

## **Pomegranate (Anor) – Punica Granatum L.**

**Khasanova Gulbahor Rakhmatullaevna**

Department of Pharmacognosy and Pharmaceutical Technology, Samarkand, Uzbekistan

**Uralov Eldor, Abduganiyeva Nigina**

Students 308 group of pharmaceutical faculty of Samarkand State Medical University

**Abstract:** Living nature serves man, because whether we are talking about created fruits and vegetables, about the green world, everything serves only living beings. People use them for food, medicinal herbs, medicines, light industry, farming, animal husbandry and other purposes. One of them is the pomegranate plant, which we eat a lot.

**Keywords:** Amino acids, oil, seeds, bitterness, tannins, alkaloids.

A shrub or tree from the pomegranate family – Punicaceae with a height of 2-5 m. The leaves are opposite, leathery, shiny, elliptical, oblong-lanceolate, whole-edged. The flowers are large, 2.0–4.5 m in diameter, bisexual or unisexual, on short pedicels, numerous, the calyx is dark red or crimson, leathery, the corolla is bright red. The petals are thin, obovate, alternating with sepals, there are many stamens, anthers are yellow. The fruit is spherical, large, topped with the remains of a calyx at the top, bright red or yellowish. The size of the fruits is 10-15 cm in diameter, weight up to 300 g, and sometimes more. The seeds are angular, numerous, each of them is surrounded by a thin film-like shell filled with juice. The color and seeds (of the fruits) are red or purplish crimson, the taste is sweet and sour or sweet. It blooms in May and August. The fruits ripen in September and November. In its wild form, pomegranate grows in Central Asia, Transcaucasia, the Mediterranean, Asia Minor, Afghanistan and Iran. On the basis of wild species, many sweet and high-yielding varieties have been selectively bred. In the USSR, pomegranate is widely cultivated in the republics of Central Asia, Transcaucasia, and Crimea. The chemical composition . The juice and pulp of the seeds of mature fruits of cultivated pomegranate varieties contain up to 20% sugar, 0.2 to 9% acidic acids, including 5-6% citric acid, and a small amount of malic acid. Pomegranate juice contains 0.208–0.218% of minerals, including manganese, phosphorus, magnesium, aluminum, silicon, chromium, nickel, calcium, copper (V. T. Gogia, 1984). Vitamin content in mg%: C 4-8.7, B1 0.04–0.36, B2 0.01–0.27, B6 0.50, B150.54, quite a lot of vitamin-like substances, niacin, traces of vitamin A and folacin. In the composition. the juice of wild pomegranate varieties contains 5-12% sugar, and acidic acids – above 10%. Tannins and coloring substances in the composition of pomegranate juice contain 0.82–1.13%, flavonoids, including anthocyanins 34.0–76.5 mg%. In addition to phenolic compounds, pomegranate juice contains 15.5–29.2 mg% catechins, about 2% proteins, 61-95 mg% amino acids. Of these, 15 amino acids have been identified: cyetine, lysine, histidine, arginine, aspartic acid, serium, threonine, glutamic acid, alanine, hydroxyproluin,  $\alpha$  aminobutyric acid, 6-20% fatty oil consisting of linoleic (40.03%), palmitic (16.46%), oleic (23.75%), linolenic (2.98 %), stearic (6.78%), begonic (1.63%) acids. In addition, they contain 3.40% nitrogenous substances, 12.6% starch, 22.4% cellulose. Pomegranate oil contains 272 mg% vitamin E. The peel of fruits and the bark of pomegranate roots contain 25-30% tannins. Pomegranate peel contains polyphenols, catechins, 3-6% pectin substances, about 16% cellulose, wax, starch and a number of other substances. Pomegranate flowers contain the coloring agent

