

**DEVELOPING MEDICAL LITERACY BY TEACHING STUDENTS ABOUT NATURAL  
MEDICINAL PLANTS (BELONGING TO THE FLORA OF UZBEKISTAN) USED IN FOLK  
MEDICINE**

<https://doi.org/10.5281/zenodo.11413292>

**M.A. Abdurahimova**

*FarDu is a teacher*

Geographical areas of medicinal plants used in folk medicine and official medicine, their types, their growing characteristics and chemical composition are calculated. The study of medicinal plants of folk medicine and official medicine is of great importance in the local medicinal plant science of our republic. In particular, the role of medicinal plants and medicinal preparations prepared from them is incomparable in maintaining public health, preventing diseases, raising and forming the young generation healthy. In recent years, the rapid development of the pharmaceutical industry has been observed in many countries, including the Republic of Uzbekistan, which is the reason for the sharp increase in the demand of pharmaceutical enterprises for raw materials of medicinal plants. Botanists - systematists and geobotanists studied medicinal plants and determined their beneficial properties. Gradually, the study of medicinal or useful plants developed, and an independent department of botany - Resource Science was formed.

Growing interest in medicinal plants used in folk medicine and studying them only in traditional medicine

In countries where many medicinal plants are used (India, China, Vietnam, Burma, Philippines, Arab countries, other South-East Asian countries, African countries), many drugs are not made from henna, but by chemical synthesis. The chemical pharmaceutical industry that can be obtained is also observed in well-developed countries

**Onion - *Allium cepa* L. belongs** to Liliaceae family. It is a perennial herb reaching 60-100 cm in height. There will be a large bulb under the ground. The stem is thick, hollow inside, swollen below the middle part, and has 4-9 sheathed leaves at the base. The leaf is long - cylindrical, straight, with a sharp tip, hollow inside, shorter than the stem. The flowers are collected in a spherical simple umbrella surrounded by a single petal. The flower is simple, white, consists of 6 petals, the paternal node is 6, the maternal node is three-digit, located above. The fruit is a spherical, multi-seeded pod. The seed is black, three-sided, wrinkled. It blooms in June-August. The fruit ripens in August-September. . The fruit ripens in August-September. Geographic distribution. Native to Southwest Asia. Onions are grown in abundance everywhere. Appearance of the product. The finished product consists of an



oblong or flat spherical bulb, covered with a yellow-brown, reddish, sometimes white or purple skin. Onion has a unique smell, sharp, bitter taste, volatile substances in it irritate the mucous membranes of the eyes and nose. Chemical composition. Onions contain 0.01-0.05% essential oil, 10-11% sugar, 10 mg % vitamin C, 60 mg % vitamin V1, carotene, flavonoids (quercetin and its glycosides). Onion leaves contain 20 mg % vitamin C, 50 mg % vitamin B2, 4 mg % carotene, essential oil, citric and malic acids. Onion essential oil contains sulfur compounds (mainly, disulfide, etc.). Usage

Medicinal preparations of the onion plant are used for the treatment of intestinal atony, colitis, arteriosclerosis, sclerotic form of hypertension and avitaminosis. These drugs are applied to the mucous membranes of the nose in case of rhinitis and are also used in the treatment of trichomonad colpitis in gynecology. Preparations of the onion plant have bactericidal properties. Crushed onion head is also used to treat hard-to-heal and festering wounds. In folk medicine, onion is used as a diuretic and cures scurvy. Medicinal preparations. Allilchep (vinegar).

