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Areological Analysis Of The Fabaceae Family In The Kuhitang Ridge Flora

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Abstract: The Kuhitang ridge is located in the south-western part of the Pamir-Alay mountain range. Administratively, it belongs to the territory of Sherabad district of Surkhandarya region.

Key Words: Flora, Area, Aerologic, Hedysarum Magnificum, Astragalus Leiosemius

Introduction

The western slope of the Kuhitang ridge is the territory of the Republic of Turkmenistan, where the kuhitang's Nature Reserve (total area 27,139 hectares) is located. The total length of the border from south to north is about 70 km and is located at an altitude of 850-3137m above sea level. The average height of the watershed is 2682m in the north (Khatak section), 3137 m in the central part (Ayri Bobo peak of Kampirtepa section) and 2361 m in the southern part (Vandob section).

Natural-geographical description of the Kuhitang ridge and data on floristic researches S.A. Nevsky [11], N.A. Merkulovich [10], R.V. Camelin [5, 6, 7, 8], F.O. Hasanov [12, 13,14], Ibragimov [1, 3, 4].

Scientific studies have revealed that the flora of the Kuhitang ridge includes 72 species belonging to 22 genera of the family Fabaceae. The Fabaceae family (72 species) is the second largest family in the Kuhitang flora. Family leadership traits are also characteristic of other flora in the Ancient Mediterranean [2]. The predominance of the family Fabaceae in the flora of the ridge is explained by the large number of species *Astragalus* (30 species), *Vicia* (7) and *Onobrychis* (4).

Distribution of species in the flora of the mountainous regions of Central Asia by habitat types Based on the classification proposed by Camelin [6], the implementation was accepted. At the same time, various researchers make changes depending on the location of the flora under study, the purpose and objectives of the work, the composition of the species. In particular, L.S. Krasovskaya and I.G. The Levichevs [9] point out the need to adhere to the principle of hierarchy in the categorization of range types, that is, the initial type implies that the type should be included in the next type of mass. R.V. According to Camellin [6], it is better to derive from the general configuration of the species area in the separation of the main area types, and the existing classifications should be based on the ecological characteristics of the species, and the coordination and coordination between the species should be coordinated. Therefore, the geographical structure of the Fabaceae family in the flora of the Kuhitang ridge is based on the description that is favorable and generally accepted for the native regions of Central Asia [6].

Litereture View

Based on the study of representatives of the family Fabaceae in the flora of the Kuhitang ridge, are divided into 26 habitat types.

1. Kuhitang type - this type includes only 4 species of endemic plants in the flora of the Surkhandarya State Reserve, located on the eastern slope of the Kuhitang mountain range: *Astragalus plumbeus* (Nevski) Gontsch. ET Popov, A. *subschachimardanus* Popov, *Oxytropis megalorrhyncha* Nevski, O. *pseudoleptophysa* Boriss and others.
2. South-West Gissar type - R.V. Camelin, F.O. Hasanov [7] and F.O. In the district of the same name, as interpreted by Hasanov [13]. This type includes 9 species: *Astragalus baissunensis* Lipsky, *A. bobrovii* B. Fedtsch., *A. terrae-rubrae* Butkov, *A. ammophilus Kar*. et Kir., *A. densus* Popov, *A. kusnetzovii* Popov, *A. subspinescens* Popov, *A. willisii* Popov, *Hedysarum magnificum* Kudr and others.

