

Apricot Seedling Cultivation and Garden Establishment Technology

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Abstract:

Apricot varieties adapted to the conditions of our republic are divided into strong, medium and weak growing grafts or small grafts depending on the nature of growth. They differ in terms of cold resistance, early or late harvest, demanding of water, resistant to diseases and pests, etc. The strength of growth, longevity and productivity of trees in the garden, their adaptability to environmental conditions (climate, soil, moisture) and finally the quantity and quality of seedlings grown in the nursery depend to a large extent on grafting. Welds must be resistant to certain environmental conditions.

Keywords: Vegetatively propagated apricot Common apricot (A. Vulgaris), Siberian apricot (A. Sibirica Lam), Manchurian apricot (A. manshiruca koshne Skvorix), David (A. Davidianacor) and Chinese apricot mume (A. Mume sieb) early and served as an object of evening varieties.

Introduction: Grafts are divided into strong, medium and weakly growing or small grafts depending on the nature of growth. They differ in terms of cold resistance, early or late harvest, demanding of water, resistant to diseases and pests, etc. 19 of the trees in the garden growth strength, long life and productivity, their environmental conditions, climate, soil, humidity, and finally, the quantity and quality of seedlings grown in the nursery depend to a large extent on the graft

Apricot is one of the most widely planted fruit trees in Uzbekistan. It is widely distributed mainly in Ferghana and Zarafshan valleys. Apricot grows well in all types of soils, but in stony soils with a soil layer of 0.5-2 m. It also grows on mountain slopes, well-supplied with water, and fertile stony lands. Very resistant to drought, Navi is being cultivated. depending on the conditions, the fruit

contains up to 20% sugar, organic acids, carotene, vitamin C, aromatic and mineral substances, up to 58% oil, up to 20% protein in the pulp. The fruit is eaten fresh, dried and canned. Apricots (*Armeniaca* mill) are divided into 7 species, the most important of which are: Jaidari apricot, Siberian apricot, Manchurian apricot, Gunafsha rang gadir-budir apricot, Chinese apricot, Mumi and Japanese apricot -ansu.

Common apricot (*A. Vulgaris*) has cultivated and wild forms, wild ones are found in the mountains of Central Asia. Depending on the growing zone, this apricot is divided into several groups. For example, Babai, Isfarak, Kandak, Mirsanjali, Subhani, Hurmai and other varieties are planted in Ferghana. These are disease-resistant varieties. In the Khorezm zone, horaki varieties such as Nuqul, Payvandi, Kuzgi, Khorezm are planted. These varieties are resistant to diseases and cold.

Siberian apricot (*A. Sibirica* Lam) grows as a bush or tree, flowers very early. The fruit cannot be eaten. The pulp is well separated from the flesh and the pith is bitter. This species is very frost-resistant in its place, it can be used as a low graft for other plums.

The height of the Manchurian plum (*A.manshiruca* koshne Skvorix) reaches 20 m. The tree of this type of apricot is cold-resistant and is a good graft for cultivated apricot.

David (*A.Davidianacor*) is close to Siberian birch. Cold resistant.

Chinese plum mume (*A.Mume* sieb) is grown in China and Japan. Heat-loving. resistant to extreme humidity and root bacterial diseases. This plum is used as a graft for ornamental trees and fruit trees. Local apricot trees grow strong (up to 15 m), fruitful, live up to 100 years. Depending on the variety, the fruit ripens from the end of May to September, the average weight of one fruit is 25-30 g, it has different colors and shapes. Apricot varieties grown in Uzbekistan are divided into three groups: khoraki apricot varieties - Javpazak, Rukhi juvonon. Ahrori, Arzami, White apricot; dried apricot varieties: Khurmani, Isfarak, Subhani, Gulyungi, Badomi, and canned apricot varieties - Korolevsky, Wengersky, Krasnoshyoki, etc.

Arzami, Ruhi Juvonon and Iskandari varieties can also be included in the third group. Early and mid-ripening apricot varieties are widespread in Uzbekistan. Apricots mainly. It is cultivated in Uzbekistan and Tajikistan. Convenience of natural conditions, continental climate of the mountains, rapid growth, lack of land selection, early harvest and abundant harvest caused the apricot tree to spread widely in Central Asia. In the conditions of Central Asia, the earliest varieties of apricots ripen in the middle and end of May. At this time, other fruits are less ripe. Apricots are harvested 3-4 years after planting. Apricots are mainly grown in Uzbekistan for dry fruit production and fresh fruit consumption. Apricots are dried in the sun during the hottest period of the year - June-August. At this time, the weather is open, warm, and the air humidity is relatively low, which makes it possible to dry apricots on the ground, that is, in open areas. Apricot varieties grown in Central Asia mainly belong to the Central Asian group, which differ in maturity and other characteristics. The fruit of the famous apricot, which belongs to the European group, is large, the flesh is not very dense, the taste is fragrant, powdery, less juicy, more sour. These varieties are easy to preserve and dry less. Varieties belonging to the Iranian-Caucasian group, as well as black or purple apricots, are very rare. Varieties belonging to the Central Asian group are derived from the eastern and western Tianshan wild species and are cultivated primarily in the Ferghana Valley and around the Zarafshan Basin. Their type and shape are very diverse, more than 300. The trees are distinguished from the varieties belonging to the European group by their strong and fast growth, early harvest, long ripening, resistance to heat and drought. resistance of flower buds to spring frost (which somewhat slows down their growth), the ability to produce buds not only on the ends of the branches, which can produce a lot of fruit in the future, but also on the branches located in the middle, extreme resistance to wind, and in several varieties, the fruit remains on the tree, new The sweet fruit differs in the fact that it contains a lot of sugar (1.5 times more than in the varieties belonging to the European group), but it is low in acid. At the same time, many varieties belonging to this group are