#### **MEDICINAL PREPARATIONS. ALLILCHEP (VINEGAR).**

Garlic onion (stinky onion) — *Allium sativum* L. Garlic - *Allium sativum* L. belongs to the Liliaceae family. Perennial bulbous herb, 20-70 (sometimes 100) cm tall. The stem is upright, cylindrical, and about half of it is surrounded by a leaf sheath. The leaf is linear, flat or serrate, with a sharp tip. Some varieties of garlic onions have bulbs in the leaf axils. The flowers are gathered in a simple canopy. The umbrella is enclosed in a sheath with a single leaf that falls. Between the flower bands are small bulbs. The flower is simple, consisting of 6 white petals. The paternal node is 6, the maternal node is three-digit, located above. The fruit is a pod with many seeds. The fruit is a pod with many seeds. Often it does not bear fruit. Geographic distribution. Homeland South Asia. Garlic onions are grown in abundance in all districts. Appearance of the product. The finished product consists of an egg-shaped onion covered with a loose skin. A bulb consists of 7-30 individual cloves surrounded by a pink or purple skin. Onions have a unique pungent smell and bitter taste. Volatile substances in onions irritate the mucous membranes of the eyes and nose. Chemical composition. The product contains 0.3% alliin, 0.4-2% essential oil, 10 mg % vitamin C, phytoncides, phytosterols, 0.06% fat, a small amount of iodine and other substances. The essential oil is composed of a mixture of 6% allylpropylsulfide, 60% diallyldisulfide, 20% diallyltrisulfide and about 20% other polysulfides. Alliin is a crystalline compound that is broken down into allicin, pyruvic acid and ammonia under the action of the enzyme allinase. Allicin is a colorless, oily liquid with a garlicky odor. It dissolves poorly in water, dissolves well in organic solvents, decomposes under the influence of alkalis. Allicin has strong bactericidal properties (allicin diluted up to 1:125000 stops bacteria from growing). Usage. Medicinal preparations of the garlic plant are used in arteriosclerosis, hypertension, colitis, pulmonary tuberculosis; in gynecology, it is used in trichomonad colpitis and enema is used to kill ostriches. Preparations of the product and crushed onion are also used in the treatment of purulent wounds.

Garlic bulb has bactericidal, fungicidal, prostistocidal properties and repels worms. Medicinal preparations. Nastoyka. Before, other medicinal preparations were prepared from garlic and used in medicine. Of these, the onion pill has not been released since 1970, Alliglycer - since 1978, and Allilsat drug since 1979, and they are not used in medicine today.

### HYPERICUM PERFORATUM

*Hypericum perforatum* L. and spotted (four-sided) *hypericum Maculatum* Crantz. (*Hypericum quadrangulum* L.); Hypericaceae belongs to the family Hypericaceae. Dalchoi species are perennial herbaceous plants reaching 30-100 cm in height. Rhizome and taproot. The stem is several, upright, smooth, hairless, pointed, and the upper part is oppositely branched. The leaf is simple, oblong-ovate, with a straight edge, and is opposite on the stem. The flowers are golden yellow, clustered in a shield-shaped raceme. The fruit is a three-celled, multi-seeded capsule that opens when ripe. The seed is small, oblong and pitted and painted in brown color. It blooms in June-August. Geographic distribution. Field species grow on roadsides, stream banks, meadows, meadows, forests, forest edges, and among bushes. It is mainly found in Ukraine, Belarus, Moldova, the Baltic countries, the European part of Russia and the forest, forest-desert zone of Western Siberia, the Caucasus and Central Asia. Appearance of the product. The finished product consists of a mixture of leaves, flowers, unripe fruits and partially leafless stems. The stem is cylindrical, the upper part is branched, double-edged and hairless. The leaf is oblong-ovate, flat-edged, hairless, 0.7-3.5 cm long, 1.4 cm wide, with dotted spots. The flower is straight, the calyx is deeply cut into five parts, the corolla is 5, golden in color, oblong-ellipse, the upper part is curved and tooth-shaped, the paternity is numerous, the maternal node is located at the top. The product has a fragrant smell, a bitter, slightly astringent taste. According to the XI DF, the product moisture content is 13%, total ash is 8%, ash insoluble in 10% hydrochloric acid is 1%, organic impurities are 1%, mineral impurities are 1%, the fine fraction passing through a sieve with a hole diameter of 2 mm is 10 %, stems and side branches should not exceed 50%. For the sheared product, the particles larger than 7 mm should not exceed 10%, and the small part passing through a sieve with a hole diameter of 0.315 mm should not exceed 10%. The extractives (solvent 40% alcohol) should not be less than 25%.

