

GEOGRAPHY OF EREMURUS M. BIEB. SPECIES IN THE FLORA OF THE FERGANA VALLEY

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ABSTRACT

The article provides an analysis of the taxonomic and geographical distribution of species of the genus Eremurus m. BIEB in the Fergana Valley. There are 13 species in the Fergana Valley, of which 7 species are found in Uzbekistan.

KEYWORDS: Genus, Eremurus, Soil, Leaves, Shrubs, Rhizomes, Spruce.

INTRODUCTION

The Eremurus family, with about 40-45 species, is widespread in Central and Eastern Asia [1-7]. The southern mountains of Central Asia played an important role in the origin of this series, and according to R.V. Kamelin [9], it is one of the distinctive features of the local flora. In the first volumes of "Flora of Uzbekistan" [20] and "Key to plants of Central Asia" [8], A.I. Vvedensky quoted data as well as with the additions of K. Sh. Tojibayev [10-14] the territory of Uzbekistan, as part of this large area, slightly concentrated 27 species of Eremurus. In the flora of the Fergana Valley studied, 13 species of the genus were found [21]. This figure is 28% of the total number of Eremurus species, and more than 48% of the Uzbek species. Indicates the importance of the species as an area of great importance for the study and conservation of species [15-19].

Materials and methods

Examples of species of the Eremurus family that are distributed in the Fergana Valley - Representatives of this family have seasonal adaptations and distribution throughout the world, especially in the Central Asian region. In the territory of Fergana region of the republic can be found the following plants belonging to the family Eremurus: *Eremurus aitchisonii*, *E. alberti*, *E. altaicus*, *E. kaufmannii*, *E. olgae*, *E. regelii*, *E. robustus*, *E. sogdianus*, *E. tianshanicus*, *E. turkestanicus*, *E. zenaidae*. We will describe each of these plants separately by geography.

Eremurus aitchisonii. In the lower and middle parts of the mountains, fine particles are found on the rocky slopes. Distributed in Samarkand, Surkhandarya, Kashkadarya regions: Zarafshan and Gissar ridges, Cholbayir, Boysun, Kohitang mountains. It is also found in Kyrgyzstan, Tajikistan

and Afghanistan. In the lower part of the mountains, small rocks grow on sandy and gravelly slopes. [17-19].

E. alberti. Rooted. It is found among the rocks at the bottom of the mountains. For example steppe shrubs, shibleyak. It can be found along the Fergana Valley and in Kabul and Turkey (up to 2000 m above sea level). Distributed in Kashkadarya and Surkhandarya regions: Bobotag, Sherabad valley, and around Dehkanabad. It is also found in Tajikistan and Afghanistan. It grows in low mountain rocks at an altitude of 900-1200 m above sea level. It grows in sparse pistachio forests of the Southern Pamirs, among ephemeral grasses.

E. altaicus. Rooted. Occurs on rocky, fine-grained slopes at the bottom and top of mountains. Examples: deciduous mesophilic shrubs. It grows in the salt marshes of the steppes from the foothills to the Alps (200-3000 m above sea level). Species distribution in the Altai Krai of Russia, eastern Kazakhstan, Mongolia, Kyrgyzstan, Uzbekistan, Tajikistan; In western China, it is depicted in the foothills of the Altai Mountains: a tributary of the Irtysh that grows along the Uba River. Occurs in Bukhara, Tashkent, Kokand, and Fergana Valley of Uzbekistan [18-21].

E. kaufmannii. Rooted. Occurs on rocky, fine-grained slopes in the middle of hills and mountains, spruce, mountain mesophilic meadows, and steppe meadows.

E. olgae. Rooted. In the lower and middle parts of the mountains, fine-grained soils and fine-grained soils are found on rocky slopes. Examples: spruce, Iranian-Turanian semi-savannah, high mountain semi-savannah, steppe shrubs, tragacanta and thorns, shibeak. In the Pamirs, it was discovered in 1870 by Olga Fedchenko. It is found in northern Afghanistan and in the mountainous regions of Iran at altitudes of 800 to 2,700 meters above sea level. It is still rarely used as an ornamental plant. Occurs in Samarkand, Bukhara, Tashkent and Fergana Valley of Uzbekistan. In the lower and middle parts of the mountains, fine particles are found in the soil, and fine particles are found in the soil-rocky slopes.