punicin. The presence of 0.2% ursolic acid in pomegranate leaves was found (A. D. Turova, 1967). The bark of roots, trunks and branches contains the alkaloids pelterin and isopelterin. Economic importance. Pomegranate fruits are widely used as fresh fruits. Pomegranate juice, syrups, compotes, and various soft drinks are prepared from them. Tannins and pectin substances are obtained from the peel of the fruits, pomegranate oil is obtained from the seeds. Tannins are widely used for tanning leather, pomegranate pectin is used in confectionery production. In folk medicine, fresh pomegranate and pomegranate juice, the peel (peel) of fruits, the bark of roots or stems, as well as pomegranate flowers are used as a therapeutic agent. Sweet and juicy varieties of pomegranate, its fresh juice are popularly recommended in the treatment of feverish conditions, anemia, lack of appetite and in the treatment of tuberculosis, pneumonia, hypoacid forms of gastritis, dysentery, poisoning, simple diarrhea and a number of other infectious toxic diseases. The fruits and juice of sour and sweetly sour pomegranate varieties are recommended in the treatment of patients with diabetes mellitus. A decoction from the peel of fruits or pomegranate flowers is widely used as an anti-inflammatory agent, locally in the form of rinsing is used to treat sore throats, stomatitis and wounds. A decoction from the bark of roots, trunks or young branches of pomegranate is used as an anti-inflammatory and anthelmintic agent. A decoction from the peel of fruits is prepared as follows: 20 g of dry crusts or 50 g of pomegranate with fruits is boiled over low heat for 30 minutes in 200 ml of water, filtered, consumed 2 tablespoons 2 times a day. A decoction of pomegranate crusts is especially effective for allergic colitis and enterocolitis. In ancient medicine, according to the descriptions of Muhammad Hussein Sherazi, pomegranate is useful for strengthening the liver, jaundice, spleen diseases, palpitations, chest pain, cough. It helps in the treatment of scabies and improves the complexion. Hippocrates recommended the skin of fruits for the treatment of dysentery and wounds, and pomegranate juice for stomach pains. According to ibn Sina's descriptions, all types of pomegranate, even acidic ones, have cleansing and astringent properties. Pomegranate seeds with honey are used as an ointment for malignant ulcers, are useful for toothache and earache, it is a good ointment for the inside of the ear. Pomegranate syrup and thickly brewed juice help with a hangover. Sour pomegranate makes the chest and throat rough, while sweet pomegranate softens and strengthens the chest. All parts of the pomegranate help with heart failure, and sweet pomegranate cleanses the insides. Sour pomegranate helps against inflammation of the stomach, fevers. Pomegranate seeds with honey help with ulcers in the anus, and sour pomegranate is harmful to the anus and intestines. The peel of the pomegranate root removes worms. In modern medicine, until the fifties, a decoction of pomegranate bark was used as an anthelmintic for the treatment of tapeworm infestations. Currently, a number of new highly effective and low-toxic anthelmintic drugs have been developed. Pomegranate juice is recommended as a dietary remedy to stimulate appetite and improve digestion. Citric acid, obtained from pomegranate fruits, is used for blood preservation. Safety precautions. A decoction from the bark of pomegranate roots and branches is considered toxic due to the content of the alkaloids pelletierine and isopelletierine. In the case of taking large doses of the decoction, dizziness, general weakness, convulsions, blurred vision and vomiting may occur. Taking pomegranate fruits is considered harmful for people with chronic constipation, in the presence of hemorrhoids and cracks in the anus. Constipation that occurs after taking a pomegranate contributes to bleeding after the act of defecation.

#### REFERENCES:

1. СОҒЛОМ ОБҚАТЛАНИШ ТАРЗИ АШ Махмудова, КФ Гайбуллаева, ГР Хасанова Та'лим fidoyilari 24 (17), 571-575rishi // Science and Education. 2022. №11. URL: <https://cyberl/article/n/geksikon-shamchasini-tayorlashda-uning-asosni>
2. Хасанова, Г. Р., & Усмонова, М. Б. (2022). Применение фасоли (phascolus) в медицине. Science and Education, 3(11), 117-1253., Хасанова, Г. Р., Усманова, М. Б., & Нажмитдинов, Х.

