European Journal of Humanities and Educational Advancements (EJHEA)
Available Online at: https://www.scholarzest.com
Vol. 3 No. 10, October 2022
ISSN: 2660-5589

ARTEMISIETA FORMATIONS IN THE VEGETATION COVER OF THE ZAMINSU RIVER BASIN

L.A. Botirova, J.Kh. Karshibaev
GULISTON STATE UNIVERSITY
E-mail:botirova.laziza@-mail.ru

Article history:

Received 17th August 2022
Accepted: 17th September 2022
Published: 23rd October 2022

Abstract:

The research object is the vegetation cover of the Zomin water basin. The geobotanical research conducted in the research area was studied based on the manual "Polevaya geobotanika" (1959-1976). During the field studies of plant communities, the boundaries of the study were conducted in plots of no less than 20x20 m2. The abundance of plant species was determined according to Drude's (1922) 7-point system. The scientific names of the taxa are S.K. Quoted from Cherepanov (1995).

Keywords: Wormwood, plant

Wormwood is one of the most common plants in arid regions. In the hills of the Zamin water basin, wormwood groves are widespread on the south-eastern slopes of the lower hills, as well as sedges and brown groves.

Many botanists studied Adir sumac gardens, called them by different names, and included them in different types. K.S. provided various information about Adir sumac groves: their history, distribution, composition, structure, importance in the national economy, the required number and quality indicators of productivity. Afanasev (1956), E.M. Demurina (1975) R.S. Wernick, T. Rakhimova (1982), and can be found in the scientific works of other authors. E.P. Korovin (1962) called wormwood - a type of gypsophilic semi-shrubs.

Q.Z. Zakirov and P.Q. Zakirovs (1969) named Adir wormwood groves as Xerohemithamnica, a xerophilous semi-shrub forest of the Adir region, based on the ecological and morphological principle.

Z.A. Maylun (1976) in the 3rd volume of the monograph "Rastitelnyy pokrov Uzbekistana" called and described wormwood by this name. In this type, it is shown that the following wormwoods dominate and form the formation: Artemisia sogdiana, A. tenuisecta, A. scotina, A. ferganensis, A. porrecta, A. glanduligera, A. baldshuanica and rarely Perovskia scrophulariifolia is also found in hilly terrain in this type. and has been shown to form communities.

In the basin where we conducted research, as shown in the above literature, species such as Artemisia sogdiana, A. ferganensis were found, and it was noted that they are more common in ephemeral and wheat fields.

Several types of wormwood found in all regions of Uzbekistan are good food plants. Wormwoods play a key role in creating a natural landscape, and since most species are covered with thick hairs, they form the main gray background of the landscape and even give a special smell to the air where they grow. Almost all types of wormwood contain essential oils, which gives them a unique smell. They are widely used not only as fodder, but also in folk medicine. Therefore, the study of these plants is one of the current problems.

RESEARCH OBJECT AND METHODS

The research object is the vegetation cover of the Zomin water basin.
The geobotanical research conducted in the research area was studied based on the manual "Polevaya geobotanika" (1959-1976). During the field studies of plant communities, the boundaries of the study were conducted in plots of no less than 20x20 m2. The abundance of plant species was determined according to Drude's (1922) 7-point system. The scientific names of the taxa are S.K. Quoted from Cherepanov (1995).

THE OBTAINED RESULTS AND THEIR ANALYSIS

The meeting of such species as *Artemisia absinthium, A. annua, A.* dracunculus, *A. diffusa* (on the lower hill), *A. ferganensis, A. juncea, A. leucoides, A. scoparia, A. sogdiana* was found in the hills of the basin where research was carried out. They are it was studied that they participate in different plant communities and that some of them meet as subdominant and dominant. As a result of geobotanical studies, it was found that the following formations of wormwood are distributed in the Adir region: *Artemisieta sogdianae* - Sogdian wormwood, *Artemisieta ferganensis* - Fergana wormwood, *Artemisieta tenuisectae* - thin-leaved wormwood formations.

On the hills on the right bank of the Zominsuv River, around the villages of Cho'nayma, Karatash, Turkman, and at the foot of Koplantog (1320 m), the communities of Sogd shuvakzori are scattered among kiltykzor, konkirboshzor, and rangzors. *Poa bulbosa, Carex pachystylis, Phlomis thapsoides, Cullen drupacea, Taeniatherum crinitum*, etc. are

permanent participants in the hilly region due to their adaptation to the same soil type and climatic conditions. They are the species that form the main pasture types.

R.S. Wernick, T. Rakhimovalar (1982) in the description of the Namangan region "Pasture map of Yangikurgan district" determined the productivity of Sogd sumac fields in the seasons and noted that the best indicator corresponds to summer and autumn seasons.

