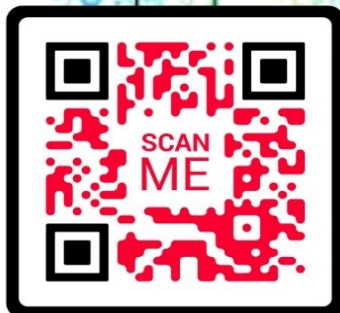


## Table Of Content

<b>Journal Cover</b>	2
<b>Author[s] Statement</b>	3
<b>Editorial Team</b>	4
<b>Article information</b>	5
Check this article update (crossmark)	5
Check this article impact	5
Cite this article	5
<b>Title page</b>	6
Article Title	6
Author information	6
Abstract	6
<b>Article content</b>	7

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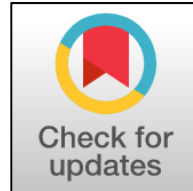
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**Dissemination, Health Features, Production and Agriculture of  
Turkestan Lion Plants in The Territory of Uzbekistan.**

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**Abstract**

The article describes the species of mammalian lion, which is widespread in Uzbekistan and describes its use in folk medicine, chemical composition, the use of herbal remedies in modern medicine, and the ways of preserving the natural resources of cultivating the Turkestan lion.

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## Introduction

Currently, the development of many plant species is negatively affected by global climate change. The natural range of species that have the capacity to adapt to changing conditions is declining as a result of adverse effects. It is necessary to select and study the most promising plant species in the new climatic conditions of natural medicinal, spicy and nutritious plants. Therefore, cultural reproduction of plants is important in their study of morphological and bioecological features and their introduction.

The five-parted lioness - *Leonurus quinquelobatus* Gilib. (*Leonurus villosus* Desf.), A simple lion - *Leonurus cardiaca* L. and the Turkestan lion - *Leonurus turkestanicus* c. Krecz. et Kupr .; mammals are perennial herbs belonging to the Lamiaceae family (Lababi- labiate).

The five-parted lion tree grows in empty, abandoned and abandoned areas in Belorussia, Ukraine, the European part of Russia (except the north), the Caucasus and Western Siberia. The Turkestan lion grows mainly in the Central Asia (Tashkent, Samarkand, Jizzakh and Surkhandarya regions) in the mountainous and sandy-steep slopes of the mountainous areas.

Turkestan lion tree is known from ancient times as a spice and medicinal plant in folk medicine. The three species of lion tree are very similar to each other and differ in the structure of the leaves. The five-parted lion's leaf is stiff.

## Theoretical background

The finished product of all types of topsoil (stem, leaves, and flowers) of 30–40 cm cut. The stem is four-sided, with a hollow and red purple. Leaves are dark green, hairy (simple and unoccupied leaves of Turkestan lions), the bottom of the stem is oval-shaped and heart-shaped, the middle of the trunk is cut into 5 pieces, the upper part is elongated or lanceolate, triangular or triangular. located opposite. The leaves at the top of the stem are arranged in the form of a ring on the armpit, forming a spiky inflorescence. The rosette is 5-toothed, tubular, bell-shaped, two-lobed, pink or pink-purple, with 4 beads, 2 of which are short, the main node is four.

Moisture of the product is 13%, ash 12%, insoluble in 10% hydrochloric acid 6%, yellow and brown leaves 7%, stalks 40%, stems over 5 mm thick, 3% organic compounds and mineral. mixtures should not exceed 1%. For the whole product: small slices with a 3 mm diameter should be 10%, for products with a size greater than 7 mm 17%, and through a socket with a diameter of 0.5 mm, the sieve must not be more than 16 %. The content of soluble extracts in 70% alcohol should be no less than 15%.

The chemical composition of the species *Leonurus* L. has not been studied extensively. Plant contains flavonoids, substances which increase to 2.01-9%, alkaloids up to 0.035- 0.4% (when the plant starts to blossom), 0.05% essential oil, n-gambic acid, vitamin C, iridoids, saponins, bitter, sugar. and other substances.

The flavonoids of the product contain rutin, quercetin, hyperoside, quercetin 7-glycoside, quercetin and quinqueloside, alcaloid leonurine (0.4%) and stachidine from alkaloids. Arsenic preparations are used mainly as a soothing agent for the treatment of hypertension, nervous disorders and some heart diseases (cardiac neurosis, cardiosclerosis).

## Main part

Turkestan lion grass has isolated rutin, quercetin and quinqueloside, alkaloid leonurin and stachidine from ursolic acid, excipients, organic acids, saponins, flavonoids, and recently found valepotriates (iridoids) in the product. Its medicines are also used as a calming agent (like valeriana medication) for the treatment of hypertension, nervous disorders and some heart diseases (cardiac neurosis, cardiosclerosis). Medicines - drops, herbs, liquid extracts and sedative teas.

It is recommended to plant lion plants on well-watered soils rich in structural humus. Before plowing, 30 tons of manure per hectare and 50-80 kg of phosphorus fertilizers per hectare. The soil is pumped to a depth of 22-25 cm. Dried seeds are sown in late autumn or spring at 7 kg per hectare. After seeding on irrigated fields, 60-70 cm irrigation furrows are removed and watered consecutively. The seeds should be mixed with manure. After all, surface frost often destroys the crop. 20-25 days after seeding, the grass begins to sprout. Maintenance activities include cultivation, manual weeding and isolation. The bush is between 15 and 20 cm and leaves 1-2 plants in each nest. At the time of flowering, along with the cultivation, 50-80 kg of nitrogen fertilizer per hectare. It is irrigated 7-8 times during the growing season and is given 110 kg of nitrogen, 80 kg of phosphorus and 60 kg of potassium fertilizer. Fertilization is carried out in the phases of bloom and flowering when the leaf blossoms.

The lion stem can be trimmed at an average height of 30-40 centimeters. In the first year, it can produce an average of 5-6 centners per hectare, and in the following years it can be harvested from 10-12 centners. The yield

of seeds can reach 0.5-0.6 centners per hectare.

## Conclusion

The land surface of the Turkestan lion is harvested by hand or mechanism when the plant enters the flower. The raw material is dried in well-ventilated rooms or under a pile, spreading thinly on paper and stirring constantly. The plant is stored in 15 kg bags and 50 kg in bulk bags. Can be stored in dry and well-ventilated warehouses for up to 3 years.

Land surface of the Turkestan lion can be prepared in limited quantities from Tashkent and Jizzakh regions. Lion-plantation can be kept in one field for 3-4 years.

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