

The Flora of the Rock and Reef –Plants in Shamkir Region

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The rocks and sediments are spread in large areas in the lower, middle, (subalp, alp, subnival, nival) valleys of the basin of the high mountain. Each zone has its own plants. The ecological condition of the reef and rocks of these zones is the same, and the kind composition is different. The spreading of the plants in the reef and rocks depend not only the point of view of the slope, but also on its geological composition. Thus, when the rock-and sediments plant is mentioned, the naked main rocks: the limestone rocks and the community of the petroglyphs which are considered on the gravel plies after the soil erosion is meant. (Lat. Petrofite, petrofiton- is a rock plant). In other words, to this type includes the stony and rocky, as well as plants of rocky and stony places. Here, the higher plants do not form a closed coating. This type of plant is mainly changed according to the dependence on a number of factors: sea level, altitude, climate type, wind form of abrasion, chemical composition.

Therefore the conducting research of the taxonomic composition and life forms and so on of rock and rubble plant flora of Shamkir region is an actual problem.

As a result of the study of literature and field research materials, the rock and rubble plant flora of Shamkir region is characterized by 28 species of 22 genus of 14 kinds.

The systematic composition of rock and sediment flora of Shamkir region.

The three families spreading in the flora of area of the rock and debris have more kinds. *Poaceae* includes 6 species, 7 species (25%), *Asteraceae* Dumort breeders 2 species, 4 species (14.28%), *Violaceae* Batsch breeders 1 genus, 3 species (10,71%) and the remaining 11 chapters include 14 species which is about 50% of the total species in the flora.

The systematic composition of flora of the rock and reef -plants

S/№	Families	Genus	Species
1.	<i>Poaceae</i> Barnhart (<i>Gramineae</i> Juss.)	<i>Agropyron</i> Gaertn.	<i>A.imbricatum</i>
		<i>Alopecurus</i> L.	<i>A.vaginatius</i> <i>A.laquroides</i>
		<i>Agrostis</i> L.	<i>A.lazica</i>
		<i>Trisetum</i> Pers.	<i>T.rigidum</i>
		<i>Hordeum</i> L.	<i>H.violaceum</i>
		<i>Stipa</i> L.	<i>S.capillata</i>
2.	<i>Caryophyllaceae</i> Juss.	<i>Dianthus</i> L	<i>D.kusnezovii</i>
3.	<i>Ranunculaceae</i> Juss.	<i>Delphinium</i> L.	<i>D.caucasicum</i>
4.	<i>Crassulaceae</i> J. St.-Hil.	<i>Sedum</i> L.	<i>S.involucratum</i>
5.	<i>Saxifragaceae</i> Juss.	<i>Saxifraga</i> L	<i>S.cartilaginea</i>
6.	<i>Rosaceae</i> Juss.	<i>Alchemilla</i> L.	<i>A.sericea</i>
7.	<i>Fabaceae</i> Lindl.	<i>Vavilovia</i> Fed.	<i>V.formosa</i>
8.	<i>Violaceae</i> Batsch	<i>Viola</i> L.	<i>V.somchetica</i> <i>V.caucasica</i> <i>V.minuta</i>
9.	<i>Gentianaceae</i> Juss.	<i>Gentianella</i> Moench (= <i>Gentiana</i> L.).	<i>G.aquqtica</i>
		<i>Lomatogonium</i> A.Br.	<i>L.carinthiacum</i>
10.	<i>Lamiaceae</i> Martinov. (= <i>Labiatae</i> Juss.)	<i>Euphrasia</i> L.	<i>E.kurdica</i>
11.	<i>Asteraceae</i> Dumort (= <i>Compositae</i> (Vaill.) Adans.)	<i>Erigeron</i> L.	<i>E.venustus</i> <i>E.uniflorus</i>
		<i>Cirsium</i> Mill.	<i>C.tomentosum</i> <i>C.macrocephalum</i>
12.	<i>Apiaceae</i> Lindl (= <i>Umbelliferae</i> Juss.)	<i>Chaerophyllum</i> L.	<i>C.humile</i>
		<i>Chamaescidium</i> C.A.Mey.	<i>C.acaule</i>

13.	<i>Boraginaceae</i> Adans.	<i>Cynoglossum</i> L.	<i>C.holosericeum</i>
		<i>Nonea</i> Medik.	<i>N.alpestris</i>
14.	<i>Selaginellaceae</i> Willk.	<i>Selaginella</i> Beauv.	<i>S.helvetica</i>

The three families of the rock and reef plants spreading in the region floras have more kinds.

Poaceae families 6 genus, 7 kinds (25%), *Asteraceae* Dumort families 2 genus, 4 kinds (14,28%), *Violaceae* Batsch families 1 genus, 3 kinds (10,71%) and the rest of 11 families have 14 kinds that contains (50%) in the common types of flora.

