

RARE AND ENDEMONIC SINGLE PLANTS OF FLORAS OF SURKHAN STATE RESERVE

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Abstract. The article provides information about rare and endemic monocotyledonous plants of the flora of Surkhandarya State Reserve.

Keywords: flora, kohitang, poaceae, tree, unicorn, ridge, mountain-forest, ecosystem, endemic.

РЕДКИЕ И ЭНДЕМИЧНЫЕ ЕДИНИЧНЫЕ РАСТЕНИЯ ФЛОР СУРХАНСКОГО ГОСУДАРСТВЕННОГО ЗАПОВЕДНИКА

Аннотация. В статье приведены сведения о редких и эндемичных однодольных растениях флоры Сурхандарьинского государственного заповедника.

Ключевые слова: флора, кохитанг, злаки, дерево, единорог, хребет, горно-лесной, экосистема, эндемик.

INTRODUCTION

Uzbekistan is the most populous country in Central Asia. From ancient times, especially after the second half of the twentieth century, the factor of human influence on the ecosystem of the country has increased. As a result of the development of the Fergana, Zarafshan valley, Kashkadarya, Surkhandarya, Khorezm and Tashkent oases of Uzbekistan, the natural ecosystem has been completely replaced by anthropogenic landscapes. [1] Certain rare species have become extinct, and some are on the verge of extinction. Among them are many rare, endemic and relict species that need serious protection. There are about 400 such species, which make up 10-12% of the flora of Uzbekistan. [1] The flora of the Surkhandarya oasis is also rare and relict today, as well as the number of endemic species is 41 families, 150 species belonging to 78 genera. These species are now protected in the Surkhandarya State Reserve, Boysun and Gissar forestries. [1] However, endemic plant species listed in the Red Data Book of the Republic of Uzbekistan are also found in unprotected areas. One of the current problems is to study the state of their population today, the reasons for its decline. To do this, it is necessary to carry out explanatory work among tourists, tourists and locals who go on vacation in the bosom of nature.

MATERIALS AND METHODS

Route, taxonomic, areologic, biomorphological methods were used in the study. In the study of the flora of the study area, B.A. Yurtsev's program "Study of flora of nature reserves and other large protected areas" was used. The research was conducted in the Kohitang mountain range of Sherabad district. The study of the floristic composition of the Surkhandarya State Reserve will serve as a basis for all future research, as well as the development of measures for the systematic protection of its rich and diverse plant resources:

Stipa gnezdilloi Pazij.-Gnezdillo chalovi-Kohitang ridge is a rare petrophytic plant with hairy stems, perennial herb, height 50-60 cm, leaves hairless. Tongue 1-2 mm, ciliated. Inflorescence 11-17 cm long. The spikes are almost the same, 3-4 cm long. Bottom flower bark 11-13 mm. Hair 12-13 cm long, 2 times elbow, feathers 0.2-0.3 mm. It flowers and bears fruit in May-June.

Allium giganteum Regel. - Large onion - a rare, endemic plant in the Southern Pamirs. The width of the bulb is 3-5 cm, dark, with a papery skin. Stems 60–130 cm long, smooth. The leaves are 4-5, smooth. The umbrella is multi-flowered, almost spherical, 5-12 cm in diameter. Inflorescences are almost equal, no petals, 3-6 cm long. Inflorescences are star-shaped, light purple, 5-6 mm long, oval, blunt, inflexible. Powdery mildew, 4-5 mm long. The cup is spherical, 5-6 mm in diameter. It blooms in May and bears fruit in June. It grows sparsely and scattered in the Kampirtepa, Boglidara, Qizilolma, Shalkan regions of the Kohitang ridge, around the villages of Omonkhona and Qiyakamar in the Boysun ridge, and in the rocky, partly gravelly slopes of the southwestern part of the Gissar ridge.

