

SCIENTIFIC BASIS OF USING OAK TREE IN URBAN GREENING

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ABSTRACT

The importance of the oak tree in the national economy, its cultivation, its use for industry and its storage as a reserve, the place of oak trees in the greening of residential areas, and the place of oak trees as ornamental trees is very incomparable. In this article, it is intended to find the most optimal ways to grow an oak tree.

KEYWORDS: Oak, Tree, Industry, Landscaping, Walnut, Pathways, Forests, Landscapes.

INTRODUCTION

In ancient times, information about tree species was known by factors related to food from plants, hunting of animals, hiding from the tree trunk in the hollows in unfavorable weather conditions. As soon as man moved from a nomadic state to a settled one, he began to create forest crops.

Andijan region borders the Kyrgyz Republic to the north-east and south, Fergana region to the west and Namangan region to the north-west. The climate of the region is sharply continental, dry. Due to the fact that the mountain ranges block the penetration of cold air into the Fergana Valley, the weather is mild in winter. The summer is hot, the average temperature of July is 27.3 °C, the winter is relatively cold, the average temperature of January is -3 °C.

The vegetation period is 217 days, the average annual rainfall is 200-250 mm. The soil consists of gray, brown, grassy, marshy soils, sandstone, marl calcareous rocks, and various plants on the uncultivated plains. The city is located 450 meters above sea level, along the shores of Andijonsoy.

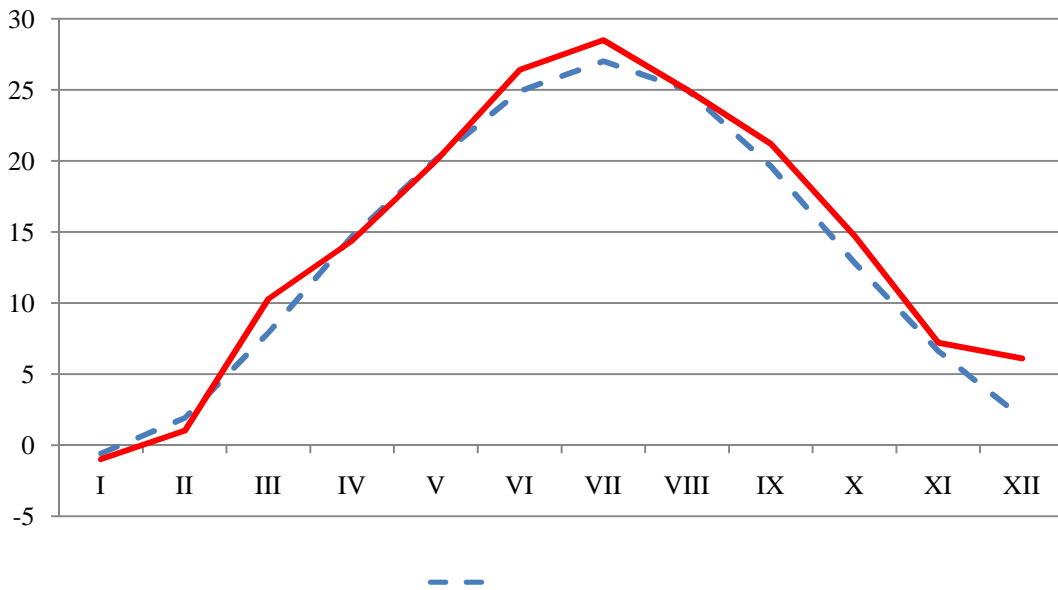
Climatic data was analyzed according to "Andijan" weather station. The climate conditions are unique, the air temperature decreases from the plains to the mountain regions, and the amount of atmospheric precipitation increases on the contrary.

The main part of atmospheric precipitation occurs in the form of snow in the mountain region, and in the form of rain in the hilly and plain regions. Most of the precipitation falls in the winter and spring months, and a small amount falls in the autumn months. In the summer months, there is almost no rain. In autumn, the warm days last much longer, the air temperature slowly decreases. In late October or early November, the temperature drops sharply. During this period, the amount of precipitation increases. Weather temperature and average precipitation data for "Andijan" weather station are presented in Table 1 below.