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3. The Southern Pamir type covers the mountain ranges of southern Tajikistan and Uzbekistan (from the Kuhitang ridge to the Hazrati-Imomaskarid mountain range). There are 3 species of this type: *Astracantha kuhitangi* (Nevski) Podlech. (= *Astragalus kuhitangi* (Nevski) Širj.), *Astragalus leiosemius* (Lipsky) Popov, *Medicago lanigera* C. Winkl and B. Fedtsch and others.
4. Kuhitang - Nurota disjunctive type - this type includes the Kuhitang, Nurata Mountain ranges, and in part the Aktog and Molguzar mountains. It includes 1 species *Cicer grande* (Popov) Korotkova.
5. Kopetdag-south-Pamirolai type - starting from Kopetdag, south-western Gissar and southern Tajikistan cover mountain ranges. This species consists of 2 species: *Astragalus nobilis* Bunge ex B. Fedtsch., *Bunium intermedium* Korovin, *Chesneya tribuloides* Nevski.
6. The Kuhistoni-Southern Pamirolai type is a part of the Kuhistan Mountains (Zarafshan and Turkestan ridges), from the Nurata and Zirabulak mountains to the Kuhitang ridge, as well as the mountain ranges of southern Tajikistan. Composition 3 species: *Astragalus marguzaricus* Lipsky, *A. kudrjaschevii* Korol. *A. rumpens* Meff and embraces others.
7. The Kuhistoni-Gissar type is a large part of the mountains that make up the Kuhistan district (northern slopes of the Turkestan, Zarafshan, Gissar mountain ranges and part of the Korategin ridge) and small areas on the southern slopes of the Gissar ridge. Composition 3 species: *Astragalus janischewskyi* Popov, *A. lipskyi* Popov, *A. subverticillatus* Gontsch includes.
8. The Western-Mountain type includes mountain ranges from Turkestan, Zarafshan, Gissar, Korjontag, Ugam, Pskem, Kurama, Chatkal, Syrdarya Karataghi, Nurata and up to Kuhitang. This type of habitat includes 1 species *Astragalus globiceps* Bunge.
9. The Pamirolay type covers the whole Pamir-Alay (Turkestan, without the eastern part of the Alay, Zerafshan, Gissar, Korategin, Peter I, Darva, the Academy of Sciences) and the Western Pamirs (Badakhshan). This type includes 3 species. *Cicer macracanthum* Popov, *C. paucijugum* Nevski, *Melissitus adscendens* (Nevski) Ikonn and others.
10. The Western Tien Shan (Pamir-Alay) type includes the Western Tien Shan (Mount Chu-Ili, Karatag, from the western part of the Kyrgyz ridge to the Kurama and Fergana ridges) and the Pamir-Alay. There are 4 species of this type: *Astragalus maverranagri* Popov, *A. xanthomeloides* Korovin ET Popov, *A. sogdianus* Bunge, *Vicia kokanica* Regel et Schmalh and others.
11. The Central Asian type is located on the border of the Central Asian province and includes the Western Tien Shan and the Pamir-Alay (excluding the Eastern Pamirs). This type of habitat includes 3 species: *Astragalus campylotrichus* Bunge, *Onobrychis seravschanica* B. Fedtsch., *Hedysarum plumosum* Boiss and Hausskh and others.
12. The Khorasan-Mountain-Central Asian type is an area type that covers the area from Khorasan-Kopetdag to the Central Asian mountain ranges. This type includes 2 species: *Astragalus schmalhausenii* Bunge, *Medicago meyeri* Gruner and others.
13. The Turan type is a type of range that covers the Central Asian plains and the surrounding mountain ranges, as far as Kulja, Kashgar, northern Afghanistan, and Iran. There are 5 species: *Alhagi kirghisorum* Schrenk, *Astragalus filicaulis* Fisch. ET C.A. Mey., *Onobrychis micrantha* Schrenk, O. *pulchella Schrenk*, *Goebelia pachycarpa* (C.A. Mey.) Bunge (= *Vexibia pachycarpa*) and others.
14. The Iranian-Central Asian type extends to the southeastern part of Iran, the Caucasus, and the Altai and Xinjiang. There are 2 species in this type of habitat: *Astragalus sieversianus* Pall, *Onobrychis chorassanica* Bunge, and others.
15. The Iranian type includes the territories from Eastern Anatolia (Turkey) to Tien Shan and Western Pamirs (Badakhshan). This type of habitat includes 3 species of plants: *Astragalus stalinskyi* Sirj, *Psoralea drupacea* Bunge, *Vicia michauxii* Spreng and others.
16. The Himalayan type includes the Western Himalayas, Afghanistan, Central Asia, and parts of Tibet, western China, Mongolia, and the Altai. This type includes 1 species *Astragalus leptostahys* Pall.
17. The Iranian-Himalayan type extends from Eastern Anatolia (Turkey) to Iran, the Caucasus, Central Asia, and the Western Himalayas. It consists of 2 species: *Astragalus campylorrhynchus* Fisch ET C.A. May, *Vicia subvillosa* (Ledeb.) Boiss
18. Caucasian-Iranian-Central Asian type - this type includes 2 species of plants: *Lagonichium farctum* (Banks. ET Sol.) Bobr, *Lens orientalis* (Boiss.) Schmalh and others.

