Taxonomic Analysis of Honey-Juicy Plants of Karakalpakstan

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Abstract

Nowadays, the bee-keeping is considered one of the getting developed field in the Republic of Uzbekistan. As we know, honey products are used not only in medicine to recover some diseases but also in cosmetology and confectioneries.

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There are more than 1000 honey-juicy plants in Uzbekistan, bee-keeping gives

honey products which are very essential raw materials for human and the industry of medicine and food [1,3]. The products of honey consist of: honey, propolis, flower dust, mother milk, bee poison and wax. Currently, honey, bee poison and milk contain more than 70 active substances, enzymes vitamins, hormones, salts and other chemical compounds are found. Bee products are an important source of medicine for the treatment of several diseases: nerve, gastrointestinal, bodily, cardiovascular, kidney,liver, skin, tuberculosis, blood pressure. However, honey-infested plants in Karakalpakstan have not been studied in detail [1,2].

At present, there are 207 species of 125 families belonging to 42 families. There

are also many species of honey-rich culture in our region. However, we only do research on native plant species [1,2].

The results of taxonomic analysis of the flora of honey-bearing plants in

Karakalpakstan have shown the following main results. The majority of honey-sweet plant species are twoseeded (Magnoliopsida). They consist of 194 species, accounting for 93.72% of the total flora and honey flora. Of these, one seed (Liliopsida) is 6.28% [1,2]

(Table 1).

Correlation of the main systematic groups of honey-and-flora of the Republic

Department	Number			Honey-juicy	General flora %
	Family	Group	Туре	pinioia /0,	1101 <i>u</i> 70,
Magnoliopsida	37	114	194	93,72	17,48
Liliopsida	5	11	13	6,28	1,17
Overall:	42	125	207	100	18,65

Thus, 152 species of honey-like plants have medicinal properties. In the 12 main honey-rich families, the maximum number of species was 150 and the category 82 (65.6%), with 72.46% of the total floral flora (Table 2). The taxonomic analysis of such plants was used by C. Raunkier (1934).[1,2]

2 -table

Leading families in the flora of the Republic of Karakalpakstan

Ne l'anny Number of groups Number of types	№ Family Number of groups Number of	types
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1	Asteraceae	19	33
2	Fabaceae	16	29
3	Brassicaceae	19	28
4	Convolvulaceae	3	10
5	Polygonaceae	3	8
6	Tamaricaceae	1	8
7	Poaceae	7	7
8	Salicaceae	2	6
9	Rosaceae	4	6
10	Caryophylaceae	2	5
11	Zygophyllaceae	2	5
12	Lamiaceae	4	5
	Overall:	82 (65,6%)	150 (72,46%)

In the study of the categories, a list of useful genera of 4 or more species was compiled, which accounted for 27.53% of honey-bearing plants (Table 3).

3 -table

A wide range of species of honey-and-sweet plants in the Republic of Karakalpakstan

N⁰	Family	Group	Type number	%
1.	Asteraceae	Artemisia	9	4,35
2.	Tamaricaceae	Tamarix	8	3,86
3.	Brassicaceae	Strigosella	5	2,41
4.	Polygonaceae	Calligonum.	5	2,41
5.	Convolvulaceae	Convolvulus	5	2,41
		Cuscuta	4	1,93
6.	Fabaceae	Astragalus	5	2,41
		Alhagi	4	1,93
7.	Plantaginaceae	Plantago	4	1,93
8.	Salicaceae	Salix	4	1,93
9.	Zygophyllaceae	Zygophyllum	4	1,93
	Overall:	11 (9%)	57 (27,53%)	27,53

The following are some of the types of categories listed in Table 3 below. For example, the leading constellation of the Asteraceae family is Artemisia, with 21 species of this species in the flora of our region[4,5], but they are among 15 medicinal and 9 honey-bearing plants[1,2]. The most wid espread species in the region are: *Artemisia annua*, *A. diffusa*, *A. juncea*, *A. terrae-albae*, *A. tournefortiana*, *A. turanica*. In summary, the analysis of honey-sweet plants in Karakalpakstan reveals that there are 194 species in Magnoliopsi and 13 in Liliopsi[1,2]. Also, the plant flowers each year produce different flowers. Unfavorable factors are the most frequent factors in the allocation of roses.

References

- 1. Abdiniyazova Gulnara Joldasbaevna Currentstate of medicinal and melliferous plants of Karakalpakstan and way of their rational use/ dissertation abstract of the doctor of philosophy (PhD.) on biological sciences. Tashkent 2017.46p.
- Abdiniyazova, G. J. Honey in traditional cuisine of Uzbekistan and analysis of melliferous flora of Karakalpakstan / G. J. Abdiniyazova, O. K. Khojimatov, V. V. Pak // Journal of Ethnic Foods. -Elsevier, 2016. - P. 1-6.
- 3. Hamidov G. Honey plants of Uzbekistan and ways of their rational use. Tashkent: Fan. 1987.-128 p.
- Sherbaev, B. Flora and vegetation of Karakalpakstan / B. Sherbaev. Nukus: Karakalpakstan, 1988.
 304 p.
- 5. Yerzhepov, S. Flora of Kara-Kalpak, its economic description, use and guard / S. Yerzhepov. Tashkent : Fan, 1978. -P. 22-24.