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CURRENT STATE OF WILD *Pistacia lentiscus* IN AZERBAIJAN

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СОВРЕМЕННОЕ СОСТОЯНИЕ ДИКОРАСТУЩЕЙ *Pistacia lentiscus* В АЗЕРБАЙДЖАНЕ

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Abstract. Information is provided on *Pistacia lentiscus* L. belonging to natural forest vegetation, Anacardiaceae family, *Pistacia* genus. Information is given on the modern status and importance of *Pistacia lentiscus* L., which is one of the wild tree species in the flora of Azerbaijan. Due to its resin content, the *Pistacia lentiscus* is a valuable plant that is resistant to pests and used in various fields. The *Pistacia lentiscus* is a long-lived tree that coexists with other forest plants.

Аннотация. В статье приводятся сведения о *Pistacia lentiscus* L., относящейся к естественной лесной растительности, семейству Anacardiaceae, роду *Pistacia*. Приводятся сведения о современном состоянии и значении *Pistacia lentiscus* L., являющейся одним из дикорастущих видов деревьев во флоре Азербайджана. Благодаря содержанию смолы *Pistacia lentiscus* является ценным растением, устойчивым к вредителям и используемым в различных областях. *Pistacia lentiscus* является долгоживущим деревом, которое сосуществует с другими лесными растениями.

Keywords: *Pistacia lentiscus*, resin, medicinal plants, folk medicine, forest.

Ключевые слова: фисташка мастиковая, живица, лекарственные растения, народная медицина, лес.

Discussions

Forests, which have an exceptional role in natural resources, are extremely important. *Pistacia lentiscus* L. is one of the tree species of the Pistachio genus, which belongs to the natural forest vegetation and is distributed widely in Azerbaijan. *Pistacia lentiscus* L. is a wild species in Azerbaijan, and it is one of the most valuable relic trees of the third period. The *Pistacia lentiscus* L., which has passed through the difficult paths of a long period of time and has come out of severe trials, has entered our time, and now it has settled in the soil and climate conditions that are unfavorable for other tree species of our republic. Although these trees are rarely found in the forest areas of our republic, its geographical area is wide. *Pistacia lentiscus* L. can be found isolated on cliffs, stony dry areas, calcareous and saline soils. In the territory of our republic, the *Pistacia lentiscus* L. in small areas and clumps rises vertically from 50 meters above sea level to 1200 meters and higher. It is found in the Greater Caucasus in Devechi, Gusar regions, in the Lesser Caucasus — in Zangilan, Gubadli and Lachin regions, in Nakhchivan, in Karabakh, in the Kura

gorge, in the Bozgir plateau, in the Ellar hollow — in the area where Eldar pine grows, in Absheron, in Gobustan [1, 3].

This valuable tree of the Tertiary age, *Pistacia lentiscus* L., is also known as mastic, turpentine and dull-leaved pistachio. It is a dioecious plant. It blooms in April and May and the fruit ripens in August. It bears fruit every year or two. The sparser the trees are, the more fruits they bring. According to outstanding forest scientist K. C. Asadov (1981), 5-10 kg of fruit can be collected from a normally developed 60-80-year-old tree. A. A. Ismikhanova's research (1964) in the Sultanbud forest in Karabakh showed that in a year of abundant harvest, one hectare of mature *Pistacia lentiscus* in the forest area produces up to 84 tons of fruit [5].

Pistacia lentiscus L. is a slow-growing plant and has a long life. It lives up to 800-1000 years. It is a light-loving plant with a spherical umbrella and a decorative appearance.



Figure. *Pistacia lentiscus* L.

The *Pistacia lentiscus* L. is a plant that withstands high summer temperatures of 40⁰, winter frosts of -30⁰ and strong winds. It is undemanding to the soil and its moisture, and tolerates highly calcareous and chlorinated salty soils.

Pistacia lentiscus L. is a very useful tree species. Its wood is heavy and sinks in water like that of cranberry, it is very durable and hard. It has a pleasant aroma and a beautiful border, it takes a good caress. In carpentry, gears wheel are made from it for valuable products and mechanisms. The resin obtained from the wood of the *Pistacia lentiscus* is also of high technical quality and is used in the aviation, electronics and chemical industries. Its resin is used in dyeing and pharmaceuticals.

The *Pistacia lentiscus* L. fruits contain up to 60% fat and 20-25% protein. It is used to get technical oil, soap and candles are also made from this oil. Tannins obtained from leaves, bark and wood are indispensable for tanning leather.

