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Vegetation Classification of *Juniperus communis* L. Species in Azerbaijan

Afag Rzaeva

Department of Chemistry-Biology, Baku Engineering University, Baki Az0102, Azerbaijan

Abstract: The Republic of Azerbaijan, is a country in the south Caucasus having continental influenced climate with warm summer and mild cold, dry winters. Relating to its climate this region has a rich and very interesting vegetation cover. In presented article the vegetation communities with the presence of *Juniperus communis* L. species and subspecies have been described.

Key words: Vegetation, *Juniperus communis* L., species, subspecies.

1. Introduction

Juniperus communis L. belongs to the family Cupressaceae [1, 2] and can be found mainly in temperate and subtropical regions. Due to its sundry ethno botanical, healing and culinary uses this plant has a significant place in folklore of Azerbaijan [3, 4]. Attributable to their potential to grow under the hard conditions, *Juniperus communis* L. species can be suited for afforestation programs in very different ecological regions of the world. The comprehensive study of biomorphology and ecology of this plant is indispensable for better appreciation the difference in abundance of this species, its impression on ecosystem structure and function.

2. Materials and Methods

The *Juniperus communis* L. species were collected from their natural habitats in different phenological phases. The identification of species is according to Gurbanov et al. Plants names were given according to Euro Plant Checklist. In subspecific identification herbaria samples from Herbaria Base of ANAS Azerbaijan Republic were also used. Vegetation classification is given according to Mucina et al. [7].

Corresponding author: Afag Rzaeva, PhD candidate, research fields: plant ecology and systematic.

3. Results

Two subspecies of *Juniperus communis* L. are accepted according to Euro Veg Checklist: *Juniperus communis* subsp. *hemisphaerica* (C. Presl) Nyman [6], *Juniperus communis* subsp. *nana* Syme for this region. *Juniperus communis* ssp. *communis* were identified in 2017 by Gurbanov.

Considering on the current decreasing of distribution of coniferous plants in the area of our republic, the research of plant communities with the presence of *Juniperus communis* L. species is important for working out preserving methods of this plant.

Juniperus communis ssp. *communis* subspecies [5] from Azerbaijan have been observed mainly in RHA Rhamno-Prunetea vegetation class [7]. Special compositions of these communities are made of *Rhamnus frangula* L., *Crataegus pentagyna* Waldst. et Kit., *Crataegus oxyacantha* L., *Prunus vachuschtii* L. etc.

4. Conclusion

Few decades ago *Juniperus communis L.* communities were widely distributed in mountainous areas of Azerbaijan but nowadays the contraction of their number can be explained with anthropogenic factor.

Fig. 1 *Juniperus communis* L. shrubs from Azerbaijan.

In current research the species composition of these communities has been described and that is important for working out protection methods of this plant.

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