

**CURRENT STATE OF THE AYGUL FLOWER (PETILIUM EDWARD), GROWING IN THE STATE BOTANICAL RESERVE "MOUNTAIN AYGUL-TASH"
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Abstract: this article discusses the current state of the rare flower *Petilium Eduardii*, which is included in the Red Book of the USSR and Kyrgyzstan. The flower grows in the Aygul-Tash mountains in the Kara-Bulak village area of the Batken region, Batken oblast. Currently, this rare flower is facing threats of extinction, as people wishing to see it are picking, breaking, and trampling it, which reduces its numbers. Due to this, a moratorium has been announced from 2023 to 2026. At present, no one is allowed to visit and view the Aygul flower growing in the Aygul-Tash Mountain botanical reserve. The flowers can only be seen at the mountain peaks, among rocks and thorns, which is concerning. Flowers that were once found lower on the mountain slope are now disappearing, with fewer seen every year. Preserving the flowers given to us by nature and passing them on to future generations is our responsibility.

Keywords: *Petilium Eduardii*, Aygul flower, rare species, Red Book, conservation, Kyrgyzstan, Batken, botanical reserve, protection, mountains.

СОВРЕМЕННОЕ СОСТОЯНИЕ АЙГУЛЬСКОГО ЦВЕТКА (ПЕТИЛИУМ ЭДУАРДА), ПРОИЗРАСТАЮЩЕГО В ГОСУДАРСТВЕННОМ БОТАНИЧЕСКОМ ЗАПОВЕДНИКЕ "ГОРА АЙГУЛЬ-ТАШ"

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Аннотация: в данной статье рассматривается текущее состояние редкого цветка Петилиум Эдуарда (*Petilium eduardii*), включенного в Красную книгу СССР и Кыргызстана, который растет в горном массиве Айгуль-Таш в Баткенской области, Баткенского района, в окрестностях села Кара-Булак. В настоящее время этот редкий цветок подвергается угрозе исчезновения, поскольку люди, желающие его увидеть, вырывают, ломают и топчут его, что сокращает его численность. В связи с этим с 2023 по 2026 год был объявлен мораторий на его сбор. На данный момент доступ к наблюдению за цветами Айгуль-Ташского горного ботанического заповедника ограничен, и они находятся под охраной. Цветы видны только на вершинах гор, среди камней и шипов, что вызывает беспокойство. Когда-то цветы встречались ниже по склону, но со временем их число уменьшилось, и теперь они остаются только на вершине. Сохранение природы и передача этого цветка будущим поколениям - наша обязанность.

Ключевые слова: Петилиум Эдуарда, Айгуль цветок, редкий вид, Красная книга, сохранение, Кыргызстан, Баткен, ботанический заповедник, защита, горы.

The Aigul flower (*Petilium Eduardii*), known for its breathtaking beauty and rarity, is an endemic and rare species that has been included in the Red Book of the USSR and Kyrgyzstan. This unique flower grows in Aigul-Tash Mountain, located in Kyrgyzstan's Batken region, Batken district, within the Karabulak village area of the Karabulak rural administration.



According to the inventory materials from February 1992 (№5807, code №739), the total area of Aigul-Tash Mountain, located in Karabulak village, Karabulak rural administration, Batken district, Batken region, is 253.9 hectares.

133.3 hectares of this land are pasture, 1.3 hectares are land under field roads, and 119.3 hectares consists of other terrain, including rocky areas.

On October 9, 2009, by Decree №628 of the Government of the Kyrgyz Republic, Aigul-Tash Mountain was officially designated as a State Botanical Reserve.

The Aigul flower was included in the Red Book of the USSR in 1978 and later added to the Red Book of Kyrgyzstan in 2004.

The Aigul flower, an endemic species of Kyrgyzstan, faces pressing issues regarding its origin, benefits, unique characteristics, and the alarming decline in its population.

In recent years, the protection of wild Aigul flower species has become an urgent concern. One of the main reasons for this decline is that the number of Aigul flowers grown in the homes of Karabulak villagers far exceeds those growing in the wild. Even though livestock grazing on Aigul-Tash Mountain has decreased, challenges persist in ensuring the free growth and natural spread of these flowers. Visitors who come to admire the flower often pluck it, uproot it along with its bulbs, or dig out its underground parts, leading to a rapid decrease in its natural population. The more visitors the site receives, the greater the threat to the species.

Together with students of Batken State University, we actively participate in cleaning the surrounding area of the Aigul-Tash State Botanical Reserve while conducting research on the biology and ecology of the Aigul flower. Scientific studies are being carried out in collaboration with biology students from the university, focusing on the current state, biological characteristics, and ecological conditions of the species.

Our research involves measuring the height of the flowers, counting the number of petals, identifying their locations, recording areas where they are most found, and estimating their population density within a 10m² area. All collected data is carefully documented in research notebooks.

During our studies, we have also encountered cases of the Aigul flower being illegally picked. This highlights the reckless human impact on nature, proving once again that we are contributing to its destruction. In our opinion, a three-year moratorium on picking Aigul flowers was a necessary step. Without such protective measures, we risk completely losing this rare and precious species.





The photo was taken on April 13, 2022..



We captured the moment when the Aigul flower was being picked in a photograph.



In reality, it is evident that the flowers remain only at the mountain peaks, among rocks and thorns. Seeing this sight is truly heartbreaking. It is noticeable that the flowers, which were once abundant at the foot of the mountain, have gradually disappeared and are now moving higher up the slopes with each passing year.



During Biology Week, teachers and students participated in cleaning the surroundings of the Aigul-Tash Botanical Reserve.



A moment captured while cleaning the surroundings of the reserve.

We believe that by working together with students, we are not only conducting research and monitoring the flowers growing in the reserve but also contributing to conservation efforts by cleaning the area and setting an example for others.

It is great to see thousands of visitors from neighboring countries and different parts of Kyrgyzstan coming to admire the flower every day. However, it is truly heartbreaking to witness some of them trampling, picking, and destroying these precious flowers.

Our research over the past few years has shown a decline in the flower's population. Now, they are found only in the upper parts of the mountain, among rocks and thorns, which is a concerning sign of their decreasing numbers.

Unfortunately, the current state of the Aigul flower is far from encouraging. The protective measures taken so far have been almost ineffective, and it seems the flower has been left to be destroyed rather than protected by people. Along with this, natural disasters, such as floods and heavy rainfall, as well as livestock grazing in the mountains, have had a negative impact on its survival.

As we all know, based on Order №29t of the Batken District State Administration of Kyrgyzstan dated March 29, 2023, and Order №01-10/7 of the Batken Forestry dated April 3, 2023, a temporary ban on the entrance of citizens to the Aigul-Tash Nature Reserve has been imposed from April 1, 2023, to April 1, 2026 (for three years) in order to protect the rare Aigul flower and its habitat.

Therefore, we believe that the moratorium is a correct decision, and we hope that over the next three years, we will be able to protect at least some of the flowers. We plan to continue our research starting in 2026.

We urge everyone to cherish and protect the Aigul flower, a gift of nature, and contribute to its conservation!

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