

UDC 581.93
AGRIS F02

<https://doi.org/10.33619/2414-2948/66/10>

SPRING FLORA OF THE NORTHEAST PART OF THE LESSER CAUCASUS AND ITS CLASSIFICATION

©*Bayramova A., Dr. habil., Ganja State University, Azerbaijan State Agrarian University,
Ganja, Azerbaijan, abayramova@rambler.ru*

©*Rzayeva F., Ganja State University, Azerbaijan State Agrarian University, Ganja, Azerbaijan*

ВЕСЕННЯЯ ФЛОРА СЕВЕРО-ВОСТОЧНОЙ ЧАСТИ МАЛОГО КАВКАЗА И ЕЕ КЛАССИФИКАЦИЯ

©*Байрамова А. А., д-р биол. наук, Гянджинский государственный университет,
Азербайджанский государственный аграрный университет,
г. Гянджа, Азербайджан, abayramova@rambler.ru*

©*Рзаева Ф. В., Гянджинский государственный университет, г. Гянджа, Азербайджан*

Abstract. The article discusses the geobotanical classification of some species of spring flora formed in the north-eastern region of the Lesser Caucasus in Azerbaijan, vegetation types, phytocenosis and the composition of the flora, morphological structure and distribution of associations. The spring vegetation of the study area is relatively poorly studied. As a result of the research, it was found that the spring flora is dominated by annual and perennial grasses. Also, in order to determine the geographical structure of the species during the research, a comparative analysis of the geographical elements, including the habitat types of the species, was conducted.

Аннотация. В статье рассматривается геоботаническая классификация некоторых видов весенней флоры, сформировавшейся в северо-восточном районе Малого Кавказа в Азербайджане, типы растительности, фитоценозы и состав флоры, морфологическая структура и распространение ассоциаций. Весенняя растительность района исследований изучена сравнительно мало. В результате исследований установлено, что в весенней флоре преобладают однолетние и многолетние травы. Также для определения географической структуры вида в ходе исследования был проведен сравнительный анализ географических элементов, в том числе типов местообитаний вида.

Keywords: spring plant, ephemeroïd, formation, association.

Ключевые слова: яровое растение, эфемероид, формация, ассоциация.

The natural territory of the Small Caucasus is located in the north-east on the right bank of the Kura. The area is distinguished by the diversity of natural conditions and the richness of natural resources. The forest, meadow, steppe, desert and semi-desert natural floristic complexes of the Small Caucasus have long attracted the attention of researchers not only as a natural historical monument reflecting the charming beauty of nature, but also with ecologically clean and rich flora. Due to the complex physical and geographical conditions of the Small Caucasus, its vegetation is also very diverse. In particular, the spring flora differs from other plants in the area due to the diversity and richness of species.

Materials and methodology

The object of the research was the vegetation of the ravines of the Khinna gorge. The research material was the flora biodiversity of river basins. Phytocenological descriptions were made within the boundaries of natural vegetation groupings. With the help of the TURBOVEG program, a geobotanical and phytocenological description bank was created and worked on the basis of the MEGATAB program. Abundance of species Braun-Blanquet [4] names of species Flora of Azerbaijan [4], Abstract of Caucasus flora, [1, 3], Gurbanov [2]. To determine the status of rare and endangered species, the Red Data Book IUCN [5] was used. The plants are named after the books "Flora of Azerbaijan" [1950-1961] and "Abstract of Caucasus flora" [2003-2012], "The plant World of Azerbaijan" [3]. General methods accepted in botany, as well as ecological-geographical-morphological, areological, geographical-systematic, statistical-floristic methods were used in the development and determination of materials. Chamber research was conducted at the Department of Botany of Ganja State University.

Ephemerals are widespread in the study area. Ephemerals grow very rapidly and form a dense grass cover that prevents the growth of plants in the meadows in the spring. It grows in a very short time during the season, and some complete the full development period in a few weeks. These are mainly meadow, steppe, forest, steppe, abyss, desert and semi-desert plants. They develop intensively, bloom during the wet period (spring or autumn), give fruit and are completely destroyed during the summer drought. However, some ephemerals disappear completely after flowering and seeding in the flora. Early flowering annual plants are called spring ephemerals.

Ephemerals are of great economic importance. Ephemerals form the basis of the fodder base in winter pastures in Azerbaijan.

Modern phytocenological classification of vegetation of the north-eastern part of the Small Caucasus was carried out at the association level, 43 formations and 57 associations were identified. The Small Caucasus range is 600 km long and consists of characteristic plant groups starting from an altitude of 3700 m.

The spring flora of the study areas mainly belongs to the mesophyte or xero-mesophyte group. Migratory species are also found in the area. The entry of plants into a new area depends on the nature of that area. Growing plants in bare areas depends on the amount of seeds, the direction of the wind, the nature of the soil, the nature of the moisture. At the initial stage of development of the new phytocenosis, light seeds brought by wind predominate. Weeds grow faster in such phytocenoses.

