering (70%) of heterogeneity and samples between the first and second harvest is 2.07.2022, in which 70% flowering was carried out. The data in the table are also compared to the Tashkent-1 template type. The average day for 70% flowering of sample Tashkent-1 was 24.3 days. That is, as of July 26, 70% have bloomed. The sample with collection number k-6194 took 21 days (23.07.2022) for 70% flowering and had the best performance among all samples. Collection number k-6105, k-6197, k-6100, k-6172, k-6637, k-6186, k-6750, k-6649, k-6629, k-6650, k-6219, k-6535, Samples k-6656, k-6757 spent 22 days (25.07.2022) for the sample to bloom 70%. As a consequence of the study, the above varieties and samples also marked the superiority of the sample over the Tashkent-1 variety. It required 23 days (25.07.2022) for 70% flowering of these samples and the foreign variety Barenburg, which received the numbers k-6633 k-6224 k-6220 from the alfalfa collection. Foreign variety Emilyana, an unnumbered sample from the collection (as shown in table XXX) and samples with collection numbers k-657,1 k-6171, k-6218, k-6662, k-6643, k-6640 template type showed 70% flowering in 24 days, which is slightly better than Tashkent-1, i.e. Local 2 (25.3 days), Local 3, Banat, k-6804 (24.5 days), k-6719 k- 6660 k-6181 k-6756 is slightly negative of the model variety, i.e. 70% bloomed for 25 days. Local-1 sample planted by residents, collection samples such as k-6735, k-6163, k-6200, k-6227 spent 26 days for 70% flowering and had a negative indicator compared to the model variety. The following samples indicated the worst indicators in terms of average flowering day. In samples k-6682, k-6204, k-6771, k-6638, k-6753, these indicators were 28 days.

Summary. The following conclusions can be drawn from the table in terms of number of days until flowering and the day of flowering of alfalfa samples before the second harvest of the first year of study. 27 out of 45 samples that flower faster than the sample Tashkent-1 variety and, in turn, may have an impact on the number of harvests during one year of calendar. 18 showed a negative result. k-6194 (21 days), k-6105, k-6197, k-6100, k-6172, k-6637, k-6186, k-6750, k-6649, k-6629, k-6650 , k-6219, k-6535, k-6656, k-6757 (22 days) samples showed best results, while k-6682, k-6204, k-6771, k-6638, k-6753 samples showed worst results.

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