The total amount of flavonoids in the product should not be less than 1.5% according to XI DF, calculated according to rutin. Chemical composition. The product contains 10-12.8% additives, 0.1-0.4% atracene products (hypericin, pseudohypericin and 115 others), flavonoids (hyperoside, rutin, quercitrin, isoquercitrin, quercetin, myricetin, etc.), 0.1 - 0.33% essential oil, 55 mg % carotene, 1151.8 mg % vitamin C, 34 mg % choline, very small amounts of alkaloids and



up to 10% tar. Usage. Medicinal preparations of the product have astringent, antiseptic and wound healing effects. In medicine, it is used in the treatment of gastrointestinal (colitis, diarrhea), oral cavity (gingivitis and stomatitis) and II and III degree burns, as well as for rinsing the mouth. The above-ground part of the plant has a bactericidal effect. Medicinal preparations. Tincture, nastoyka, liquid extract, bactericidal drug novoimanin, peflavit (a collection of catechins is produced in Bulgaria in tablet form, has the effect of vitamin R). Novoimanin is a dark brown powder (powder), which is a 0.5-1% solution in water, water-alcohol, water-glycerin, and powder (powder) and ointment for simple purulent wounds, It is used to treat burns, scabies and other purulent processes. Oily extract of dalchoi plant (dalachoi oil) is used in the treatment of gastrointestinal ulcer diseases. The type of field-chovy that grows in Central Asia, the Caucasus and Altai is rough field-choy (*Hupericum scabrum* L.) from the foothills of the mountains in the mountainous districts of Tashkent, Fergana, Samarkand, Kashkadarya and Surkhandarya regions of Uzbekistan. It is common in open, flat and other places with soft stone and gravel mountain slopes up to the middle part. This type of dalchoi is shorter than the open dalchoi (20-50 cm), the lower part of the stem is reddish-purple and usually several, the leaves are small (10-15 mm long), shortened from the leaf axils. (1-4 cm) is distinguished by the growth of branches and the yellow flowers collected in a shield-shaped tubercle. Dagal dalachoe blooms in May-July, and fruits ripen in June-August. The chemical composition of the surface of the dagal dalachoe, its pharmacological effects, and the properties of treating diseases in clinical conditions have been thoroughly studied. As a result, there are chemical compounds (flavonoids, vitamin C, carotene, organic acids, anthocyanins, tar, carbohydrates, etc.), gastrointestinal (diarrhea, colitis, enterocolitis), the treatment of oral cavity (gingivitis, stomatitis) and wounds and burns was found to be the same. Therefore, the General Department of the Ministry of Health of the Republic of Uzbekistan DVTTSNQ (Quality Control of Medicinal Products and Medical Equipment) approved the VFM prepared for the surface of the rough field and its medicinal preparations in medical practice along with the above-mentioned hole field preparations it was allowed to be used as an astringent and antiseptic for the treatment of diseases. Product moisture should not exceed 9%, total ash 7%, ash insoluble in 10% hydrochloric acid 1%, stems 45%, organic impurities 1% and mineral impurities 1%. For crushed (shredded) products, 10% of particles larger than 7 mm, and 10% of small particles passed through a sieve with a hole diameter of 0.310 mm should not exceed 10%. According to the requirements of the Pharmacopoeia, the amount of additives in the product should not be less than 5%, and the total amount of flavonoids (compared to rutin) should not be less than 1.5%.