Table 1: Weather Data (According to Andijan Weather Station)

	Months	Average air Temperature, oS		Amount of Precipitation, mm	
		More than Average Anniversary	2021	More than Average Anniversary	2021
1.	January	-0,6	-1,0	49	72,3
2.	February	1,9	1,0	52	74,2
3.	March	7,9	10,3	73	60,1
4.	April	14,7	14,4	57	43,7
5.	May	20,1	20,0	32	27,3
6.	June	24,9	26,4	11	1,5
7.	July	27,0	28,5	3	0
8.	August	25,0	25,0	2	0
9.	September	19,6	21,2	4	9,0
10.	October	12,8	14,7	27	12,8
11.	November	6,6	7,2	41	32,6
12.	December	1,9	6,1	54	35,3
13.	Yearly	13,5	14,5	405	368,8

In 2021, the annual average temperature was observed to be higher than the long-term average. According to the long-term average, the average temperature in July was 27.0 oS, and in 2021 this indicator was 28.5 oS.



Graph 1: Changes in Average air Temperature by month, oS



Biological Properties of the Oak Tree

Oak - *Quercus* is the main genus of the birch family and has about 600 species. All (large) species are large trees, sometimes there are bushes with spreading branches. The bark of young species is smooth, dark gray in color, and later cracks. In the bark of some species, podic layers are formed. Buds are covered with dense scales and arranged in a spiral. The leaves are also simple, arranged in a spiral shape, in some species they are kept green throughout the winter. Most of them shed in autumn. The leaf plate is cut feather-like, the edge has large teeth, in some species it is whole, the edge is toothless.

The flowers are monoecious. Deciduous species bloom at the same time as the leaves fall. The flower is pollinated by the wind. The fruit is a one-seeded nut, produced in the first or second year. The root is an arrowroot, it turns blue from the tip. It does not grow at the root. Oak wood is hard, heavy and used for many purposes.



Plain oak

There is a 6th oak tree in the yard of the Andijan Agricultural and Agrotechnological Institute. Among them, the 2nd bush is the pyramidal oak (*quercus pyramidalis*), the 4th bush is the large-fruited oak (*quercus macro carpa*). I learned to distinguish them by picking their seeds. I weighed 1 kilogram of seeds on an electronic scale. The purpose of weighing is to determine how many seeds are in 1 kg of seeds. In the courtyard of the Andijan Institute of Agriculture and Agro-Technology, the seeds of an oak tree ripened and spilled. On September 5, I picked oak seeds from the yard of the institute. The seeds I picked are 10-12 kg. The next Monday, I picked the seeds again. Seeds come in 8-10 kg. The next day, we collected oak seeds with my group mates, the weight of the seeds reached 20 kg. I have been picking oak seeds this week. The seeds I collected reached a total of 70 kg. I dug the ground in the shape of a rectangle of 1 meter by 0.5 meters in the yard of our house,



Then I took 10 cm deep hemlocks. I put oak seeds in a row, then buried them with sand.

I put the remaining oak seeds in a bucket and poured water on them. I put 3 types of soil in the containers - sand, soil, humus. I put 2 pieces of oak seeds in containers and buried them with soil. I poured water over it, then put it in the thermostat at 30 C for 3 days. After 3 days, I took the containers from the thermostat. Oak seeds began to germinate, then I left them at room temperature 20-25 C.

CONCLUSIONS

In short, an oak tree grows from its seed, stem, and trunk. In many regions of the Caucasus, it is planted in rows and used as an ornamental tree. It grows well in temperate climates, when planted in hot countries. In some places, there are 2000-year-old bushes. Studying the growth, development and characteristics of oak seeds in the Andijan branch of Okhiti. Growth rate, duration of ontogeny periods, demand for moisture and mineral nutrition, resistance to diseases and pests were also determined.

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