

Medicinal Properties and Resources of the Plant *Glycyrrhiza Glabra L.*

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Abstract: The article contains information about the medicinal properties, uses, raw material resources, and reserves of the medicinal plant *Glycyrrhiza glabra L.* in the region.

Keywords: *Glycyrrhiza glabra L.*, medicinal plants, districts, distribution area, resource.

In recent years, there has been increased interest in finding and using natural, highly effective and inexpensive plant antioxidants to replace existing synthetic ones. Dried licorice roots are widely used as a food flavoring agent and for various medicinal purposes.

Glycyrrhiza glabra L. - Licorice (boyan - Karakalpak name). Sem. Fabaceae is a perennial plant. A decoction, powder and extract of the roots in folk medicine is used as a diaphoretic and laxative, for coughs and pains in the chest and throat, for the treatment of the respiratory tract, whooping cough, also for gastrointestinal diseases, dysentery, diseases of the bladder, kidneys, as an expectorant and in other diseases[2,3,4].

There are 13 species belonging to the licorice plant family, of which this is the only species belonging to the family with the most promising medicinal properties in our region. The Uzbek name is shirinmiya, qizilmiya, smooth shirinmiya, and the Karakalpak name is boyan[1,2].

The flora of the territories of the Republic of Karakalpakstan is very rich in medicinal plant species and their reserves. At the same time, 444 species of natural medicinal plants belonging to 63 families and 240 genera grow in our region. Among them, there are several promising species, *Glycyrrhiza glabra L.* is a plant species rich in raw materials with extensive medicinal properties in the treatment and prevention of various diseases[21].

Harvesting of *Glycyrrhiza glabra L.*-roots and rhizomes takes place from March to November, depending on weather conditions. It is necessary to collect 50-75% of the raw material in reserve, for recovery, it is necessary to leave 25-50% as the plant reproduces vegetatively[5,6].

According to the results of our research, the reserves of the sweet medicinal plant distributed in the territory of Karakalpakstan were determined. They are: widespread in Kegeili district (Jaksilik, B.Karimberdiev, along the Kuvoncharma canal, Ko'ko'zak, Musajali, Aktuba), Chimboy, Shumonay, Tortkul, Mo'inoq, Amudaryo, Ellikkala, Takhtakopir, Nukus district, Karaozak, Kungirov, Khojayli and other places of our region. it also depends on the climate

conditions being favorable for the growth and reproduction of the licorice plant [2]. As a result of research carried out in recent years, the biological reserve of licorice plant in our region is: 6120.68 ± 734.48 tons, the used plant reserve is equal to: 1591.38 ± 244.83 tons, and the possible annual amount of plant raw material preparation is 244.83 It was determined to be ± 77.12 tons [2]. The total area of the plant is 11128.5 ha [2].

Currently, in the Republic of Karakalpakstan, there are several joint enterprises for the processing of licorice root and obtaining glycyrrhizic acid, and scientific research aimed at their effective use by chemical analysis of the mass of solid and liquid waste in these enterprises is being conducted[5].

The presence of silicon, calcium, aluminum, iron, sulfur, potassium, titanium, manganese, phosphorus and other micro-, macro- and ultra-microelements in the chemical composition of solid waste from sweet potato processing plants, based on which they are promising preparations in agriculture and other sectors of the national economy by using them as natural, cheap raw materials in creation, it provides an opportunity to further reduce the harmful impact on the environment in our region. The presence of silicon, calcium, aluminum, iron, sulfur, potassium, titanium, manganese, phosphorus and other micro-, macro- and ultra-microelements in the chemical composition of solid waste from sweet potato processing plants, based on which they are promising preparations in agriculture and other sectors of the national economy by using them as natural, cheap raw materials in creation, it provides an opportunity to further reduce the harmful impact on the environment in our region.

It is a medicinal plant with perennial roots. In scientific medicine, due to the wide range of therapeutic effects, the root and rhizome of the plant are widely used as medicinal preparations and in folk medicine. Dry alcohol of the plant is used in gastrointestinal and chest diseases. Their decoction is used for dry throat, shortness of breath, whooping cough, gastrointestinal, laxative, emollient and diuretic, expectorant, regular water-salt exchange. Glycyrrhizic acid, essential oil, aspirin, ascorbic acid, saponin, substances are found in 23% of the dry mass of root and rhizome of this plant. The root and rhizome extract of the licorice plant is currently the most demanded promising product, which occupies an important place in the domestic and foreign markets[5].

Glycyrrhiza glabra L.- products obtained from the root of the plant are used in other areas of the plant national economy, pharmaceutical, food, cosmetics, light industry, chemical industry.

The roots and rhizomes of this plant are used in folk medicine and scientific medicine for dry throat, shortness of breath, whooping cough, gastrointestinal, laxative, emollient and diuretic, expectorant, regular water-salt exchange.

In the Republic of Karakalpakstan (excluding forestry and protected areas) 11,183.5 ha of sweet potato area was determined (Table 5.2), of which an average of 6.1 t/ha from 1,435.1 ha, and a total of 8,754.0 t of sweet potato root raw material possible

Only 75% of the roots and rhizomes of the sorghum in the area to be dug up are collected, and the remaining 25% must be left in the same area to propagate vegetatively and maintain the plant stock. Re-harvesting from the harvested areas can be done after 6-8 years. The collected and cleaned raw materials are dried in the open air. If the root is well dried, the root should break without bending. At present, licorice plant is one of the most exported plants in the territory of Karakalpakstan. The results of the performed work have been summarized[2,6].

Glycyrrhiza glabra is a stout herb with imparipinnate and multifoliolated leaves. Flowers are papilionaceous present in axillary spikes which are violet in colour. The reniform seeds are compressed in pods and the hardy rootstock makes numerous amounts of perennial roots. The drug (licorice) can be accumulated either in dried, peeled or unpeeled underground stems or in roots.

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