According to the biomorphological characteristics, the spring flora is dominated by annual and perennial grasses. The range of some species is widespread.

Family. Liliaceae Juss. — Lily family.

Genus *Gagea* Salisb. — *Gagea*.

1. *G. chanae* Grossh. 1924, in Grossh. et Schischk. Sched. Herb. Pl. Or. Exsicc.1-8:16, exs, № 55, emend, Levichev, 2006, Бот. журн. 91,6:930. — *G. pusilla. villosa* auct. non A.Terracc.: Misch. 1912, Fl. Cauc. Crit. 2,4: 153. — *G. pusilla. obliqua* auct.non A. Kerner in Irmisch: Misch. 1912, 1. c.: 154. — *G. pusilla* f. *luxuriense* auct. non A. Terracc.: Misch. 1912, 1.: 154, p.p. — Khani gagea.

Bulbous perennial herb, cryptophyte (geophyte, spring ephemeral), 5-10 cm, flowering II-IV. In the middle mountain belt, at the edge of bushes, in the foothills of mountain. Caucasus. (Pl.)

The species is described from Georgia.

General prevalence Caucasus.

2. *G. taurica* Stev. 1857, Bull. Soc. Nat. Mosc., 30, 3:83, emend. Levichev, 2006, Бот. журн.

91,6: 936. — Crimea.

Bulbous perennial herb, cryptophyte (geophyte, spring ephemeral), 5-8 cm, flowering III-IV. Up to the middle mountain belt, on dry clay, rocky slopes. Crimea-Novosibir. (R.)

The species is described from the Crimea.

Southeastern Europe (Southeastern Crimea).

Family. Convallariaceae Horan.-Lily of the valley family.

Genus *Polygonatum* Hill-Poly Hill

3. *P. verticillatum* (L.) All. 1785, Fl. Pedem.1:131; R.R. Mill, 1984, Fl. Turk.8:82; Wendelbo, 1990, in Rech. f.Fl. Iran.165:182;-*Convallaria verticillata* L.1753, Sp. Pl.:315. — Heap poly.

It is a perennial herb, cryptophyte (geophyte, spring ephemeral), 20-70 cm, flowering VI-VI. Up to Subalpine belt, 2000 m in forests, meadows. Holarctic. (Pl.)

The species is described from Northern Europe.

Europe, Southwest (Turkey, Afghanistan, Pakistan) East Asia.

4. *P. glaberrimum* C. Koch 1849, Linnaea, 22:267; R.R. Mill, 1984, Fl. Turk.8:83; Wendelbo, 1990, in Rech. f.Fl. Iran.165:179;- *P.ovatum* Miscz. ex Knorr.1935, Фл. СССР, 4:465, nom. inval.; Гроссг. 1949, Опред. раст.Кавк.:629. — Smooth poly.

It is a long-rooted perennial herb, cryptophyte (geophyte, spring ephemeral), 20-50 cm, flowering V. Up to the subalpine zone, in beech, hornbeam, oak, pine forests, on the edges of bushes, in meadows. Caucasus. (Pl.)

The species is described from the East Caucasus.

South-West Asia (Turkey, Iran).

Family. Caryophyllaceae Juss. — Clougelly-flower.

Genus *Holosteum* L. — Sleenwort.

5. *H. umbellatum* L. 1753, Sp. Pl.: 88 — Umbrella s .

It is annual grass, terophyte (ephemeroid), 5-15 cm, flowering IV-V. In the middle mountain belt, in the foothills, in the bushes at the edge of the forest. The ancient Mediterranean (Pl.).

The species is described from Germany and France.

Europe, Mediterranean, Southwest (Iran), Central Asia.

6. *H. marginatum* Fisch. and C.A. May. 1838, Bull. Soc. Nat. Moscou, 11: 402 — Marginatum.

It is annual herb, therophyte (ephemeroid), 5-20 cm, flowering IV-V. In the north of the Small Caucasus, up to the middle mountain belt, in the foothills of the dry rock. Caucasus. (R.).

The species is described from the Caucasus (Goy-Gol region).

General prevalence Caucasus.

Genus *Queria* L. — Paronychia.

7. *Q. hispanica* L. 1753, Sp. Pl.: 90. — *Scleranthus hamatus* Hausskn. et Bornm. 1891, Mitt. Geogr. Ges. Thür. Jena, 9: 17. — *Minuartia hamata* (Hausskn. et Bornm.) Mattf. 1921, Bot. Jahrb. Syst. 57, 2: 29. — Spain p.

It is annual herb, therophyte (ephemeroid), 2-15 cm, flowering IV-V. Up to the middle mountain belt, in dry rocky places.

The species is described from Spain.

Mediterranean, Southwest, Central Asia.