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19. From the East-Ancient Middle Ages - from Palestine and Asia Minor to the Western Himalayas and Altai, Syria, Iran, the Caucasus, partly Tibet and Xinjiang. There are 1 species in this type of range: *Lotus sergievskiae* Kamelin ET Kovalevsk.
20. The ancient type extends from Spain and Morocco to the Western Himalayas. This includes Western China and Western Mongolia, as well as parts of Central Europe. It contains 4 species: *Lathyrus aphaca* L., *L. inconspicuus* L., *Trigonella geminiflora* Bunge, *Vicia cinerea* M. Bieb and others.
21. Euro-Eastern Mediterranean type - this type includes Eastern Mediterranean, Western and Central Europe. It contains 1 species of *Lathyrus cicera* L.
22. The Pontic-Eastern Mediterranean type includes the area from Boreal Province to the eastern part of the Ancient Mediterranean (from Syria and Palestine to the Western Himalayas and Xinjiang). This type includes 1 species of plant: *Glycyrrhiza glabra* L.
23. The Pontic-Ancient Mediterranean type - the territories of the Ancient Mediterranean and the Northern Black Sea, extending partly to Central Europe. There are 4 species: *Astragalus alopecias* Pall, *Cicer songaricum* Stephan ex DC., *Medicago minima* (L.) Grufberg, *Vicia peregrina* L and others.
24. The Ancient Mediterranean Type - Ancient Mediterranean, the southern part of Siberia, extends from Europe to Scandinavia. This type includes 3 species: *Alhagi pseudalhagi* (M. Bieb.) Desv, *Trigonella grandiflora* Bunge, *Vicia angustifolia* L. and others.
25. The Palearctic type is a species that is widespread in the temperate and subtropical regions of the Holarctic floristic world on the borders of the New World. This species includes 1 species: *Trifolium pratense* L.
26. The Holarctic type covers the continental part of the entire Northern Hemisphere. This type includes 4 species: *Amoria repens* (L.) C. Presl. (= *Trifolium repens*), *Melilotus albus* Medik, *Melilotus officinalis* (L.) Pall, *Vicia narbonensis* L. and others.

Conclusion

The species distributed in the south-western Gissar district make up 13 species in the flora of the reserve. This is where R.W. Camelin and F.O. Hasanov [7] proves once again that the idea of including the Kuhitang ridge in the South-West Gissar district is correct.

Also, 4 of the species distributed within the boundaries of this district are representatives of the Kuhitang type, i.e. endemic species of the system. This shows that the flora of the system has the characteristics of the flora of Central Asia and has a special place.

References

1. Ibragimov A.Zh. Endemism of the flora of the Kugitang ridge // Biodiversity: problems and prospects for conservation: Proceedings of the Int. scientific. conf May 13-16, 2008 - Penza, 2008 .-- S. 217-219.
2. Ibragimov A.Zh. Mateen Axmad Farid. Bioecology of Eremerus Types in the Flora of the Baysun Ridge. International Journal of Innovative Research in Science, Engineering and Technology. Issue 5, May 2021
3. Ibragimov A.Zh., Karimov B.Қ. Endemic Species of Flora Kuhitang Ridge: The American Journal of Agriculture and Boimedical Engineering Published: November 30, 2021.
4. Ibragimov A.Zh., Gurbonova Z.M., Monocotyledonous Plants in the Flora of Surkhandarya State Reserve. The American Journal of Agriculture and Boimedical Engineering June 30, 2021.
5. Kamelin R.V. Florogenetic analysis of the natural flora of mountainous Central Asia. - L .: Nauka, 1973 .-- 353 p.
6. Kamelin R.V. Kuhistan district of mountainous Central Asia. - L .: Nauka, 1979 .-- 117 p.
7. Kamelin R.V., Khasanov F.O. Vertical zonation of the vegetation cover of the Kugitang ridge (southwestern Pamir-Alai) // Bot. zhurn., 1987. □ No. 1 (72). -WITH. 49-58.
8. Kamelin R.V. Flora of the Syrdarya Karatau), Leningrad: Nauka, 1990, 145 p.
9. Krasovskaya L.S., Levichev I.G. Flora of the Chatkal Nature Reserve) Tashkent: Publishing house. FAN UzSSR, 1986. □ 176 p.

ISSN NO: 2770-0003
Date of Publication: 09-11-2021

10. Merkulovich N.A. Vegetation of Shirabad and Baysun regions. UzSSR (bot-geographer. Sketch). // Tr. Uzbek. state University, 1936.T.3. - S. 9-59.
11. Nevsky S.A. Materials for the flora of Kugitangtau and its foothills. In the book. Flora and taxonomy of higher plants - M., L .: Izd. Academy of Sciences of the USSR, 1937 .-- S. 199-346.
12. Khasanov F.O. Xerophilous tree and shrub vegetation of Kugitang-tau: Author's abstract. dis ... cand. biol. sciences. - Tashkent, 1987. - 20 p.
13. Khasanov F.O. Endemic plants of the southwestern spurs of the Gissar ridge // Uzbek. biol. zhurn. - Tashkent, 1991. □ No. 2. - S. 41-45.
14. Khasanov F.O. A brief sketch of the vegetation of the Kugitanga // Tez. Report anniversary. Scientific. Conf. young scientists and specialists seeding the 60th anniversary of the Komsomol of Uzbekistan, 1985. - pp. 167-168.