The species composition of flora of the rock and reef –plants

S/№	Names of species	Grown place	Life forms
1.	<i>Selaginella helvetica</i>	Q,T	Terofit
2.	<i>Agropyron imbricatum</i>	Q	Hemikriptofit
3.	<i>Stipa capillata</i>	Q	Hemikriptofit
4.	<i>Alopecurus laguroides</i>	Q	Hemikriptofit
5.	<i>Alopecurus vaginatus</i>	Q	Hemikriptofit
6.	<i>Agrostis lazica</i>	Q	Hemikriptofit
7.	<i>Trisetum rigidum</i>	Q, T	Hemikriptofit
8.	<i>Hordeum violaceum</i>	Q	Hemikriptofit
9.	<i>Delphinium caucasicum</i>	Q	Hemikriptofit
10.	<i>Sedum involcratum</i>	Q	Hemikriptofit
11.	<i>Saxifraga cartilaginea</i>	Q	Terofit
12.	<i>Alchimilla sericea</i>	Q, T	Hemikriptofit
13.	<i>Vavilovia formosa</i>	Q	Hemikriptofit
14.	<i>Gentiana aquqtica</i>	Q, T	Terofit
15.	<i>Lomatogonium carinthiacum</i>	Q	Terofit
16.	<i>Erigeron venustus</i>	Q, T	Hemikriptofit
17.	<i>Erigeron uniflorus</i>	Q	Hemikriptofit
18.	<i>Cirsium macrocephalum</i>	Q, T	Hemikriptofit
19.	<i>Cirsium tomentosum</i>	Q, T	Hemikriptofit
20.	<i>Chamaescidium acaule</i>	Q, T	Hemikriptofit
21.	<i>Cynoglossum halosericeum</i>	Q, T	Hemikriptofit
22.	<i>Viola caucasica</i>	Q, T	Hemikriptofit
23.	<i>Viola somchetica</i>	Q, T	Hemikriptofit
24.	<i>Viola minuta</i>	Q, T	Hemikriptofit
25.	<i>Dianthus kusnezovii</i>	Q	Hemikriptofit
26.	<i>Chaerophyllum humile</i>	Q	Hemikriptofit
27.	<i>Nonea alpestris</i>	Q, T	Terofit
28.	<i>Euphrasia kurdica</i>	Q, T	Hemikriptofit

The vegetation is spared on the northern slopes of well-developed rocks,. They belong to various vital forms, give the

xerophytic feature one at a time and the pillow-shaped plants are made of grassy plants. The formation of vegetation on rocks, stones depends on biogenic environment and type of soil. The *Chaerophyllum humile*, *Dianthus kusnezovii*, *Delphinium caucasicum*, *Saxifraga cartilaginea*, *Sedum involucreatum* and others species are dominante in Shamkir region.

The rubble (reef) plants are formed in the humus layer between the rock cuts as a result of weathering in the mountainous rocks. The vegetation of this kind of leaf is formed mainly in shady places and river basins. The *Saxifraga* and others, as humus layer creates mosaic background between the cracks of worn rock fragments. The fragmented rocks divide into different sizes and spread through the wind. In the lower parts of the mountain slopes, from their stack soft rock stool, spills are formed.

The large fragmented materials are changed to down rock crumbs, while the pieces are changed to the upside.

Spills create special conditions for seeds that come from different places. The lower part of the sediment is always moist, and the upper part is dry and hot. Therefore, the roots of rubble plants can create a favorable environment by sliding between deep and fine particles. They can well grouse in debris. This condition of the roots creates conditions for fertilization and the formation of vegetation in them. The vegetation consists of fragmented groups and consists of separate species. Therefore, it is difficult to separate the forms. In the territory of Shamkir region, *Nonea alpestris*, *Trisetum rigidum*, *Chaerophyllum humile*, *Cirsium tomentosum*, *Chamaesciadium acaule* and etc. kinds are encountered.

The analysis of life forms shows that rock and spill forms are restrained types. The wide range of biological possibilities of the species in open clusters creates a large area of land. The role of irruptive forms in the formation of rock and rocks vegetation is great. Having this kind of lawfulness of living things allows them to be subdivided into optional and subordinate petroliferates. According to the living forms and

their composition, the rock and the rubble differ greatly from the vegetation covering them. This proves the peculiarities of this type of plants. The rock and rocks are generally characterized by the presence of traceability, closedness and inadequacy of the foliage.

Despite the small number of rock and sedimentary plants, it is very difficult. Here are a variety of vital forms: long-haired, smoked, rosette-shaped, fringed root chuck, etc. are available. Perennial herbs dominate in the high mountain plants.

Hemicriptophytes (Hemicryptophyta - HK) are perennial herbs. Sprouting begins from the soil surface. Here includes rosette-type, grass-forming and short-haired herbs. The *Asteraceae*, *Poaceae*, *Fabaceae*, *Rosaceae*, *Apiaceae*, *Lamiaceae*, *Violaceae* and others are dominated among the Hemicriptophytes. Hemicriptophytes play a decisive role in the spectrum of rock and sedimentary plants.

Terofites (wool, tero-summer, floral-plant) are the annual crops that carry the unhealthy period of the year in the form of seeds. The terofites are represented with 5 types - *Nonea alpestris*, *Gentiana auktytica*, *Lomatogonium carinthiacum* and others. (17,85%) in the rock and rubble plant of flora of Shamkir region. They grow in favorable conditions, give seeds, and spend the winter season as seeds. These plants start growing in the fall and hibernate in the state of vegetation and end their life cycle by sowing seeds in spring or summer next year.

The Literature

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