

THE EFFECT OF MEDICINAL PLANTS (SMALL-FLOWERED GORSE, PEPPERMINT, CHAKANDA, DALACHOE, ROSEMARY, CAROB) ON HUMAN HEALTH

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Abstract. Decision PQ-4670 dated April 10, 2020 "On measures for the protection, cultivation, processing and rational use of available resources of medicinal plants growing in the wild". On the basis of the Decree No. PF-139 of May 20, 2022 "On measures to create value chains by supporting the effective use of raw material base of medicinal plants, processing" Medicinal plants such as rosemary and black sugar are mentioned to be important in maintaining health by using scientific research works of scientists to improve human health.

Keywords: essential oil, triterpene, coumarin, flavonoid, pertussin, menthone, methylacetate, mentafuran, ceneol, biogen E, K, provitamin A, alanine, phenylalanine, glutamine, cysteine, leucine, lysine, arginine, serine, valine, S, V1, V2, V6, iron, magnesium, manganese, copper, boron, sulfur, chlorine, aluminum, silicon, pinene, camphene, cineol, barneol, berberine, oxycontin, berbamin

Introduction. Currently, 112 types of medicinal plants are allowed to be used in official medicine in the Republic of Uzbekistan, and 80% of these medicinal plants are naturally growing plants. Natural resources of medicinal plants are also limited, and their protection, study of bioecological properties, proper use of resources and development of scientifically based methods of reproduction are urgent problems. In order to ensure the implementation of the Decision of the President of the Republic of Uzbekistan dated April 10, 2020 No. PQ-4670 "On measures for the protection of medicinal plants growing in the wild, cultivated cultivation, processing and rational use of available resources", the natural and cultivated medicinal plants in the Republic. It is important for foresters, farmers, and pharmaceutical industry workers to use this manual and protect human health.

1. Small-flowered mountain basil (*Origanum tyttanthum* Jontseh).

Perennial, erect stem, numerous, branching from the top, height 30-60 cm.

The leaf is ovate, the base is obtuse, and the edges are hairless. The flowers are collected in sessile spike-like, semi-umbrella-like inflorescences. Calyx 3 mm long with short hairs. Corolla pale bluish-pink 5 mm long. The nut is dark brown, 0.75 mm long. It blooms in July-August and its seeds ripen in July-September. It grows in rocky and gravelly places in the middle and lower regions of the mountains.

It is distributed in Tashkent, Andijan, Fergana, Samarkand and Surkhandarya regions. The composition of the surface of the earth contains essential oil, triterpene acids, coumarins, flavonoids and other substances. Liquid extract of the above-ground part of common mountain basil is used as an expectorant in respiratory diseases, when bowel movement is weakened, to stimulate appetite, to improve digestion, to expel urine and wind. The liquid extract is included in pertussin, which is used in respiratory diseases and whooping cough. Thymol is used to disinfect

the mucous membrane of the mouth and to relieve toothaches, and to treat fungal skin diseases, and sometimes to expel worms.

2. Peppermint - (*Myata perechnaya*) In Uzbekistan, peppermint is grown in the Shifobakhsh scientific production farm and in farms by local residents. wire spread. In Uzbekistan, peppermint is grown at the Shifobakhsh scientific production farm and by local residents in their homesteads.

Peppermint leaves, essential oils and menthol are used in medicine. For pharmacies, the leaves of the plant are harvested by means of special tools when 50-75% have entered the flower. Varieties that retain high essential oils are harvested in August-September. Drying of plant leaves is carried out in special dryers at temperatures not higher than 30-35°C. The amount of essential oils contained in peppermint leaves is 3% in the southern regions, 2-2.5% in the northern regions; and the amount of menthol in essential oil is 50-55%.

The essential oil of the plant contains menthol, menthone, methylacetate, mentafuran, cineol and other biogenic substances. Essential oils are used in perfumery, food industry, production of alcohol products. In addition to essential oils, the leaves of the plant are rich in carotene, organic acids and other compounds. Fragrant teas and tinctures are prepared from the leaves of the plant, which dilate and invigorate blood vessels. The main active substance of the plant is menthol, which is used as a pain reliever in neuralgia, myalgia, arthralgia, and with other drugs as a vasodilator and sedative. Menthol is part of validol, valocardin drugs.

3. Chakanda- (*Oblepixa krushinovidnaya*) is a plant that grows in the valleys and riverbanks of Uzbekistan and is found in Tashkent, Samarkand, Fergana, Bukhara, Kashkadarya and Surkhandarya regions. Widespread in Central Asia, Caucasus, Siberia, Western Europe, Mongolia, Tibet, Iran, Afghanistan.

