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# FERGANA VALLEY CLIMATIC SUITABLE, NEW VARIETIES OF MULBERRY WELD SWORDNGAN GROWTH AND BRUISING OF SEEDLINGS VA STUDY OF LEAF FORMATION

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**Abstract**
In this scientific work, the issues of propagating promising mulberry varieties by vegetative methods, namely by bud grafting, were studied. During the research, the propagation technology of the candidate selection numbers №1-21 (Yangi Andijon) and №5-21 (Vodiy-1) was investigated. The grafting process was carried out according to the method of U. Abdullayev. As scion material, cuttings 50–60 cm long were collected from the branches of the selected varieties at the beginning of February, before the sap flow began in the trees, and were stored in a refrigerator at a temperature of 24 °C until the time of grafting. Bud grafting carried out in April under the conditions of Marhamat district gave positive results. The results of the study showed that vegetative propagation of new selection mulberry varieties helps to preserve the economically valuable characteristics of the variety and is important for establishing high-yielding mulberry plantations in the future.

**Keywords:** Mulberry tree, vegetative propagation, bud grafting, selection varieties, Yangi Andijon (№1-21), Vodiy-1 (№5-21), scion, rootstock, cutting, mulberry nursery, variety, mulberry plantation.

**Anotatsiya:**
Ushbu ilmiy ishda tut daraxtining istiqbolli navlarini vegetativ usulda, ya’ni kurtak payvandlash orqali ko‘paytirish masalalari o‘rganildi. Tadqiqot jarayonida №1-21 (Yangi Andijon) va №5-21 (Vodiy-1) navlikka nomzod seleksion raqamlarning ko‘paytirish texnologiyasi tadqiq qilindi. Payvandlash ishlari U. Abdullayev usuli asosida amalga oshirildi. Payvandust sifatida tanlangan navlarning shoxlaridan fevral oyining boshida, daraxtda shira harakati boshlanishidan oldin 50–60 sm uzunlikdagi qalamchalar kesib olinib, payvand qilish vaqtigacha +2+4 °C haroratda sovitkich kamerada saqlandi. Marhamat tumani sharoitida aprel oyida bajarilgan kurtak payvandlash ishlari ijobiy natija berdi. Tadqiqot natijalari yangi seleksion tut navlarini vegetativ usulda ko‘paytirish, navning xo‘jalik jihatdan

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muhim belgilarini saqlab qolish hamda kelgusida sermahsul tut plantatsiyalarini tashkil etishda muhim ahamiyatga ega ekanligini ko‘rsatdi.

**Kalit so‘zlar:** ut daraxti, vegetativ ko‘paytirish, kurtak payvandlash, seleksion navlar, Yangi Andijon (№1-21), Vodiy-1 (№5-21), payvandust, payvandtag, qalamcha, tut ko‘chatchiligi, nav, tut plantatsiyasi..

**Аннотация:**
В данной научной работе изучены вопросы размножения перспективных сортов тутового дерева вегетативным способом, а именно методом окулировки (прививки почкой). В процессе исследования была изучена технология размножения селекционных номеров-кандидатов в сорта №1-21 (Янги Андижон) и №5-21 (Водий-1). Работы по прививке проводились по методу У. Абдуллаева. В качестве привоя с выбранных сортов в начале февраля, до начала сокодвижения у деревьев, были заготовлены черенки длиной 50–60 см, которые до момента прививки хранились в холодильной камере при температуре +2+4 °C. Окулировка, проведённая в апреле в условиях Мархаматского района, показала положительные результаты. Результаты исследования показали, что вегетативное размножение новых селекционных сортов тутового дерева позволяет сохранить хозяйственно ценные признаки сорта и имеет важное значение для создания высокопродуктивных плантаций тутовника в будущем.

**Ключевые слова:** тутовое дерево, вегетативное размножение, окулировка, селекционные сорта, Янги Андижон (№1-21), Водий-1 (№5-21), привой, подвой, черенок, питомниководство тутовника, сорт, плантация тутовника.

## Introduction

As you know, the reproduction of the flora occurs in two different directions. Jump to search *Morus alba* Jump to search Jump to search Jump to search Jump to search The genotype of the same variety is preserved 100%. The basis of vegetative reproduction is that the bud, branch and root will be able to freely regenerate separately in another environment or in a graft. Thus, a single unique or new genotype is preserved without change. Jump to search

He analyzes the development trends of Tutism in the context of drought around the world, noting that the increasing drought in the world requires the creation of new varieties of various plant species, including mulberry, suitable for drought. In his article, the author noted that water scarcity negatively affects the most basic water conservation properties of mul.**1**].

THe evaluated nine promising varieties of UT by feeding two silkworm hybrids. Feeding experience revealed that varieties ASS-143 and ASS-203 are superior over other varieties, and all farm signs of the pill are good. It also notes that Ass-143 and Ass-203 showed significantly better results than other varieties during repeated worm feeding seasons [4].

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The nutritional quality of the leaf is due to the degree at which it is eaten and digested by the silkworm, as well as the formation of silky mass as a result of the piraeus is determined by the quantity. Consequently, by the nutritional qualities of the leaf it is There is a disconnect between the mass of the worm and the amount of silk dependency is highlighted **[2]**.

Khorezm's disambiguation page lists articles associated with the title Khorezm. The city of Khorezm was founded in 2014 and was founded in 1914 by the Khorezm Institute.

