## International Journal of Health Systems and Medical Sciences

ISSN: 2833-7433 Volume 2 | No 7 | Jul -2023



# Some Wild Medicinal Plants in the Local Cuisine of Bukhara

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**Annotation:** The article contains information about the use of wild plants in cooking by residents of 12 districts and cities of Bukhara. Interviews were mainly conducted with village elders, elderly housewives, shepherds and traditional healers. When registering the results, scientific information was also used. In the course of these studies, 14 species of medicinal plants common in the Bukhara region, which are used by the local population for food, were studied, and information was found about one of them - Portulaca oleracea.

Keywords: Bukhara, old man, housewife, shepherd, healer, extract, WHO, ArcGIS.

**Introduction.** According to the World Health Organization (WHO), today about 80% of the world's population uses medicinal plants, and more than 35% of the drugs used are obtained from medicinal plant species [8]. The traditional use of medicinal plants depends mainly on socio-economic factors, and not on climatic conditions or the richness of the flora [7]. Ethnobotanical research plays a key role in better understanding these processes and finding practical solutions. Ethnobotanical research is of great importance for identifying species of medicinal plants of local importance and for formalizing extensive knowledge about endangered species [6].

Since ancient times, people have known about the healing and tonic properties of natural medicinal plants and have used this knowledge in the treatment of various diseases. For example, in ancient Egypt, India, China, Central Asia and other countries, doctors wrote many treatises on the treatment of diseases with cannabis. Among them you can find medicinal compositions prepared from various herbs that have not lost their significance and are used in practice. Currently, in our republic, many wild plants are used as medicines. They are prepared and used in the form of a decoction, tincture, medicinal tea, decoction or extract [1,2].

### 2. Research methods.

As a result of research conducted during 2019-2023, meetings with representatives of the local population living in the city of Bukhara and 12 districts of the region, information was collected on the use of wild plants in cooking. Interviews were mainly conducted with village elders, elderly housewives, midwives, shepherds and doctors. Scientific information was also used. In the course of these studies, information was revealed about dishes prepared by the local population from garden purslane, a vegetable-fatty plant common in the Bukhara region.

**2.1 Study area:** Bukhara region is located in the south-west of Uzbekistan, its total area is 40,220 km2 (http://geografiya.uz)[12]. The Bukhara region borders on the Khorezm, Navoi, Kashkadarya regions, the Autonomous Republic of Karakalpakstan and the Republic of Turkmenistan, and 90% of the territory consists of sand dunes. Bukhara region ranks 9th in terms of population among 14



regions of Uzbekistan. The population is 1 million 990 thousand 400 people (https://stat.uz) [11], of which 62% are rural residents and 38% are urban residents. There are 11 districts and 107 villages in the region. 92.54% of the population of the Bukhara region are Uzbeks, 3.13% Tajiks, 1.28% Russians, 3.05% representatives of other nationalities.



(Fig-1.) Study area - Bukhara region.

**2.2 Collection of ethnobotanical data.** In order to collect ethnobotanical data, audio recordings and interviews in the form of a questionnaire were conducted with the consent of the local population. Ethnobotanical data were collected in accordance with the 2006 ISE Code of Ethics (www.ethnobiology.net) [10].

Although the botanical studies carried out in the Bukhara region provide information about medicinal plants, their ethnobotanical properties are not described [4;5;6;7;8]. On the basis of ethnobotanical research, determination of the composition of medicinal plants naturally growing on the territory of the Bukhara region, identification of their species and introduction into production will serve to satisfy the needs of the population in medicinal and food products. In this regard, the inventory of medicinal plants, compiling a synopsis (systematization), identifying reserves of promising species and possible collection areas, and classifying medicinal plants by disease groups are of great scientific and practical importance [3;6;7].

### 3. Results obtained.

**3.1** In the Bukhara region, as in other regions of Uzbekistan, the local population has long used some wild medicinal plants in some of their dishes, which is due to the geographical location and climate of the region. For example; garden purslane, white stonecrop (Chenopodium album), red stonecrop (Chenopodium rubrum), Turkestan rhubarb (Rheum turkistanicum), common snakehead (Capsella bursa - pastoris), Asian mint or spearmint (Mentha longifolia) local residents prepared salad, dumplings, blue somsa, somsa tandoor and various liquid dishes from time immemorial.

The preparation of traditional dishes from these plants has been passed down from generation to generation among the local population. Among the above plants used for food, I would like to highlight more information about vegetable purslane [6; 9], which is more common on the banks of canals, in flower beds. It blooms in June-August, the flowers are yellow, the seeds ripen in September.

Portulaca oleracea - glucose, galactose, fructose, sucrose, maltose, raffinose, carotenoids (lutein,  $\beta$ -carotene), fatty acids ( $\alpha$ -linolenic acid), organic acids (mainly oxalates, nicotine), flavonoids



(liquiritin), betacyanins in ) vitamins B1, C, (up to 2.4%)  $\alpha$ -tocopherol (E), PP and K, mucoid and sticky substances. Seeds contain fatty acids (oleic, linoleic, palmitic) [6; 7].

Portulaca oleracea is eaten by the local population in the preparation of various dishes (somsa, bichak, chuchvara, manti). When cooking from this plant, its leaves are collected, crushed and cooked with onions, eggs and various spices [6,9] (Fig. 1; 2). Therefore, Portulaca oleracea has been widely used since ancient times both as a medicinal plant and as food. Vegetable oil has been known as a medicinal plant since the time of Hippocrates and Galen. In those days, it was said that the seeds of the plant have the ability to cleanse the human body. For this reason, as a medicine, the plant is widely used as food in China, Russia, Korea, India and other countries.

Portulaca oleracea is used as a body cleanser, as a natural antioxidant (against snake and insect bites), as well as for impotence, depression, eye inflammation, diabetes, dysentery, asthma, liver and kidney diseases, urinary tract diseases (cystitis and urethritis), hemorrhoids, insomnia, headache are used in the treatment of diseases such as pain. In addition, the plant is widely used to reduce the amount of sugar and cholesterol in the blood, to prevent flatulence, to quickly heal wounds, and to lower body temperature [3; 5;6;7].



(Fig-2). Portulaca oleracea (Fig-2). Dish from Portulaca oleracea - dumplings

**Summary.** Based on the results of the study, the following conclusion can be drawn. Garden purslane, a wild medicinal plant of the Bukhara region, due to its nutritional and medicinal properties, is widely used not only in Bukhara, but also in many countries of the world (China, Russia, Korea, India and Africa). This plant has been found to have a high and valuable nutritional value with medicinal properties. Their unique biological properties increase the body's immunity, provide vitamins, prevent and protect against various diseases. These species increase the body's resistance to various diseases in the hot climate of Uzbekistan, especially Bukhara.

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