

THE PLACE OF HARMALOUS PLANT IN MEDICINE*Scientific supervisor: Koziyeva Saxobat Uktamovna**Umarkulova Visola**Student of JDPU***Annotation:**

This article discusses the place, chemical composition, medicinal properties and rational use of the harmalous plant (*Peganum harmala* L.), which has long been used as a remedy for various ailments, in folk medicine. Practical recommendations are also given on the protection of the harmalous plant, the scientific processing of products obtained from it and its use in folk medicine.

Keywords

harmalous plant, *Peganum harmala* L., folk medicine, medicinal plant, essential oils, protection, ecology.

Among the medicinal plants growing in Uzbekistan, harmalous plant (*Peganum harmala* L.) occupies a special place. It has been widely used since ancient times not only in folk medicine, but also in religious and household rituals. Issiriq is a heat-resistant perennial plant that grows in desert and steppe regions, and its leaves, seeds and roots are used for various medicinal purposes.[2] The plant contains alkaloids such as peganin, harmaline, harmalol, and harmaline derivatives, which have a positive effect on the functioning of the nervous system, heart rate and blood pressure.[3] Issiriq also has antibacterial, antiviral, anthelmintic and sedative properties. For this reason, it is used to treat many diseases - colds, flu, nervous tension, rheumatism, allergies, intestinal diseases, and skin inflammations.[4]

Issiriq belongs to the Zygophyllaceae family and is known by the common names "isiriq", "isiriq grass", "wild isiriq". Height: Grows up to 30–60 cm. Root: The main root is long and thick, penetrating 1–2 meters into the soil. Stem: Upright, branched, sometimes brownish-green. Leaves: Thin, divided at the ends, arranged in a row. Flowers: Bloom in May-June; white or light yellow, with 5 petals. Fruit: Ripens in July-August, contains small black seeds. Issiriq has long been widely used in folk medicine.[6] It contains beta-carboline alkaloids (e.g. harmine, harmaline), which are responsible for its medicinal effects. It is considered useful in the following diseases: nervous tension, insomnia and headaches, rheumatism, colds, fever, worms and bacterial infections, gastrointestinal disorders, toothache, joint pain, and uterine diseases in women.[7] A tincture made from heather seeds reduces fever, increases appetite, and calms the nerves. Smoking purifies the air and destroys harmful microorganisms. Today, soothing tablets, antibacterial ointments, and cosmetics (skin cleansing tonics) are made from heather extracts, essential oils, and alkaloids. Pharmacological studies have confirmed the antibacterial, antimicrobial, antiviral, and antidepressant effects of heather alkaloids. In folk medicine, Isirik is used for the following diseases and conditions: gastrointestinal problems (colic, gas, indigestion), urinary tract infections and coughs, skin diseases and wounds, an antiparasitic (anti-worm), rheumatism and joint pain, headache and cold symptoms. These uses are known to many peoples (Central Asia, North Africa, Asia) traditions. The plant is considered a soil-strengthening plant in desert areas. It creates a natural protection against wind and water erosion. Therefore, it also plays an important role in maintaining ecological balance.[6] Abu Ali Ibn Sina noted in his "Canons of Medicine" that tinctures and powders made from the seeds of the plant improve digestion, reduce fever, and are used as a sedative for the nervous system. In modern medicine,

the extract of the plant is used in the production of pharmaceutical preparations for its antibacterial and antimicrobial effects. In medicine, it has long been used to treat various diseases (seizures, sore throats, ulcers), as a diuretic, and as a diaphoretic. Abu Ali Ibn Sina recommended the use of the plant as a painkiller for colds of the sciatic nerves, and for stiff knees and bones.[1] In addition, fundamental studies on the prevention of influenza have been published on the use of alkaloid extracts from the plant. It has been proven that the alkaloids contained in the plant are an effective anti-tumor agent. It has been reported that the alkaloids contained in the plant inhibit the development of harmful microorganisms. When the plant is burned, α -pinene, limonene and styrene are released, and these compounds have the property of disinfecting microorganisms. There is also a tradition of burning the plant among the people. It is recognized not only as a natural air purifier, but also as a means of eliminating harmful microorganisms. In order to protect the plant and use it rationally in the territory of the Republic of Uzbekistan, it is important to maintain ecological balance. [5] The seeds and essential oils of the plant have export potential, and there are opportunities to produce medicinal and cosmetic products through their processing. The plant is a unique plant of deserts and arid regions and is also of ecological importance. It strengthens the soil and acts as a natural protection against wind and water erosion. Therefore, its reproduction and cultivation in a cultural state are one of the important issues.[7] In many Central Asian traditions, the seeds and the plant are burned in a dry state as a ceremonial smoke, which is considered a means of protection against the evil eye, evil energy or disease.[6]

Conclusion:

The heather plant has long been known as a plant beneficial to human health. Its chemical composition, medicinal properties and ecological significance have led to its important place in both folk and modern medicine. The rational use of heather, its protection and restoration measures are of great importance in maintaining human health and enriching medicinal plant resources.

LIST OF REFERENCES:

1. Ibn Sina. "The Canons of Medicine". Selected, Volume 1. – Tashkent: "Science", 1980. – pp. 125–127.
2. E. Abdunazarov, M. Ibragimov, Sh. Eshonov. "Medicinal plants of Uzbekistan". – Tashkent: "Science and Technology", 2019. – pp. 78–81.
3. N. Mamatkulova. "Chemical composition and healing properties of medicinal plants". – Samarkand State University, 2020. – pp. 93–96.
4. Sh. Jo'rayev. "Pharmacological properties of the plant *Peganum harmala* L. (Issiriq)". – Journal "Biology and Medicine", 2021, No. 3. – pp. 45–48.
5. Resolution of the President of the Republic of Uzbekistan dated April 10, 2020 No. PQ-4668 "On measures for the development of folk medicine".
6. Maripjonov, Jasurbek & Qobilova, Gulnoza. (2025). "Medicinal properties of the Isirik plant and its use in folk medicine."
7. Internet sources:
8. - www.ziyonet.uz
9. - www.biouz.uz