distinguished by the fact that they do not produce fruit when pollinated from the flower of this tree and are less resistant to clasterosporiosis and gray rot disease. From the fruits of apricot varieties belonging to the Central Asian group. Dry fruit is grown mainly, a small amount is canned and eaten fresh. Varieties included in this group are divided into several subgroups. Among them, those belonging to the Fergana, Zarafshan and Khorezm groups differ in their fruit morphological characteristics, mechanical and chemical composition and biological properties (mainly frost resistance). It should also be mentioned that not all groups of apricot varieties grown in Central Asia have been tested. Apricot varieties grown in the Bukhara oasis, Kitab, Shahrisabz group, Pamir mountain districts, southern and northern parts of Turkmenistan can be included in this group. When we dwell on the biology of apricots, it should be emphasized that it requires specific favorable climatic conditions for its abundant harvest. An effective active temperature of 2500 °C is required for the growth and development of the trees and for the ripening of the apricot fruits. Trees in the southern districts of Central Asia at high temperatures; it grows well at 42-45 °C and even above 48 °C on some days. Apricot trees differ in their resistance to severe frosts. But one of the most important disadvantages is that the fruit buds wake up very early and begin to bloom. During this period, if the air temperature drops too much, they will get cold. If the winter is warm and it is cold from time to time, the development of flower buds accelerates and their resistance to cold decreases. In the middle of February, when the temperature is 18-20 °C, flower petals die completely, and in the beginning of March, when the temperature is 8-10 °C, the buds can be damaged. Apricot fruit buds die when the frost is minus 5-6 °C during the crowning period, and newly opened flowers die when the newly born node drops to minus 1-2 °C. In the plain regions of Central Asia, the temperature changes frequently in winter, as a result of which the apricot trees quickly end the period of dormancy and begin to prepare for growth. This event happens in January or February in some years. That is why the fruit buds of apricot are strong in the flat zone, less damaged in the sub-mountain and mountain zone, because in such areas the fruit buds wake up a little later and the flowering is a little delayed, this phenomenon often begins after the end of the spring frost. In the districts located further north - in the lower part of the Amudarya, apricots bloom very late every year, so an abundant harvest is obtained almost every year.

Apricots are mainly grown in Ferghana Valley. It grows here from 300 m to 1610 m above sea level. However, the pre-mountain zone (600-1000 meters above sea level) is the most favorable zone for apricots. Due to the early flowering of apricots in the flat area of the valley, it is more often damaged by spring frosts than in the foothills and mountainous areas. The main commercial apricot plantations are located in the slightly drier western part of the valley: as the climate conditions worsen (mainly due to high summer rainfall) as you go up, their importance decreases. Other types of tree seedlings, mainly seed fruit seedlings, are placed on these lands. For example, the average annual precipitation in the western districts of the valley is 96-108 mm, and in Andijan in the east it is two and a half times more, that is, 236 mm. Precipitation is high (600-900 mm) in the Chotkal and especially Fergana mountain ranges on the north-eastern side of the valley.

In the south-western districts of the valley, in Isfara, Khojacent, Konibodom of Tajikistan, in Rishton, Altariq, Vodil, Sokh districts of Uzbekistan, the industrial apricot tree grows on lands 1400-1500 m above sea level. Apricots ripen very well here. However, due to high rainfall in the early spring and summer in some years in the higher part of the mountain, fruits and trees are severely affected by fungal diseases, namely, clasterosporiosis and monilia. In the northern part of the valley (at the beginning of the Kurama and Chotkal mountain ranges and in the Asht district of Tajikistan, in the Chust, Kosonsoy and Yangigorgon districts of Uzbekistan), apricots from which commercial products are obtained grow only at an altitude of 1000 m above sea level; higher than that, it is very rare, because the higher the temperature is, the lower it is in the summer, which causes the product to be of poor quality and susceptible to diseases.

In the Fergana Valley, apricot grows on weakly saline, heavy and clay soils to gravelly soils. Apricots grow well and produce abundantly on fertile sandy soils with a gravel layer 1.5-2.0 m deep. Apricot grows especially well in the hills.

References.

