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HISTORY AND PROSPECTS OF USING *Punica granatum* L.

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ИСТОРИЯ И ПЕРСПЕКТИВЫ ИСПОЛЬЗОВАНИЯ *Punica granatum* L.

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Abstract. Pomegranate has been used since antiquity in culture, traditions, cooking, crafts, arts and crafts, myths, fairy tales and other areas of creativity. Pomegranate is associated with long-term fertility, abundance and is considered a carrier of energy. In the past, in the legends of Azerbaijan, the pomegranate was considered a symbol of love and passion, and religious people saw it as a symbol of eternity. In medicine, the leaves, fruits, bark and roots of the pomegranate were used. Their therapeutic effect is due to the presence of alkaloids in these parts of the plant. Phenolic compounds provide a high level of antioxidant activity in the human body. Particular attention is paid to the pomegranate populations in the territory of Azerbaijan.

Аннотация. Гранат использовался с древности в культуре, традициях, кулинарии, ремеслах, декоративно-прикладном искусстве, мифах, сказках и других областях творчества. Гранат ассоциируется с долговременным плодородием, изобилием и считается носителем энергии. В прошлом в легендах Азербайджана гранат считался символом любви и страсти, а религиозные люди видели в нем символ вечности. В медицине использовали листья, плоды, кору и корни граната. Их терапевтическое действие обусловлено наличием в этих частях растения алкалоидов. Фенольные соединения обеспечивают высокий уровень антиоксидантной активности в организме человека. Особое внимание в статье уделяется популяциям граната на территории Азербайджана.

Keywords: Punica granatum L., fruits, habitats, varieties.

Ключевые слова: гранат обыкновенный, фрукты и ягоды, местообитания, сорта.

The common pomegranate, *Punica granatum* L., belongs to the family Lythraceae. Pomegranate is one of the oldest edible fruits and is associated with the ancient civilizations of the Near East. In many cultures, the pomegranate features in numerous myths about various human lives. Zoroastrians planted this tree in their homes as a blessing. In Greek mythology, pomegranate was considered an irrevocable symbol of marriage. In Persian mythology, Esfandiar (an ancient Persian king) believed that he was invincible by eating pomegranates. Buddhists consider pomegranate as one of the three blessed fruits. In Chinese ceramics, pomegranate is considered a symbol of high fertility, abundance, happiness, healthy and bright future. In Christian and Bedouin tribes, pomegranate is associated with fertility. In Islam, the Qur'an describes a heavenly paradise with pomegranates [1, 3].

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It originates from Iran, Afghanistan, India, China, and also spreads from the west to Mediterranean countries such as Spain. Due to the adaptation of pomegranate trees to the changing climatic conditions of Morocco, Egypt, Tunisia and Turkey, it is manifested in the widespread distribution of wild forms throughout Eurasia. It is now widely cultivated in subtropical and tropical areas in many variable climates. Analysis of the conditions, rapid development, geographical analysis in different countries shows that pomegranate has the ability to adapt to a wide range of climates. Today, besides being a fruit, pomegranate has many properties that are applied in various fields.

Methodology: In the food industry, many researchers in different countries have drawn attention and conducted extensive research. Pomegranate trees grow in natural climatic conditions, can adapt to a wide area and different soil conditions. Trees are sensitive to poorly drained soils. Such conditions reduce the quality of the product, and the plant does not grow. In general, the best soil for growing pomegranate in a natural environment is sandy-clay soil. The highest crop growth, productivity and quality can be obtained in hot areas. At this time, the pomegranate tree has a long life.

One of the most critical limitations of pomegranate cultivation is its sensitivity. Pomegranate trees can be damaged at temperatures below −10 °C. Countless pomegranate cultivars and many germplasm collections are grown in different countries. There are more than 500 varieties of pomegranate in the world, which shows the genetic diversity of the plant. There are many opportunities for growing new varieties in pomegranate production. The main characteristics of breeding programs are large fruit size, larger arils, soft seeds, abundant high juice yield, red skin and higher yield [2].

Discussions: Pomegranate juice is one of the important food products loved by people of Eastern countries since ancient times. It is used to quench thirst, increase tone, improve digestion, and induce appetite.

In 1957, the Ujar canning plant in Azerbaijan started the first production of valuable pomegranate juice from pomegranate fruit on an industrial scale. About 352,000 bottles of juice are produced every year [4].

Pomegranate and its use are deeply rooted in human history. It is found in many ancient human cultures as a food and medicine. Its bark, seeds, flowers and juice are used to treat many diseases. They contain dietary fiber, antioxidants, unsaturated fats, minerals, etc. nutrients have a positive effect on human health.

Since ancient times, pomegranate has been used frequently to treat common ailments in the oldest cultures of the Indus Valley, ancient China, Greece, and the Middle East.

Even before our era (240 years), they used the leaves, fruit, bark and roots of the pomegranate in medicine. Their therapeutic effect is due to the presence of pomegranate alkaloids. The best worm medicine used in world medicine. A decoction prepared from the peel of the fruit is used for stomach disorders. Pomegranate poultice made from dried fruit and peel is used to treat severe burns. At this time, clear pomegranate juice is first applied to the burn and powder is sprinkled on top [4].

The chemical composition and pharmacology of pomegranate parts are of great interest. The wide range of benefits of the product is considered to be a life factor in the modern world and one of people's favorite fruits. In the world, the demand for pomegranate cultivation, fresh consumption, juice production, medicinal preparations have increased according to the global trend. Pomegranate production in the world has increased more than 10 times in the last two decades, primarily due to the presence of phenolic compounds in pomegranate juice. These compounds, as shown in clinical

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trials, provide a higher level of antioxidant activity in the human body than other plants. Most of the research on this fruit has focused on its medicinal properties.

The public's enthusiasm for pomegranate is helping to grow it everywhere and spread it in backyard gardens. However, in recent years, many problems have occurred during the cultivation and cultivation of pomegranate under different climatic conditions. Pomegranate requires favorable climatic conditions for quality fruit production. During the introduction of pomegranate, the soil should be well drained, fertile and adequately prepared. Clean water sources are required. The product is sensitive to many pests, plant diseases, as well as negative temperature. If the requirements are not followed during the introduction, the fruits are cracked and damaged during ripening, and the research areas are out of order.

A lot of research has been done to solve these production problems in different regions. Especially in Western countries, attention has been paid to pomegranate populations. Every year in the territory of Azerbaijan, mainly in Goychay district, in October and November, during the pomegranate harvest, a pomegranate festival is held. Here, 4,000 hectares of fruit orchards have been planted. The festival is organized to celebrate the traditional uses of pomegranate and its symbolic meaning. Pomegranate varieties grown in different villages of Goychay district and products made from them are brought to the district center on the Pomegranate Holiday and displayed at an exhibition organized in the city square. Performances of young athletes and concert programs are watched in the city center. The main purpose of holding the holidays is to promote the regions, show the cultural and economic potential and develop tourism.

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