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## CHARACTERISTICS AND CHEMICAL COMPOSITION OF HYPERUCUM PERFORATUM L.

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### **ABSTRACT**

Medicinal dalahai (hypericum perforatum L.) is grown in our country. Special attention is paid to the determination of the chemical composition of plants and the development of technologies for growing promising species in various climatic conditions, and certain results are achieved.

#### **KEYWORDS**

Salinity, Agrochemistry and agrophysics, salt balance, essential oil, flavonoids, alcohol, vitamins, coumarins, tar, seeds, stem, root, yield, yield.

#### INTRODUCTION

The relevance of the topic: the strategy of actions for the further development of the Republic of Uzbekistan defines the important tasks of "developing the pharmaceutical industry, providing the population and medical institutions with affordable, high-quality drugs." In the implementation of these tasks, substantiating the morpho-biological properties of Hypericum perforatum in different climatic conditions and developing recommendations for the production of raw materials are of great scientific importance.

The purpose of study: to analyze the bioecological properties of the dalshay (Hyperucum perforatum L.) plant in the conditions of medium and high saline soils

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of the Republic of Karakalpakstan, including the retention of mineral nutrients and chemical composition during the implementation agrotechnology.

### Tasks of study:

- study of the effect of salt concentration on the agrochemical and agrophysical properties of the soil;
- Preparation of seeds of the fennel (Hyperucum perforatum L.) plant.
- The growth, development and productivity of Dalahai (Hyperucum perforatum L.) plant.
- Determining the economic results of the production method of Dalahai (Hyperucum perforatum L.) plant.
- Determination of the advantages of combined processing technologies of Dalahai (Hyperucum perforatum L.) plant.

As an object of study, in the conditions of the Republic of Karakalpakstan, the pasture-alluvial soil of the Republic of Karakalpakstan, the test grounds of the Institute, humus and mineral springs, the seeds of the Dalahai (Hyperucum perforatum L.) plant were taken.

As the subject of study, the productivity of the Dalahai (Hyperucum perforatum L.) plant in the field is influenced by both humus and mineral nutrients, plant and development, agrochemical agrophysical properties of the soil, and the vegetative and generative organs of the plant.

### **METHODS**

The laboratory and field experiments were carried out according to the methods confirmed. Analyzes of the results of field experiments, biometric measurements, "Methods of conducting field experiments" (UzPITI, Tashkent, 2007); "Methods of agrochemical, agrophysical and microbiological research irrigated areas", "Methodology of economic efficiency of use and results of agricultural production, scientific research and experimental design work, new technical, experimental and rationalization research" (B.A. Baranov) - statistical analysis using Microsoft Word and Excel computer programs according to the methods of B.A. Dospekhovtin.

One of the most widely used plants in folk medicine and scientific medicine has been discovered. Kóbinese medicine is made from the leafy and flowery branches of the oleander. It is recommended to plant 25-30 cm apart when the fruit is ripe and ripe. One of the characteristic features of Dalahai is the presence of 0.01-1.75% shekem essential oils in its composition. It was determined that the composition of the essential oil contained about 148 g of elements, and the following were found: the most sesquiterpene hydrocarbon (69%) and 60% monoterpene. 2, 3 mg/ml of rutin in the alcohol solution and 9 elements were detected in the oil solution, the most important of which were chlorogenic acid biapigenin and hypericin.

In the following years, it was discovered that there are new biologically active elements in the chemical composition of dalahai [6; p. 126 7; 146- p. 8; 16-17 p. 9; 24- p. 10; 65-66- b].

hypericin, pseudohypericin, 0.1-0.4% protopseudohypericin are also left-handed elements in the upper part of the dalahai;, all sol-like elements; 2-5% quercetin, 0.5-0.7% rutin, 0.4-0.5% quercitrin, 0.01-1.25% essential oil [11; 209-301- p. 12; p. 65-68. 13; 94-p]. In addition to these, the composition of dalahai contains 0.31% alkaloids, choline C, PP vitamins, coumarins, enhancing elements (2, 8-12, 4%), anticyanins (5-7%), 17% tar elements, nicotinic acid, carotene. It was

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determined that 1% organic acids are present [14; 183-184-b].

Scientists are paying attention to the fossils in Dalahai. This is because these elements have been found to have no effect on the skin, leading to an increase in physiological activity levels in humans. In addition to being rich in biologically active elements, it also contains sodium, calcium, potassium, manganese, iron, zinc, copper, lead, and other essential mineral elements that are necessary for the body. Antiviral properties of hypericin should be considered. Because this element has a variable biological activity, it has been used in the fight against cytomegalovirus, human papilloma viruses, influenza, hepatitis and AIDS, and left-sided diseases [15; pp. 18-25].

The hyperforin in the Dalshay composition has a variable antimicrobial effect, and in that case, the bacterial activity is inhibited, because of this, they gave effective results in the fight against staphylococci. This one, compared to the other sections of the discussion, explained a lot. Its urine has also been shown to be anti-parasitic.

Today, dalshay herb is widely used in the pharmacology of Russia, the Czech Republic, Poland, France and other countries, and in Bulgaria, the preparation of catechin from this plant is sought.

"Giflarin" drug taken from Dalahai was used against acute and moderate nephritis and nephrosis. Phytolithum from Dalshay has the ability to dissolve stones in the urinary tract.

In other countries, antidepressants such as the weed herb Deprim and negrustin have been used as retinoids.

Dalahai drugs had a beneficial effect on the cardiovascular system, and improved the process of venous blood circulation. The amplitude of the contraction is greater than that of the contraction.

He had spasm of blood vessels, and his capillary vasculature was favorable. It was determined that the composition of the plant in the region of Uzbekistan contains 10-12% nutritional elements, 0.1-0.4% anthropocene compounds, flavonoids, essential oils and vitamin C.

Abu Ali Ibn Sino used the herb as a pain reliever, a diuretic, and as a vaccine for various wounds. In folk medicine, a decoction prepared from dalshay species was used to inoculate bladder and stomach diseases.

Dalahai plant can help in the treatment of dysentery, stomach pain, stomach fever, liver, lung and heart diseases [15; pp. 18-25].

The phytochemical composition of the upper part of this type of Hypericum was studied at the department of pharmacognosy of the Tashkent pharmaceutical institute. We did not mention the analysis of chemical elements in the root system according to the phases of the plant.

The above-mentioned scientific data show that this plant is of great importance. It was a good idea to prepare the dalahai plant from the trees and shoot it on the stem. The reason is that the handle of any medicine device has to be connected to the handle of the device.

#### CONCLUSION

According to the information available to us, the chemical composition of the species (Hypericum L) distributed in our Republic, the areas of distribution in the Republic, and the incomplete natural reserves, which would be medicinal properties, have been studied. It has been determined that flavonoids (o, o1-

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o, 13%), 10-12% additional elements, 1-o, 4% anthracene derivatives, dipericin and others are present in Dalahai composition.

Flavonoids include hyperoside, rutin, quercetin, 0.1-0, 33% essential oil, 55% carotene and magnesium.

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