



HE ROLE AND ROLE OF PLANTS IN THE INFRASTRUCTURE OF THE CITY OF FARAGONA.

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Anotation.As a result of the glorious efforts to establish a new Uzbekistan and lay the foundation for the third Renaissance, our cities and villages are taking on a modern image, the construction of many social structures gives us all unlimited pride and pride.

Today, as in other regions of our country, large-scale improvement works are being carried out in Fergana, and as a result, we are all aware that huge construction and landscaping work is being carried out in our city, as well as the highest examples of modern cities.

Аннотация: Благодаря таким грандиозным усилиям, как возведение нового Узбекистана и закладка фундамента для третьего Ренессанса, наши города и села приобретают современный облик, возводятся многочисленные социальные сооружения, дающие всем нам безграничную гордость и гордость.

Сегодня в городе Фергана, как и в других регионах нашей страны, проводятся масштабные работы по благоустройству, в результате которых в нашем городе, как и в самых высоких образцах современных городов, ведутся масштабные работы по созданию и озеленению.

Ключевые слова: ландшафтный дизайн, плантации, климат, фитонциды, оздоровление окружающей среды.

Keywords: landscape design, plantations, climate, phytoncides, environmental improvement.

Introduction: as a result of complete Greening, the air is almost completely cleared of dust. In this case, kehg is used in the greening of automatic roads from plants. Car trunk Greening: includes protective and scenic plantings planted on either side of the road, Greening the line of section of the road (on Category 1 roads), Greening intersections, bus stops, areas where passengers and drivers are intended for longer rest. Greening is mainly roadside landscaping, which prevents road erosion, creates favorable climatic and hygienic conditions that ensure movement safety. These cultivated areas are erected in the flat areas of the relief, by planting in rows, the number of rows is determined by the width on the side of the road. Multi-row crops created on the border of agricultural crops simultaneously serve as field-protecting orchards. The hilly terrain sections of the road are mainly occupied by tree-shrubs. Phytoncides released from plants reduce harmful microbes in the air by 40-50%. Even





if the trees do not have leaves during the winter months, their importance in dust protection is great. Along with other additional measures to ensure air cleanliness – measures to prevent the spread of waste from industrial enterprises, street improvement is also considered important.

During the summer season, it is necessary to wash off the dust from the leaves of trees and shrubs more often, a large accumulation of dust can negatively affect the respiration and development of plants, causing them to gradually die. A high protective effect can be achieved if one adult tree retains the amount of dust in the air during the growing season, studying the dust protection property of one or another type of tree and shrub,organized in a comprehensive plan, correctly placing them.

Through engineering and environmentally-biologically correct design, the effectiveness of the sanitary task of the work of green crops is ensured. When building green sanitary crops, the direction of the wind, the type, height and composition of the waste that spreads to the atmosphere, chemical and physical properties should be taken into account. In addition to the development of urban planning, the problem of combating noise with an increase in traffic numbers is also becoming more and more acute. From a physical point of view, sound(noise) is the vibration of the elastic medium. As a result of the process of evolution, man is adapted to the perception of vibrations, mainly from 16 to 20,000 Hz. The level of sound pressure is determined in decibels (dB). An increase in noise levels negatively affects the human body. Causes various mental disorders. And the role of the plant world in reducing urban noise is incomparable. It is advisable to plant in the chess method of tall, branching trees.

The main aspect of landscaping is that, using the territory of natural tree plantations, it is necessary to change the appearance, combine natural samples with works of Applied Art, creating a holistic landscape. The reproduction of landscape crops occurred during the time of the slave society. Even at that time, palaces, mausoleums, hiyobon and gardens were erected in wealthy apartments, and special attention was paid to landscaping. For example, when planning ancient Egyptian Gardens, certain rules were followed: in the center of the composition is the main building, a long corridor (alleya) with a tree planted on both sides is the main part of this composition, connected to the entrance to the courtyard, and dividing the garden area into two equal sections. In each stretch, right-angled bodies of water were created. In the ancient Mesopotamian States, large reserves intended for hunting were established.

