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CLASSIFICATION OF USEFUL PLANTS OF KARAULBAZAR OAK

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Annotation
This article provides a classification of naturally occurring useful plants in the Karaulbazar oasis. The flora of the oasis is divided into 13 groups according to their beneficial properties. Medicinal and fodder plants have been found to be common among the beneficial groups.

Keywords: Karaulbazar oasis, classification, Phragmites australis, Cynodon dactylon, Peganum harmala, Glycyrhiza glabra.

Introduction

Among the natural resources of the republic, plant raw materials have a special place. These include food, fodder, honey syrup, preservatives, dyes, vitamins, essential oils, and many other valuable medicinal properties. [1]
According to the literature, there are more than 4,560 species of higher plants in the country. Of these, 577 are medicinal plants, 103 species are dye plants, 650 species are essential oils, 400 species are herbivores, about 1,700 species are forage and 964 species are honey plants.

Research Methods

In determining the beneficial properties of plants, P.K. Zakirov, T. Norbobayeva [21] S.Ye. Yerejepov [9], H.X. Xolmatov., A.I. Qosimov [18], K. Kholikov [19], P.Ya. Cherneshev [22], S. Yunusov [23], S. Sahobiddinov [3], M.M. Nabiyev, R.Yu. Data from Kazakbayev [14] and other scientists were used.
In the classification of useful plants, N.V. Pavlov [15], M.M. Ilin [12], A.A. Grossgeym [10], A.A. Pristupa [16], V.M. Kozo-Polyansky [13] methods were used.

Research Results

The composition of the flora of the Karaulbazar oasis has not been studied in depth by scientists. However, a comprehensive analysis of the flora of the Bukhara oasis bordering the region H.Q. Esanov [4; 5; 6; 7; 8; 17]. It lists the beneficial properties

of 528 species of plants. The study also provides partial information on the Karaulbazar plants. The study in the Karaulbazar oasis has so far created a synopsis of 380 species of higher plants belonging to 48 families, 226 genera. The beneficial properties of these plants have been identified in scientific sources and observations, and it is noted that they belong to 47 families, 342 species (90%) belonging to 211 genera.

Useful properties of tall plants found in Karaulbazar oasis M.M. Ilin divided into groups according to the classification of the year [12]. In particular, the plants are divided into medicinal, honey, dyed, nutritious, ornamental, fuel, vitamin, fodder and other groups according to their useful properties.

The following table shows which plants belong to which group in terms of utility and the percentage of useful plants in the region.

(Table 1). Grouping of plants of the Karaulbazar oasis according to their useful properties

Useful properties of plants	Numbers					
	Family		Category		Types	
	Abs.	%	Abs.	%	Abs.	%
Medicinal plants	43	87	120	56,9	146	42,7
Fodder	36	76,6	153	72,5	248	72,5
Honey is juicy	27	57.4	65	30.8	78	22.8
Cooker	17	36,2	29	13,12	41	12
Nutritious	9	19,15	30	13,6	33	9,65
Poisonous	18	38,3	42	19	46	13,45
Paint	18	38,3	34	15,4	49	14,33
Essential oil	13	27,66	23	10,4	29	8,5
Ornamental	16	34	20	9	24	7
With vitamins	8	12	18	8,14	20	5,85
Fuel	9	19,15	11	5	22	6,43
Construction	2	4,25	4	1,8	5	1,46
Fibrous	6	12,76	8	3,62	11	3,22

As can be seen from the table, 248 species (72.5%) of fodder plants occupy the first place in terms of usefulness of plants. The flora of the Karaulbazar oasis can be explained by the abundance of forage plants, its connection with the desert environment of the region, and the abundance of forage plants in such environments.

Amaranthaceae-52 species (20.97%), Poaceae-36 species (14.52%), Asteraceae-32 species (12.9%), Brassicaceae-28 are the richest in the number of species of forage plants. species (11.3%) and Fabaceae-26 species (10.48%). Amaranthaceae are very common throughout the region.

Amaranthus viridis L. of the family Amaranthaceae and Symphyotrichum graminifolium (Spreng.) Belonging to the family Asteraceae, identified as a result of scientific research and registered as a new species for the flora of Uzbekistan in 2017, are also specific to the flora of the Guardland. , these plant species are also considered nutritious forage plants [4; 5]. Forage plants are the largest group in terms of their useful properties. Forage crops are the main food for livestock and poultry. These plants include Amaranthus retroflexus, Glycyrrhiza glabra, Artemisia turanica, Aeluropus repens, Stipagrostis pennata, Trigonella grandiflora, Karelinia caspia, Cynodon dactylon, Phragmites australis, Sorghum and many other species of halepense.

Phragmites australis, Aeluropus repens, Alhagi persarum, Alhagi kirghosorum, Acroptilon repens are the most common forage plants. Yantak is an important food for livestock and karakul, and is consumed throughout the year, mainly during the summer flowering period and in the winter. It is found in roads, canals, ditches, lakes, plains, cotton fields, uncultivated fields and open spaces in the oasis. The locals store it with kakra as a dry mass for the winter.

Reeds (Phragmites australis) are one of the main forage plants in the oasis and are loved by livestock until the stems and leaves are rough. It is used as a valuable food for farm animals in winter. Hay is prepared for livestock. It is also used as a building material.

Cynodon dactylon is found in the oasis along ditches, roads, canals, among crops, in abandoned lands, in gardens and alleys. It is a valuable fodder plant and is highly nutritious. It is consumed by livestock throughout the year.