3. ВИТАМИНГА БОЙ ЛОВИЯ (PHASCOLUS) ЎСИМЛИГИНИНГ УМУМИЙ ХУСУСИЯТЛАРИ. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(9), 333-336.
4. Xasanova, G. R., Ernazarova, M. E., & SHIFOBASH, Q. O. T. F. J. *ORIENSS*. 2022. № Special Issue 4-2. URL: <https://cyberleninka.ru/article/n/shifobash-qoqiotining-foydali-jihatleri>.
5. Yakubova, Sarvinoz Raxmonqulovna, & Xasanova, Gulbahor Raxmatullayevna (2022). КАМҚОНЛИК HAQIDA TUSHUNCHА. *Oriental JOURNAL OF NEW CENTURY INNOVATIONS* <http://www.newjournal.org/> Volume-25\_Issue-1\_March\_2023 46 *renaissance: Innovative, educational, natural and social sciences*, ( Special Issue 4-2), 897-900
6. Ordinary mountain Basil-origanum vulgare GR Khasanova, SM Olimov *Web of Scientist: International Scientific Research Journal* 3 (5), 471-474 White mulberry
7. GR Xasanova. Karomatov, N. T. (2023). DAFNA BARGI EFIR MOYI (JABP-LAURUS). *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 15(2), 126-129.
8. Хасанова, Г. Р. (2023). ШИФОБАХШ АНОР-PUNICA GRANATUM L. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 15(5), 33-36.9.
9. Xasanova Gulbahor Raxmatullayevna, Абдурахмонова Д (2023). DORIVOR O'SIMLIK LARDAN AJRATIB OLINGAN ODDIY EKSTRAKTLARNING SHIFOBAXSH XUSUSIYATLARI HAQIDA. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 15(5), 44-48.10.
10. Xasanova, G. R., Abluraxmonova, D., & Eshmuxammatova, D. (2023). BUYRAKLAR TO'GRISIDA FIKRLASHAMIZ. *Journal of new century innovations*, 25(1), 38-46.
11. Xasanova, G. R., & Salohiddin o'gli, M. M. (2023). SHIFOBAXSH CHOY HISLATLARI. *Journal of new century innovations*, 25(1), 47-53
12. Xasanova G.R., & O'ralov Eldor. (2023). MINERAL MODDALARNING INSON HAYOTIDAGI AXAMIYATI . *Journal of New Century Innovations*, 26(4), 102–108. Retrieved from *AMERICAN Journal of Language, Literacy and Learning in STEM Education* Volume 01, Issue 08, 2023 ISSN (E): 2993-2769 Characteristics of the Almond (Amygdalus L.)
13. Nizomiddin Daminovich Kodirov Gulbahor Rakhmatullaevna Khasanova Assistan 188-191стр"Science and Education" *Scientific Journal / Impact Factor 3.567 (SJIF) November 2022 / Volume 3 Issue*
14. Geksikon shamchasini tayorlashda uning asosni almashtirish Marhabo Balhievna Usmanova Gulbahor Raxmatullaevna Xasanova
15. FARMAKOLOGIYA FANIGA KIRISH, FANNING BOSHQA FANLAR BILAN BOG'LIQLIGI, KELIB CHIQISH TARIXI *Boymurodov Eson assistenti Xasanova Gulbahor Olimov Sardor "Экономика и социум" №11(90) 2021 www.iupr.r*
16. TARKIBIDA EFIR MOYI BO'LGAN DORIVOR O'SIMLIK LAR VA MAHSULOTLAR Shukurova Dilorom Yoqubjon Olimov Sardor Mustafo Xasanova Gulbahor Raxmatullayevna "Экономика и социум" №11(90) 2021 [www.iupr.ru](http://www.iupr.ru)
17. Использование индекса рма для определения начального воспаления тканей пародонта опорных зубов. Хасанова Гулбахор Рахматуллаевна Якубова Сарвиноз Рахманкуловна. *Стаматологии и крвниофациальных исследований SPECIAL ISSUE JUJRNAL* 10 26739/2181-
18. Лекарственные растения содержащие фитонциды. Хасанова Г.Р Кодиров Н.Д. *Гепато-гастроэнтеологиягических исследований. USSN 2181-1008*

19. Khasanova GR Uralov Eldor Volume–26\_Issue-4\_ <http://www.newjournal.org/> Volume–26\_Issue-4\_April\_2023 109 THE IMPORTANCE OF MINERALS IN HUMAN LIF
20. Gulbahor Rakhmatullaevna Khasanova, Nizomiddin Daminovich Kodirov Characteristics of the Almond (*Amygdalus L.*) AMERICAN Journal of Language, Literacy and Learning in STEM Education Volume 01, Issue 08, 2023 ISSN (E): 2993-276921. WHITE MULBERRY
21. Xasanova G. R WEB OF SCIENTIS:INTERNATIONAL SCENTIFIC RESIARCH JOURNALISSN: 2776-0979 22. СОВРЕМЕННЫЕ ПОДХОДЫ К ЛЕЧЕНИЮ ОСТРЫХ И ХРОНИЧЕСКИХ БОЛЕЙ У ПАЦИЕНТОВ С ЗАБОЛЕВАНИЯМИ ОПОРНО-ДВИГАТЕЛЬНОГО АППАРАТА: ФОКУС НА БЕЗОПАСНОСТЬ ФАРМАКОТЕРАПИИ.
22. Хасанова Г.Р Нажмитдинов Х.Б;Махмудова М.М. Ta'lim fidoilari 10-son,3-qism 51-55betlar ISSN 2180-2160 2021yil.
23. Yuldashev, S., Halimbetov, Y., Usmanova, M., Naimova, Z. S., & Khamraeva, M. (2021). National Processes In Uzbekistan And The Formation Of The Internationalist Maturity Of The Younger Generation. The American Journal of Medical Sciences and Pharmaceutical Research, 3(06), 167-175.
24. Usmanov, M. B., Mamadaliyevna, J. N., Bolikulovna, S. H., & Olimovna, M. N. (2023). Endocrinological Mechanisms of Depressive Disorders and Ill Health. American Journal of Language, Literacy and Learning in STEM Education (2993-2769), 1(8), 460-463.25.
25. Usmanov, M. B., Mexrullayevna, S. F., & Xidirboyevna, M. S. (2023). Symptoms of Dysentery in Children and Basic Treatment Guidelines for this Disease. American Journal of Language, Literacy and Learning in STEM Education (2993-2769), 1(8), 123-127.