

Peach Production Methods

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ABSTRACT

Peach is one of the most useful fruits for human health. In order to provide the population with peach fruit, it is one of the important factors to come up with the methods of its intensive breeding and to apply it in practice. Peaches can be propagated from seeds, green cuttings and by grafting.

No. PF-5853 of the President of the Republic of Uzbekistan dated October 23, 2019 "On approval of the strategy for the development of agriculture of the Republic of Uzbekistan for 2020-2030"

Ensuring the implementation of the decree, production of high-value-added products in the field of fruit and vegetables and viticulture, increasing the volume of exports, development of unused and dry land, increasing the planting of exportable agricultural crops in areas that are being reduced from cotton and grain, as well as effective use of the opportunities of gardens, vineyards and greenhouses. is intended to be launched.

It consists of growing cheap and high-quality seedlings of a regionalized species and variety for a specific region, using intensive methods of seedling cultivation and extensive use of mechanization in production processes.

The vegetative method of peach propagation is known, in which seedlings of other pome fruit crops, called seedlings or rootstocks, are grown in nurseries. These seedlings are grafted with the roots or shoots of another type of peach. If grafting is successful, the components will grow together and continue to grow as a single organism, forming the grafted plant. Such a peach graft is called.

Vegetative reproduction is based on the ability to restore (regenerate) the whole organism from a certain viable part of the plant - a branch, root, leaf and even a piece of tissue.

These parts of the organs restore the root beginning in the mother plant, which gives rise to the root, and from the bud gives the stem, which gives out leaves. In vegetative reproduction, the plant is kept relatively pure, and the characteristics and characteristics of the mother plant are transferred to it. And when it reproduces sexually, a hybrid is obtained that has both maternal and paternal traits, and sometimes the oldest ancestors.

Propagation from green cuttings. This is how peaches are often propagated. However, this method has two important drawbacks. First, the time spent on rootstock cultivation increases both the time of its propagation and the production area allocated to the nursery. And secondly, if the rhizome and the plant are incompatible, their tissues will not grow together, but this does not prevent the reproduction of one or another variety on this or that rhizome. This can be avoided by propagating peaches from green cuttings.

The good adhesion of the graft to the graft depends on their botanical affinity, which is called affinity. The reasons for the mismatch between the weld and the weld have not yet been sufficiently determined. However, its biological essence is seen in the violation of the metabolism between the plant's surface and roots.

Usually, when plants of the same species or close to the same species are grafted, they behave well and develop normally. Fruit trees do not hold well when grafted between species, especially within the same family. When plants that are botanically distant from each other are grafted, sometimes the biochemical and physiological difference of the protoplasm of the cells of the components (symbionts) being grafted, the anatomical-morphological structure of the tissues, the different growth depending on the thickness of the graft and the graft body, and the lack of connection of the tube systems prevent their good capture. , there are opinions.

In horticulture, it is known that some types of fruits, for example, apricots, plums, apricots, peaches, some varieties of pears, are grafted with quinces, almond peaches, and they get along well with each other. But even here, it is observed that the graft and the graft do not match well, for example, the above-ground part of the plant grows slowly, does not live long, and a bump is formed in the grafted place.

Fractures caused by graft-to-graft mismatch are as common to trees in the garden as they are to saplings in nurseries. It is characteristic that the trees grow and produce normally for several years, but when the branches reach a certain thickness, they begin to break from the wind. Especially when grafting plum to apricot and peach to apricot, cases of breakage were observed. As can be seen from the above information, the fact that the graft is closely related to the scion to a certain extent ensures their normal retention and good growth of the grafted tree.

A prerequisite for a good connection is a good fit between the weld tag and the weld cambium. In order for the joint to be flat, the pods should be larger so that they do not dry out, it is necessary to quickly perform the work processes in grafting - fast installation and tying of the seedling, care of plants in the nursery on the basis of high agrotechnics.

Cuttings are a vegetative method of propagation of plants by root cuttings. Green cuttings of peach take root in protected soil. Such a peach is called its own root (cuttings). Experts say that self-rooted seedlings can be grown only in the conditions of horticultural institutions, ordinary gardeners cannot create favorable conditions for rooting from green cuttings.

One of the most important factors in the propagation of peaches from green cuttings is that the reproduction of peaches from green cuttings is based on the biological properties of plants - regeneration, that is, the ability of individual parts or organs to restore the growth and functions of the body. Green cuttings form adventitious roots during peach tissue regeneration.

Accidental root recovery depends on many factors that need to be considered. Green cuttings should be cut from young, high-yielding winter-hardy peach trees. You should choose varieties

that are resistant to diseases and pests. The duration of this process is the first two ten days of June, depending on weather conditions. The optimal time to collect peach green cuttings is in the morning, before sunrise, they should be taken from the lower part of the crown of the peach tree for cutting, they have the best regenerative ability. Green cuttings taken from the upper and middle parts of the current year's branch or from the lower part of last year's branch are well rooted.

