

**MINT, DISTRIBUTED IN THE FERGANA VALLEY-LAMIACEAE L. PROMISING SPECIES
OF THE FAMILY USED IN FOLK MEDICINE**

<https://doi.org/10.5281/zenodo.11682443>

Sayramov Fayzullo Baratjon o'g'li

Fergana State University student

Annotation: *now in our republic, special attention is paid to the inventory of medicinal plant species, the assessment of their resources and the production of natural medicines based on local plant raw materials. In the strategy for further development of the Republic of Uzbekistan "...the tasks of" further development of the pharmaceutical industry, provision of the population and medical institutions with affordable, high-quality medicines " are set out. From these tasks, it is of important scientific and practical importance, including substantiating the bioecological properties of certain medicinal plants of the Lamiaceae family, assessing their natural reserves and making recommendations for production.*

Keywords: *mint family, Turkestan maple, pepper mint, small-flowered mountain Maple, Mountain Ash.*

INTRODUCTION

Human life cannot be imagined without the Mother Nature, the world of plants, which is an integral part of it. Human doima lives with plants, enjoying its invaluable gifts.

The green world in the bosom of eternal nature is a source of vitality. Nature avenges every adult sprout as if it venerates the mother's child. She is always encouraged to sprout, live in a barque and leave offspring and stay alive for centuries.

Not only do plants, the product of a harmonious nature, nourish, dress a person, give aesthetic pleasure, but their inner world, embodied in the process of historical development, with incredible amazing biological properties, makes us a symbol.

Humanity has long used the gift of nature – the plant world-to treat diseases and prevent them. For example, India has long been famous for its amazing medicinal “Wizard” plants. Four thousand years ago, Indians v knew more than a hundred plants that would cure various diseases.

Famous healers of ancient times widely used medicinal plants Hippocrates, Dioscorides, Galen and others.

More than 500 medicinal plants have been described in Abu Ali ibn Sina's world-famous book “The Laws of Tib”, which is considered the Sultan of tib ilmi. At the same time, the rules for the collection, storage and use of medicinal plants are also detailed in the work. For example, " medicines collected from the desert are all stronger and often smaller in volume than those collected from gardens. Medicines from medicinal plants

picked from the mountains will be even stronger than herbal medicines picked from the desert. Medicines from plants grown in wind-walking, open fields and high ground will be stronger than those obtained from other lands" ("laws of Tib, Book II").

LITERATURE ANALYSIS AND METHODS

S.S.Sahobiddinov's " Plant Systematics. II. Flowering plants " in detail about flowering plants, including representatives of the Labguldash family.

In the literature, information is mainly given about the naturally distributed representatives of the family of Labguldash. For Example, S.Haligov, A'.Pratov and A.Fayziev "plant determinant" (Tashkent "teacher" -1995, pp. 114-118.) , a general description of the Labguldosh family as well as *Mentha asiatica* of the same family, *Salvia sclarea* L., *Ziziphora tenuior* L. and those who have cited information about some other species.

O'.Pratov, H.Akhunov, V.Mahmudov and b. "Botany" (Tashkent "educational publishing house" -2010, pp. 232-234.) is a general description of the mint family as well as a brief Botanical description of some species of the same family.

K.Toyzhanov, S.Melibayev, V.Mahmudovs "Explanatory Dictionary of the category names of high plants of Uzbekistan" (Tashkent "Fan")-2008.69-73- b.) in *Mentha* L, *Ocimum* L, *Salvia* L, *Mentha* L, *Melissa* L, *Lycopis* L, *Thymus* L, *Satureja* L, and others who gave details of the meanings and origin of the name of the order.

