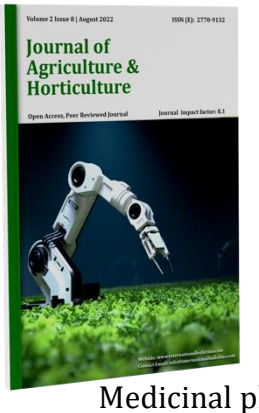

MEDICINAL PLANTS IN FOLK MEDICINE IN UZBEKISTAN

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Medicinal plants have been known to mankind from the past. In particular, the work of Abu Ali ibn Sina, one of our compatriot scholars, "The Laws of Medicine" has served as a program not only for Arabs, but also for European doctors for centuries. Abu Ali ibn Sina described about 900 medicinal plants and left a method of treatment with them in writing.

It is now noted by the World Health Organization that the recommendations and activities of folk medicine are very important today. Traditional medicine has been given official status in more than 120 countries around the world. In a number of countries there are academies of folk medicine, research institutes, departments of training of scientific and practical specialists for the medical system in medical medicine.

It is known that about 50% of medicines produced by pharmaceutical companies worldwide are made from medicinal plant raw materials. It should be noted that at present, a maximum of 42 species of medicinal plants are grown in farms, forests and other forms of ownership in the country, which specialize in providing the pharmaceutical industry and pharmacies with plant raw materials.

The rapid development of the pharmaceutical industry in many countries, including the Republic of Uzbekistan, has led to a sharp increase in demand for such raw materials for medicinal plants. It should be noted that due to the limited reserves of naturally growing medicinal plants, the pharmaceutical industry can meet the demand of enterprises for raw materials for medicinal plants, mainly through the cultivation of medicinal plants.

In accordance with paragraph 24 of the Program for further development of key sectors of the economy in Surkhandarya region, approved by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 83 —Investment in the pharmaceutical industry In order to accelerate and attract more foreign investment, it is planned to establish a free economic zone only for the pharmaceutical industry. In Boysun district, it is planned to develop and submit to the Cabinet of Ministers a draft resolution on the establishment of a free economic zone only for the pharmaceutical industry.

There are about 600 species of naturally growing medicinal plants registered in the country and whose biochemical composition has been studied. Most of them are distributed in mountain forests. Raw materials of 230 species of these medicinal plants are prepared for the needs of the pharmaceutical industry, most of which are cultivated and about 254 types of medicinal products are prepared on the basis of their raw materials.

In addition to establishing the correct and rational use of naturally growing medicinal plants, the source of raw materials would be further strengthened if we could turn plantations into promising medicinal plants that provide high quality medicinal products, which are a valuable raw material source. With the implementation of these measures, a wide range of

new high-quality products of medicinal plants will be produced, resulting not only in social efficiency, but also in economic benefits.

Therefore, for the development of folk medicine and modern medicine, the study and analysis of historical experience, the study of medicinal plants, the conservation of naturally occurring species of medicinal plants in the climatic conditions of the Republic, the adaptation of introducible species and the establishment of large-scale plantations.

In 2017, when analyzing the demand for medicinal plants by enterprises of Uzpharmsanoat JSC, it was found that there are 2.02 tons of lemon juice, 6.0 tons of deer grass, 1.03 tons of mint, 0.09 tons of fennel, etc. We will focus on some medicinal plants below.

Medicinal lemon (*Melissa Offitsinalis*) belongs to the family Lamiaceae (*Laviataye*). A perennial herbaceous plant, 30-60 cm tall. Stems single or multiple, oppositely branched. The leaves are ovoid, slightly pointed, serrated (on the upper side), serrated, arranged opposite each other on the stems and branches with a short band. The white, hairy, two-lipped flowers are placed in the leaf axils with a floral band, forming a ball flower. Fruit - 4 nuts.

It flowers in June-August and bears fruit in July-August.

Geographical distribution. It grows in the shade of trees in Central Asia, Crimea, the Caucasus, the southern European part of Russia and other countries, in the shade of rocks in mountainous areas and on other shady lands. Occurs in Tashkent and Surkhandarya regions of Uzbekistan.

Chemical composition. The surface contains 0.01-0.33% of essential oil, vitamin C, carotene, phenylcarboxylic acids (coffee, chlorogen, rosemary, ferul, protokatex, etc.), triterpenes, flavonoids (luteolin-7-glycoside, etc.), 5 —10% additives and other substances, seeds contain 20-27% fat.

