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SELECTION OF APRICOT VARIETIES

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ABSTRACT

The article provides research observations on the formation of apricot trees to study local and foreign varieties of apricots in the conditions of the Kashkadarya viloyati and to select varieties that are promising, as well as the correct formation of pine-Shaba in trees where the shape is given and annual varieties are shortened, the quality of fruits increases, adaptability to external conditions.

KEYWORDS

Climate, shape, branch, quality, bud, flower, fruit, harvest, local, garden, edge, selection.

INTRODUCTION

Prunes are a type of fruit with high potential productivity seedlings planted as early as 3-4 years, the elements of the crop are formed. Usually an apricot tree that is not given a shape and is not cut, with a rich harvest in the years of its initial harvest, its aging period is accelerated, fruits and leaves are crushed, quickly and strongly damaged by various diseases. This results in the branches becoming glabrous, while the fruit-forming zone moves to the ends of the branches. As a

result of the weight of the crop, the branches are broken and the tree is damaged.

Scientific significance: in recent years, many varieties of apricots have been created in the field of horticulture as well as by foreign research institutions and domestic breeders, which have a complex of useful qualities. There has not yet been enough research work on this in our republic. It follows that in



the Kashkadarya region, it is aimed at developing effective norms through new varieties of unexplored apricots, their comprehensive agrobiological and technological assessment, as well as methods for shaping native and imported apricot varieties, cutting annual growing branches in parameters suitable for apricot varieties and giving them a suitable shape. From this, our research is to expand the areas of promising apricot gardens and achieve a stable, high-quality and abundant harvest by studying apricot varieties and developing effective methods of shaping trees and pruning correctly.

The cultivation of apricot fruits and products in all regions of the Republic has sharply decreased as a result of various factors. In solving the problems that have arisen and further increasing the yield of apricots and prunes, it is necessary first of all to choose varieties suitable for climatic conditions for each area, as well as to develop effective agrotechnical measures aimed at increasing their yield.

In most apricot varieties, mainly in the winter-spring season, there is damage to flower buds and formed fruits under the influence of early spring frosts. Accordingly, the choice of varieties, taking into account the biological characteristics of the varieties under such conditions, is to achieve regular fruiting by applying agrotechnical measures in optimal options for their duration based on observed and determined data.

Degree of study: in the opinion of the authors who have carried out research in this regard, shaping and cutting in horticulture is one of the main agrotechnical measures. In connection with this, according to most scientists who have dealt with the problems of shaping and pruning fruit trees in different years, one of the agrotechnical measures that ensure the development and growth of the underground part of any tree is the

orderly pruning of branches. As a result of pruning annual branches, the relationship of the parameters of the branches, growth and fruit formation changes. The number and length of the branches of the fruit increase. With this, the light radiating to the Branch-Branch part increases in one time, the leafiness of the branches to the fruits increases, and this fertility has a positive effect on long life. [1. 2. 3. 4]

The effect of pruning on fruit trees is multifaceted and depends on several reasons. It has been found to depend on the agrotechnical measures developed, the methods of pruning and the degree of pruning, the survival of the tree, the timing of pruning and shaping, as well as the air temperatures during the growing season

Pruning trees with buds located on the branch part of the branch-trunk enhances growth processes. As a result of this, the growth of branches is accelerated, and changes in the function of generative organs occur. From generative shoots formed after giving the correct shape and cutting, often larger fruits are formed. Cutting activates vital processes, replacing old organs with a new one. In regulating correlation changes, it has been observed that some part tasks of trees are increased and others are reduced [5].

The effect of the degree of pruning of branches is due to the peculiarity of its formation to apricot fruits, the intensity of the slowdown of growth from year to year in late or non-optimal pruning has decreased, and the increase in the yield of trees has increased with tension. It has been observed in the formation of very poor-quality fruits in European varieties of apricots. The fact that apricots cannot provide excess shoots, like other types of fruits, therefore, in an orderly or irregular cutting, it is very easy and has been found to form a lot, the fruits crumble, reducing their

succulence and aroma. It has been observed that this results in fruit formation (salinity) [6].

Apricot seedlings after planting in most cases in 2-4 years, the branches grow strongly lengthwise and branch sparsely. Therefore, for sklet branches, which are formed in addition to thinning in the spring from the 2nd year, it is necessary to shorten the annual branches more strongly. More than (60 cm) of the branches with strong growth, and strongly branching varieties about $\frac{1}{2}$ of the growing branches are shortened, shortening to $\frac{2}{3}$ in short branching varieties. [7].

