ХОЗЯЙСТВЕННОЕ ЗНАЧЕНИЕ *GLICIRRHIZA GLABRA* L. BUNGE. ИЗ СЕМЕЙСТВА *FABACEAE* LINDL. ДИКОРАСТУЩИХ СОРОДИЧЕЙ КУЛЬТУРНЫХ РАСТЕНИЙ РЕСПУБЛИКИ КАРАКАЛПАКСТАНА

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Аннотация: В статье проведен анализ диких сородичей культурных растений из семейства *Fabaceae* Lindl. Республики Каракалпакстана. В Каракалпакстане из 171 вида ДСКР семейство *Fabaceae* Lindl состоит из 10 родов и 15 видов. По расположению ДСКР делили на 4 части– это Каракалпакская часть плато Устюрта и Кызылкума, Дельты Амударьи и Аралкум. Анализ конспекта показал, что *Glicirrhiza glabra* L. занимает видное место. Многолетнее корневищное, травянистое растение. Цветет с конца мая по июнь. Солодка голая — понтическо-средиземноморский вид, восточная граница ареала которого доходит до Ирана и Афганистана. Хозяйственное значение: техническое, кормовое, лекарственное, медоносное.

Ключевые слова: Дикорастущие сородичи культурных растений, флора, *Glicirrhiza glabra* L.

ECONOMIC VALUE GLICIRRHIZA GLABRA L. BUNGE. FROM THE FAMILY *FABACEAE* LINDL. CROP WILD RELATIVES OF CULTIVATED PLANTS OF THE REPUBLIC OF KARAKALPAKSTAN

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Abstract: The article analyzes the crop wild relatives of cultivated plants from the *Fabaceae* Lindl family. Republic of Karakalpakstan. In Karakalpakstan, out of 171 WRCP species, the *Fabaceae* Lindl family consists of 10 genera and 15 species. According to the location, the WRCP was divided into 4 parts - this is the Karakalpak part of the Ustyurt plateau and Kyzylkum, the Amu Darya Delta and Aralkum. Analysis of the synopsis showed that *Glicirrhiza glabra* L. occupies a prominent place. Perennial rhizome, herbaceous plant. Blooms from late May to June. Licorice glabrous is a Pontic-Mediterranean species, the eastern border of the range of which reaches Iran and Afghanistan. Economic value: technical, fodder, medicinal, melliferous.

Key words: Crop wild relatives of cultivated plants, flora, *Glicirrhiza glabra* L.

Introduction. About 80% of Uzbekistan's area is occupied by deserts, of which Kyzylkum is the largest with an area of 30 million hectares. A unique gene pool of various ecological groups is concentrated on the territory of Uzbekistan, which is a valuable reserve of forage, raw materials, medicinal, food and other useful plants. [13].

Determination of biological productivity and rational use of wildlife is one of the most important tasks of modern ecology [14].

Evaluation and preservation of the gene pool of desert wild species of local flora is closely related to the study of morpho-anatomical characters, chemical composition, including economic value.

Plants are a renewable resource of nature, and people have long used their healing properties. Despite advances in the synthesis of chemical compounds in the creation of medicines, plants remain the most important resource for obtaining a number of valuable medicines. On the international market, every third medicinal product is of plant origin, and as for the drugs used, for example, for the treatment of diseases of the cardiovascular system, 80% of them are of plant origin. The interest in medicinal plants is due to the fact that the systematic and long-term use of any synthetic drug can cause

various disorders in the human body.Medicinal plants, as a rule, are not toxic (or contain toxins in small quantities), therefore they do not cause side effects. Preparations based on the use of several plants have medicinal properties precisely due to the total content of biologically active substances in them. In addition, many medicinal plants are available, and the technology for making medicines from them is simple and feasible even at home. Sesquiterpene lactones, along with alkaloids, glycosides, coumarins, and flavonoids, are naturally biologically active compounds isolated from plants. Many of them have analgesic, antitumor, anthelmintic, growth stimulating, and antimalarial effects [4, 5, 6].

