

MORPHOLOGY, CHEMICAL COMPOSITION AND MEDICINE APPLICATION OF
LIONTAIL PLANT

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Abstract: *This article describes the morphology, ecology of distribution, agrotechnical measures, preparation of raw materials and its quality, use in medicine and folk medicine, chemical composition and recommendations on the use of the plant. Today, traditional medicine (folk medicine) is a very rich and vast body of experience and knowledge, imbued with folk ingenuity. It is an inexhaustible resource that enriches scientific (official) medicine with new, effective medicinal preparations. The value and role of folk medicine in this field is priceless. For this, as an example, it is enough to remember that most of the medicinal plants used in modern medicine were taken from the treasury of folk medicine in a short period of time, or that modern scientific medicine developed on the basis of folk medicine.*

Key words: *lion's tail plant, diterpene alcohol Lagoxilin, essential oil, additives, organic acids, carotene, phylloquinones, ascorbic acid, aminstahydr, calcium.*

Five-lobed liontail - *Leonurus quinquelobatus* Gilib. (*Leonurus villosus* Desf.) and ordinary lion's tail - *Leonurus cardiaca* L., belong to the family of sedges - Lamiaceae (labiateae). It is a perennial herb reaching 50-150 (sometimes 200) cm in height. The stem is several, four-sided, upright, branched. The leaf is simple, claw-like, five-lobed, the upper ones are three-lobed, opposite to the stem band. The flowers are five-lobed, two-lipped, arranged in a ring in the axils of the leaves on the upper part of the stem, forming a spike-like inflorescence. The fruit is three-sided, dark brown, consisting of 4 nuts. It blooms from June to September.

The spread of the plant. The plant is distributed only in Uzbekistan (mainly in Samarkand region) and Northern Tajikistan. It grows in barren and desert plains, on mountain slopes. Due to the extensive preparation of raw materials from the natural resources of the plant, its bushes are gradually decreasing, and it is necessary to establish cultural plantations.

Other types of plants are also suitable for use in medicine. For example, *Lagochilus setulosus* Vved., *L. gypsaceus* Vved., which grows in Central Asia. and others.

Agrotechnical activities. The area allocated for planting is plowed in November to a depth of 25 cm. 50 tons of manure and up to 100 kg of phosphorus are applied to each hectare of bare, infertile gray soil. In the spring, the field is plowed and leveled. Usually, in March-April, 5-6 kg of seeds per hectare are sown in vegetable planting equipment. In order for the seed to fall evenly, 1/5 of sand or other filler is mixed with

it and planted at a depth of 0.5 cm. After that, the sown land should be slightly compacted with a roller. After sowing the lawn, the dry surface of the soil, the seed sowing equipment is also taken with a tractor. It is irrigated by successive folding and soaking, otherwise the crop may be completely washed away. In particular, the seed can germinate uniformly only if the soil layer is kept moist for 2-3 weeks. Grasses start to appear in 10-15 days after sowing. At first, growth is slower and weedy. Therefore, after every two irrigations, the soil is softened and planted, and if the crop is dense, it is unified. It is watered up to 10 times during the season in the first year, and up to 7-8 times in the following years. 50 kg per hectare before harvesting in mid-July. nitrogen fertilizer is applied. Productivity is 8-10 centners per hectare.

Preparation of raw materials and its quality. It is prepared during the flowering period of the bozulbang plant, that is, from May to October. Since the plant is thorny, it is cut with a hoe. It is dried in the shade on a tarpaulin cloth or in clean areas and ground with sticks. The fallen leaves and flowers of the plant (with thin parts of the stems) are also picked. Use in medicine and chemical composition. Herbal preparations have blood-stopping properties and are used in medical practice as preventive and medicinal substances for various diseases - bleeding (hemorrhoids, lungs, nose, wounds, etc.). It also lowers blood pressure.

Based on the hemostatic properties of the plant, the blood clotting process is activated and the permeability of the vessel walls decreases. It is drunk as a decoction (1:10) as a blood-stopping and capillary-strengthening agent.

Calcium salts with lagoxilin in herbal preparations, as well as additives and vitamin K accelerate blood coagulation and reduce vascular permeability, have the effect of lowering blood pressure.

A tincture made from the flowers and leaves of the plant has hemostatic properties. It is used to stop bleeding from the uterus, lungs, nose, wounds and other places, as well as in surgical operations.

To prepare tincture at home: 10 g of flowers and leaves (or 3 tablespoons) are put in 1 cup of boiled water. Infuse for 6-8 hours, drink 1 tablespoon mixed with $\frac{1}{4}$ glass of water up to 6 times a day. Herbal preparations are recommended for various hemorrhoidal diatheses. In such conditions, the tincture is drunk $\frac{1}{3}$ cup 3-4 times a day. Treatment is carried out for 2-3 months without a break.

In some cases, herbal preparations are also used as sedatives. As an additional substance in treatment, tincture made from plant leaves is used to treat glaucoma, hypertension (increased blood pressure) of the I and II degrees, and allergic skin lesions. In such conditions, the tincture is prepared in a ratio of 1:20 and drunk 3 times a day on 2 tablespoons. In some patients, the tincture causes weakness and a decrease in pulse. In this case, the amount of pink tincture is reduced by 2-3 times. A gauze napkin or cotton is applied to the tincture (1:10) as a hemostatic agent and applied to the bleeding tissue for 2-5 minutes.

The flowers and leaves of the plant contain the diterpene alcohol lagoxilin and essential oil. The leaves contain nutrients (11-14%), organic acids, carotene (6-10 mg/10.0 g), phyloquinones, ascorbic acid, aminstachydrine and a small amount of calcium, and its stem also contains nutrients (6-8%) .

Recommendations. The plant is included in the Red Book of Uzbekistan. There are almost no natural reserves, but it can be easily cultivated in the dry lands of Samarkand, Navoi and Jizzakh regions of the Republic.

Conclusion: To sum up, the lion's tail plant is considered a very medicinal plant. Medicinal preparations of lion's tail are used as a sedative (like valerian preparations) to treat hydertonia, nervous excitement and some heart diseases (cardiac neurosis, cardiosclerosis). Among the drugs used in the treatment of various diseases that occur in the human and animal body, drugs prepared from medicinal plants have a significant place. Many medicinal plants are not sold in pharmacies, but are considered the main source of raw materials for the production of medicines. When we use medicines, we often do not even think about the fact that they are made from medicinal plants. For example: Cardiovalen is one of the high-quality drugs used in the treatment of heart diseases, and it is a complex compound made from hawthorn, valerian, adonis and several other types of plants. Currently, one third of the more than 900 different medicines used in medicine are products of medicinal plants. 77% of drugs used to treat heart diseases, 74% of drugs used to treat liver and gastrointestinal tract diseases, and 80% of drugs used against uterine diseases are made from medicinal plants.

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