The results of the study showed that in the local and introduced varieties of Cypress, Subhoni Zarya, Nadjimi, rughi juvanon miona Apricot, the full supply of hornbeam bats with light and sunlight, and the correct formation of trees were given a vase shape in order to increase productivity and fruit quality, and observations were made on the development of trees, cutting off strong annual branches by 15 cm, 30 cm and 45 cm. As a result of our observations, it was observed that trees were more fully using diffused light compared to the light that fell straight into them. Because it passes through all sides of the tree branch, and the sun's rays fall on all the leaves. On top of this, it has been demonstrated that diffused light has a greater effect on proper light-the large size of the leaves, the colorfulness, the quality of the fruit, and the good development of the tree-and how long daylight lasts is of great importance.

As strong growth continued in strongly branching varieties for 4-6 years at the time of the Trees ' entry into harvest, in addition to thinning during this period the branches were shortened to $\frac{1}{4}$ - $\frac{1}{2}$ and $\frac{1}{3}$ in length depending on the varietal character. The result was the development of varieties from the upper 2-3-buds, and

the formation of fruit branches and Spurs from the lower branches.

In some varieties, increased reduction of branches and branches has led to increased growth and decreased yield. In unformed nimjon pine trees, it was observed that all fruit nodes die quickly, the tree trunk takes on a dry appearance, and at the end of the sklet branches the formation of dried leaves. Therefore, the nimjon was reduced to an equal half length of annual branches in horned varieties.

In the studied varieties of apricots, the movement of air in the form of a wind has shown great importance. The effects of wind on the plant varied, and its effects at large speeds (up to 10 meters per second and faster) resulted in 10-15% damage to the fruit nodes and leaves on the plant. Strong winds have been found to interfere with pollination of flowers by insects, damaging the flower as well as young nodules by 15-20%. At wind speeds of 20-25 m/s, tree branches were broken, they were completely damaged. In trees given the form, however, damage was found to be significantly reduced.

In the research carried out, apricot varieties suitable for soil and climatic conditions were studied, promising varieties were selected in the cultivation of quality fruit products based on the climatic conditions of the region. In kashkadarya region, summer is hot and dry and winter is cold with an average annual air temperature of 13.80 s, the warmest temperature is 26.80 s in July and the cold is 140s in January. The highest temperature in June was observed to rise to 500s heat and in January, February the temperature dropped to -240s cold. The sum of useful temperatures during the season reached 2400-28000s in February-June. The duration of frost-free days is on average 240 days. Spring frosts were observed until the third decade of February, with some years lasting until April.

Depending on this, the vegetational phases of the apricot varieties under study were studied.

These phenological phases were observed below in the varieties of apricots under study in the Nadzhimi variety of apricot varieties planted in 2009, while the bulging of buds in 2017-2019 was observed in the corresponding order on March 4-11, in the variants given the form, this indicator was observed on average on March 6-14. while the spelling of the consonants was determined on 7-14 march, in the variants given the form it was found that the average lasted until 9-18 March. The beginning of the flowering phase was observed on March 9-17, while in the form-given variants, this indicator continued until March 10-20. Whereas dwarf flowering has been found on unformed trees from 13 to 21 March, form-given variants have been observed to last on average from 14 to 25 March, while flowering phase ends have been observed on non-form trees from 21 to 26 March, while form-given variants have lasted from 22 to 30 March. The ripening of its fruits, on the other hand, lasted from May 25 to June 5, while in the variants given the form, on average, it was observed from May 21 to June 3. The beginning of hazonrezgilik began on October 9-22, and in the variants given the form, this figure began on average on October 14-27. The end of hazonrezgilik, however, was observed in non-form variants on 5-17 November, and in form-form variants it was found to last from 8-20 November. The vegetational period was found to last up to 246-251 days in non-form variants, and 248-255 days in form-form variants. These phenological phases were presented in the table in the appropriate order in the remaining varieties. (Table 1).