Leafy green cuttings take root only in light. Reducing the area of the leaves reduces the percentage of rooting of green cuttings, so there should be as many healthy leaves as possible in the cutting. Green peach branches no longer than 60 mm are cut with a sharp knife. The cut is made perpendicular to the axis of the cut, it should be smooth, without cuts. With dew drops on the leaves early in the morning or in cloudy weather after rain, green cuttings have a low water holding capacity and are in a state called turgor.

Peach green cuttings should be planted in the prepared substrate without delay, because with the loss of turgor it will be impossible for green cuttings to take root. The substrate is the medium in which the lower (basal) part of the cutting is placed, where the roots are formed. The depth of planting peaches is such that the stem is kept upright. Rooting occurs in the upper layer of the substrate, and further development of the root system occurs in the lower layer.

Light, heat and moisture are the necessary factors for peach to take root from green cuttings. Since rooting occurs in the first two weeks of June, the plant receives enough light and heat. The temperature of the substrate can vary around 18-25 ° C during the day. Air humidity is very important for root formation in the substrate and further development of the root system.

Propagation by grafting. Peach grafting is an integral part of obtaining high-quality fruit in different regions of our country. In other words, it makes it possible to grow the southern tree even in cold regions where it was impossible before. Peach grafting is the only possible way to preserve a rare tree variety.

Depending on the region and its climatic characteristics, grafting is usually carried out from March to early May in the southern regions. However, first of all, we must rely on the weather conditions of the current season and the condition of the tree.

Peach bud grafting is mostly done in summer. More precisely, it is held at the end of July at the beginning of August.

It is known that all fruit tree seedlings are propagated mainly by bud grafting. With the help of scientific experiments, it was found that the younger the tree, the better it takes the graft. Grafts made on seeded fruits hold up better than seeded fruits.

Grafting gives a good result for the cultivation of 1-2 year old wild fruit trees. A young tree can sprout several eyes. The thickness of the branches on which the bud is grafted should not be less than 8-10 mm, the bark should move well. For this, careful preparation is done in advance. One-year branches should be located on the edge of young trees. Because if it is grafted to the branches that grow from the middle part of the tree, the cultural branches that grow from them will excessively thicken the branches of the mother tree.

As a result, it becomes difficult to give them the correct shape. In order to avoid this, a bud is grafted to the part of the reddish one-year branches located on the edge of the tree branches, located 3-5 cm from the main branch (smooth, partially bent and growing).

Before grafting the bud, excess branches on the branches are removed from the shoots using vine shears. The tree bark is watered 3-4 days before in order to facilitate its migration.

After the bud graft is placed in a T-shaped incision, it is gradually enriched with the help of polythene tape. In this case, it is necessary to keep the bud from sticking to the bottom of the binding film. After 12-14 days, the grafted shoots are examined. Usually, well-established shoots

are bluish-blue, and the leaf band falls to the ground at the touch of the hand. The knot of stuck buds is released. But you can only leave it empty without taking it completely.