RESULT AND DISCUSSION

Representatives of this family consist mainly of annual and perennial herbaceous plants, chalky shrubs, shrubs and trees that rarely grow in tropical countries. The stems are 4-pointed. The leaves are simple, oppositely arranged, without leaflets. The flowers are arranged in cymose inflorescences. They are composed of 3-flowered dichasium or complex structured, double gajak inflorescences. The flowers are zygomorph, 5-lobed, the inflorescence 5-toothed, sometimes 2-lipped, the upper labi 3-petal, the oysters 2-petal. The inflorescence is 5-lobed, usually 2-lipped, with an ostkichi 3-toed, and an ostkisi 2-toed. Changchi 4. The pollen threads are attached to the flowerpot tube. The Seeder has 2 fruit petals. Node top, 2 cells, each Nest 2 seed pods. A premature barrier is formed between any seedcurtle. As a result, the node is separated into 4 compartments, similar to that of the snails. The flowers mature faster than proterandria, the pollinator Seeder. The fruit is divided into 4 nuts with one seed. The seed is almost endospermless. Pollinated from the outside using insects. The mint family is phylogenetically very close to the systematics of the mint family. It is distinguished by the fact that the Murtak Root is facing down. Almost all representatives of the mint family are rich in essential oils. They do not have waterways and strong-acting toxic substances. Representatives of the mint family are widespread mainly in countries with warm and temperate climates. The mint oil includes about 200 species, about 3,000 species. In Central Asia, 460 species are found in 53 orders. In Uzbekistan, 210 species of 42 species grow. Mint is one of the most common families in Uzbekistan, which is distinguished from other families by its richness in useful (medicinal) species. Including Butterfly (*Ajuga Regel*), Bozulbang (*Lagochilus* L.), Arslonquyruq

(Leonurus L.), Mint (*Mentha* L.), Tograikhan (*Origanum* L.), Mavrak (*Salvia* L.), Mountain Wood (*Betonica* L.), Caclicott (*Thymus* L.) and Deer (*Ziziphora* Vved.) representatives of their derivatives have long been used in medicine, food, confectionery and in the perfumery industry.

Turkestan arslonquyruğ (*L. turkestanicus* V. I.Krecz. & Kuprian.). Perennial. The STEM is several or numerous, erect, simple or branched with a branched upper part, finely pubescent or smooth, 10-150 cm high. The leaves are broadly ovoid-rounded, palmately divided, rhombic inverted oblong, acute or sharpened, deeply patchy-fragmented or patchy divided, usually with elongated pieces, pointed or sharpened, covered with short hairs that are almost smooth or densely adhered to one, long-banded; the petals become smaller, quickly shrink upwards, the complex is undivided. The flowers are paler, sparsely flowered, very dilated between on the underside, and are arranged above in somewhat closely spaced rings on the axils of the petals. The petals are bigish-shaped, bent, directed upward, gently pubescent, much shorter than the pubescent. Cockroaches are 8-9 mm long, short-haired, with a wide triangle, narrowed immediately to the stem, with a web-like vein in its fruits, with bent teeth, approximately equal to the length of the tube. The petals are pinkish-purple in color, hairy on the outside, 12-13 mm long. The nuts are light brown, with a sharp three-edged, the upper part is obliquely cut and pubescent, about 3 mm long. Blooms in June-July; fruits in July-August.



The herb contains ursulinic acid, stachydrine, flavonoids including rutin, hyperoside, phenolcarboxylic acids, alkaloids, tannins, organic acids, saponin.

In folk medicine, water-alcohol extract and tincture are also used as sedatives in the treatment of heart disease.

Pepper mint (*M. longifolia* (L.) L.). Perennial herbaceous plant, horizontal rhizomes are well developed. The STEM is erect, four-pointed, branched, densely leafy, up to 1 m high. The leaves are sharpened, elongated-ovoid, with a sharp saw-like edge, up to 8 cm long and about 2 cm wide, short-banded. The flowers are pink or pale purple, collected in a small, false ring, forming pointed spike-like inflorescences. The fruit consists of four nuts, rarely produced. The plant is very fragrant. Blooms in June-October; fruits in July-September.

The above-ground part of the plant contains 0.3-0.6% essential oil with a pleasant mint smell and a slightly bitter taste. In addition, the presence of vitamin C and organic acids (Amber, Lemon, Apple) has been found.

In folk medicine, Mint is used for nausea, vomiting and diarrhea, which are associated with inflammation in the gastrointestinal tract, especially when a painful colic and a large amount of intestinal gas are formed. In chronic stomach diseases, it is recommended to drink mint tincture in the morning. The use of Mint is especially effective when the acidity of gastric juice increases. Peppermint is also prescribed as a sedative in diseases of the liver and gallbladder (as an analgesic and gallbladder drive), as well as in various nervous diseases.



