

**THE MEDICINAL VALUE OF CROP WILD RELATIVES OF
CULTIVATED PLANTS FROM THE *FABACEAE* LINDL. FAMILY
REPUBLIC OF KARAKALPAKSTAN**

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Abstract: The article analyzes the crop wild relatives of cultivated plants from the *Fabaceae* Lindl. family, the flora of the Republic of Karakalpakstan by their medicinal properties. Analysis of the synopsis showed that WRCP consists of 10 genera and 15 species, and revealed the presence of 10 medicinal plants. Of these, two species are represented in the genera *Alhagi* Hill, *Ammodendron* Fisch, *Astragalus* L., *Glicirrhiza* L., *Melilotus* Mill, and in the rest *Caragana* Fabr., *Medicago* L., *Onobrychis* Hill, *Trigonella* L., *Trifolium* L. ...

Key words: crop wild relatives of cultivated plants, flora, the medicinal value.

Аннотация: В статье проведен анализ диких сородичей культурных растений из семейства *Fabaceae* Lindl., флоры Республики Каракалпакстан по их лекарственным свойствам. Анализ конспекта показал, что ДСКР состоит из 10-родов и 15-видов, и выявил наличие 10 лекарственных растений. Из них по двум видам представлены в родах *Alhagi* Hill, *Ammodendron* Fisch, *Astragalus* L., *Glicirrhiza* L., *Melilotus* Mill, а в остальных *Caragana* Fabr., *Medicago* L., *Onobrychis* Hill, *Trigonella* L., *Trifolium* L. представлены по одному виду.

Ключевые слова: Дикорастущие сородичи культурных растений, флора, лекарственные виды растений.

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.[1].

Determination of biological productivity and rational use of wildlife is one of the most important tasks of modern ecology. [2].

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.

Medicinal plants, like other natural resources, are the property of the people and their protection is one of the most important tasks today. This should be remembered from the moment of organizing work on their procurement. When the areas and scales of procurement of medicinal raw materials are determined and explanatory work is carried out with collectors, special attention should be paid to the following: in order to preserve the habitats of useful plants, it is necessary to harvest only those parts of them (leaves, flowers, grass) that will be used, and strictly in the required amount. The entire plant should not be destroyed predatory by uprooting it. When harvesting medicinal raw materials, the species surrounding the medicinal plant must not be damaged. The underground organs of plants are usually harvested after the fruit has ripened, which must first be collected and scattered around the mother plant to ensure the preservation of natural thickets, and only then the plant must be dug up. It should be remembered that plant conservation is the business of every inhabitant of our planet.

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].

Crop wild relatives of cultivated plants (WRCP) are carriers of such biological properties as resistance to extreme environmental factors (high and low temperatures, droughts, salinity, flooding, etc.), as well as to diseases, pests, etc. Therefore, further progress in breeding is not conceivable without the comprehensive and complete use of wild relatives of cultivated plants.

A prominent place in the composition of crop wild relatives of cultivated plants for economic use belongs to the representatives of the legume family (*Fabaceae* Lindl.). In Karakalpakstan, out of 171 single WRCP species, the legume family consists of 10 genera and 15 species. Which belong to different life forms[4, 5].

Objects and research methods. The objects of study are wild medicinal plants of the *Fabaceae* Lindl family of the natural flora of the Republic of Karakalpakstan. The proposed list of wild relatives of cultivated melliferous plants was developed on the basis of a literature review.

Family Fabaceae - one of the largest families of the world's flora, herbaceous and woody plants. Legumes are easily recognizable by their flower shape. Another sign of legumes is a fruit characteristic only for this family, a bean. Valuable food plants are high in protein. (beans, mung bean, soybeans, peas, peanuts, etc.) vegetable oil, a source of medicinal substances, decorative, technical, etc. Many leguminous plants on the roots have nodules filled with nitrogen-fixing bacteria.

Considering, on the one hand, the insignificance and, on the other hand, the specificity of the species composition of the desert flora of the Republic of Karakalpakstan, knowledge about the use of useful qualities of plants is of particular interest. [6, 7].

Research results. Our research has shown that in the *Fabaceae* lindl. WRCP is marked with 10 genera and 15 species. Two of them were recorded in the genera *Alhagi* Hill, *Ammodendron* Fisch., *Astragalus* L., *Glicirrhiza* L. and *Melilotus* Mill. In other genera, one species is presented (Table 1).

Table 1

The medicinal value of crop wild relatives of cultivated plants from the *Fabaceae* Lindl family.

<i>Fabaceae</i> Lindl family.			
№	Genera	Species	Med
1	<i>Alhagi</i> Hill	1,1 <i>A.persarum</i> Boiss. et Bushe	+
		2,2 <i>A. pseudoalhagi</i> (Bieb.) Fisch.	+
2	<i>Ammodendron</i> Fisch	1,3 <i>A. conollyi</i> Bunge	+
		2,4 <i>A. longiracemosum</i> Raik	+

3	<i>Astragalus</i> L.	1,5 <i>A. transcaspicus</i> Freyn	–
		2,6 <i>A. unifolialatus</i> Bunge	–
4	<i>Caragana</i> Fabr.	1,7 <i>C. grandiflora</i> (Beib.) DC.	–
5	<i>Glicirrhiza</i> L.	1,8 <i>G. aspera</i> L	+
		2,9 <i>G. glabra</i> L.	+
6	<i>Medicago</i> L.	1,10 <i>M. lupulina</i> L	+
7	<i>Melilotus</i> Mill	1,11 <i>M. albus</i> Medik.	+
		2,12 <i>M. officinalis</i> (L.) Pall	+
8	<i>Onobrychis</i> Hill	1,13 <i>O. micranta</i> Schrenk.	–
9	<i>Trigonella</i> L.	1,14 <i>T. grandiflora</i> Bunge	–
10	<i>Trifolium</i> L.	1,15 <i>T. repens</i> L	+
Bcero			10

The table shows that the analysis of the composition of plants from the *Fabaceae* Lindl. Family, found within the Republic of Karakalpakstan, revealed 10 species of medicinal plants. Of these, *A. persarum* Boiss medicinal species are of the genus *Alhagi* Hill. et Bushe and *A. pseudoalhagi* (Bieb.), and from the genus *Ammodendron* Fisch species *A. conollyi* Bunge and *A. longiracemosum* Raik, two species *G. aspera* L and *G. glabra* L. from the genus *Glicirrhiza* L., species *M. albus* Medik. and *M. officinalis* (L.) Pall from the genus *Melilotus* Mill. The other of the genera are represented by one species of medicinal plants - *M. lupulina* L, a species from the genus *Medicago* L. and *T. repens* L from the genus *Trifolium* L.

Other species: *T. grandiflora* Bunge from the genus *Trigonella* L., *O. micranta* Schrenk. from the genus *Onobrychis* Hill, *C. grandiflora* (Beib.) DC. from the genus *Caragana* Fabr. and the species *A. transcaspicus* Freyn and *A. unifolialatus* Bunge from the genus *Astragalus* L. have no medicinal properties.

Conclusions. It should be noted that the given figures for the composition of crop wild relatives of cultivated plants from the *Fabaceae* Lindl. flora of Karakalpakstan is not yet final. Further detailed study of the flora of individual regions of the republic, undoubtedly, should lead to a clarification of the number of genera and species of flora of the republic that are of economic value.

Thus, summarizing the above, we can conclude that the wild medicinal flora of the Republic of Karakalpakstan has significant potential and, with rational and competent use, will provide the population not only with high-quality,

environmentally friendly drugs, but also other valuable products for folk treatment of various diseases.

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