Allium kugitangi F.O. Khass. - Kohitang onion is an endemic type of Kohitang ridge, the width of the onion is 1-2 cm, elongated brown-dark color, surrounded by a papery shell (skin). Stems 15–30 cm long, smooth. The leaves are 1-2, some 3-4, tapered, 5-10 cm long, 0.5-1 cm wide, smooth. The umbrella is multi-flowered, densely packed, almost spherical, 5-6 cm in diameter. Inflorescences equal, no petals, 5-10 cm long. Pieces of cauliflower are star-shaped, fleshy, purple, 7-10 mm long, elongated-oval, sometimes lanceolate, blunt. The powdery threads are pink, 16-13 mm long, glabrous, much of which is intertwined. The cup is spherical, 3-4 mm in diameter. It blooms in April and bears small fruits. Forms small communities consisting mainly of 5-8 bushes. This type of onion was introduced to A.J. in 2006-2008. As a result of researches carried out by Ibragimov, from the eastern slope of the Kohitang ridge, i.e. from the Boglidara section of the Surkhandarya reserve, etc. At an altitude of 1500-1800 m, fine-grained, fine-grained soil between sparse pine forests was found and incorporated into science.

Sternbergia lutea (L.) Spreng. - Yellow sternbergiya is a very rare species in the south of Uzbekistan, a perennial, bulbous herb up to 20 cm tall. Onions are large, almost round, up to 4 cm wide and 5 cm long. The leaves are broad-leaved, blunt, slender, with sharp fine-toothed edges. The leaf grows in the fall at the same time as the flower. The flowers are loose, yellow. The petals are lanceolate, elongated. It blooms in September-October. It is spread around the city of Shargun, located on the slopes of the Gissar mountain range. It grows on rocks and rocky slopes in the middle of the mountains.

Eremurus albertii Regel. - Albert sagebrush is a rare species in Uzbekistan, perennial herb growing up to 25-80 cm in height. The rhizome is shortened, claw-shaped, the scales are thickened, the thickness is 7-10 mm. The leaves are broad pencil, the width of the outer side is 1.5-2 cm. Shingles sparse, many-flowered, 10-50 cm long. The petals are large, triangular-lanceolate. The inflorescences at the bottom of the inflorescence are 2-2.5 times longer than the inflorescence. The leaves of the cauliflower are single-veined, reddish-brown in color, elongated towards the base. The pollen is 1.5 times shorter than the pollen. The calyx is round, three-celled, smooth, 2-2.5 cm wide. It flowers in April and bears fruit in May. It grows sparsely and scattered in the Sherabad plain of the Kuhitang ridge, in the foothills, as well as in the Bobotag ridge at 900-1200 m above sea level.

Emurus baissunensis O.Fedtsch. - Boysun shirachi is a very rare endemic plant in the South-Western Pamirs-Alay, a perennial herb with a height of 60-80 cm. The rhizome is short, the width of the roots is 4-6 mm. The leaves are thin pencil, width 4–6 mm. Rare, many-flowered, 25-45 cm long. The petals are large, triangular in shape. The bands of the flowers below the shingles are 1.5 times longer than the petals. The flowers are fragrant. The leaves are

white, single-veined. The pollen is uneven and shorter than the stalk. Fruits are linear, elongated, smooth, 6-7 mm wide, 15-20 mm long, the seeds are thin-winged. It blooms in April-May and bears fruit in May-June. It grows on the rocky, fine-grained, gypsum soils of the Kohitang ridge around Boglidara, Tangi-Dara and Khatak villages (at an altitude of 1000-1200 m) with an average area of 100-12 m². It is distributed in the Machaydarya basin of the Boysun ridge, in the foothills and lowlands of the Upper Machay, Kok-Bet, Halqajar and Kumarik regions.

Eremurus robustus Regel. - Nor Shirach-Tianshan and Pamir-Alay is an endemic plant species with isolated and shrinking range, a large perennial herb reaching 100-250 cm in height. The rhizome is short, radiant, the fragments are thickened. The leaves are broad pencil, 4-8 cm wide, smooth. Dense, many-flowered, cylindrical, 35-120 cm long. The petals are triangular in shape. The band of flowers at the bottom of the stem is 1.5-2 times longer than the stem. The leaves of the rose are solitary, light pink. The pollinators are slightly shorter than the pollen. Fruit - round, smooth, resembling a pod, 1.5-2.5 cm wide. It flowers in May-July and bears fruit in July-August. In the Kohitang ridge, only on the southern slope of the Boglidara section, there is fine-grained soil, gravelly ground, etc. It grows at an altitude of 1300 m. Omonkhana, Qiyakamar village of Boysun ridge, around Boysun town, Lower Red areas. Harvesting by the population and over-grazing of livestock are leading to a decrease in the number of bushes.