Medicinal plants are also common in the oasis. Medicinal plants are the second most useful in the oasis. This group includes 146 species (42.7%) of plant specimens. In terms of medicinal properties, Asteraceae-17 species (11.64%), Amaranthaceae-14 species (9.6%), Fabaceae-13 species (8.9%), Poaceae-8 species and Brassicaceae-8 species (5, 48%) are led by family members.

We all know that medicinal plants have been used for centuries to treat various diseases in humans - hemostasis, oral cavity, gastrointestinal, liver, kidney diseases, bile, urinary incontinence, ulcers, fever has been used in the treatment of depression, colds, skin and others.

Medicinal plants are widely used by locals in folk medicine and medicine. Common species of medicinal plants include Roemeria hybrida, R. refracta, Portulaca oleracea, Spinacia turkestanica, Polygonum aviculare, Alhagi persarum, Halimodendron halodendron, Datura stramonium, Tribulus terrestris, Glycyrhiza glabra, Peganum vodala.

Medicinal plants contain a wide range of chemical compounds - biologically active substances, organic acids, minerals, flavonoids, glycosides, alkaloids, saponins, coumarins and others.

Locals use the roots, stems, leaves, flowers, fruits and seeds of these plants in the treatment of various diseases at home, dried and used as tinctures.

In the oasis, dried leaves, fruits and stalks of Peganum harmalaning are widely used to kill influenza viruses. The incense is sterilized by rinsing the mouth. The seeds are sometimes mixed with milk.

Glycyrhiza glabra rhizome is dried in the open air and juice is made from it. The juice can be used for respiratory diseases. It is also used for inflammation of the gastrointestinal tract

Honey succulents are followed by 78 species (22.8%). Fabaceae (10 species; 12.82%), Asteraceae (9 species; 11.54%) and Brassicaceae (8 species; 10.25%) are distinguished from other families in terms of species richness.

Bees also collect propolis from succulent plants. Bees use propolis mainly as a wax in the construction of cages. It also contains antibacterial agents. Propolis is obtained from the buds of some plants, poplars, conifers, sunflowers. Propolis contains 50-55% resin, 8-10% essential oil, about 30% wax [11].

The group of dyeing plants in the oasis flora consists of 18 families, 49 species belonging to 34 genera. The most common representatives of this group in the oasis are Chenopodium album, Halothamnus subaphyllus, Salsola arbuscula, Calligonum caput-medusae, Persicaria hydropiper, Limonium meyeri, Psylliostachys leptostachya, Populus euphratica, Isatis violascens, Andiachne rotundif.

Plant dyes are more resistant to artificial dyes. Some of these dyes are used to dye yarn and fabrics, while others are used to dye food.

The group of poisonous plants in the oasis consists of 46 species (13.45%). Plants with this trait are more common in the Brassicaceae (7 species), Amaranthaceae (6 species), and Asteraceae (5 species) families than in other families. It is now known that Lolium temulentum, a poisonous plant, damages many wheat fields and reduces yields by 40-50%. This type of plant grows mainly on private gardens. The stems and leaves of this plant are not poisonous. Its grain is considered poisonous because it contains toxic alkaloids such as lolin, lolin, lolinidine.

There are 17 families of herbaceous plants in the oasis, 41 species belonging to 29 genera, which make up 12% of the plants. These plants are Polygonaceae (9 species), common in the Fabaceae (4 species) and Tamaricaceae (5 species) families. Common species in the oasis include Calligonum caput-medusaye, Medicago lupulina, Lotus sergiyevskie, Halimodendron halodendron, Glycyrhiza glabra, Tribulus terrestris, Mentha asiatica.

Essential oils are also important in the flora of the Karaulbazar oasis. There are 13 families and 29 species of 23 genera in the region. Plants of this group are common in the family Asteraceae (7), Lamiaceae (5), Apiaceae (3). Other families have 1 to 2 essential oils. The most common categories of essential oil species in the oasis include Tamarix, Alhagi, Glycyrhiza, Acroptilon, Mentha and others. A. Akramov [2] gave a lot of information about the beneficial properties of the essential oil plant Cuminum setifolium in the conditions of Bukhara region.

Essential oils are now used for a variety of purposes. In particular, it is a major raw material in food production. To date, 650 species of essential oil plants have been identified in the country.

There are 22 species (6.43%) of the plants used as fuel in the region. These plants are used by the population as firewood. Common species in this group include Haloxylon persicum, Calligonum caput-medusae, Calligonum aphyllum, Tamarix hispida, Populus pruinosa, Karelinia caspia, Phragmites australis.

Forage plants are also rare in the oasis, but play an important role in the formation of flora. They formed 9 families in the oasis, 33 species belonging to 30 families. These plants are regularly used by the population for daily needs. They are common in the oasis as weeds and weeds. They contain proteins, carbohydrates, fats, vitamins, mineral salts and other substances.

These plants are the most common families Chenopodiaceae, Brassicaceae, Fabaceae, Poaceae. Edible plants include Portulaca oleracea, Spinacia turkestanica, Capsella bursa-pastoris, Elaeagnus angustifolia, Cichorium intybus, Mentha longifolia, Hibiscus trionum, Ferula foetida, Lycium ruthenicum, Asperugo procumbens. The leaves of Portulaca oleracea, Spinacia turkestanica, Mentha asiatica, Capsella bursa-pastoris are eaten by the population as blue dumplings and used as a spice in food. It is also used in salads and liquid dishes.

The remaining groups of other plants (5 species), vitamin (20), fibrous (11), ornamental (24), although small, play an important role in the formation of oasis flora.

In summary, the main part (90%) of the flora of the Karaulbazar oasis has shown beneficial properties due to its application in various fields. Fodder and medicinal

plants in particular prevailed. Therefore, the study of the composition of this flora and their protection is of great scientific and practical importance.

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