The fruit of the *Pistacia lentiscus* L. should be eaten. It is used roasted. It replaces hazelnuts, walnuts and almonds in the household. It has been used in folk medicine since ancient times. In Vejnali, Bartaz and other villages of Zangilan region, they cook soup from the fruit of the *Pistacia lentiscus* L. Here this fruit is called Chattagush. The proverb "I have a jar of chattagush, it's like I have a jug of oil" used by the people of people from ancient times confirms once again that the fruit

of the the *Pistacia lentiscus* is valuable. The elderly residents of Vejnali say that until now, no one in this village has complained of stomach and abdominal pain, and the reason is that we eat chetagush fruit. In the Talysh region, they boil the bark of the *Pistacia lentiscus* and treat stomach ailments with the liquid obtained from it, and in Arabia, they treat liver disease with the oil of the fruit [2, 4].

The *Pistacia lentiscus* L. is found in many parts of the world. It is more common in the eastern Mediterranean, Asia Minor, Iran and Arabia. In Russia, the *Pistacia lentiscus* L. is mainly distributed on the southern coast of Crimea, Northern Crimea, Turkey, the Caucasus, as well as Eastern and Western Transcaucasia.

According to the research conducted and the information of the elderly residents, there is currently a significant decrease in the study area compared to the past. Over time, a part of the forests have been destroyed due to the adverse effects of human beings on the economy and a number of valuable plant and animal species have been extinct. Since the modern natural conditions of the area correspond to the biological characteristics of the *Pistacia lentiscus* L., it has remained a permanent resident here. The territory of Karabakh occupied by the Armenian aggressors for nearly thirty years has been severely degraded and the existence of the only *Pistacia lentiscus* L. forests growing on the Karabakh plain is currently under threat. Back in 1930, taking into account the importance of protecting the Sultanbud forest in Karabakh, a special decision was made to declare it a reserve. In 1958, when the Turyanchay reserve was created, the Sultanbud forest became a branch of this reserve. Later, for some reason, this area was used for forestry.

Recently, new forests have been planted in the territory of Karabakh. On the initiative of our esteemed President Ilham Aliyev, the works carried out for the purpose of restoration and expansion of greening have yielded positive results. Besides the *Pistacia lentiscus* L., chestnut, oak, walnut, pistachio, sycamore, poplar, apricot, and peach trees are also planted here. The planting of *Pistacia lentiscus* L. has given very good results. Therefore, it is appropriate to apply this practice when planting forests in the Mil and Karabakh plains.

At one time, *Pistacia lentiscus* L. forests spread widely in the Kura zone and formed a certain belt. Sparse park-like *Pistacia lentiscus* L. forests occupied the outermost strip, located deep in the ground water. Now, there is not even an untouched area of these forests left. Now *Pistacia lentiscus* L. can be found near Mughanli and Sadıgli villages of Gazakh region. Unfortunately, as a result of people's neglect, they are also slowly dying. Sometimes *Pistacia lentiscus* L. can be found near the Kura River. During the research, we observed such areas in the Gapanli area of the Ganja forestry Samukh forest, in the Barda forests, in the area near the place where the Tartar river flows into Kura, and in the basin of the Gabirri river. In such areas, the course of the Kura river and the groundwater level are relatively deep. Among the xerophytic shrubs in the described *Pistacia lentiscus* L. forests, pomegranate, blackthorn are also found [6].

The *Pistacia lentiscus* L. is more common in Zangilan region on the south-eastern slope of the Lesser Caucasus. Here, the *Pistacia lentiscus* L. grows in small areas as a pure tree, sometimes mixed with juniper and oak. The *Pistacia lentiscus* L. is more common around the villages of Vanedli, Iskanderbeyli, Kechindi, Bartaz and Vejnali. *Pistacia lentiscus* L. salt, single *Pistacia lentiscus* L., etc. near the village of Vejenli is shown that *Pistacia lentiscus* forests once had a wider area in such named areas. The *Pistacia lentiscus* L. juniper forest grows between Aghband station and Vejenlikandi. Here some junipers reach 15-18 m. But as a result of the barbaric relations of the Armenian invaders of, *Pistacia lentiscus* L. and juniper trees are about to die. *Pistacia lentiscus* L. is found singly and in groups, which are dried and cut. Therefore, the preservation of this valuable forest area cannot be postponed.

Conclusion

As a result of our researches, giant *Pistacia lentiscus* L. from ancient times were discovered in different areas of our Republic. Such *Pistacia lentiscus* L. are sometimes found singly, sometimes in clumps around villages, cemeteries. Undoubtedly, these trees are the relics of the past forests that have reached us. It is very important to ensure the preservation of such trees as monuments in the territory of our republic, they are of great scientific importance.

Planting and seeding of *Pistacia lentiscus* L. in sparse areas of forest fund lands should be one of the main issues facing us biologists to help natural regeneration in forest areas. For this purpose, according to the decree signed by the President of our republic Mr. Ilham Aliyev on December 25 2023, the year of 2024 was declared the "Year of Solidarity for the Green World".

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