Drought resistance, close relationship between water regime processes and environmental factors and high adaptability characteristics were studied, in this regard, the leaf level in the Subhoni Zarya variety was

on average 42 cm² in large leaves, and on small-sized leaves an average of 31 cm². In the Nadjimi variety, however, these indicators were observed on the leaves of large ones, on average up to 50 cm², and on the leaves of small sizes up to 29 cm². In the Sarvari Variety, the level of large leaves was up to 57 cm², and in small-sized leaves, on average, 39 cm², and in large-sized varieties, in the rugi juvanon miona, 60 cm², and in small-sized leaves-31 cm². In the Subhoni Zarya Variety, the Leaf weight was found to be 0.82 mg in the large leaves, 0.50 mg in the small-sized leaves, and the average weight in the large leaves of the Nadjimi variety was found to be 0.20 mg in the small-sized leaves. In the Jubilee Navoi variety, it averaged 0.92 mg in large leaves to 0.87 mg in small-sized leaves, in the rugi juvanon miona variety, it averaged 1.16 mg in large leaves, and 0.56 mg in small-sized leaves. During the growing season, the degree of water supply of leaf tissue manifested its resistance to drought through the property of water retention, as well as the ability to carry out starch synthesis even in the hot summer period. The resistance of the nadzhimi and Subhoni Zarya varieties to squatting was largely due to the small size of their trees and leaves in comparison with the studied varieties, the possibility of maintaining sufficient moisture in the composition even in unfavorable conditions of nature. The number of leaves of the apricot varieties under study, the leaf level, the amount of water contained in the Leaf were determined in field and laboratory conditions. (Table 2

In monitoring the biological characteristics of the studied varieties, the beginning of the period of vegetation in the Nadjimi Variety the period of Bud bulging in the tree was observed on March 11, 2017, March 4, 2018, and March 11, 2019, and the humming continued on March 14, 2017, and March 7, 2018 and March 14, 2019. The start of flowering occurred on March 17, 2017; March 9, 2018; and March 16, 2019; and

the end of flowering on March 26, 2017; March 21, 2018; and March 25, 2019.

The ripening of fruits began on June 5, 2017. In 2018 it was observed on 25 may and in 2019 on 5 June. The weight of one quality fruit is 38.1, 37.9, 38.0 gr, the side

size of the fruit is 4.0, 3.9, 4.0 CM, the upright size of the fruit is 4.2, 4.1, 4.3 cm, the weight of the average fruit of 10 pieces is 393.1; 376.0; 388.5 gr, the fruit t'ami is sweet, the leaves are dark green 11.6 cm by 8.3 CM varietal indicators are presented in Table 1.



CONCLUSION

from the observations carried out, it can be said that in the cultivation of apricot fruit, it was important that, in addition to the high yield, the quality indicators of the fruits, their appearance and their mass also changed.

According to the research carried out, it turned out that the mass of shaped fruits in plants to some extent also depends on the degree of reduction of annual growing varieties, such as the biological characteristics of apricot varieties.

Suitable varieties for soil-climatic conditions were selected by choosing varieties of varieties with high yields, resistant to diseases and adverse weather conditions, as well as maintaining, breeding local, promising fertile varieties that are disappearing by interbreeding with local varieties.

In the process of conducting research, the spirit of juvanon miona, Nadjimi, Subhoni Zarya and Jubilee Navoi varieties were distinguished from among the

varieties studied by their resistance to adverse effects, soil-climatic conditions, and resistance to garimselous winds and drought conditions, yield, large size, high yield of fruits.

Problem and suggestions: in solving the problem that has arisen, it is important to create and select new apricot varieties with useful qualities and their application in their production.

The introduction of new varieties created in several scientific organizations of Uzbekistan and in nearby foreign countries contributes to the quality of fruits and the fertility of apricots, as well as the spread of these varieties to other districts.

However, production experience shows that an increase or change in the number of varieties in an increase in the yield of apricots cannot completely solve the problem. Alternatively, it is necessary to study scientifically based climatic conditions, develop effective agrotechnical measures.

REFERENCES

1. Агафонов, Н. В. Научные основы размещения и формирования плодовых деревьев / Н. В. Агафонов.-М.: Колос, 1983.- 173 с.
2. Муханин, И. В. «Шоковая» омолаживающая обрезка / И. В. Муханин.- Тамбов: Изд-во ТГТУ,- 2001.- 103 с.
3. Мухин С. А. Обрезка и формирование плодовых деревьев / С. А. Мухин.- Краснодар. 1979.-20 с.
4. Фисенко, А. И. Схемы посадок, формировки и управление ресурсным потенциалом плодовых растений /А. Н. Фисенко // Интенсивные технологии возделывания плодовых культур.- Краснодар.2004.- с. 281-295.
5. Плодоводство / Под ред. В. И. Черепихина.- М.:Агропромиздат, 1991.- 271 с.
6. Смыков, В. К. Пути повышения продуктивности абрикосовых садов / В. К. Смыков // Повышение продуктивности абрикосовых насаждений : сб. научн. тр. Ялта, 1986, т. 100.- с. 7-15.
7. Абрикос / Под. Ред. В. К. Смыкова.- М.: Агропромиздат, 1989.- 240 с.

