JOURNAL OF MULTIDISCIPLINARY SCIENCES AND INNOVATIONS
GERMAN INTERNATIONAL JOURNALS COMPANY
ISSN: 2751-4390
IMPACT FACTOR (RESEARCH BIB) : 9,08. Academic research index

BIOECOLOGICAL CHARACTERISTICS OF ELM ULMUS L IN SALINE SOILS OF THE REPUBLIC OF KARAKALPAKSTAN.

Assistant teacher of the Department of
"Plant Growing, Forestry and Landscape Design"
of the Karakalpakstan Institute of Agriculture and Agrotechnology
Utegenov Islambek Baxıtbayevıch

Abstract: In this article, within the framework of the "Green Space" project, it is planned to breed trees suitable for the climatic conditions of the regions of the Republic of Karakalpakstan. About elm, the most suitable tree for the climatic conditions of the regions of the Republic of Karakalpakstan.
Keywords: region, climate, tree, conditions, elm, root, saline, soils, resistant, propagated, light-loving, drought-resistant, vigorous variety, ovoid, family species, small-leaved, widespread use.

It is planned to grow trees suitable for the climatic conditions of the regions of the Republic of Karakalpakstan. One of the most suitable trees for the climatic conditions of the regions of the Republic of Karakalpakstan is the elm. This tree is extremely hardy and lives for more than a hundred years in the conditions of Karakalpakstan. Experts say that this tree, belonging to the elm family, is not picky about its location and can grow even in saline soils by taking deep roots. Therefore, our ancestors have long planted elm trees around the ancient monuments they built.
Elm is a deciduous tree of the family of the Elm family, an ornamental plant. It grows mainly in Central Asia and Azerbaijan. It lives for 80-120 (400-500) years. The tree is light-loving, drought-resistant, and frost-resistant. It is also found in the mountains at altitudes up to 1500 m. In Uzbekistan, the tree is widely distributed as the small tree, the small tree, the smooth tree, the field tree, especially the common tree and the original tree (the common tree) or the androsov tree. This tree is 10–15 m tall, with a thick, spherical trunk, with alternate, ovate leaves. It blooms and bears fruit in March-April. The flowers are bisexual. The seeds are nut-shaped (seed-like). Due to its deep shade and beautiful appearance, it is grown in courtyards, gardens, and alleys in Western and Central Asia, in Transcaucasia. All types of elm are planted to create forests, parks, and landscape groves. In addition, elm is of great importance in human life and industry, and its wood is used in furniture production, mechanical engineering, and the manufacture of various items. It is propagated from seeds and root cuttings.
The life form of the Ulmus genus consists of trees and shrubs. Currently, there are 140 species of the Ulmaceae family in 13 genera on Earth. 10 species of this family are widespread in Uzbekistan. In Uzbekistan, the following species of elm are widely distributed: Ulmus suberosa, Moench - cork elm, U. pumila L. - dwarf elm, U. androssovii Litv. - androsov elm or dwarf elm, U. parviflora Joeg. - small-leaved elm, U. laevis Pall. - smooth elm, Ulmus uzbekistanica. Drob. - dwarf elm, U. densa Litv. - plain elm, U. campestris L. - field elm.
The species of the elm genus are mainly grown in gardens and alleys due to their decorative and beautiful appearance and the deep shade they provide. Due to their good noise and dust absorption properties, the species of kayragoch are planted as ornamental trees in residential areas and on roadsides in the city.
Sadakayragoch or elm is a perennial tree, usually reaching a height of 10-20 meters, - says Rashid Rahmonov, associate professor of Bukhara State University. - It has been distinguished since ancient times by its slow growth, as well as its strong stem. In addition, this

plant is resistant to salt and drought, and due to its spherical shape, it is distinguished by its increased survival by blocking its roots from sunlight. In addition to preventing sandstorms, blocking wind paths, and protecting soil from erosion, it also helps to moderate the climate. Especially in the heat of summer, it provides a dense shade and does not let in even the sun's rays. Smooth elm (Ulmus laevis Pall.) is a large tree reaching 40 m in height and 1 m in diameter. The bark is dark brown, thin, and peeling. Young branches are hairy, and the branches are thin, smooth, shiny, conical, with two-colored needles. The leaves are dark green, oval-shaped with a serrated edge, with two rows of serrations, a sharp tip, glabrous on the upper side, and hairy on the lower side. They are arranged alternately. The fruit hangs in clusters on a long serrated edge. The serrated edge is 2-5 times longer than the wing. The wing is oval-shaped, with ciliate edges. The nut is located in the center of the wing. The seed quickly loses its germination. Therefore, the collected seeds are sown quickly. They germinate in 10-15 days. Elm grows in deciduous or coniferous and broad-leaved mixed forests in the forest or forest-steppe zone. In the CIS, it grows in the Caucasus, Scandinavia, England, and Central Europe. This elm is frost-resistant, grows in the second tier among shade-loving trees. It likes moist and fertile soils, and is susceptible to powdery mildew. Its wood is used in carpentry, mechanical engineering, and for making yokes, wheel rims, and sledges. Elm attracts attention with its beautiful branches that provide good shade. It is often planted in parks. It grows very large on fertile lands. It is resistant to heat and drought. This elm has long been planted for landscaping purposes. It is highly valued in our republic for its resistance to the hot and dry climate.

The Tashkent Botanical Garden received Ulmus laevis Pall. seeds from the Frunze State by F.N. Rusanov in 1950 for introduction and were planted in nurseries. The seedlings grown from the seeds sprouted in March 1950, and the young seedlings were transplanted to the European-Crimea-Caucasus exposition in 1954. Currently, 2 adult trees of this species are growing at the exposition.

The beautiful, dense canopy of the elm tree, which provides good shade, and the abundance of leaves enriches the air with oxygen. Most importantly, it is resistant to diseases. The elm tree reproduces by root and seed. If it is grafted onto the sedum tree, i.e. the karamon tree, its resistance to waterlogging is further strengthened and its life is extended. In particular, its porcelain gujum variety, created by welding, is distinguished by its beautiful appearance.

Currently, work is underway to widely introduce Bukhara porcelain gujum in the neighboring Kashkadarya, Khorezm, Navoi regions, and the Republic of Karakalpakstan.

References

1.M.M. Qalandaroy Forestry Tashkent "New edition" 2008.

2. Mycobiota and fungal diseases of elm (ulmus l.) trees distributed in Uzbekistan A.A. Abdurazakov, S.A. Ikromov, G.K. Norimova, Z.Sh. Islamiddinov, O.M. Mamarakhimov, Yu.Sh. G'afforov.

3. A reserve of elm trees was created Zarif Kamilov, Tohirjon Istatov (photo), UzA correspondents.

4.https://uzbbg.uz/ru/sahifalar-ru/Elm