1. O'zbekiston Respublikasi Prezidenti Islom Karimovning mamlakatimizni 2014 yilda ijtimoiy-iqtisodiy rivojlantirish yakunlari va 2015 yilga mo'ljallangan iqtisodiy dasturning eng muhim ustuvor yo'nalishlariga bag'ishlangan Vazirlar Mahkamasining majlisidagi ma'ruzasi Xalq so'zi.2015 yi
2. Almeyev A.V., SHaripov K.M. Bog'-tokzorlardan yuqori hosil olish omillari. Buxoro, 2010. - B.35-37.
3. Bo'riyev X.CH .Xavaskor bog'bonga qo'llanma.-T. "SHarq" nashriyoti-matbaa AK, 2002 yil 176 b
4. Buriyev X.CH., Boymatov K., Juraev R., «Meva va rezavor meva ekinlari selektsiyasi va navshunosligi», Toshkent, «Mexnat» 2001 yil
5. Soliyeva, M. B., Yuldasheva, K. T., Xatamova, X. K., Kimsanova, X. A., & Isroilova, S. S. (2021). The effect of shelf life of live cocoons on their temperature and quality. *Asian Journal of Multidimensional Research (AJMR)*, 10(3), 254-260
6. Yuldasheva, K. T., Soliyeva, M. B., Kimsanova, X. A., Arabboev, A. A., & Kayumova, S. A. (2021). Evaluation of winter frost resistance of cultivated varieties of olives. *ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL*, 11(2), 627-632.
7. Xatamova, X. K., Yuldasheva, K. T., Soliyeva, M. B., Kimsanova, X. A., & Juraboyeva, S. M. (2021). Methods of preserving subtropical fruits. *Asian Journal of Multidimensional Research (AJMR)*, 10(1), 109-115.
8. Yuldasheva, K. T., Soliyeva, M. B., Xatamova, X. K., & Kimsanova, X. A. (2020). Effect of arbuscular mycorrhiza on micro propagated olive. *ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL*, 10(12), 1491-1498.
9. Bo'riyev X.CH .Xavaskor bog'bonga qo'llanma.-T. "SHarq" nashriyoti-matbaa AK, 2002 yil 176 b
10. Buriyev X.CH., Boymatov K., Juraev R., «Meva va rezavor meva ekinlari selektsiyasi va navshunosligi», Toshkent, «Mexnat» 2001 yil
11. Soliyeva, M. B., Isroilova, S. S., & Abdullayev, A. A. (2022). The Influence of the External Environment on Hatching and Mating of Butterflies. *International Journal of Formal Education*, 1(10), 141-147.
12. Soliyeva, M. B., Israilova, S. S., & Abdullayev, A. A. (2022, October). The Effect of Moisture on the Silk Worm. In *International Conference on Multidimensional Research and Innovative Technological Analyses* (pp. 122-126).
13. Soliyeva, M. B., Isroilova, S. S., & Abdullayev, A. A. (2022, October). Haroratning Ipak Qurti Tanasidagi Fiziologik Jarayonlarga Ta'siri. In *International Conference on Multidimensional Research and Innovative Technological Analyses* (pp. 118-121).
14. Soliyeva, M. B., & No'monov, N. N. (2023). Establishment of Nutritious Mulberries in Our Republic. *Web of Synergy: International Interdisciplinary Research Journal*, 2(2), 145-150.
15. Soliyeva, M. B., & Mirzaxmedova, G. L. (2023). INCREASING THE LEAF YIELD OF THE MULBERRY TREE. *Horizon: Journal of Humanity and Artificial Intelligence*, 2(5), 179-183.

16. Soliyeva, M. B., & Yusufjonov, J. I. (2023). Features of the Construction of Bushes. *Web of Semantic: Universal Journal on Innovative Education*, 2(5), 288-292.
17. Soliyeva, M. B., & No'monov, N. N. (2023). DASTA TURLARI VA ULARNI TAYYORLASH. *Science and innovation*, 2(Special Issue 6), 205-207.
18. Soliyeva, M. B., & Sirojiddinova, M. A. (2023). Chemical Composition of Coir Fiber. *Information Horizons: American Journal of Library and Information Science Innovation* (2993-2777), 1(9), 102-106.
19. Soliyeva, M. B., & Mirzaxmedova, G. L. (2024). Basics of the Silk Worm Organism Functions and Growth of the Worm Body. *Web of Semantics: Journal of Interdisciplinary Science*, 2(2), 31-36.
20. Soliyeva, M. B., & Sirojiddinova, M. A. (2024). Types of silk worm. *Miasto Przyszłości*, 47, 93-97.
21. Azamovna, K. K. (2024). Effect of Mother Plant Placement Schemes on Seed Yield of Cherry and Plum Grafts. *Miasto Przyszłości*, 47, 148-150.
22. Azamovna, K. K. (2024). Characteristics of Growing Cherry Varieties in the Conditions of Andijan Region. *Miasto Przyszłości*, 47, 535-538.