List of used literature

1. M.M.Yakubov “Meва, stitrus, rezavor meva va uzum ko’chatlarini tayyorlash” - “Tasvir” Nashiriyot uyi-2021 yil
2. Khatamova HK, Kimsanova KA. The Peach Propagation Methods. The American Journal of Agriculture and Biomedical Engineering, 2020;2(11):42- 46.
3. Xatamova XK, Yunusov OB. Useful Properties of Cherries and Cherry Juice. The American Journal of Agriculture and Biomedical Engineering, 2021;3(06):6-12.
4. Alisher V, Komiljonovna KH, Botirovna SM, Yulbarsovna DS. Bamiya-Medicinal Plant and Flour Production Technology. PalArch's Journal of Archeology of Egypt / Egyptology, 2020;17 (6):3479-3482.
5. Quince fruit and its useful properties BGR Khatamova Xamidahon Komiljonovna, Kxoldarova Dilnozaxon Mahkamjon kyzy ACADEMICIA: An International Multidisciplinary Research Journal 3 (Vol. 12 ...
6. Шафтоли етиштириш ва саклаш технологияси ХК Хатамова, ШМЎ Инобиддинов, ГРҚ Болтабоева Oriental renaissance: Innovative, educational, natural and social sciences 2 ...
7. Soliyeva, M. B., Sh, T. J., &Asronov, E. K. (2021). To Learn Of Biological And Productive Indicators Of Imported Mulberry Silkworm Breeds. *The American Journal of Applied sciences*, 3(04), 131-137.
8. Asronov, E. K., &Soliyeva, M. B. (2020). The importance of feeding silkworms under polyethylene. *ACADEMICIA: An International Multidisciplinary Research Journal*, 10(10), 1169-1174.
9. Асронов, Э. К., &Солиева, М. Б. (2020). ВЛИЯНИЕ ИЗМЕНЕНИЯ ТЕМПЕРАТУРЫ НА ПРОДУКТИВНОСТЬ И КАЧЕСТВО КОКОНОВ ВО ВРЕМЯ КОРМЛЕНИЯ ТУТОВОГО ШЕЛКОПРЯДА. *Экономика и социум*, (12-1), 388-391.
10. 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
11. Туйчиев, Ж. Ш., Убайдуллаев, С. Ш., Турдиева, Ф. Т., &Солиева, М. Б. (2015). ИЗМЕНЕНИЕ ДОЛИ ДЕФЕКТНЫХ КОКОНОВ В ЗАВИСИМОСТИ ОТ СРОКОВ ПОСТУПЛЕНИЯ НА ЗАВОД. *Современные тенденции развития науки и технологий*, (4-2), 78-81.
12. Туйчиев, Ж. Ш., Мирзаев, Р. О., Солиева, М., & Гафурова, Ю. К. (2016). ЗАВИСИМОСТЬ КАЧЕСТВА КОКОНОВ ПЕРВИЧНОГО ПОКОЛЕНИЯ ОТ КОЛИЧЕСТВА ФОРМ ИЗМЕНЕННЫХ ИЗ ПАРТИИ ПЛЕМЕННЫХ. *Современные тенденции развития науки и технологий*, 124.
13. Yuldasheva, K. T., Soliyeva, M. B., Daminov, X. E., Botirov, S. T., &Mamadjanova, G. S. (2021). The process of growth of vegetative organs of olive seedlings in protected areas during the development phase. *ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH*, 10(4), 287-293.
14. Sokhibova, N. S., Nazirova, M. I. K., &Botirovna, S. M. (2020). INFLUENCE OF REARING SILK WORMS WITH HIGH PRODUCTIVE MULBERRY LEAVES ON THE BIOLOGICAL INDICATORS OF SILK GLAND AND RAW SILK EFFECTIVENESS. *Life Sciences and Agriculture*, (2).

15. 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.
16. 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.
17. 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.
18. ВАХОБОВ, А., СОЛИЕВА, М., & ХАТАМОВА, Х. СОРТА КРАСНОКОЧАННОЙ КАПУСТЫ ДЛЯ ПОВТОРНОЙ КУЛЬТУРЫ. *ИРРИГАЦИЯ-МЕЛИОРАЦИЯ*, 57.
19. Асранов, Э. К., Салиева, М. Б., Салиев, С. А., & Давлатов, Х. Р. (2018). ХРАНЕНИЕ ПЛОДОВООЩНОЙ ПРОДУКЦИИ. In Северный морской путь, водные и сухопутные транспортные коридоры как основа развития Сибири и Арктики в XXI веке (pp. 264-266).
20. Xatamova, X. K., Soliyeva, M. B., Kimsanova, X. A., Yunusov, O. B., & Yuldashev, R. T. (2021). Methods Of Drying Subtropical Fruits And Their Importance For Human Health. *The American Journal of Applied sciences*, 3(05), 148-154.
21. Асранав, Э. К., Салиева, М., & Алижанов, Ж. (2019). ЛЕЧЕБНЫЕ СВОЙСТВА ТУТОВНИКА. *Академическая публицистика*, (5), 24-28.
22. Alisher, V., Komiljonovna, K. N., Botirovna, S. M., & Yulbarsova, D. S. (2020). БАМИЯ-ШИФОБАХШ ЎСИМЛИК ВА УНИ ЕТИШТИРИШ ТЕХНОЛОГИЯСИ. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 3479-3482.
23. Soliyeva, M. B., & Abdumutalipova, G. A. (2022). Influence of cocoon wrapping agrotechnics on the quality of cocoons. *ACADEMICIA: An International Multidisciplinary Research Journal*, 12(2), 380-386.
24. Soliyeva, M. B., & Nabiyeva, Z. A. (2022). Influence of Silk Gland Activity on the Quality and Technological Performance of Cocoons. *European Multidisciplinary Journal of Modern Science*, 6, 333-339.
25. Soliyeva, M. B., & No'monov, N. N. (2022). Processes for Obtaining Quality Silk Raw Materials From Industrial Silkworm Cocoons. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 3(6), 88-92.
26. Soliyeva, M. B., No'monov, N. N., & Isroilova, S. S. (2022). INFLUENCE OF SILKWORM FEEDING ON QUALITY MULBERRY LEAVES ON LARVAL VIABILITY AND BIOLOGICAL PARAMETERS. *Web of Scientist: International Scientific Research Journal*, 3(6), 378-386.
27. Ларькина, Е. А., Акилов, У. Х., Туйчиев, Ж. Ш., Асранов, Э. К., Солиева, М. Б., & Абдикаюмова, Н. К. (2022). Использование способов управления размножением тутового шелкопряда (*Bombyx mori* L.) в практическом шелководстве. *Аграрная наука*, 1(7-8), 114-120.
28. 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.
29. 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).

30. 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).