The Spotted-flowered Mountain King (*O. vulgare* subsp. *Gracile*) letsw). Perennial herbaceous plant. Stems are several, erect, branching above, curly hairy, 30-60 cm long. The leaves are ovoid or oblong, blunt or sharpened, broadly wedge-shaped or almost round at the base, whole, almost smooth above, with a fringe along the conducting ligaments and curly hairy under them, banded, gradually diminishing upward. The flowers are almost grazier, clustered in a spike-like semi-umbrella, with thyroid-ciliated nodules at the top of the branches. The petals are almost thin-veined, oblong-lanceolate, slightly longer than the carapace, short-ciliated. The cockroaches are round, 3 mm long, short hairy, with a triangular sharp tooth, 3 times shorter than the tube. The tadpoles are 5 mm long, pale purple. The nuts are dark brown, about 0.75 mm long. Blooms in July-September, fruiting in July-September. In medicine, flowering above-ground parts of the Mountain Garden (grass) are used.



Mountain herb contains essential oil containing tannins, ascorbic acid, flavonoids, and aromatic phenols (thymol, carvacrol), sesquiterpenes, free alcohols, and geranylacetate.

Mountain herb has a calming effect on the central nervous system, enhances the secretion of the stomach and bronchial lymphatic glands, and increases intestinal motility. Mountain herb decoction also has a strong effect on urine output. It is used as a remedy for high intestinal atony, appetite suppressant and expectorant in colds. It is part of air-driving preparations from the chest, sweating and intestines, and is also used as a bath for rinsing in sore throat and purulent skin diseases. Essential oil is used as an analgesic in the treatment of teeth.

Mountain Wood (*B. betoniciflora* (Rupr. ex O.Fedtsch. & B.Fedtsch.) Sennikov).

Perennial herb 75-100 cm high. The roots are thin, the stems are four-pronged, covered with long hairs on the underside, the hairs on the top are scattered. The leaves are oblong-ovoid, curved at the base, round-toothed, 13-15 cm long and 4-5 cm wide, the leaves above are square, arranged along the edge, Lancet-shaped, the leaves above the very top are whole, more pointed, the lower leaves are short-banded, blunt-tipped, scattered feathery, and in the lower part they are long feathery over the ligaments. The flowers are more herbaceous, they form a spike-shaped inflorescence on the tip, 10-12 in the ring. The rings are closely spaced, sometimes

with only one or two protruding from the bottom. The petals are lanceolate, 6-10 (17) mm long, sharpened, shorter than or almost equal to the cocoon, hairy, sometimes reddish in color. The Kosachabarg is clasped, short-haired, 10-13 mm long, with 10 links and thin-triangular, with a pointed tooth with coarse hairs, 2 times shorter than the tube. The petals are 15-20 mm long,



dark red or pink-purple, scattered on the outside with pubescent or fine hairs, its tube is quite protruding from the carapace, the folded area is two – lipped, the upper lips are slightly immersed in it, the lower ones are equal to the lower ones-Three-Lobed, the middle ones are wide ovoid, the side ones are inverted ovoid, slightly shorter than the middle ones. The fruit has a three-pointed nutmeg longitudinal arch. The peculiarities of the terrestrial organs of the mountain well are as follows: the curvature of the cell walls of the epidermis, sometimes shed-colonized, the fact that the gills are with two, rarely three or four lateral gall cells, the plumage is of three different types (simple, ringed and scaly), the essential oil glands consist of 4, 6, 8, 10, sometimes 12 dividing cells, Blooms in June-August, fruiting in August-September. In medicine, 0 parts of the plant (herb) collected during the flowering period are used.

During the flowering period, essential oil has been identified on the harvested plant. Mountain ash leaves contain 54 mg of ascorbic acid and 42% fat in their seeds. Stachydrine, betonycin and tyrosine have also been identified.