The structure, width, height and composition of tree species of crops are closely related to these indicators. Large horn-bulbous, pubescent, wrinkled, heady - budir, unevenly deciduous tree species (oak, birch, Mulberry, black walnut, white poplar, maple, small-leaved Jay, barberry, Catalpa, soap tree, carcass and so on.) well captures dust in the air. Just like these absorb toxic rare compounds, especially carbon dioxide.

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Nina leafy leafy leaves retain more dust compared to trees. It is also important that in autumn, snow-free winter and early spring, when a lot of dust accumulates in residential areas, ninabargli, including representatives of the cypress family, are densely covered with the body, the leaves of which are leafy to the body, since at this time deciduous trees do not have leaves.

Since tall-growing oak, sofora, larch, Birch, shumtol trees have a large leaf surface, green arrays made from them provide good protection of the atmosphere from transport –industrial waste and dust.

Observations and experiments have shown that the plant world has the property of capturing dust. Such a division is due to the bioecological properties of plants, especially since they are characterized by their feathery – hairless leaves, stems, branches.

Any of the dust was captured by Chestnut and dub trees. The dust that different plants hold is in different quantities. It depends on the fact that the variety divides the plants in different quantities the pollen grains that are in the atmosphere during the growing season. It is also necessary to take into account the effect of the wind on this thing. G.M.Ilkun and S.A.According to anikina (1971), black poplar leaves of average age, which they are 50 m2. This will retain 44 kg of dust during the growing season. The White Poplar weighs 53, the white willow weighs 34, and the Klein weighs 30 kg. From trees with a total weight of 1 kg(depending on the dry matter), White acacia leaves accumulate 69 kg of SO2 during the growing season. As can be seen in the cited data, plant reproduction is important in the purification of atmospheric air.

It is impossible to fully imagine their wellness function without taking into account the phytoncidal properties of trees and shrubs. Plants release organic compounds from themselves, which, having lost harmful microorganisms, have a positive effect on the environment and the human body. Urban air contains a large amount of disease-spreading microbes compared to those in the open field. Hiyobon and amusement parks tend to have low levels of bacteria compared to those on the streets. The effect of flying phytoncides fractions on microorganisms is closely related to the species composition of plants. In pine forests, for example, the number of bacteria in 1 m3 of air is 170, in Birch Grove-1806, in mixed forest (coniferous and deciduous) - 1400.

Based on the requirements of the environmental conditions of plants, large plant arrays erected in compliance with the relevant agrotechnical rules are able to fully demonstrate their sanitary and hygienic properties. It is advisable to place tree species taking into account their ecological and biological characteristics: the demand for light, soil, moisture, the degree of mutual proportionality in time and width.

Conclusion: based on scientific research carried out in our country and abroad, the electrical condition of the air is of particular hygienic importance. Organic



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substances that spread from plants have a great influence on the ionization of air; it is he who ensures the accumulation of negative ions necessary for human health. The degree of utility of climate is determined by the concentration of negative ions in the air, which in turn increase the protective nature of the human body.

From industrial, diverse factories and manufacturing enterprises, from cars to atmospheric air, the flame of various gases is constantly released. As a result, there is an unfavorable environment, and among the population there is an increase in the number of allergic and skin-venereal diseases of various types. From this, the transfer of various carcinogenic substances from air to soil, there to plants and animals, and from food to humans, is the cause of the development of dangerous diseases. The role of the plant world in cleaning atmospheric air from dust and harmful gases of various kinds is incomparable. Scientific experiments show that plants of urban gardens and meadows with an area of 1 hectare clean 10-20 million m3 of air from dust during the growing season. In addition, plants secrete phytoncides from themselves that prevent the growth of harmful pathogenic bacteria, microorganisms in the air. Currently, more than 500 plants have been found to possess varying degrees of phytoncidal properties among them, such as white acacia, common barberry, birch,oak,common spruce, Horsetail, small-leaved Linden, sibr spruce, Japanese safflower silver Poplar, red maple, common pine, etc. The role of plants is also incomparable in a significant decrease in noise levels. Most plants selectively affect disease-causing bacteria.For example: Oak and Poplar phytoncides have the property of eliminating dysentery triggers, arch needles diphtheria, pine needles tuberculosis sticks. Phytoncides purify the air from various microbes and rightfully consider vitamins of the atmosphere.