Ўрик навларида олиб борилган фенологик кузатувлар 1-жадвал

№	Навлар	Йиллар	Куртак бўйиши	Ғунчалаши	Гуллаши				Тўлиқ барг чиқариши	Меваси	Барг сарғайиши	Ҳазонрезгилик				Вегетацияда ври(кун)
					Бошланиши	Тўлиқ гулла	Тугаши	Бошланиши				Тўлиқ тўкил	Тугаши			
1	Наджими	2017	11/I II	14/I II	17/I II	21/I II	26/I II	10/I V	5/V I		30/X	19/ X	2/X I	13/X I	247	
		2018	4/II I	7/II I	9/II I	13/I II	21/I II	5/I V	25/ V		10/X	9/X	24/ X	5/XI	246	
		2019	11/I II	14/I II	16/I II	19/I II	25/I II	11/I V	5/V I		3/XI	22/ X	5/X I	17/X I	251	
2	Субхони Заря	2017	12/I II	15/I II	18/I II	22/I II	27/I II	12/I V	24/ VI		29/X	11/ X	25/ X	13/X I	246	
		2018	4/II I	8/II I	10/I II	13/I II	21/I II	2/I V	9/V I		14/X	8/X	26/ X	5/XI	246	
		2019	9/II I	12/I II	14/I II	17/I II	23/I II	7/I V	16/ VI		4/XI	14/ X	29/ X	15/X I	251	
3	Руғи жуванон миона	2017	11/I II	15/I II	18/I II	22/I II	26/I II	12/I V	11/ VI		6/XI	25/ X	9/X I	16/X I	249	
		2018	3/II I	7/II I	10/I II	14/I II	20/I II	6/I V	5/V I		7/X	22/ X	8/X I	18/X I	260	
		2019	6/II I	10/I II	12/I II	15/I II	21/I II	7/I V	9/V I		8/X	19/ X	6/X I	15/X I	254	

4	Сарвари	2017	11/I II	15/I II	18/I II	22/I II	27/I II	14/I V	20/ VI	1/XI	19/ X	9/X I	16/X I	249
		2018	4/II I	8/II I	10/I II	12/I II	17/I II	5/I V	8/V I	16/X	5/X	17/ X	5/XI	246
		2019	6/II I	10/I II	12/I II	15/I II	20/I II	9/I V	14/ VI	4/XI	16/ XI	7/X I	15/X I	254

**Ўрик навларида 2017-2019 йй дарахтларнинг барглари сони, барг сатҳи, таъбий ва қуритилган вазн ўлчамлари
2009 йилда экилган. 2-жадвал**

№	Навлар	Йил	Барглари сон(1т дона)	Барг сатҳи (см ²)			Баргнинг таъбий оғирлиги			Баргнинг қуруқ оғирлиги		
				Йирик	Ўртача	Майда	Йирик	Ўртача	Майда	Йирик	Ўртача	Майда
1	Наджими	2017	12260	42	35	29	1,22	1,06	0,56	0,41	0,36	0,19
		2018	11384	52	37	30	1,36	1,11	0,58	0,49	0,39	0,20
		2019	12053	50	36	29	1,30	1,10	0,57	0,48	0,38	0,20
2	Субхони Заря	2017	11640	39	31	22	0,76	0,52	0,48	0,22	0,19	0,16
		2018	10875	41	32	24	0,81	0,54	0,51	0,25	0,21	0,19
		2019	11128	42	31	23	0,82	0,56	0,50	0,24	0,20	0,18
3	Руғи жуванон миона	2017	5876	57	38	31	1,11	0,99	0,69	0,05	0,03	0,01
		2018	4960	60	38	34	1,23	1,02	0,76	0,05	0,03	0,02
		2019	5164	58	36	33	1,19	0,89	0,71	0,05	0,03	0,02
4	Сарвари	2017	6088	56	47	39	1,30	0,97	0,58	0,04	0,02	0,02
		2018	5960	57	50	41	1,32	1,08	0,63	0,04	0,02	0,02
		2019	6204	56	48	40	1,30	0,98	0,61	0,04	0,02	0,02