In the development of silkworm growing in Slovenia and Hungary, they studied the mechanism of influence of local promising mulberry varieties on the productivity indicators of silkworms, as well as the chemical composition and nutritional indicators of leaves. This disambiguation page lists articles associated with the title Disambiguation[edit]

Farmed in agro-ecological conditions in mountainous areas, the variety is fed with leaf crops of mulberry trees *ipak qurtini Bombyx mori L.* Disambiguation pages with short descriptions

**Research objective:**

The main goal is to use a method that provides a comfortable and high percentage of breastfeeding, while preserving the hereditary characteristics of the varieties. It is not in vain that we carry out this study, since the candidates for varieties No. 1-21 (New Andijan) and No5-21 (Valley 1) have been able to quickly reproduce new fertile varieties and organize new mulberry plantations from seedlings. Providing the silk industry of our republic with a solid feed baseand consists of.

**Research objectives:**

One of the tasks of our research work is to multiply selected selection nominees of mulberries for varieties using an effective method of grafting when breeding new varieties of Tut No. 1-21 (New Andijan) and No. 5-21 (Valley 1).

**Research materials and methods:**

Research papers To the farm "SILK SEEDLING CLUSTER" in Marhamat district We have selected a small plot of land of 25 acres. It should be noted that Uzbekistan used 2-year-old mulberry seedlings of hybrids as a grafttag.

**Results and discussion:**

CENTRAL ASIA This disambiguation page lists articles associated with the title Mulberry Tree. Retrieved 2012-01-12. Catching in our country and developed at a high level, as in India, that they can't leave Exactly navdor, made up of fertile mulberry varieties plantations It can be considered that the reason for insufficient growth.

Also in welding payvandust It will be a good variety that will be mainly propagated, and the graft will consist of another species or hybrid seedlings. Then new navdor The fact that the root of the seedling can be changed in any other form is a great achievement in tut cultivation is.

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The importance of this research work is that we Tester Candidates for varieties No1-21 (New Andijan) and No5-21 (Valley 1) seleksion nomerJump to search Increased.
Varieties No1-21 (New Andijan) and No5-21 (Valley 1) The technique of bud grafting was carried out on the basis of the method of U. Abdullayev. Cuttings from the branches of new varieties, starting from the beginning of February, before the aphid movement on the tree begins 50-60 smli Branches are cut into size, sovitkich Kamerada 24 ºKept at C temperature until the time of grafting. Bud grafting can be done at different ages. We are Welcome We had a shot in April and the results weren't bad. Figure 1 shows the processes for grafting shoots obtained from the pens of newly selected mulberry varieties.

**1-rasm. Welcome The process of grafting mulberry buds on the land of the farm "SILK SEEDLING CLUSTER" in the district.**

According to experiments, from the fixed location of the weld «T» Jump to navigation Then the bud was cut out of the pen. On the bud there is a really thin piece of wood and a part of the eye Nayli We paid special attention to the preservation of the fibers. Then «T» Jump to search The grafted bud was tightly tied from the top and bottom with a polyethylene film. 20-25 days after grafting, the lower ligament was released. Jump to navigation Your When the leaf was formed, the link was removed altogether. Grafted in Figure 2 Seedlings care and monitoring processes

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**2-rasm. Welcome The process of grafting and monitoring grafting seedlings on the farm land "SILK POT CLUSTER" in the district**

Our seedlings have been watered and fertilized according to agrotechnical rules so that our seedlings can grow and develop well.

The result of our experience in this direction is, firstly, to prepare graft seedlings in large quantities of our selection no. 1-21 (New Andijan) and No. 5-21 (Valley 1) varieties, and secondly, to determine the degree of bruising when the buds are grafted. And also New Selected varieties of selected varieties are seedlings Welcome Telugu "SILK SEEDLING CLUSTER" Fergana Farm Land Valley Features of acclimatization to climatic conditions Learned, analyzed Therefore, we have determined the percentage of bruises of buds grafted in 2025. Our initial results are listed in Table 1.

**Table 1 Indicators by the degree of bruising of mulberry varieties with buds grafted in April 2025**

| **Nomerlar selection** | **year** | **Grafted varieties of mulberry, pieces** | **Bruise level** | |
|---|---|---|---|---|
| | | | Woman | Percentage (%) |
| No1-21, (New Andijan) | 2025 | 6000 | 5280,0 | 88,0 |
| №2-21 | 2025 | 100 | 85,0 | 85,0 |
| № 4-21 | 2025 | 100 | 83,0 | 83,0 |
| No. 5-21, (Valley 1) | 2025 | 3500 | 3112,0 | 89,0 |
| Tadjikskaya Bessemyannaya (q(Ibid.) | 2025 | 100 | 85,0 | 85,0 |

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By analyzing the data of Table 1, we found that among the new selection nominees No. 5-21, (Valley 1) and No. 1-21, (New Andijan) the rate of bruises was 89% and 88%, respectively, compared to the rest of the breeding nominees Nos. 2-21, No. 4-21. Comparator Tadjikskaya Bessemyannaya Jump to search It's, 83.0 % and 85 % respectively in the other two nominations. It's of the organization.

**Conclusion**

As a result of the research, it turned out that the reproduction of mulberry trees in a vegetative way, in particular by bud grafting, is an effective method of preserving the economically important signs of varieties. Pens for grafting are cut off in early February, before the onset of aphid movement on the trees, 2It has been observed that maintaining at a temperature of 4 °C is important in maintaining their viability. Bud grafting carried out in April in the conditions of Marhamat district gave a good result, and showed the possibility of successful breeding of new varieties.

In this regard, it is considered promising to increase breeding numbers No1-21 (New Andijan) and No5-21 (Valley-1) by the bud grafting method, and in the future it is desirable to widely use this method in the construction of plantations.

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