Medicinal plants Cultivation of promising medicinal plant species in the flora of Uzbekistan, starting their cultivation in industrial plantations, creating a base of raw materials for the pharmaceutical industry. *Hippophae rhamnoides* L. x is considered one of such promising medicinal plants.

Hippophae, one of the representatives of the *Elaeagnaceae* family, is a small tree or shrub with a height of 4-6 m and a diameter of 15-20 cm. The category includes 3 species. All of them are considered medicinal plants, and oil is extracted from the peel and juice of the fruit. Chakanda oil, in turn, is rich in E and other vitamins and carotenoids, and it is considered an equal load medicine in the treatment of skin, gastro-intestinal, stomach mucosa, gastro-intestinal ulcer and gynecological diseases damaged by radioactive rays.

Under the influence of various external conditions and as a result of long adaptation, Chakanda vegetation forms its climatic types, which differ from each other in terms of morphological features. Today, great importance is attached to the healing properties of the chakanda, so the chemical composition of its fruits is being studied in depth. Chakanda is considered a low-calorie plant, 100 grams of its fruit provide 30 calories. The acidity of the fruits ranges from 1.3% to 2.7%.

At the same time, there are also vitamins E, K, provitamin A in the oil, and substances of the nature of stearin are found in the oil kernels - sitosterol, phospholipids, choline, carotene, and the fruit contains a large amount of vitamin E and amino acids, for example, alanine, phenylalanine, glutamine, cysteine, leucine, lysine, arginine, serine, valine and others. Fruit juice

contains vitamins A, C, V1, V2, V6, E, K, P. The amount of ascorbic acid is 37-268 mg/100 g of fruit.

In addition, essential oils, micro- and macroelements, about 15 trace elements were found in the fruits, which are iron, magnesium, manganese, copper, boron, sulfur, chlorine, aluminum, silicon and others. It is considered a good immunomodulator and immunoprotector [3].

Chakanda's leaves and bark are also medicinal, ascorbic acid and carotenoids, P-active substances are found in its composition. Serotonin alkaloid is found in the bark of its branches, this alkaloid is of great importance in the functioning of the nervous system. According to its chemical structure, serotonin belongs to biogenic amines belonging to the class of tryptamines. Serotonin is often called the "mood hormone" and the "happiness hormone."

4. Dalchoi, kizilpoycha, chayoti - (Zveroboy prodyryavlenny) The stems are four-sided, the lower part is woody, gray in color, the upper part is hairy, green. It grows naturally in the mountainous regions of Mediterranean countries. In Uzbekistan, it is widely found on mountain slopes. Decoctions made from the above-mentioned diseases are also used in folk medicine for the treatment of the above-mentioned diseases.

Although dalchoi is considered a medicinal plant, caution should not be forgotten when using it. In particular, hypertensive patients cannot use it for a long time. In addition, dalchoy is prohibited during pregnancy. A strong infusion of dalchoi can cause acute gastritis symptoms even in healthy people, and pain and severe spasm in those with hyperacid gastritis or stomach ulcers.

Excessive use of this plant can cause headaches, nausea and vomiting. Dalchoy does not "go out" with beer, coffee, wine, chocolate, smoked or marinated products, yogurt. Also, it cannot be used together with anti-hay fever and nasal drops. Do not take over-the-counter medications when you have a fever. They can increase the sensitivity of the skin to ultraviolet rays, so it is necessary to avoid walking in the sun after taking the drug.

In folk medicine, patients with urinary incontinence are advised to drink the tincture of dalchoi. To do this, put 10 g of the ground part of the plant in a glass of boiling water and leave it for a while. Strain and drink one tablespoon 2-4 times a day.

Fenugreek decoction can also be used in the treatment of gastrointestinal diseases. Pour 1 cup of boiling water on 1 tablespoon of crushed plant and boil for 15 minutes on low heat. After straining, drink a quarter glass three times a day. Fenugreek oil is also useful. To prepare the oil, 1 part of dalchoi is added to 2 parts of olive (almond or peach) oil and left to stand for 3 weeks. It can be used as a compress to treat burns or wounds (for example, trophic ulcers). To treat alcoholism, put 2 tablespoons of dried field tea in 250 ml of boiled water and put it in a water bath for 20-30 minutes. Strain and drink 2 tablespoons before breakfast and lunch.

5. Medicinal rosemary-(Rosmarin aptechnyy) Distribution of the plant. It grows naturally in Africa (Algeria, Libya, Morocco, Tunisia), Turkey, Cyprus, the northern part of Europe, the countries of the former Yugoslavia, Greece, Italy, Portugal, Spain, France. In most cases, it is found in soils with a high content of lime, on dry rocks, on the southern slopes of mountains, in places where the sun shines well.

