ISSN NO: 2770-0003
Date of Publication: 16-11-2021

Analysis Of Life Forms And Vertical Regions Of *Poaceae* Family In The Flora Of The Kuhitang Ridge

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Annotation: The flora of the Kuhitang ridge includes 59 species belonging to 37 genera of the Poaceae family. In the Kuhitang ridge, members of the Poaceae family are divided into three vertical regions. The diversity of the main species in the family coincided with the mountainous region. This is a characteristic feature of the flora of Central Asia. The Adir region is rich in both quantity and quality. The number of species in the pastures is relatively small, but the diversity is satisfactory.

Keywords: Poaceae, family, flora, mountain, Adir, genus, species, altitude zone.

Introduction:

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.

The western slope of the Kuhitang ridge is the territory of the Republic of Turkmenistan, where the Kuhitang 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 850-3137 m above sea level. The average height of the watershed is 2682 m 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).

Kuhitang ridge's Information on flora and vegetation cover Nevsky [2], N.A. Merkulovich [3], R.V. Camelin [4, 5, 6], F.O. Hasanov [7] and Ibragimov [8, 9, 10] also found their reflection.

Scientific studies have revealed that the flora of the Kuhitang ridge includes 59 species belonging to 37 genera of the Poaceae family. It is the third most polymorphic family (59 species or 7.94%) in the flora of the Kuhitang ridge. While this is a characteristic feature of the flora of Mountainous Central Asia [5, 6], its place in the flora of the northern regions is more significant [14, 15, 16]. The leading position of this family is based on the richness of the species Poa (5 species), *Aegilops* (4), *Bromus* (4).

In the analysis of the life forms of the Poaceae family in the flora of the Kuhitang ridge, I.G. Serebryakov's classification [12, 13] was used.

According to A. Ibragimov, the life forms of the flora of the Surkhandarya State Reserve I.G. According to Serebryakov's classification [13], 19 main biological types have been identified. In this case, part of the flora was star Polycarp grasses. They make up to 178 species in the flora (23.95% of the total flora). Representatives of this group were mostly observed in the families of Fabaceae (43 species), *Asteraceae* (34), *Lamiaceae* (18), *Boraginaceae* (12).

The family Poaceae differs from other members of the family in the flora and retains the characteristics of the family in terms of life forms. As a result of the research, the following life forms were recorded in this family.

Ephemerals (Greek - one-day):

Annual plants that grow in deserts, semi-deserts and hills. The growing season is short. It grows mainly in spring and autumn, when the soil is wet. When the warm days of early spring begin, the ephemerals grow rapidly, bloom in a few weeks, and dry out when the seeds are ripe. Such species include *Aegilops crassa* Boiss., *A. cylindrica* Host. *A. Juvenalis, A. triuncialis* L., *Bromus danthoniae* Trin. *B. lanceolatus* Roth. (= *B. macrostachys*), *B. oxydon Schrenk, B. scoparius* L., *Eremopyrum buonapartis* (Spreng.) *Nevski*, E. *distans* (C. Koch.) *Nevski, Henrardia persica* (Boiss.) CE Hubb., *Heteranthelium piliferum* (Russ.) *Hochst, Vulpia myuros* (L.) CC Gmel.

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Annuals:

Are plants that sprout, grow, flower and reproduce during the growing season, all life cycles. These include *Anisantha sericea* (Drob.) Nevski (= *Bromus sericeus*), *A. sterilis* (L.) Nevski (= *B. Sterilis*), *A. tectorum* (L.) Nevski (= *B. Tectorum*), *Avena fatua* L., *A. trichophylla* C. Koch., *Boissiera squarrosa* (Soland.) Nevski, *Hordeum leporinum* Link., *H. spontaneum* C.Koch., *Milium vernale* M. Bieb, *Nardurus krausei* (Regel) V. Krecz. et Bobr, *Nevskiella gracillima* (Bunge) V. Krecz. et Vved. (= *Bromus gracillimus* Bge.), *Phleum paniculatum* Huds., *Polypogon monspeliensis* (L.) Desf., *Taeniatherum crinitum* (Schreb.) Nevski, *Trachynia distachya* (Strand.) Link, *Vulpia persica* (Boiss.et Buhse) V. Krecz. And Bobr.

