



THE ROLE OF ENDEMIC PLANTS DISTRIBUTED IN THE TERRITORY OF UZBEKISTAN IN THE FLORA AND PROVISION ISSUES

Urinova Khulkar Shokirovna

**Associate Professor of the Department of Agronomy,
Navoi State Mining and Technology University.**

Isroilova Charos

**41-25 Agro group student of the Department of Agronomy,
Navoi State Mining and Technology University.
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ABSTRACT

This article highlights the significance of endemic plants found in the territory of Uzbekistan in preserving biological diversity, their distribution characteristics, and current issues regarding conservation. Endemic species within the republic's flora are a vital part of the natural gene pool, playing a special role in ensuring ecological balance. Anthropogenic factors affecting endemic plants and recommendations for their conservation are also presented.

Preserving biological diversity on Earth is considered one of the vital directions of modern ecology. Each region has its own unique composition of flora and fauna, among which endemic species found only in specific geographical areas are of particular importance. The territory of Uzbekistan is characterized by a diversity of natural and geographical conditions. The presence of desert, adyr, foothill, and high-altitude regions has created a foundation for the formation of many rare and endemic plants.

Endemic plants are scientifically valuable because they have adapted to the conditions of a specific region as a result of evolutionary processes. Therefore, the preservation of such species is one of the issues of not only national but also global importance.

The uniqueness of the flora of Uzbekistan. The flora of Uzbekistan is considered one of the richest in Central Asia. Thousands of wild plant species are found in the republic. A certain portion of them are considered endemic and relict species. In particular, the Western Tien Shan, Gissar-Alay, Zarafshan, and Turkestan mountain ranges are recognized as regions with a high level of endemism.

Many indigenous species have formed in mountainous regions as a result of long-term geographical isolation and the unique nature of ecological conditions. This is one of the main factors determining the uniqueness of the flora of Uzbekistan.

Ecological significance of endemic plants. Endemic species are considered a vital component of ecosystems. They play an important role in soil formation processes, the stable functioning of food chains, and the preservation of natural landscapes. Furthermore, many endemic plants are of value as valuable genetic material for medicinal, ornamental, and breeding work.

Certain species of tulips, bulbs, and other rare plants found in the territory of Uzbekistan possess not only ecological but also aesthetic and economic value. They are an integral element of natural ecosystems and serve to enrich biological diversity.

Factors threatening endemic plants. In recent years, many natural ecosystems have been undergoing changes as a result of intensified human activity. Land development for agricultural purposes, excessive use of pastures, illegal plant harvesting, and urbanization processes are causing a decrease in the number of certain endemic species.

Furthermore, global climate change is also negatively affecting the distribution areas of endemic plants. As a result of rising temperatures and fluctuations in precipitation, certain species are at risk of losing their habitat.

Ways to protect endemic species.

Protecting their natural habitats is crucial for the preservation of endemic plants. Nature reserves, national parks, and sanctuaries established in the republic play an important role in preserving rare plants.

It is also advisable to implement the following measures:

- regular monitoring of endemic species;
- scientific study of rare plant populations;
- development of artificial reproduction in botanical gardens;
- strengthening environmental education and advocacy;
- expanding the area of protected natural areas.

These measures ensure the preservation of the genetic diversity of endemic plants and their transmission to future generations.

Endemic plants distributed across the territory of Uzbekistan are considered a unique natural wealth of the country. They play an important role in preserving biological diversity, ensuring ecological balance, and enriching the gene pool. Under conditions of anthropogenic pressure and climate change, the protection of endemic species remains one of the urgent tasks. Therefore, these valuable plants can be preserved by expanding scientific research, improving conservation measures, and increasing ecological culture.

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