The republic possesses innumerable plant resources and many of them have not yet been touched by the breeder's hand. Creating new varieties, breeders are increasingly turning to wild forms of one type or another [3].

In Karakalpakstan, out of 171 WRCP species, the *Fabaceae* Lindl family consists of 10 genera and 15 species. According to the location, the WRCP was divided into 4 parts - this is the Karakalpak part of the Ustyurt plateau and Kyzylkum, the Amu Darya Delta and Aralkum. On Aralkum from the Fabaceae family Lindl. there are 4 genera and 5 species. Which belong to different life forms [1, 2].

Objects and research methods. The object of this research is the plant *Glicirrhiza glabra* L., a species from the *Fabaceae* Lindl family.

Glycyrrhiza glabra L. - Nude licorice. Perennial rhizome, herbaceous plant. Blooms from late May to June. The total identified area occupied by this plant is 2 856 hectares, from one hectare beekeeping farms receive 50-60 kg of pure honey. However, in view of the intensified exploitation of commercial thickets by organizations that harvest the roots and rhizomes of the plant, wild populations of licorice are decreasing from year to year [7, 9, 10].

Areal. Licorice naked is a Mediterranean species, the eastern border of the range of which reaches Iran and Afghanistan [11].

Ecology. The main habitats of licorice are the floodplains and river valleys of the steppe and desert regions of Central Asia, Kazakhstan, and the Caucasus. The peculiarity of the habitats of naked licorice is their temporary flooding in the spring-summer period and the relatively high standing of groundwater in them.

Economic value: technical, fodder, medicinal, melliferous. From the roots and rhizomes of licorice, up to 23% of saponin-glycyrrhizin (potassium and calcium salt of glycyrrhizic acid), which gives them a sweet taste, and 27 flavonoids (liquoritin, liquiditoside, isoliquiritin, etc.) are isolated, the total content of which reaches 4%, glabrous (glycyrrhizic) acid, steroids, essential oil, asparagine, ascorbic acid, bitterness, pigments, gums, etc. [7, 8].

Research results. The aerial part of licorice naked contains saponins, tannins, flavonoids, essential oils, sugars, pigments and other substances. This opens up prospects for the use of licorice herb in medicine, as a possible raw material for the creation of anti-inflammatory, protistocidal, antispasmodic and antiviral drugs.

Licorice preparations have long been used in medicine as a mild laxative, expectorant, emollient and diuretic, and also as a means of regulating water-salt metabolism. Dry extract, thick extract, licorice syrup, breast powder and other preparations are used. Licorice root also serves as a base for pills and improves the taste of various preparations and mixtures [7, 8].

Recently, on the basis of glycyrrhizic and glycyrrhetinic acids, preparations have been created (glycyram, etc.) used for the treatment of inflammatory diseases, bronchial asthma, eczema, etc. Based on the flavonoids of licorice roots, preparations have been created that have antispasmodic and antiulcer activity - liquiditon and flacarbin. There are also encouraging data on the anticancer and protistocidal activity of licorice root and the substances it contains.

Licorice is used in more than 20 industries and agriculture. Its root and extracts are used in the tobacco and food industries (in the production of beer, kvass, confectionery). The foaming properties of the root have found application in

technology (in the production of fire extinguishers and paints). Licorice root is also used in soap making, textile, leather and chemical industries, and even in metallurgy - to suppress sulfuric acid mist in electrolysis baths. Wastes from the production of licorice extract are used as raw materials for the manufacture of fertilizers, parchment, heat and sound insulation boards. Licorice hay is highly nutritious and is eaten by many pets [7].

Beekeeping farms receive 50-60 kg of pure honey from one hectare. However, in view of the increased exploitation of commercial thickets by organizations harvesting the roots and rhizomes of the plant, wild populations of licorice are decreasing from year to year [12].

Conclusions. Thus, summarizing the above, we can conclude that *Glycyrrhiza glabra* L. is a valuable plant, it is used as a medicinal, technical, fodder and honey plant. The wild flora of the Republic of Karakalpakstan has significant potential and, with rational and competent use, will provide the population with not only high-quality, environmentally friendly honey, medicine and other valuable products for many years to come.

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