Weeds:

These are plants that produce perennial grain *Achnatherum caragana* (Trin.) Nevski, *Aeluropus litoralis* (Gouan.) Parl., *A. repens* (L.) Beauv., *Alopecurus ventricosus* Pers., *Bromopsis inermis* (Leyss.) Holub. (=*B. inermis*), *Cynodon dactylon* (L.) Pers., *Elymus longe-aristatus* (Boiss.) Tzvelev (=*Agropyron longe-aristatus*), *Elytrigia intermedia* (Host.) Nevski (=*Agropyron intermedium*), *Enneapogon persicum* Boiss., *Erianthus ravennae* (L.) P.B. Agrost., *Festuca arundinacea* Schreb., *Festuca valesiaca* Schleich., *Glyceria plicata* Fries, *Hordeum bulbosum* Torn., *Imperata cylindrica* (L.) P.B. Agrost., *Lolium perenne* L., *Melica altissima* L., *Melica jacquemontii* Decne., *Phleum pratense* L., *Phragmites australis* (Cav.) Trin. et Steud., *Piptatherum latifolium* (Roshev.) Nevski, *Poa annua* L., *P. bactriana* Roshev., *P. bulbosa* L., *P. pratensis* L., *P. trivialis* L., *Sorghum halepense* (L.) Pers., *Stipa caucasica* Schmalh., *Stipa gnezdilloi* Pazij, *S. hohenackeriana* Trin. et Rupr tribes were included.

In conclusion, the diversity of biomorphic species of the Kuhitang ridge plants is a result of the diversity of environmental factors in the ridge.

Distribution of species by steep regions:

The diversity of plant species in mountainous areas depends not only on the size of the area covered by the flora, but also on the location relative to sea level, the number of steep areas and the geomorphological structure of the area. Therefore, the analysis of mountain flora, of course, requires the study of the distribution of species in steep regions.

Analysis of the flora of the Kuhitang ridge by steep regions K.Z. It was carried out on the basis of the classification proposed by Zokirov [22, 23].

The Kuhitang ridge does not fall within the scope of the desert zone. The lower boundary of the range begins at an altitude of 700 m above sea level, i.e. in the Adir region, and this geomorphological step is included in the ridge. Covers altitudes of 850-1200 m. The general boundary of the mountainous region, etc. At 1200-2800 m, the pasture covers 2800-3137 m.

The distribution of species in the Kuhitang ridge is not uniform. According to the results of the study, only for the Adir region, there are 18 species of 13 genera's such as plants. *Aegilops crassa* Boiss. *A. cylindrica* Host, *A. juvenalis* (Thell.) Eig, *A. triuncialis* L., *Aeluropus litoralis* (Gouan.) Parl., *Avena fatua* L., *Eremopyrum buonapartis* (Spreng.) Nevski, *E. distans* (C.Koch.) Nevski, *Glyceria plicata* Fries, *Henrardia persica* (Boiss.) C. E. Hubb., *Hordeum leporinum* Link., *H. spontaneum* C.Koch., *Milium vernale* M. Bieb., *Nardurus krausei* (Regel) V. Krecz. et Bobr., *Phragmites australis* (Cav.) Trin. et Steud., *Poa bulbosa* L., *Sorghum halepense* (L.) Pers., *Taeniatherum crinitum* (Schreb.) Nevski

Only 6 species in the mountains vegetation is widespread. *Anisantha sterilis* (L.) Nevski (=B. sterilis), *Stipa gnezdilloi* Pazij, *Trachynia distachya* (Strand.) Link, *Heteranthelium piliferum* (Russ.) Hochst, *Melica altissima* L., *M. jacquemontii* Decne

In the Kuhitang ridge, the vegetation typical of the pasture region is in short supply in terms of the number of species. *Poa bactriana* Roshev is a member of the *Poaceae* family that is unique to the grasslands.

