

## **Astragalus karakuschensis gontsch: Astragalus jucunda**

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### **Abstract**

*Astragalus karakuschensis* Gontsch-Garagush is one of the subendemic plants in the territory of Nakhchivan Autonomous Republic. In the article is described the biological characteristics of the Garagush Jucunda, its distribution area, efficient use and protection capabilities. It was recommended that the flora of Nakhchivan AR, which will be redeveloped in the future, be included in the second edition of the Red Book and that the Ministry of Ecology and Natural Resources of the Nakhchivan Autonomous Republic consider it expedient to protect this species. Conservation work will be carried out in the area of Garagush Mountain, which is part of the Arpachay State Nature Reserve.

**Keywords:** legume family , legumes, buckwheat, garagush buckwheat, red book, lower risk (LR), least concern (LC), ministry of ecology and natural resources

### **Introduction**

The modern territory of Nakhchivan Autonomic Republic takes an important place in the Caucasus due to its genesis and geographical position. Located on the border of several botanical and geographical regions, the area may be in migration of flora with the Caucasus, Central Asia, Central Asia and Iran. The territory of Nakhchivan AR has inexhaustible plant resources and according to its literature, its modern flora is represented by 176 genera, 908 genera and 3021 species of higher spore, bare-seeded and covered-seeded plants, of which 1050 species are in the plains, 1869 species in the mountains and 400 species in the It is widespread in both the plains and the mountainous part. This amount is 60.38% of the flora of Azerbaijan (5000). Among the plant resources of the Autonomous Republic are

legumes - Fabaceae Lindl. family takes an important place [1, p.134-146; 5, p.22-44].

Garagush mountain system has an absolute altitude of 1400-2600 m, is located between the upper reaches of the Qabaqlıchay and Chalkhangala villages, south of Kecheltepe mountain. Mount Garagush, one of the branches of the Daralayaz range, is divided into ravines with steep slopes. Mountain-meadow steppe lands prevail here. The vegetation of the area is grouped in the form of meadows, shrubs and forests, adapting to this height and temperature. Here, starting from early spring, one plant species replaces another. In the area, annual root crops, onion plants and a number of perennial grasses grow rapidly, bloom and form seeds. One of the unique plants of the area is Fabaceae Lindl of the legume family. *Astragalus* L. *Astragalus* L. *Astragalus karakuschensis* Gontsch. (Picture 1).



**Picture 1:** *Astragalus karakuschensis* Gontsch.

In the study, many research methods were used which adopted in botany [2, 3, 4, 9].

*Astragalus Jucunda* is a perennial herbaceous plant belonging to the *Astragalus* L. – *Jucunda* (Bean) of the family - *Fabaceae* Lindl. This plant is short-stemmed, reaches 5-15 cm in height with petals and is covered with 7-8 mm long counterfeit tendrils. It has a strong woody root. The leaves are double-feathered, 8-10 on the stalk. It is swollen, long, with gray hairs and 3-6 cm long. The leaves are 5 mm long and ovoid or elliptical in shape.

Stems with flowers are longer and reaching 3-6 cm. The flower stalk is longer than the leaf stalks and rises above the creeping stem. The flowers are swollen, spherical in shape for forming a bean, and covered with a mixture of short black and white hairs. 2-5 flowers are collected in clusters on the stem. Inflorescence is ovoid, 5-8 mm long, pointed tip with swollen and short black hairs. The sepal is soft white hairs mixed with short black hairs and covered with red veins, 15-18 mm long and it is ovoid. The flower crown is pink and 22 mm long. The standard petal is oblong-rectangular, up to one cm wide. The wing petal is equal to the sail, and the keel petal is shorter than it [6, p.381-382; 7, p.176; 8, p. 418-419].

Garagush is found in the Garagush mountain range of the Daralayaz range in the Nakhchivan Autonomous Republic, around Tannam, Akhura, Garabaghar and Chalkhangala villages of Sharur region, Buzgov villages of Babek region, in the middle mountain belt, on chalky, clay and gravel slopes. In addition to preventing erosion by forming grass in groups in the area where it grows, it is also a valuable fodder plant and is the main food for wild ungulates living in this area.

According to the observations, it was found that due to the negative impact of drought conditions and intensive grazing, the amount of Garagush is undergoing a significant decline. Therefore, it is advisable to include this type of Lower Risk (LR) in the Least Concern (LC) subcategory. It is known that the Lower Risk category includes less endangered species, and the Least Concern subcategory includes relatively controlled species. It was recommended that the species will be included in the second edition of the Red Book of flora of Nakhchivan AR in accordance with the specified status and that the Ministry of Ecology and Natural Resources of the Nakhchivan Autonomous Republic should expedite the protection of this species. As this area belongs to the Arpachay State Nature Reserve, it will be easy to protect the species.

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