Eremurus luteus Baker - Yellow shirach - is a very rare species in Uzbekistan, a perennial herb with a height of 35-60 cm. The rhizome is short, the fragments are thickened. The leaves are thin pencil, 4-7 mm wide. Rare, sparsely flowering, 20-30 cm long. The petals are large triangular-lanceolate, the band of flowers at the base of the stem is 1.5 times longer than the inflorescence. The flowers are fragrant. Cauliflower leaves are single-veined, pale yellow. The pollen is uneven, shorter than the stalk. The fruit is cup-shaped, elongated, smooth. The seeds are thin-winged. It flowers in April-May and bears fruit in May-June.

Eremurus aitchisonii Baker - Echison shirachi - is a rare species in the flora of Uzbekistan, a perennial herb between 70-120 cm in height. The rhizome is shortened, lightly arranged, the fragments are thickened. The leaves are broad pencil, 5-8 cm wide, light green, hairless. The stem is hairless or the lower part is hairy. The spines are sparse, pubescent, cylindrical, 20-45 cm long. The petals are triangular, oblong. The flowerbed at the bottom of the shingle is twice as long as the flowerpot. Cauliflower leaves are single-veined, pink.

The pollen is 1.5 times shorter than the pollen. The fruit is a round cup 1.5-2 cm wide. It flowers in May-June and fertilizes in June-July.

THE RESULTS AND DISCUSSION

22 species (2.96% of the total flora) of endemic and subendemic taxa in the Surkhandarya State Reserve are distributed in mountainous areas, 4 species (0.54%) in pastures, and 1 species (0.13%) in adyr regions. It turns out that the bulk of endemic plants are distributed in the mountainous region of the reserve. In terms of life forms, 12 species of endemic plants (1.61% of the total flora) correspond to star polycarp grasses, 3 species to semi-shrubs (0.40%), and 2 species (0.27%) to biennial grasses. It consists of 1 species (0.13%) in shrubs, cushioned polycarps, rhizome polycarps, onion polycarp grasses, rhizomatous, tuberous polycarp grasses. When the habitat of these species was analyzed, it was found that the areas occupied by the reserve and the main part of the range of the Kohitang ridge.

CONCLUSION

In summary, the flora of the Surkhandarya oasis today is considered rare and relict, as well as the number of endemic species is 41 families, 150 species belonging to 78 genera. These species are now protected in the Surkhandarya State Reserve, Boysun and Gissar forestries.

List of used literature:

1. Ибрагимов А.Ж.,М.Б.Эшбоев М.Б.Сурхондарё вилояти флорасининг эндем ва камёб турлари// монография. 2019-йил- Қарши “Насаф” нашриёти:Б.98-106
2. Ибрагимов А. Ж. Сурхон давлат қўриқхонасининг флораси// монография. 2016-йил- Тошкент, “Янги нашр”: Б.65-76
3. Ибрагимов А. Ж. Сурхон давлат қўриқхонаси флорасининг дарахт ва буталари // Ўзбекистонда чўлланишнинг экологик муаммолари: Халқаро илмий конференция материаллари. 25-26 сентябр 2008 й. – Ташкент, 2008. – Б. 53-55.
4. Ибрагимов А.Ж. Сурхон давлат қўриқхонаси флорасининг бирпаллали ўсимликлари // ЎзМУ хабарлари. – Тошкент, 2008. – №4. –Б. 45-46.
5. Садырова Г.А. Анализ флоры сосудистых растений высокогорий хребта Кетмен (Северный Тянь-Шань) // Бот.журн., 2006. – № 12 (91). – С. 1841-1848.
6. Сурхон қўриқхонасининг табиат солномаси – 2001. – Шеробод шаҳри, 2002. – 22 б
7. A.J.Ibragimov, M.A.Abdimuminova Analysis of life forms and vertical regions of poaceae family in the flora of the kuhitang ridge// Texas Journal of Multidisciplinary Studies <http://zienjournals.com> 2021.P:154-156
8. Raunkier C. On biologiske Typer, med Hensyn til Planternes Tilpasning til at overleve ugunstige Aarstider // Bot. Tidsskrift. – London, 1904. – 26 p.
9. Raunkier C. Planterigets Livsformer og deres Betydning for Geografien. Koebenhavn og Kristiania, 1907. – 132 p.
10. www.ipni.com (International plants Name Index).