E. robustus. Rooted. In the lower and middle parts of the mountains, fine-grained soils and fine-grained soils are found on rocky slopes. Examples: spruce, broad-leaved forests, deciduous mesophilic shrubs. Tashkent, Namangan, Jizzakh, Samarkand, Fergana, Surkhandarya, Kashkadarya regions: all ridges of the Western Tien Shan and Pamir-Alay, also found in Tajikistan, Kazakhstan and Kyrgyzstan. Occasionally, small rocks in the middle of the mountain grow on sandy and rocky slopes.

E. sogdianus - *sogdianus* (Regel) French. Rooted. Occurs on rocky slopes of hills and mountains. Examples: spruce, Iranian-Turanian semi-savannah, Iranian-Turanian friganoids, high mountain semi-savannah, steppe shrubs, shibleyak. It can be found in the lower and middle ridges of the Fergana and Alay ridges.

E. tianschanicus. Rooted. In the middle and upper part of the mountain, fine particles are found on the slopes of the soil, and fine particles on the soil-rocky slopes. Examples, spruce, high mountain semi-savannah, deciduous mesophilic shrubs.

E. turkestanicus. Rooted. Occurs on rocky slopes in the lower and middle parts of the mountain. Examples: spruce, deciduous mesophilic shrubs. It grows in semi-desert, steppe and fruit forests from the foothills of the South-Western Pamirs-Altai (southern slopes of the Gissar ridge) to the middle ridge (2800 m above sea level).

E. zenaidae. Rooted. Occurs on rocky slopes in the lower and middle parts of the mountain. Examples, spruce, high mountain semi-savannah, deciduous mesophilic shrubs.

E. comosus. Rooted. Occurs on rocky slopes in the lower and upper parts of the mountains.

E. fuscus (O. Fedtsch.). Rooted. In the middle and upper parts of the mountains, it is found on the slopes of rocky and fine-grained soils, and on the slopes of gravel-fine-grained soils. Examples: meadows, broad-leaved forests, meadows, mountain mesophilic meadows, deciduous mesophilic shrubs.

E. regelii. Rooted. In the lower and middle parts of the mountains on the slopes of fine-grained soil, fine-grained soilrock. Examples: spruce, deciduous forests, deciduous mesophilic shrubs.