When 10% nastoxic of Mountain Ash prepared in 70°C alcohol is injected intravenously, as well as taken orally, it causes an increase in uterine muscle tone and concomitant contraction during the experiment. As a result of clinical trials, preparations made from Mountain Ash increase uterine contractions in the postpartum period. It is also effective for secondary subinvolution of the uterus. Under the influence of Mountain Remedies, blood pressure practically does not change. Based on the experiments carried out, 40% alcohol liquid extract in a 1:1 ratio of Mountain Ash was recommended as a more

economical and biologically effective dosage form than 10% tincture. The extract passed clinical trials and was approved for use as uterine preparations in medical practice. After childbirth and abortion, uterine subinvolution is drunk 3-4 times a day for 5-7 days in order to prevent postpartum subinvolution of the uterus, as well as in cases of different types of etiology gynecological bleeding. In addition, it is drunk for 10-12 days in the treatment of neuroses. In veterinary practice, herbal decoction is used as an expectorant in inflammatory diseases of the respiratory tract (bronchitis, etc.), as a cardiogenic agent for liver diseases, flatulence, urination and constipation. In long-term purulent wounds, it is recommended to treat gauze from the outside in the form of soaking. To prepare the tincture, 2-3 tablespoons of crushed raw materials are poured into 200 ml of water. The approximate dose of this tincture as a sputum remover for calves: 1-2 teaspoons 3-4 times a day, herbal herb powder is used from 0.5–1 g several times a day.

CONCLUSION

Currently, more than 120 thousand species of plants are used in scientific medicine and folk medicine around the world. In particular, the flora of Uzbekistan has data that more than 1000 species have medicinal properties.

About 50% of medicinal preparations used in scientific medicine are extracted from or made from plants. Alkaloids, saponins, essential oils and other substances of great importance in medicine are also obtained from plants, and concentrates rich in various drugs, preparations and vitamins are prepared again.

The rational use of colorful wild plants in the interests of human health and their preservation for future generations is one of the most important urgent tasks before Republican scientists and the general public. The Fergana region occupies a significant place in our country in terms of the natural wealth of healing plants used in folk and scientific medicine.

LIST OF USED LITERATURE:

1. Karimov V., Shomahmudov A. Folk medicine and modern science are healing herbs that are used in medicine. Tashkent, 1993.
2. Kursanov A. I. vagabonds. Botany Volume 2-Tashkent, 1963.
3. Mustafayev.S.M. Botany-Tashkent, 2002.
4. Nabiyev M. Botanical atlas-dictionary. - Tashkent, 1969.
5. Holikov.S.X. etc. Plants and animals of the Fergana Valley included in the Red Book of Uzbekistan.
6. Oripov.R.O, Khalilov.N.X. Osimlikhsiya-Tashkent, 2007.
7. Pratov O.P., Nabiyev.M.M. Modern system of high plants of Uzbekistan Tashkent, 2007.
8. Khamidov.G'. Development of Useful Plants of Uzbekistan-Tashkent, 1990.
9. Holikov.S, Pratov.O'. Plant clarifier-Tashkent, 1970.

10. Kholmatov, X.X. etc. Healing plants of Uzbekistan-Tashkent, 1991.

11. V. Makhmudov, A. Makhmudov. Medicinal herbal flora and Systematics. Tashkent. "Fan" publishing house, 2022.

12. Yusupova, Z. A., & Baratjon ogli, S. F. (2022). LABGULDOSHLAR OILASI VAKILLARINING HAYOTIY SHAKLLARI, MORFOLOGIYASI VA TARQALISHI. IJODKOR O'QITUVCHI, 2(24), 472-479.

13. Yusupova, Z. A., & Baratjon o'g'li, S. F. (2022). LAMIACEAE OILASINING EFIR MOYIGA BOY BO'LGAN BAZI TURLARINING MORFOLOGIYASI. Scientific Impulse, 1(2), 692-695.

14. Yusupova, Z. A., & Baratjon ogli, S. F. (2022). NATURAL MEDICINAL HERBS OF THE LAMIACEAE FAMILY AND THEIR MEDICAL PROPERTIES. JOURNAL OF INNOVATIONS IN SCIENTIFIC AND EDUCATIONAL RESEARCH, 5(4), 64-68.

15. Yusupova, Z. A., & Baratjon ogli, S. F. (2022). FEATURES OF THE GENUS LAMIACEAE FAMILY, WHICH WE KNOW AND DO NOT KNOW ABOUT. IJODKOR O'QITUVCHI, 2(23), 87-90.