The essential oil of lemon consists of geraniol, linalool, nerol, farnesol and their combination with acetic acid, limonene, pulegol, geranial, neral and other terpenes.

Kiyikot (*Ziziphora peditsellata*) is a perennial herbaceous plant, 16-40 cm tall, belonging to the family Laviataye. The stem is dense. The leaves are alternate, composed of complex, white petiole, 1-14 pairs of petioles. The inflorescence is yellow, with a head of 10-20 flowers. The fruit is hairy, ovoid. It flowers in May-June and bears fruit in July.

Geographical distribution. Kiyikot grows in the open in the European part of Central Asia, Ukraine, the Caucasus and Russia, in the steppes, hills and fields, on the edges of forests. Livestock quickly disappear from grazing lands.

Chemical composition. Kiyikot contains triterpene glycosides, flavonoids, astringents, coumarins and oxicoumarins, amino acids, vitamins, including tocopherols. Kiyikot is one of the plants that accumulates selenium. This plant contains various micro and macronutrients (calcium, silicon, aluminum, iron, magnesium, cobalt, zinc, copper, manganese, molybdenum, chromium).

To be used. Kiyikot's glue contains eye medications. It has the property of relieving hot cough, reduces damage from lung ulcers, and improves voice.

In Chinese medicine, tincture or powder made from the root is used against various gastrointestinal diseases, as well as as a diuretic and diaphoretic drug. It is prescribed for use in diabetes, furunculosis, pyoderma in combination with other medicinal plants. An extract prepared from the root of kiikot is used to put on infected wounds, wounds.

In modern medicine, tinctures and decoctions of kiikot (10%) are used in hypertension, angina, circulatory failure, acute glomerulonephritis, renal disease, as well as in diabetes, stomatitis, periodontitis, furunculosis and other skin diseases.

20% tincture is useful in cardiovascular insufficiency with arrhythmias (tachycardia, extrasystole), as well as in neurasthenia.

Galenic preparations of kiikot (drops and decoctions) have a calming effect, lowering blood pressure, strengthening the heart. These drugs dilate the coronary arteries, increase blood circulation in the kidneys, and increase urine output.

Applicable part. Surface parts and roots of the plant.

Mint (*Mentha*) belongs to the family Laviataye, a perennial herbaceous plant that grows from 30 cm to 100 cm in height. It has a peculiar pungent odor, the leaves of which, when chewed, seem to cool the mouth. The rhizome is branched, the underground produces lateral branches. The roots are slender, pubescent, protruding from the joints of the rhizome. The stems are strongly branched from the base, bare or sparsely hairy. The leaves are short-banded, oblong-ovate, toothed at the edges, up to 8 cm long and up to 2 cm wide. The flowers are pink and light purple, small - small, forming inflorescences. Fruits - four double nuts.

It flowers in June-August and bears fruit in September-October.

Geographical distribution. Mint is widely grown in Ukraine, Belarus, Moldova, the North Caucasus, Tajikistan. Asian mint is widespread in all the republics of Central Asia.

Chemical composition. Mint leaves contain many essential oils, including menthol, as well as dipeptane, fellandrene, sineol, pulegon, mentofuran, acetic and valerian acid esters with menthol, carotene, hesperidin, betaine, urosolate, and oleonic acid. Flavonoids are also found in the leaves.

In addition to essential oils, Asian mint also contains additives, vitamin C and catechins. Mint is grown in a special plant to obtain essential oil and thymol. It was also found to contain simol, borleol, pinin, carvacrol, small amounts of additives and flavanoids.

To be used. Mint leaf preparations, mint juice made from essential oil, tincture are used against nausea and vomiting, as well as to improve digestion. In addition, mint juice is used to rinse the mouth and improve the taste of textures. Menthol extracted from the essential oil is used in diseases of the ear, nose, respiratory tract, as well as to relieve toothache. A migraine pen is made from menthol that leaves a headache. Menthol drug - validol, used in angina pectoris. Mint is widely used in folk medicine in acute and chronic diseases of the upper respiratory tract. Galenic drugs have sedative, herbal and diuretic properties, anti-inflammatory, analgesic, antiseptic, diaphoretic, diuretic, anti-diarrheal properties.