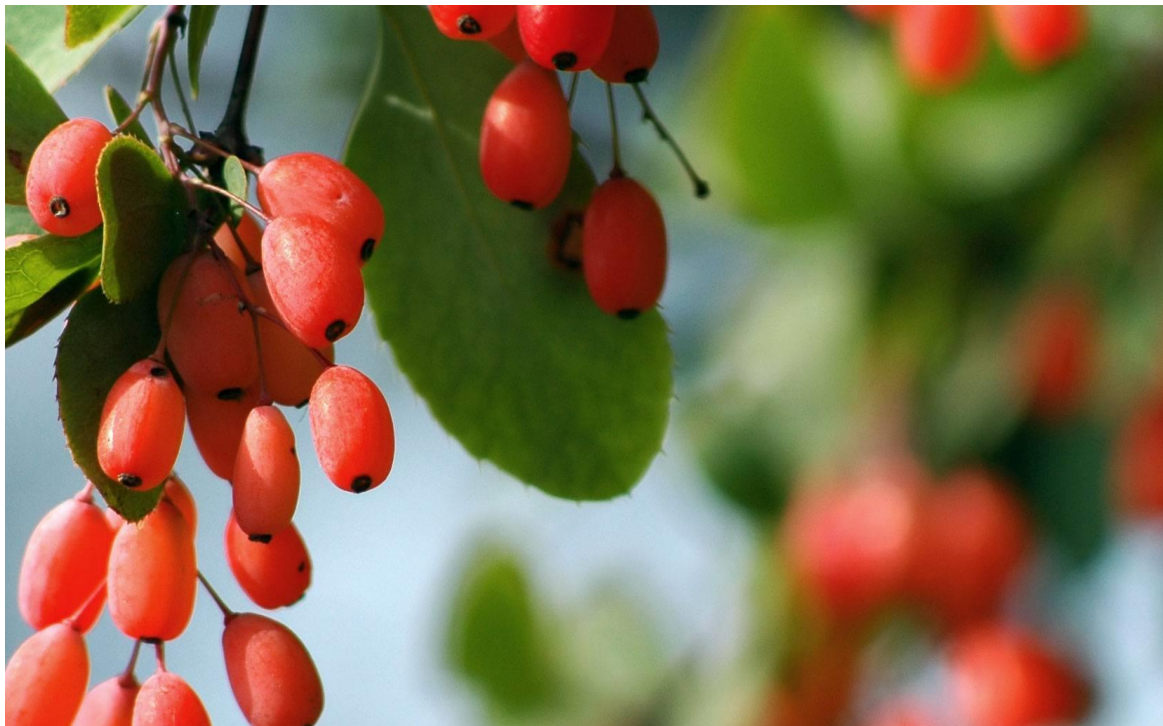
Rosemary is a bushy plant rich in essential oils that adapts to heat and cold in irrigated gray soil. The leaves are long, the lower part of the leaf with a blunt tip is covered with coarse hairs. The fruit is in the form of a nut. Essential oils are stored in all parts of the rosemary plant (especially in young stems and flowers, its amount is up to 1.2%). Since essential oil contains 50%

pinene, camphene, cineol, borneol and camphor, it is used in the perfumery industry, in the preparation of medicinal and insecticidal preparations.

In folk medicine, tinctures and alcohol solutions of the above-ground leaves and young stems of the plant are beneficial in the treatment of headaches, stomach-intestinal diseases, colds, and some diseases in women. At the same time, it refreshes the body and gives energy. Rosemary is also used as a spice in cooking meat products and keeping them for a long time due to the unique smell and taste of its leaves. It gives a unique taste and flavor when added to confectionery products.

Given that the plant does not shed its leaves even in the winter season and emits a unique smell, it is grown as an ornamental shrub in parks and avenues, courtyards and recreation areas.

6. Blackcurrant (*Smorodina chernaya*) It is found naturally in the forests of the European part of the CIS countries, in the plains and mountains of western, eastern, and southern Siberia. It is a forest plant. Black blackberry can be found along streams, lakes, rivers, ditches, in meadows, in broad-leaved, needle-leaved and mixed forest plains in moist, humus-rich soils.



ZIRK (*Berberis vulgaris* L.), black sugar - belongs to the group of shrubs belonging to the zirkdoza family (Zirkflower family). The leaves are thick, short-banded, arranged in a row. The flower is yellow, with a double peduncle, collected in a peduncle; the fruit is a berry. It is distributed in the Northern Hemisphere. There are 194 types, 45 types are acclimatized. On the mountain slopes of Uzbekistan, red sedge and black sedge are common. Zirk leaves contain berberine, oxycontin, berbamine and other alkaloids. Since their fruits are sour and tasty, they are added to various dishes, including pilaf, and make food delicious. Due to the wide consumption of black zirk, it is called "karaqand" due to its color. In medicine, it is used to treat liver diseases, reduce fever, stop diarrhea and strengthen the heart. Fruit is a dietary product with low nutritional value. It has 29 kcal in 100 g.

