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BIO ECOLOGICAL CHARACTERISTICS OF CLIMATIC LANDSCAPE PLANTS OF FERGANA CITY

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ABSTRACT

Today, more and more attention is paid to the creation of green areas in cities, and in our hot and dry climate, the importance of trees and shrubs, especially conifers and evergreens, is very high. In recent years, the number of ornamental coniferous trees and evergreen shrubs has increased in the city's greening system. Beautification of cities and villages in Uzbekistan in a modern style is an important state measure aimed at dramatically improving the living standards of the population.

KEYWORDS: *Ecology, Vegetation, Landscape Design, Ornamental Plants, Nature, Ecological Culture.*

INTRODUCTION

In the early stages of human development, ecology plays an important role among people of this period. Ecology is a science much more ancient than the various drawings left by ancient people in caves and rocks. Every person who lived at that time knew about the state of the environment in order to avoid hunger, cold and heat, collect seeds and fruits of plants, catch animals and expose themselves to danger. They knew how to avoid and hide from enemies, natural disasters. Studying the power of nature, its laws and the influence of environmental factors on adaptation to these laws, people have been collecting information for years and centuries. Ancient Greek scientists such as Hippocrates and Aristotle described the ecological nature of approximately 500 plant species and 454 animal species. For example, in his scientific works, Aristotle described the life and distribution of more than 500 species of animals, birds and fish, as well as their

migration from one place to another. Galen and Theophrastus also written valuable information about the life of different animals and their adaptation to nature.

Main part

Today, it is advisable to solve the issues of environmental education and training when developing measures to prevent various environmental conflicts arising in the environment:

1) deeply teach everyone the laws of development of society and nature, teach the relationship between them, educate a person who can think in a modern way; take into account the ecological state of various natural areas in the direction of the productive forces of socio-economic development;

2) developing of environmental plans for the future and training of environmental specialists who will implement these plans;

3) continuous communication of each person, society and various groups and categories within society with the environment in which they live, aimed at preserving nature and its resources, as well as training qualified personnel in this area;

4) the importance of the beauty of the place where they live, valleys, groves, hills, mountains and streams, their importance for human life and health in the development of their social, cultural, religious views and traditions. Explain to the younger generation in order to instill in them a love of nature;

5) explain to the population the causes of various environmental conflicts, conduct environmental education and training among them, teach to develop and implement measures, methods to overcome environmental conflicts;

6) the fulfillment of the above tasks of educational work by educators of kindergartens, schools, higher and secondary specialized educational institutions in the course of various games, films, natural and social sciences in response to natural disasters and environmental conditions in their places of live.

DISCUSSION

It is known that one of the main components of landscape design is ornamental shrubs. Trees and shrubs are not only a source of raw materials and various products, but also one of the main factors that improve the environment. The vital activity of the plant world affects the climate, i.e. it absorbs and neutralizes CO2 and other harmful gases and smoke in the air, reduces the amount of dust in the city air, phytoncides emitted by trees kill pathogenic bacteria.

One of the main directions of development of ornamental horticulture in Uzbekistan is to increase the number of species of trees and shrubs that are biologically resistant to urban conditions for landscaping. Evergreen and flowering shrubs are also one of the most important components of landscape design.

Landscape endemic and introduced plants are the beauty of alleys, parks and gardens, which are widely used as green adornments of architectural structures in cities, districts and villages.

Today it is necessary to reduce the impact of man-made factors in cities, improve the environment, protect human health, create new urban landscapes with unique architectural beauty, and introduce new trees and shrubs adapted to the climate of the region.

Chestnut, oak, tulip tree, black pine, Crimean pine, bird cherry, dzhuka, magnolia plants introduced on city streets, as well as chestnuts, oak, Crimean pine, meta grown in the climatic conditions of Uzbekistan in order to study the bioecological properties of aboriginal plants, such like sequoia, linden, virgin spruce.

During the observations, the tree branches were observed, which make up the bulk of the experimental areas. At the beginning of the year, phenological observations were carried out at the experimental sites, the results obtained were recorded in the established table of phenological observations.

A comparative analysis of the growth of branches according to the method of F.N. Rusanov (1970) was carried out at different ages in the ontogeny of species of the genus Picea.

The association of trees with low winter and high summer temperatures was determined twice a year during the tree inventory in the autumn and spring months.

The relation of spruce to light was studied on trees of different ages. The level of illumination was determined by natural and artificial dimming (umbrellas, gauze). The effect of light on the growth and development of trees was determined by the order and number of branches, the annual growth rate of branches, the size of the upper and side branches, as well as the number of leaves in branches aged 5-7 years.

In 2014-2015, with the introduced forms of chestnut, oak, tulip plants, the growth and development of local plants, adaptability to the environment, morphological, biological, ecological characteristics of plants were monitored.

According to the observation results, it can be noted that in September-October 2014, the ecological mortality of chestnut plants imported from abroad increased by 15%, which is associated with a decrease in temperature in winter and spring 2015 by 20% in oak. 5% in 2014, 15% in 2015, 18% in tulips in 2014 and 20-25% in 2015.

It was found that local chestnuts 10% in 2014, 15% in 2015, 3% and oaks lost 5% in 2014 and 2015.

In addition, the growth and development of local and introduced shrubs, such as black and red barberry, David's budley, Japanese beech, Magonia, Chubushnik, Pyrrakanta Smarodina, Elderberry, Tobulga, Sirena, Kalina, Veige, imported in the course of our research, showed resistance to external factors, climatization of plants were observed in the indicated order.

Revealed the need to examine the root and root collar of the plant to determine the symptoms of root cancer. With sharp changes in temperature day and night, cracks were found on the surface of some leaves.

In view of the above, the cause of the disease can be attributed to a change in the water regime and temperature. As a result, the plant suffers from metabolic disorders, first of all, spots that do not contain chlorophyll, which leads to yellowing and darkening of the leaf surface, slowing down the growth of the stem. In order for the seedlings to germinate well, first of all, it is

necessary to take into account the soil and climatic conditions, and also after each watering the seedlings should be thinned and loosened. An excess of water and a solution of mineral fertilizers used to preserve the greenery of these lawns will fill the first hole or well when preparing ornamental trees for planting, slightly moistening the root system of the seedlings, affecting the circulation of root air, reducing metabolism and, ultimately, leading to yellowing of the leaves slowing down the growth of annual plant stems.

Because this is due to the fact that in some of the surveyed areas the soil in the pits under the seedlings turned out to be in a sticky clay state, despite the fact that the lawn was watered for several days. It should be noted here that ornamental trees brought in for the alley require special care for their full development. When they are fully developed, they need to be brought to the lawn.

In the fall and winter, when the seedlings were transplanted from one place to another, the trees were found to dry out in early spring due to shallow planting of trees and successive floods and, in some cases, sudden cooling of the air. Therefore, when planting on seedlings, if the root collar is covered with 5-10 cm of excess soil, the above situation is not observed. This is due to the fact that one of the main reasons that some chestnut, oak and pine seedlings of the same species grow and dry out is that the wrong agrotechnical measures were taken when they were planted.

CONCLUSION

It is necessary to pay attention to suitable for planting in cities, which has a valuable scenic view, strong and durable, like conifers, such as pine, spruce, biota, metasequoia, spruce, linden, artificial chestnut, scarlet, coniferous oak, suitable for planting in cities, strong and durable and with a valuable scenic look, Norway maple, tulip tree, magnolia, catalpa, linden, sophora, small-leaved linden, ornamental shrubs, magnolia, common lilac, Indian lilac, fortification, yucca, viburnum, buldanezh, rosemary.

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