SOME BIOECOLOGICAL FEATURES PAULOWNIA TOMENTOSA AND CHITALPA TASHKENTENSISS, WHICH PROVIDE A PROSPECTIVE VIEW IN SAMARKAND CITY

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Annotation: Some bioecological features of Paulownia tomentosa (Pavlovniya tomentosa STEUD) and Chitalpa tashkentensis (chitalpa tashkentensis), which play an important role in the biological improvement of the ecological condition of Samarkand. (storage of water, absorption of gases from the ambient air, osmotic pressure of cells).

Keywords: Tomentosa Pavloniya, chitalpa tashkentensis, water storage, water content, osmotic pressure.

Introduction: Nowadays, in the context of globalization of the ecological state of the environment, it is important to improve the atmospheric air, the state of the environment. , the above-mentioned plants are of great importance in purifying the atmospheric air.

Relevance of the topic: In the current context of globalization, the Republic attaches great importance to improving the environmental situation and the adoption of laws. In particular, it was adopted by Decree of the President of the Republic of Uzbekistan dated September 11, 2017 No. 3262 “On measures to improve the system of architectural and landscape improvement of roads”. Therefore, in order to optimize the environment with the help of ornamental plants, it is necessary to plant trees such as pavloniya and Chitalpa Tashkentensis in the urban environment and around industrial enterprises. Discovers the importance of creating [1].

One of the most pressing issues is to increase the number of ornamental plants and clean the atmosphere of greenhouse gases in order to attract the attention of tourists from all over the world.

Purpose:

To study some bioecological features of fibrous pavloniya and Chitalpa Tashkentensis (water retention, absorption of some gases in the atmosphere, osmotic pressure of cells).

Research materials and methods: In Samarkand, high temperatures during the warmer months of the year lead to lower relative humidity. During the day, the average relative humidity varies from 24% to 61%. Here, one of the criteria for dry climate is the atmosphere. The average temperature in Samarkand is 14.4 degrees Celsius in April, 19.9 degrees Celsius in May, 24 degrees Celsius in June and 25.9 degrees Celsius in July. Degrees, 24.2 degrees in August, 19.3 degrees in September.

Low humidity in the region leads to an increase in transpiration in plants: the annual rainfall is 310 mm at the Samarkand metro station, 510 mm at the Urgut station, and 510 mm at the Omonkoton station.

Reaches up to 920 mm.

Paulowniais the fastest growing tree in the world, giving a beautiful landscape.

In spring, it blooms before the leaves, the flower emits a pleasant odor, the leaves are large, thick, cool. Paulownia absorbs 10 times more CO_2 than other trees and releases oxygen. This is due to the growth of skin on the leaves and body compared to other trees, possible [2,3].

Another feature of Paulowniais that it improves the condition of the earth, its roots absorbing nitrates and heavy metals and other elements from the deep horizons of the earth.

At present, paulownia plantations are being established on barren lands in developed countries.

Paulownia also has many medicinal properties, including leaves and flowers for bronchitis and cough, and the fruit helps lower blood pressure.

Large leaves contain amino acids and trace elements, and growth is accelerated when pets are fed peacock leaves.

Growing this tree in our country ensures the purity of the environment, adds beauty to the beauty of cities and villages.

Chitalpa tashkentensis is a large shrub up to 4-6-8 m long, which is due to the mixing of the two species (Chilapsis linearis Catalpa biknanioides).

The leaves are dark green, lanceolate, 22 cm long, 4-5 cm wide. The flowers are linear, the inflorescences are 12-20 cm long [3].

Propagated by cuttings only.

An important feature of Chitalpa tashkentensis is that it blooms for 6 months - from May to November. The flowers are purple in color, giving a beautiful landscape and good mood. Properties of plants 'rganildi.

Results of the research: Paulowniya and Chitalpa tashkentensis the ecological and physiological features of the botanical garden of Samarkand State University are studied in a comparative ecological way.

From physiological parameters, the amount of water in plants and the ability of leaves to retain water, cellular osmotic pressure were studied.

The experiments were conducted in July-August 2018.

The ability of plants to retain water was studied using the method of A.A.Nichipirovich. In this case, 3 leaf samples were taken from paulowniya and Chitalpa tashkentensis and weighed on a weighing scale every hour for 3 hours. were then dried in a thermostat at 105 degrees for 6 hours.

Paulowniatree was distinguished by specific physiological indicators of water regime, the content of water in the leaves of the two studied plants varied, on average in pavlonion 77.3%, in Chitalpa tashkentensis o. The average is 74.6%.

The ability of plants to retain water shows their resistance to drought. The leaves of the Paulowniatree average 84.5%, and the average yield of Chitalpa tashkentensis is 75%.

Conclusion

Based on scientific experiments, it can be noted that the two studied landscape trees differ in their physiological parameters in the conditions of the city of Samarkand.

The leaves of the Paulownia tree are more adapted to arid conditions than Chitalpa tashkentensis due to the high water content and water retention ability, which is characterized by high ecological and physiological properties to arid conditions. Therefore, Chitalpa tashkentensissa can be recommended for areas with sufficient water supply of the city, and paulowniya tree for areas with less humidity.

Both of the studied plants are promising in optimizing the urban environment due to the fact that Paulowniya and Tashkent Chetalpa have a pleasant and air-purifying properties.

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