

UDK:635.1 /9.**CARRYING OUT AGROTECHNICAL MEASURES WHEN GROWING PAULOWNIA SEEDLINGS****Abdullayev Oybek Shakirjanovich**

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Abstract: The article contains information about Paulownia and the requirements for seedlings when growing it, as well as information about carrying out agrotechnical measures when planting seedlings. Recommendations have been developed for growing seedlings to obtain wood products in Pavlov plantings.

Key words: Paulownia, plantings, wood product, seedling, row spacing, seedling, forest.

In recent years, interest in Pavlovna has been growing in our country. Paulownia is not only the fastest growing tree in the world, but it is also famous for its beautiful flowers, valuable wood, honey and biomass. Paulownia - (lat. Paulownia) or Adam's tree is a tree belonging to the Paulownia family (Paulowniaceae).

Paulownia is a deciduous tree, tall, with large leaves, about 70 cm, flowers are crown-shaped, semi-pink, pale ink, body diameter up to 1 meter, the tree is covered with bark. Some information about Pavlovna can be found in sources from 2600 BC. It is native to Japan and is known by the name Kiri, which means "life" in Japanese. Kiri has always been considered a sacred tree and a symbol of good luck. The Japanese planted Paulownia near their house and believed that the bird of happiness, the "Phoenix," would land on its branches and this would bring happiness to our family. In 1823, German naturalist Filip Frans fon Zibold brought seeds of the Kiri tree to his homeland during his visit to Japan. They want to name the new plant in honor of the beloved Dutch queen. But thanks to the existence of a plant called "Anna", after her honor, that is, after the name of her father Paul I, it is called "Paulownia". Paulownia grows to different heights, depending on growing conditions, and can reach a maximum of 30 meters. Paulownia quickly adapts to the dry and hot climate of Uzbekistan. Grows even on dry soils with a lime content of up to 2%. In 5 years this tree can reach the expected height. Paulownia has a very fast recovery. The lifespan of the root is 70-100 years, it has the ability to re-germinate after 4 and even 8-9 times of cutting within eight years. Wood is widely used in various industries as a valuable raw material. Fragrant paulownia flowers are used in the perfume and cosmetics industries. It has been proven that from one hectare of Paulownia you can get up to 800 kg of honey and even more. From the first days of spring to May, one family of bees collects 10-15 kg of honey from newly opened flowers. The quality of this honey is also high, and in medicine it helps in the treatment of many diseases. The wood is fire resistant (up to 400°C) and resistant to pests. Paulownia is also highly moisture resistant. Wooden door frames made from it do not swell or rot during the rainy season. Around 2009-2010, an Uzbek scientist, Doctor of Biological Sciences, Professor Alisher Toraev, who lectured as an honorary doctor at the University of Plovdiv in Bulgaria, became interested in a strange tree he saw there called "Paulownia". The

Bulgarians' use of fuel pellets obtained from the Pavlova tree as an alternative energy source has attracted more scientific attention. At a time when most countries had a problem with gas, Professor Toraev brought the Paulownia tree to our country and was one of the first to begin growing it in local conditions.

Based on the decision of the Cabinet of Ministers of August 27, 2020 "On measures to create fast-growing and industrial plantations of Pavlovsk wood in the republic", based on the soil and climatic conditions of our country, water shortages, unused reserve areas on fund lands where there is little water or soil saline, groundwater was laid down below 30 meters, paulownia forest plantations were established and landscaping began. According to Doctor of Biological Sciences, Professor Alisher Toraev, there are many species and varieties of Paulownia. Based on their valuable characteristics, these are the most promising species for cultivation in Uzbekistan.

Paulownia catalpifolia - Catalpa Paulownia or Snow Paulownia

Paulownia elongata - Paulownia elongated.

Paulownia Fargesii - Farges Paulownia.

Paulownia fortunei HEMSL. - Fartuney Pavlovnya.

Paulownia kawakamii - Kawakami Paulownia.

Paulownia tomentosa STEUD. - Fibrous palownia.

Paulownia Shan Tong - Pavloniyasi's Shang Tong.



In the decree of the President of the Republic of Uzbekistan Sh.M. Mirziyoyev dated October 6, 2020 "On approval of the Concept for the development of forestry of the Republic of Uzbekistan until 2030" No. PK-4850 "Cultural forest management", special measures are taken to develop the growing field, propagate paulownia, fast-growing poplar species and the procurement of its raw materials, as a result of which a new system of structure of forest crops is being introduced. In our republic, large-scale work is underway to grow and reproduce rare and fast-growing trees, as well as to form a raw material base for industry.

Today, the Paulownia seedling, which is a novelty for many, is widely used in our country as an ornamental (ornamental) tree on the streets, in recreation centers, alleys, and in landscape design. But the paulownia tree, planted in the world for the purpose of obtaining valuable wood, differs from other plants not only in its decorative (ornamental) appearance, but also in its valuable properties.

Currently, Paulownia plantations are being established on the lands of the forest fund of our Republic. To obtain wood products, it is advisable to plant paulownia seedlings according to a 5 x 3 scheme, in which a total of 667 seedlings are used per 1 hectare. Since Paulownia grows very quickly, it is impossible to plant densely between rows and between seedlings, since when they branch, the trees begin to destroy each other.

Today, the scientific team of the Andijan branch of the Forestry Research Institute is conducting research on breeding paulownia seedlings, increasing wood productivity and growing quality seedlings on the lands of the Andijan State Forestry Fund. Paulownia seedlings planted for wood products were cut at a height of 5-7 cm from the ground in early March. The main reason for pruning is the formation of a long stem (base) in Paulownia seedlings that is at least 8 m long.

After pruning Paulownia seedlings, 5-7 new shoots were observed from the remaining root system.

In the experiments carried out, sprouts that sprouted after cutting in 3 different variants were tested:

- № 1 growth dynamics of 5-7 sprouted seedlings per variant;
- № 2 growth dynamics of two seedlings in the variant;
- № 3 growth dynamics of well-developed seedlings from sprout variants;

Table 1

Results of studying the germination and development of plantain seeds under different conditions.

№	Variants	Date of experiment and result					
		Date	height (sm)	Date	height (sm)	Date	height (sm)
1	1- Variant	15.07.2023	1,90 sm	30.07.2023	2,20 sm	15.08.2023	2,60 sm
2	2- Variant	15.07. 2023	3 sm	30.07.2023	3,80 sm	15.08.2023	4,20 sm
3	3- Variant	15.07. 2023	4 sm	30.07.2023	5,10 sm	15.08.2023	6,25 sm

Field experiments were carried out on paulownia seedlings planted on forestry lands (Fig. 1).

1-fig



As a result of the experiments, it is recommended to take care of well-developed paulownia seedlings grown for wood products according to the 3rd option, when new shoots are released in March, as strong and well-developed single seedlings. With proper care of seedlings, after 6-8 years you can get from 1 m³ to 2 m³ of finished wood for processing in local crafts.



CONCLUSION:

1. They are planted on Pavlovsk plantations to produce wood products. It is recommended to plant in a 5 x 3 pattern.

2. As a result of the experiments, it is recommended to plant one well-developed king of Pavlovskaya seedlings in the 3rd option and remove the excess king.

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