Thanks to the rational policies implemented in our country, many facilities are being created for the survival of people whose urban ifrastructure has changed. Large-scale landscaping and greening work is being carried out on highways and residential arrays, special plants are being created in order to preserve human health and increase a healthy lifestyle.

List of literature used.

- 1. Sh. Mirziyoyev "Yangi O'zbekiston taraqqiyot strategiyasi" O'zbekiston Tosh.2022. 322, -324 b.
- 2. Sh.Mirziyoyev. "Buyuk kelajagimizni mard va olijanob xalqimiz bilan birga quramiz". Toshkent. O'zbekiston nashryoti. 2017.
- A.X.O'roqov "Avtomobil yo'llarini ko'kalamzorlashtirish" O'quv qo'llanma.T. 2019.
- 4. Muxamedjonov A., Berdiev E. Manzarali daraxt-buta o'simliklar tavsifi, ko'paytirish, parvarishlash, shakl berish) Toshkent, ToshDAU Tahririyatnashriyot bo'limi, 2018.-84 b.

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ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ



- 5. Abdullayeva, M. T, Xabibullayeva, M. (2022). Ekologik ta'lim tarbiya yoshlar nigohida. Central Asian Research Journal for Interdisciplinary Studies (CARJIS), 2(Special Issue 2), 180-185.
- 6. Abdullaeva, M. T., & Ibragimova, S. S. (2022, January). THE ROLE OF ECOLOGICAL EDUCATION IN THE DEVELOPMENT OF ECOLOGICAL CULTURE IN OUR YOUTH. In International journal of conference series on education and social sciences (Online) (Vol. 2, No. 1).
- 7. Abdullayeva, M. T. L., & Maqsudova, G. M. (2021). EKOLOGIK TA'LIM VA TARBIYADA XORIJIY TAJRIBA. Oriental renaissance: Innovative, educational, natural and social sciences, 1(10), 159-165.
- 8. . Arifxanov.K.T., Slavkina.T.I.DendrologiyaUz.tom.XI, Tashkent.1981.
- 9. Xalmatova, S. M., & Maxsudova, G. (2022). SHAXS MA'NAVIY ONGINI SHAKLLASHTIRISHDA OILANING AHAMIYATI. Oriental renaissance: Innovative, educational, natural and social sciences, 2(10-2), 677-680.
- 10.Makhsudova, G. (2022). SHAELLING ECOLOGICAL CONSCIOUSNESS AND CULTURE IN SCHOOLCHILDREN. Oriental Journal of Social Sciences, 2(06), 66-73.
- 11.Feruzaxon, Q., & Mohinur, B. (2023). EKOLOGIK ONGNI TA'LIM TARBIYADA SHAKLLANISHI. *Journal of new century innovations*, 20(4), 3-7.
- 12.Gulnoraxon, M. (2023). FARG'ONA VODIYSI AHOLISINING TABIATDAN TEJAMLI FAYDALANISH AN'ANALARI. Journal of new century innovations, 20(4), 8-13.
- 13. Mukhammadjonovna, M. G. (2023). Formation of Ecological Consciousness in Education. *Journal of Pedagogical Inventions and Practices*, *16*, 1-3.
- 14. Abdullaeva M. T., Usmonova T. E., Inomov H. E. Influence of number of seedlings and amount of fertilizers on the development of root system of winter wheat //Asian Journal of Multidimensional Research. – 2021. – T. 10. – №. 10. – C. 805-809.
- 15. Abdullaeva, Maqsuda Tulanovna, Tursunoy Erkinovna Usmonova, and Hayitali Ergashalievich Inomov. "Influence of number of seedlings and amount of fertilizers on the development of root system of winter wheat." *Asian Journal of Multidimensional Research* 10.10 (2021): 805-809.
- 16. Abdullaeva, M. T., Usmonova, T. E., & Inomov, H. E. (2021). Influence of number of seedlings and amount of fertilizers on the development of root system of winter wheat. *Asian Journal of Multidimensional Research*, *10*(10), 805-809.





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