Chapter Ranunculaceae Juss. — Crowfoot family.

Genus *Aconitum* L. — Monkshood.

8. *A. ranunculoides* L. — Crowfoot.

It is a perennial herb, cryptophyte (geofid, ephemeroid), 15-20 cm, flowering IV. In shady

places in the lower and middle mountains. Euro-Caucasus (Pl.).

The species is described from Northern Europe.

Europe, Atlantic, Mediterranean, Asia Minor.

9. *A. caucasica* Willd. — Caucasus.

It is a rooted perennial herb, cryptophyte (geofid, ephemeroid), 5-15 cm, flowering III-IV. Caucasus (Pl.).

In the middle and upper mountain belt, in the woods, in the bushes, in the mountain meadows. Caucasus (Pl.).

The species is described from Georgia.

Northern Iran, Caucasus.

Genus *Ficaria* Guett. — *Ficaria*

10. *F. caltifolia* Reichenb. (= *F. ledebourii* Grossh. Et Schischk.) — Hill leaf f.

It is a rooted perennial herb, hemicryptophyte (ephemeroid), 5-20 cm, flowering III-IV. Up to the middle mountain belt, in forests, bushes, foothills of mauntain. Caucasus (Pl.).

The species is described from Georgia.

General prevalence Caucasus.

Family. *Papaveraceae* Juss. — Opium poppy family.

Genus *Papaver* L. — Poppy.

11. *P. orientale* L. — East poppy.

It is a perennial herb, hemicryptophyte, 50-120 cm, flowering VI-VII. In the middle and high mountain belt, in the dry foothills. Caucasus. (Rs.)

The species is described from Erzurum.

Balkan, Southwest (Iran), Asia Minor.

Genus *Corydalis* Medic. — Fumitory.

12. *C. marschalliana* Pers. — Marshal f.

It is a rooted perennial herb, cryptophyte (geophyte, ephemeroid), 15-30 cm, flowering III-IV. From the lower to the middle mountain belt, in forests. Caucasus. (R.)

The species is described from the Crimea.

Europe, Balkans, Southwest (Iran), Asia Minor.

Genus *Fumaria* L. — Fumitory

13. *F. officinalis* L. — Pharmacy f.

It is annual herb, therophyte, 10-40 cm., Flowering III-VI. In the middle mountain belt, on mountain slopes. Euro-Mediterranean (Pl.).

The species is described from Europe.

Europe, the Mediterranean, the Balkans, Asia Minor.

Family. *Capparaceae* Lindl. — Caper-bush.

Genus *Cleome* L. — Cleome

14. *C. canescens* Stev.ex DC.(=*C. ornithopodioides* L.) — Hairless c.

It is annual herb, therophyte (ephemeral), 10-50 cm., Flowering III-VIII. Up to the high mountain belt, on rocks, rocks, sandy, clayey places. Ancient Mediterranean. (Pl.)

The species is described from Turkey.

Balkan, Asia Minor, Afghanistan, Iran.

References:

1. Bayramova, A. A. (2013). Bioraznoobrazie flory osobo ohranjaemyh prirodnyh territorij zapadnogo regiona Azerbajdzhana. Baku. (In Azerbaijan).

2. Gurbanov, E. (2009). Systematics of higher plants. Baku. (In Azerbaijan).
3. Grossgejm, A. A. (1945). Flora Kavkaza. Baku. (In Azerbaijan).
4. Конспект флоры Kavkaza (2003-2012). 1-4. St. Petersburg. (in Russian).
5. Şükürov, E. S. (1999). Plant cover of north-east region of Azerbaijan. In The preservation and use of vegetation of Azerbaijan. Baku, Elm. (In Azerbaijan).

Список литературы:

1. Байрамова А. А. Биоразнообразие флоры особо охраняемых природных территорий западного региона Азербайджана. Баку, Наука, 2013, 327
3. Гроссгейм А. А. Флора Кавказа. Баку, 1945.
4. Конспект флоры Кавказа. Т. 1-4. СПб., 2003-2012.
5. Şükürov E.S. Plant cover of north-east region of Azerbaijan // The preservation and use of vegetation of Azerbaijan. Baku, Elm. 1999.

*Работа поступила
в редакцию 09.04.2021 г.*

*Принята к публикации
13.04.2021 г.*

Ссылка для цитирования:

Bayramova A., Rzayeva F. Spring Flora of the Northeast Part of the Lesser Caucasus and Its Classification // Бюллетень науки и практики. 2021. Т. 7. №5. С. 85-89. <https://doi.org/10.33619/2414-2948/66/10>

Cite as (APA):

Bayramova, A., & Rzayeva, F. (2021). Spring Flora of the Northeast Part of the Lesser Caucasus and Its Classification. *Bulletin of Science and Practice*, 7(5), 85-89. <https://doi.org/10.33619/2414-2948/66/10>