The species dedicated to Adir-mountain (d. 850-2800 m) constitute the majority of the species in the listed flora. The family-friendly species included 19 genus and 26 species. *Achnatherum caragana* (Trin.) Nevski, *A. repens* (L.) Beauv., *Alopecurus ventricosus* Pers., *Avena trichophylla* C. Koch., *Boissiera squarrosa* (Soland.) Nevski, *Bromus danthoniae* Trin., *B. lanceolatus* Roth. (=B. macrostachys), *B. oxydon* Schrenk., *B. scoparius* L., *Cynodon dactylon* (L.) Pers., *Elytrigia intermedia* (Host.) Nevski (=Agropyron intermedium), *Enneapogon persicum* Boiss., *Erianthus ravennae* (L.) P.B. Agrost., *Festuca arundinacea*

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Schreb., *Hordeum bulbosum* Torn., *Imperata cylindrica* (L.) P.B. Agrost., *Lolium perenne* L., *Phleum paniculatum* Huds., *Ph. pratense* L., *Piptatherum latifolium* (Roshev.) Nevski, *Poa annua* L., *P. trivialis* L., *Polypogon monspeliensis* (L.) Desf., *Stipa hohenackeriana* Trin. et Rupr., *Vulpia myuros* (L.) C.C. Gmel., *V. persica* (Boiss.et Buhse) V. Krecz. et Bobr.

2 species for mountain-pasture region *Elymus longe-aristatus* (Boiss.) Tzvelev (= *Agropyron longe-aristatus*), *Bromopsis inermis* (Leyss.) Holub. (= *B. inermis*), a wide range of ecological species in the Adir-mountain-pasture region. *Anisantha sericea* (Drob.) Nevski (=*Bromus sericeus*), *A. tectorum* (L.) Nevski (=*B. tectorum*), *Festuca valesiaca* Schleich., *Nevskiella gracillima* (Bunge) V. Krecz. et Vved. (=*Bromus gracillimus* Bge.), *Poa pratensis* L., *Stipa caucasica* Schmalh. the tribal encounter was determined.

Conclusion

In summary, in the Kuhitang ridge, members of the *Poaceae* family are divided into three vertical regions. The diversity of the main species in the family coincided with the mountainous region. This is a characteristic feature of the flora of Central Asia. The Adir region is rich in both quantity and quality. The number of species in the pastures is relatively small, but the diversity is satisfactory. The idea that the mountain flora dominates in the Adir and low mountainous areas, and the elements of the Alai flora in the pasture region [6, 8] is also reflected in the Kuhitang ridge.

References

1. Ibragimov A.J. 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.J., 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.J., Karimov B.K. Endemic Species of flora Kuhitang Ridge: The American Journal of Agriculture and Boimedical Engineering Published: November 30, 2020.
4. Ibragimov A.J.,. Kurbonova 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.
10. Merkulovich N.A. Vegetation of Shirabad and Baysun districts. UzSSR (bot-geographer. Sketch). // Tr. Uzbek. state University, 1936.T.3. - P. 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 .-- P. 199-346
12. Serebryakov I.G. Ecological morphology of plants. - M .: Vys. shk., 1962 .—P. 378
13. Serebryakov I.G. Life forms of higher plants and their study // Field botany. - M .: Ed. Academy of Sciences of the USSR, 1964. – No. 3. - P. 146-205.
14. 14.Khmelev K.F., Demina O.N. Analysis of the flora of the Don River delta // Bot. zhurn. 1998. – No. 2 (82). - P. 1-12
15. Yurtsev B.A. Flora Suntar-Hayata. - L .: Nauka, 1968 . P.-238.
16. Yurtsev B.A. Theoretical and methodological problems of comparative floristry. - L .: Nauka, 1987 .- P.- 294