Optimum ways to increase the yield of earthworm fields, that is, taking into account their bioecological and fodder properties, it was noted that sowing the seeds of spiky plants and sorghum gives good results, and the yield is 5-6 times higher than that of natural pastures (Saidov D.K. et al. 1975).

The following associations were distinguished in the formation of Sogd shuvakzori: ephemeral-kizluqli-sugdshuvakzori; weedy-ephemeral-Sogdian sumac; salt-herbaceous-ephemeroid-sodshuvakzori.

The association of ephemeral-serpentine-sorghum is distributed on the typical dark gray soil on the left bank of the Zominsuv River at an altitude of 1200 m above sea level. Along with Artemisia sogdiana (30-40 cm) forming the first tier, *A. ferganensis* (40-45 cm) is involved. *Amygdalus spinosissima* (left) stands out from the bushes in some places.*Alhagi pseudalhagi*, *Phlomis thapsoides, Cousinia resinosa from ephemeroids, Carex pachystylis, Poa bulbosa* from perennial plants, *Bromus danthoniae, Trigonella geminiflora, Taeniatherum crinitum, Astragalus filicaulis, Koelpinia linearis, Anisantha tectorum, Eremopyron buonapartis, Malcolmia africana* form the basis of the ephemeral layer. Two different aspects are characteristic of the association. Pale green in the presence of ephemerals in the spring and grayish aspects of the same shade of wormwood alternate in the summer after they dry. In 2009, when the amount of annual precipitation was unfavorable (120-170 mm), due to the slow development of ephemerals, the spring aspect was mainly composed of wormwood species. The level of vegetation cover is 50-60%.

Weedy-ephemeral-Sogdian wormwood also mainly occupies 1200 m above sea level on the upper hill on the eastern slopes of the Zomin Reservoir on typical gray soil. Among the weeds, *Phlomis thapsoides, Cullen drupacea, Eremurus sogdianus, Acroptilon repens* form the upper layer. Coverage rate is 40-50%. Because of the high humidity, white wormwood (Artemisia ferganensis, sp2) also participates in this sinusia.

The association of salt-grass-ephmeroid-Sogdian wormwoods differs from the above-mentioned associations in the composition of annual salt marshes *Gamanthus gamocarpus, Salsola sclerantha* (sp2) and the abundance of species composition. The association is widespread in typical gray soil hilly terrain on the northeastern slopes (700 m) 2-3 km from the village of Beshkubi. In addition, it is necessary to highlight the high phytocenotic importance of *Carex pachystylis* and *Poa bulbosa,* the main components of the hills. Herbs and ephemerals form the basis of the cover.

In the hills, in addition to the Sogdi shuvokzori, the fergana (white shuvok) also forms communities and creates a unique landscape. The main reason for this is anthropogenic factors: *Artemisia ferganensis* increased as a result of the creation of water reservoirs and reserves and the impact on the external environment.

The composition and structure of Fergana sumac groves is one of the widespread formations adapted to the soil and climatic conditions of the Adir region. The composition of this putty is similar to the composition of Sogdi putty. This the formation is distributed in the upper part of Tog'terak village, on the right bank of Oriklisoy, in the hills on both slopes of the Zominsuv reservoir, up to 1000-1500 m above sea level. In the composition of the formation, 2 associations were distinguished: ephemeral-mixed herbaceous-Fergana fen, syrachli-mavrakli-Fergana fen.

The ephemeral-mixed-Fergana peat bog association was formed in the hills at an altitude of 1200-1300 m above sea level, on dark gray soils with large stones and small pebbles. The community is located 1.5 km north of the village of Toghterak on the right bank of Oriklisoy. *Ephedra equisetina* (sol-sp1), *Cerasus erythrocarpa* (sol) does not form a separate layer because it is sparse in the cover. *Artemisia ferganensis* forms the upper layer. Bushes of *Perovskia angustifolia, Rumex syriacus*, and *Verbascum songoricum* (sol-sp1) are found among wormwood. The basis of the lower layer is ephemera. The association is among the emerging secondary communities.

It is mainly water (moisture) and near the settlements, after the construction of the water reservoir, communities of fergana shuvoks began to form. The composition of the association consists of 30 species, the level of coverage is 50-60%.

Areas of Shirachli-Mavrakli-Fergana shuvakzori association The upper part of Toghterak village is found on dark gray soils with stone gravel, on the north-western slopes. The teams are two-tiered. *Eremurus olgae, Verbascum songoricum, Salvia sclarea, Artemisia ferganensis* form the first layer. Outside the site, *Perovskia angustifolia* is also quite dense at the bottom of the slopes.

Herbs such as *Cousinia radians, Alhagi pseudalhagi, Rumex syriacus, Mentha asiatica, Cynodon dactylon, Achillea bibersteinii* were also recorded in abundance. The lower layer is formed by *Bromus oxyodon, Trigonella grandiflora, Lappula microcarpa* and other species.