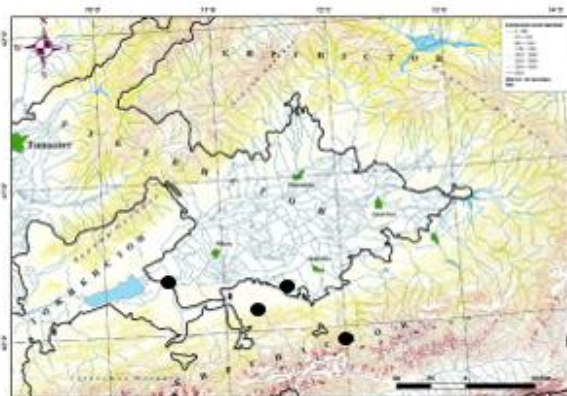


Figure 1. Figure 1. Distribution map of type *E. aitchisonii*

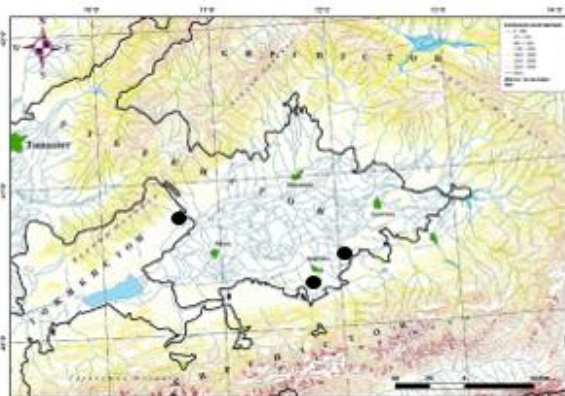


Figure 2. Figure 1. Distribution map of type *E. alberti*

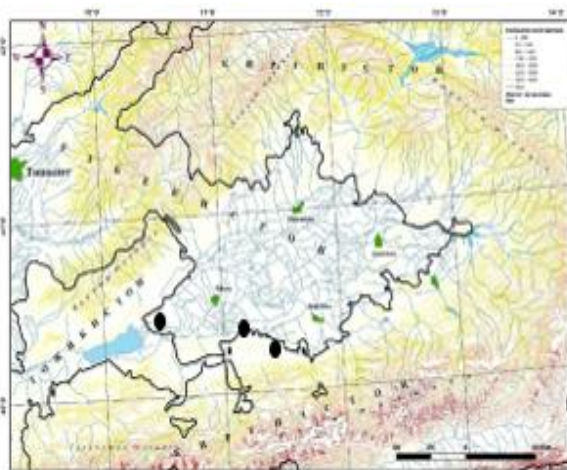


Figure 3. Distribution map of type *E. altaicus*

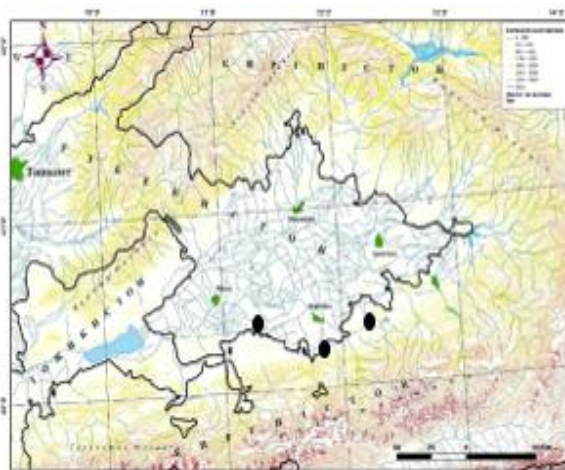


Figure 4. Distribution map of type *E. kaufmannii*

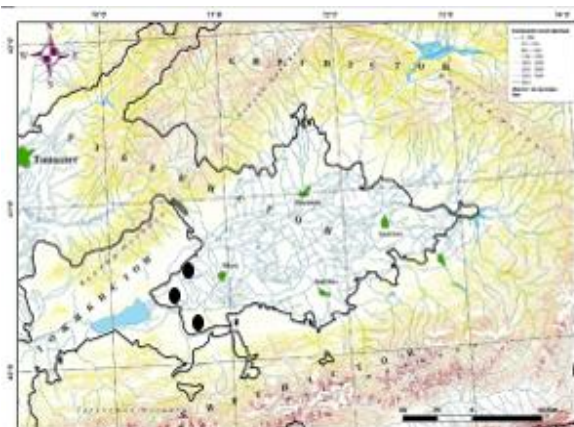


Figure 5. Distribution map of type *E. olgae*

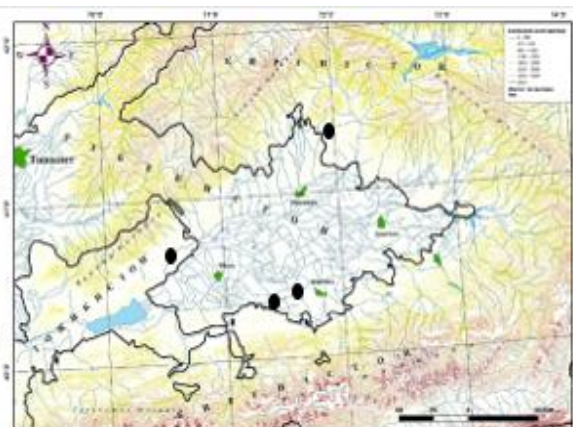


Figure 6. Distribution map of type *E. robustus*

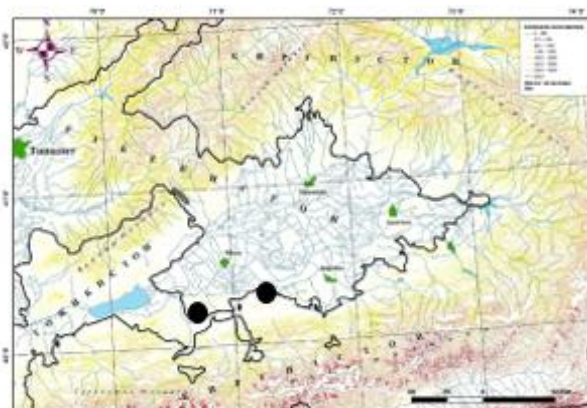


Figure 7. Distribution map of type *E. sogdianus*

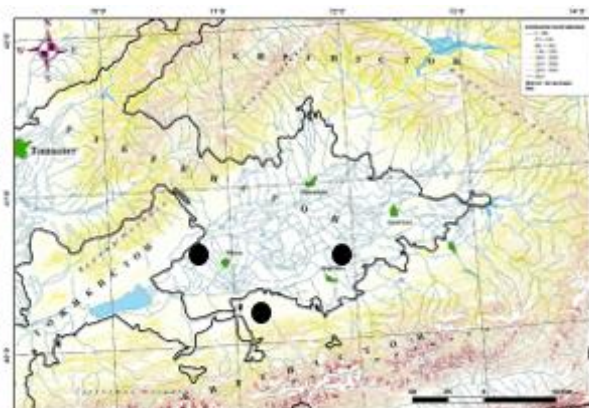


Figure 8. Distribution map of type *E. tianschanicus*

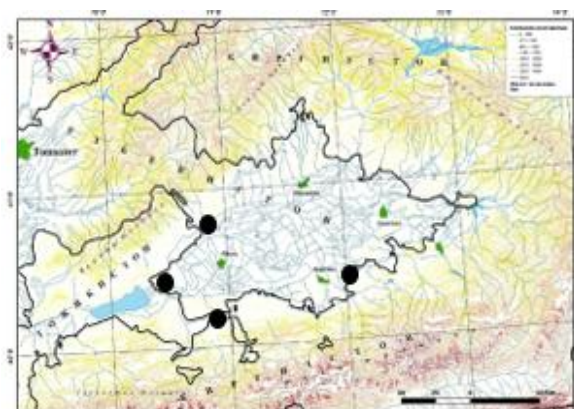


Figure 9. Distribution map of type *E. turkestanicus*

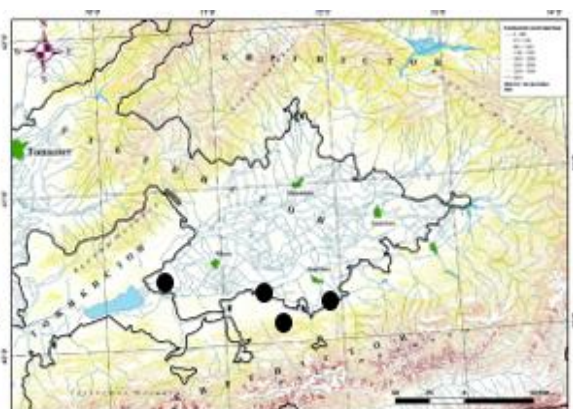


Figure 10. Distribution map of type *E. zenaidae*

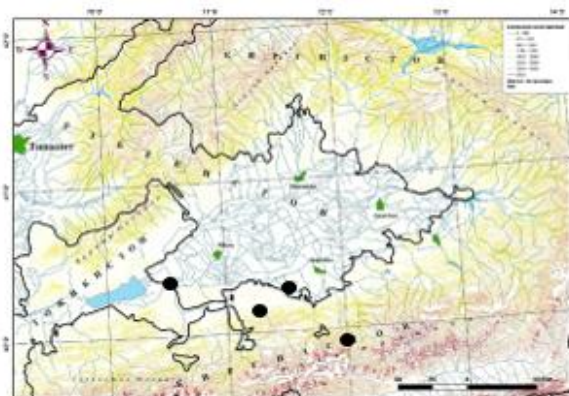


Figure 11. Distribution map of type *E. comosus*