**LIST OF REFERENCES:**

1. Kholmatov H.Kh., Kharlamov I.A. Use of medicinal plants at home. - Tashkent, UzSSR "Meditsina" publishing house.
2. Kholmatov Kh.Kh., Kasimov A.I. Russian-Latin-Uzbek dictionary of medicinal plants. -Tashkent, Ibn Sina publishing house, .
3. Kholmatov Kh.Kh., Kasimov A.I., Medicinal plants. -Tashkent, publishing house named after Ibn Sina, 1994.
4. Kholmatov H.Kh., Akhmedov U.A. Pharmacognosy: Textbook for students of medical universities. -Tashkent: Publishing-printing association named after Ibn Sina.
5. Kholmatov Kh.Kh., Mavlongulova Z.I., Use of medicinal plant extracts in various diseases. Tashkent, Ibn Sina publishing house, 1993.
6. Turdaliev A. T. et al. Influence of irrigation with salty water on the composition of absorbed bases of hydromorphic structure of soil //IOP Conference Series: Earth and Environmental Science. - IOP Publishing, 2022. - T. 1068. - no. 1. – S. 012047.
7. Abdurahimova M. A. Growth and development of medicinal plants and use of medicinal properties //Science and innovation. - 2022. - T. 1. – no. D3. - S. 35-42.
8. Abdurahimova M. et al. HEALING PROPERTIES OF MEDICINAL WHITE AND BLACK (SESAME) SESAME //Science and Innovation. - 2022. - T. 1. – no. 7. - S. 100-104.
9. Abdurahimova M., Nazirjonov U., Muhammadjonov R. USEFUL PROPERTIES OF THE MEDICINAL ESHINACEA PURPUREA PLANT AND ITS USE IN FOLK MEDICINE //Science and innovation. - 2022. - T. 1. – no. D6. - S. 197-201.
10. Abdurahimova M., Mamadaliyeva D., Siddikova G. MEDICINAL PROPERTIES OF MEDICINAL PLANTS //Science and innovation. - 2022. - T. 1. – no. D6. - S. 185-188.
11. Abdurahimova M., Nazirjonov U., Muhammadjonov R. USEFUL PROPERTIES OF THE MEDICINAL PLANT ESHINACEA PURPUREA AND ITS USAGE IN FOLK MEDICINE //Science and Innovation. - 2022. - T. 1. – no. 6. - S. 197-201.
12. Abdurahimova, M. A., & Muratova, R. T. (2023). INCREASING STUDENTS' INTEREST IN FOLK MEDICINE BY TEACHING THE MEDICAL PROPERTIES OF ERMAK AND NAMATAK PLANTS. PEDAGOG, 6(12), 42-46.
13. Abdurahimova, M. A. (2023). INNOVATIONS AND ADVANCED FOREIGN EXPERIENCES IN THE TEACHING OF THE SCIENCE OF IBIOLOGY. Novosti obrazovaniya: issledovanie v XXI veke, 2(16), 518-521.
14. Abdurahimova, M. A., & Oybek oğ, Y. L. S. (2023). SOYBEAN PLANT MORPHOLOGY AND CULTIVATION TECHNOLOGY. Novosti obrazovaniya: issledovanie v XXI veke, 2(16), 522-527.
15. Abdurahimova, M. A., & Rustamova, M. S. (2023). METHODS OF USING PEDAGOGICAL AND INFORMATION TECHNOLOGIES IN TEACHING THE SCIENCE OF MEDICINAL PLANTS. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(20), 69-75.

16. Abdurahimova, M. A. (2023). STUDY OF PLANTS WHICH ARE BASED AS MEDICINAL RAW MATERIALS AND USE OF PREPARATIONS DERIVED FROM THEM IN MEDICINE. KOKAN UNIVERSITY BULLETIN, 198-200.

17. Cultivation and Agricultural Techniques of Raspberry in Light Gray Loam Soils of The Ferghana Region S. H. Zakirova<sup>1</sup>, R. F. Akbarov<sup>2</sup>, Z. M. Razhavalieva, Abdurakhimova