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ECOLOGICAL, BIOLOGICAL, AND DECORATIVE CHARACTERISTICS OF ORNAMENTAL TREES AND SHRUBS

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Abstract

This article discusses the climatic and ecological conditions of the Republic of Karakalpakstan, the increase in dust levels during the summer season, and the importance of green spaces in city air purification. Trees and shrubs are effective in reducing harmful microorganisms in the air and reducing noise. More rapid growth of trees and shrubs can have decorative and sanitary-hygienic effects.

Keywords

trees and shrubs, ecology, bioecology, significance, sustainability.

Аннотация

В данной статье рассказывается о климатических и экологических условиях Республики Каракалпакстан, увеличении количества пыли в летний сезон, важности зеленых насаждений в очистке воздуха городов. Деревья и кустарники эффективны в уменьшении вредных микроорганизмов в воздухе и снижении шума. Более быстрый рост деревьев и кустарников может дать декоративные и санитарно-гигиенические эффекты.

Ключевые слова

еревья и кустарники, экология, биоэкология, значение, устойчивость.

The climate of the Republic of Karakalpakstan is characterized by an increase in dust during the summer season. Green forests purify the air of city streets and remove dust from it, and also facilitate their movement. A fully forested area effectively cleans the air of dust and reduces the number of harmful microorganisms by 40-45%.

In the fight against noise, dense tall trees provide a great help. Leafy trees absorb 25% of noise and reflect 75%. Trees should be no less than 10 meters long and consist of different species.

Trees and shrubs attract people's attention with their beauty, diversity of shapes and colors. This beautiful work of nature is always changing. The external environment has a great influence on the development of plant organisms; their

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appearance, size, and long-term growth are closely related to this external environment.

In the process of historical development, tree plants have adapted to growing in various ecological conditions. Some species grow well in dry sandy soils (jiyda, tamarisk, saxaul, and others), while others require richer soil and higher moisture conditions (biota, juniper, poplar, willow).

Plants also have varying requirements for temperature, light, and air humidity. In the process of individual development, plants go through a number of stages - from juvenile to mature. During these periods, a single plant's crown is characterized by varying sizes, shapes, and growth rates.

Rapid growth is an important characteristic of tree plants. Fast-growing trees and shrubs provide an early decoration and sanitary-hygienic effect and provide protective properties. The rapid fusion of branches allows for faster completion of soil maintenance work, which reduces the cost of establishing plantations.

The longer-term growth of tree species is of great importance in garden and park construction. This is necessary not only from an economic point of view, but also from an aesthetic point of view, since an old, well-growing tree is more decorative than a young one.

In the conditions of Karakalpakstan, the most important environmental factors in green construction are air temperature, soil temperature, soil moisture and nutrient regime, light and air composition. It is possible to control the nutrient and moisture regime of the soil - with appropriate agricultural techniques, it is practically difficult to control air temperature and soil temperature.

The crown of tree species is divided into the following groups:

— large, spreading, wide (incorrectly shaped): elm, oak, willow, poplar, white mulberry, and others;

— pyramidal and columnar; pyramidal oak, acute-leaved maple, pyramidal poplar, western camel, biota, etc.;

— elliptical and its variants chestnut, maple, etc.;

— egg-shaped: linden, Veymutov pine;

— Inverted egg-shaped - Syrian gibiscus;

— umbrella-shaped: Aylanthus, Albizia, Italian pine;

— spherical: pinnate elm, Japanese pagoda tree, Siberian apple, lilac, and others;

— branches hanging down - birch, willow with branches hanging down;

— bindweed - grapes, jimolost, glycina, tekoma, etc.;

— terrestrial plants: Kazakh juniper, red elder.

— cushion-like - Lavson's cypress, microbiota.

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