In addition, thin-leaved wormwood formation was also distinguished in the upper part of the basin. This formation was created by P.Q. Zakirov (1989) adir steppe is included in the edaphotype of Imioreophyta (Adyrophyta). The following associations were noted in the composition of the formation: ephemeral-mixed herbaceous-thin-leaved gorse, wheat-thin-leaved gorse, bushy-wheat-thin-leaved gorse, tall and spiky herbaceous-bush-thin-leaved gorse. The thin-leaved wormwood is not only widespread on the upper hills, but also forms a community in small areas in the mixed shrub and juniper forests. Communities of this formation are widespread in Dugoba village and upper hilly terrain on both banks of the Zominsuv reservoir.

E.M. Demurina (1975) recorded the formation of Artemisia sogdiana and A. diffusa on the northern slope of Turkestan Mountain, but did not describe the formations of *Artemisia ferganensis* and *A. tenuisecta*. The formation's

floristic composition, structure, distribution patterns, and soil are close to wheat fields. Due to the abundance of ephemerals, spiky grasses, various fodder grasses in the floristic composition of this formation, it is a source of natural pasture that can be used to graze livestock throughout the year.

Common associations in the narrow-leaved sedge formation are as follows: ephemeral-mixed herbaceous-sedge sedge association The right side of the Zominsuv reservoir was recorded 5-6 km north of Dug'oba village. The communities are mainly distributed on the large stony, stone-gravel soils of the south-western slopes. In these lands, the vegetation cover is dense, more than 30 species were recorded in the area of 20 m2. In the association, *Artemisia tenuisecta* (sp3), *Eremurus regeli* (sp3) is dominant and forms the first layer. As the level of stony soil increases, the number of lichens increases.

Perovskia angustifolia, Artemisia ferganensis, Lactuca serriola and other plant species increase as you approach the stream. The lowest layer consisting of ephemerals and ephemeroids consists of plants such as *Bromus oxyodon, Koelpinia linearis, Ziziphora tenuior, Poa bulbosa, Aegilops crassa, Tythimalis falcatus.*

Tall and spiky grass-shrubs-thin-leaved wormwood Zominsuv The right bank of the reservoir is recorded in dark gray soils with stone gravel on the southeastern slopes. Shrubs such as *Amygdalus spinosissima, Cerasus erythocarpa, Atraphaxis pyrifolia* are found in the communities. Shrubs form the first layer, and the interstices of the bushes are covered with wormwood, various grasses, and especially sedges. At the bottom of the slopes, *Perovskia angustifolia* bushes are located in the form of ribbons. Various herbs include *Tragopogon malicus, Silena guntensis, Trihodesma incanum, Sisymbrium altissimum*. Shrubby thin-leaved wormwood grows in the form of a belt to the watersheds on the eastern and western borders of the basin. The lower layer consists of ephemeris and ephemeroids, the coverage level is 60-70%.

CONCLUSIONS

1. The data collected as a result of geobotanical studies conducted in the Zominsuv basin were classified and it was found that the formations of wormwood *Artemisieta sogdianae* - Sogd wormwood, *Artemisieta ferganensis - Fergana* wormwood, *Artemisieta tenuisectae* - thin-leaved wormwood are distributed in the basin.
2. Among them, the composition and structure of Fergana sumac groves is one of the widespread formations adapted to the soil and climatic conditions of the Adir region. The composition of this putty is similar to the composition of Sogdian putty.
3. Thin-leaved wormwoods are not only widespread on high hills, but also form a community in small areas in mixed shrub and juniper forests. Communities of this formation are widespread in the hilly lands of the village of Dugoba, in the upper hilly lands on both banks of the Zaminsuv reservoir.

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Аннотация

ФОРМАЦИИ *ARTEMISIETA* В РАСТИТЕЛЬНОМ ПОКРОВЕ БАССЕЙНА РЕКИ ЗААМИНСУ

Л.А.БОТИРОВА, Ж.Х. КАРШИБАЕВ

В статье приводится данные о 3 х встречающихся формациях *Artemisieta sogdianae*, *Artemisieta ferganensis* и *Artemisieta tenuisectae,* а также о широко распространенных ассоциациях в составе этих формациях.

Ключевые слова: *Artemisia,* аридная зона, полын, формация, ассоциация.

The summary

ARTEMISIETA FORMATIONS IN THE VEGETATION COVER OF THE ZAMINSU RIVER BASIN

L.A. BOTIROVA, J.Kh. KARSHIBAEV

The article is given information about 3 common formations *Artemisieta sogdianae, Artemisieta ferganensis* and *Artemisieta tenuisectae*, and widely for common associations within these formations.

Keywords: *Artemisia,* Arid a zone, sagebrush, a formation, association.