The fruit contains carotenoids (xanthophyll, lutein, chrysanthemaxanthin, zeaxanthin, auroxanthin, flavoxanthin capsanthin, etc.), carbohydrates, aromatic and pectin substances, organic acids, macro and microelements, vitamins E and C, and beta-carotene substances.

Useful properties of zinc. In addition to its beautiful appearance, zirk also has healing properties. In ancient Greece, it was used as a blood purifier. In Tibet, zinc is believed to be a natural substance that prolongs human youth. It has been widely consumed in our country, its root, trunk and bark are used to stop bleeding and treat various colds. Fruit juice has antipyretic, germ-killing, and bleeding-stopping properties. Its consumption is also recommended for the purposes of cleansing the body, removing toxins, and slowing down the aging process. In order to get rid of liver diseases, rheumatism, urinary tract and kidney colds, it is necessary to eat freshly ripe zirk fruit with food.

Zirk contains the alkaloid berberine, which has sedative properties. This substance also helps people who are trying to get rid of alcoholism and addiction. Pharmacies sell a drug called berberine, which is made from a substance extracted from zinc. This drug is used in the treatment of gallstones and cholecystitis.

Italian scientists, in cooperation with doctors, found that berberine is a practically unparalleled healing agent for people suffering from malaria and swollen kidneys. Indian doctors use berberine to treat severe infectious leishmaniasis.

In China, the bark of the plant is used to treat eye colds, and the root bark is used to open the airways, heal wounds, and treat cancer. Bulgarians use zirk bark to treat radiculitis and kidney diseases. In Poland, zinc is used to treat hypovitaminosis (vitamin deficiency). The Germans use zirk as a tincture for the treatment of gastrointestinal tract, oral cavity, and lung diseases. In France, zirk is recommended as a bactericidal, hypotensive and antimalarial agent.

Ripe fruits and leaves can be used to make tea, which is very pleasant and rich in useful vitamins. It is very easy to prepare, for this, take 1 teaspoon of its fruit and leaves, pour 1 cup of boiling water over them and let it steep for an hour. Drink this tea three times a day for two weeks until you get a positive result.

In case of eye colds, eczema, wounds, washing with this decoction or putting a gauze soaked in it on the affected part gives a positive result. In arthritis, rheumatism, radiculitis, leg muscle damage, osteochondrosis, this herbal decoction is drunk as a cold-relieving and pain-relieving agent. Zirk root and leaves decoction: take 1 tablespoon of crushed roots and leaves, pour 1 cup of water over it, boil for 1 minute, let it rest for 30 minutes, strain. Drink 1 tablespoon 1 hour before meals.

Zirk root decoction (applied): pour half a liter of water over 1-2 tablespoons of crushed root, boil for 1 minute, let it rest for 1 hour. In the above-mentioned diseases, a gauze soaked in a decoction is placed on the diseased member and compressed. It is not possible for women to eat zirk during the days of chilla after the climax and the opening of the eyes. Zirk increases the activity of muscles, therefore pregnant women should not consume it, it may cause premature miscarriage. It can not be consumed by nursing mothers. It is not recommended to be used in cases of gallstones, liver cirrhosis, jaundice, in some personal cases where it is not liked, as well as for children under 12 years of age. It should also be noted that unripe blueberries are poisonous and should not be eaten.

1. Ўзбекистон Президентининг 2020 йил 10 апрелдаги “Ўзбекистон Республикасида халқ таболатини ривожлантиришга доир қўшимча чора-тадбирлар тўғрисида”ги ПҚ-4668-сонли қарори, 2020 йил 26 ноябрда, тасдиқланди.

2. Ўзбекистон Президентининг 2020 йил 10 апрелдаги “Ёввойи ҳода ўсувчи доривор ўсимликларни муҳофаза қилиш, маданий ҳолда етиштириш, қайта ишлаш ва мавжуд ресурслардан оқилона фойдаланиш чора-тадбирлари тўғрисида”ги ПҚ-4670-сонли қарори.
3. Абу Али Ибн Сино. Сирли табобат. Тошкент. “Насаф наширёти”, 2009 йил.
4. М.Умаров ва бошқалар. Бошига тушган табиб. Тошкент. “Истиқлол”, 2007 йил.
5. Сафар Мухаммад. Табиат неъматларининг шифобахш хусусиятлари. Тошкент, «Истиқлол», 2007 йил.