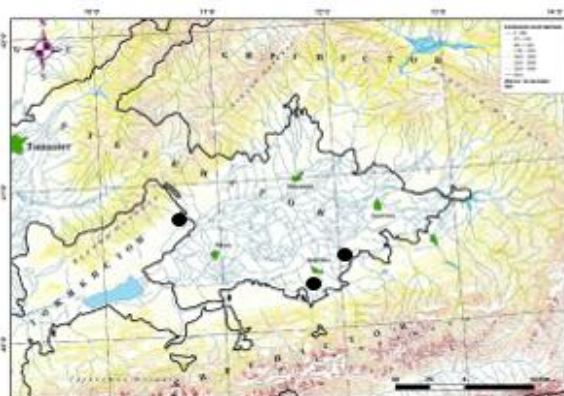


Figure 12. Distribution map of type *E. fuscus*

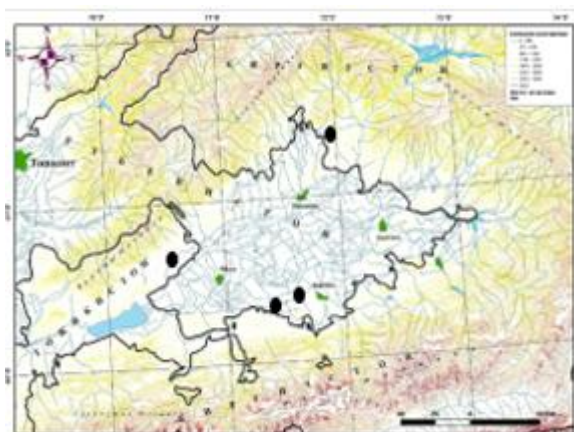


Figure 12. Distribution map of type *E. regelii*

The distribution of species of the *Eremurus* family by botanical and geographical regions in the Fergana Valley is given in the table.

The region rich in species is Arslonbob and East-Alay (10 species), West-Alay (8 species), South-Chatkal, North-Turkestan (7 species), and 1 for the Arashan region.

TABLE 1. DISTRIBUTION OF EREMURUS SPECIES BY BOTANICAL AND GEOGRAPHICAL REGIONS IN THE FERGANA VALLEY

№	Districts Number of species	Turlar nomi
1	Arashon rayoni (1,0)	<i>E. fuscus</i>
2	Chorkesar district (5,0)	<i>E. fuscus</i> , <i>E. tianschanicus</i> , <i>E. sogdianus</i> , <i>E. regelii</i> , <i>E. turkestanicus</i>
3	Mogultog District (3,0)	<i>E. alberti</i> , <i>E. fuscus</i> , <i>E. sogdianus</i> , <i>E. fuscus</i>
4	Qurama (6,0)	<i>E. fuscus</i> , <i>E. regelii</i> , <i>E. robustus</i> , <i>E. sogdianus</i> , <i>E. tianschanicus</i> , <i>E. turkestanicus</i>
5	South - Chatkal district (7,0)	<i>E. altaicus</i> , <i>E. fuscus</i> , <i>E. regelii</i> , <i>E. robustus</i> , <i>E.</i>

		<i>sogdianus, E. tianschanicus, E. turkestanicus</i>
6	Arslonbob district (10.0)	<i>E. fuscus, E. aitchisonii, E. altaicus, E. olgae, E. regelii, E. robustus, E. sogdianus, E. tianschanicus, E. turkestanicus, E. zenaidae</i>
7	West - Aral region (8.0)	<i>E. kaufmannii, E. fuscus, E. olgae, E. regelii, E. robustus, E. sogdianus, E. tianschanicus, E. turkestanicus,</i>
8	East - Alay district (10.0)	<i>E. comosus, E. fuscus, E. kaufmannii, E. olgae, E. regelii, E. robustus, E. sogdianus, E. tianschanicus, E. turkestanicus, E. zenaidae, E. robustus,</i>
9	North Turkestan region (7.0)	<i>E. kaufmannii, E. olgae, E. fuscus, E. regelii, E. turkestanicus, E. sogdianus</i>

Most of these species are native to the Pamir-Alay Mountains (12 species; 92.30%). Round 7 connects both mountain systems.

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