According to Ibn Sina, mint is useful during headaches, nausea and vomiting, hiccups, jaundice, heart and digestive disorders. Mint seeds are heat-absorbing and absorb the juices inside the body and thus make a person sweat. When mint seeds are boiled in may (wine) or mixed with figs, the sputum is much softer, and if it is applied to the affected areas, it eliminates hemorrhages.

When a person's flesh is shriveled, trembling, when a scorpion bites him, when his muscles are injured, he is ordered to drink mint decoction. It is also used for bathing.

Mint drugs increase blood circulation and intestinal motility in the capillaries, the work of the digestive glands, increase the excretion of bile and urine. Since mint leaves contain menthol, it also has antimicrobial effects.

Applicable part. Leaves and inflorescences of the plant.

Shafran or zaffaron is one of the medicinal herbs that people have long used. Country of this plant - the Middle East, the Nearest South and India. It also existed during the time of the Sumerian civilization. It was drawn in the ancient city of Crete the people painting shafran on the walls of the palace. Medical properties of zaffaron were also written in the pre-Chinese medical books, 1,500 year old Egyptian inscriptions.

Babur emphasized in his “Boburnoma” about zaffaron growing in the mountain of Kashmir and the foothills. In the botanics (shafran, crocus) (Crocus sativus L.) it is a perennial herb with tuber onion belonging to the Cossatic family. On one place it gives harvest during good 5-7 years. The word "shafran" comes from the Arabic word "za -fran" and means "yellow, yellowish." Today the plant is widely spread in France, Italy, Turkey, Iran, India, China, Pakistan, Spain, Japan, Azerbaijan, Russia and other countries. This is a very valuable plant, and the price of one gram of zaffaron is equal to one gram of gold [6].

Shafran loves heat and light and sows the soil well. Zaffaron grows and develops when it is wet in the soil in accordance with the biological nature. Vegetation stops here in the summer and in places where the soil is wet, the roots are rotted. So it is well preserved in dry soil in summer. It requires a certain temperature to flow twice a year. For flowering in autumn, the air temperature should be 12-C and chosen the right varieties. In many cases, it blooms in early spring, and the difference from other plants is in the leaves and buds of the flower at the same time. Height is 10-12 cm. There are three homogeneous pollens in the open flower that will be collected.

In order to collect one kilogram of Zaffaron at least 200,000 plant flowers will be collected from pollinators. Zaffaron blooms during just three days. At this time, three pollens should be collected from flowers. One onion forms one or three large flowers. They are of light purple, dark purple, and sometimes light yellow or orange colour. When the onions are planted in summer, the roots take root until autumn, large berries are poured out by 8-10 cm, and the small ones are sown in a depth of 4-5 cm. Before planting, a bucket with rotten fertilizer is laid in the area of 1-2 m on the furrows. Onions of Zaffaron remain on one place for 4-5 years, then dug out, carefully dried and dried in a solution of potassium permanganate, dried depending on their size. It is advisable to plant small onions in order to have more calves during the growing season. Its harvest is collected only one week. The harvest is about 20 kg per hectare when it is given the best agrotechnical cultivation [7].

Although retail is widespread in Uzbekistan, it has an isolated area. Its main distribution areas are the Pamir-Alay (Zarafshan, Surkhandarya, Sangzor river valleys), and river basins of the Tien-Shan mountain system (Chirchik river valley).

In Surkhandarya region, small retail shrubs are found in the upper basins of the Topolang, Dashnabad-Darya and Sangardak rivers.

Natural sediments are found in areas with sufficient soil moisture. However, in areas where the climate of the retail area is sharply continental, high levels of dryness are also noted when there is sufficient humidity. In some cases, retail river basins have adapted well to summer flooding, which results from the melting of glaciers in the summer after spring floods. This process is evident in the valley part of the basin, where the river floods due to the intensive melting of snow and ice in the mountains in summer. As a result, the flora of the river basin near the riverbed remains under fast-flowing floods for 10-15 days to 100-120 days. Under such anaerobic conditions, only plants that are resistant to prolonged flooding can survive. That's why the retailer is one of the first to occupy and start growing in such

difficult conditions that other plants can't always grow. Retail seeders and rootstocks are less competitive than light-loving plants and therefore do not grow on higher ground covered with thick vegetation. The distribution of these plant shrubs in the river basin depends on the course of alluvial processes there and the duration of flooding during the river flood [8].

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