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# D. Sh. Ganharov

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Nakhchivan State University AZ 7000 Nakhchivan University Campus

A. Sh. Ibrahimov

Nakhchivan Branch of the ANSA Institute of Bioresources

# New species and their bioecological features of astragalus spread in the area of nakhchivan autonomous republic

# D. Sh. Ganbarov, A. Sh. Ibrahimov

#### Abstract

As a result of literary informaions and researching private eteppe research materials 72 species of Astragalus genus of Fabaceae Lindll. family in the area of Nakhchivan Autonomous Republic. Astragalus alexandrii Charadze, A. lunatus Pall, A. contortuplicatus L. of those species are menioned to be new for the area flora by us and the areas of their spreding are shown in the article.

Keywords: Astragalus, species, genus, family, bioecological

## 1. Introduction

Nakhchivan Autonomous Republic is one of the most interesting areas from the floristic point of view. Specific rich plant coat of the area always attracted the attention of botanist investingators. The materialist about the *Astragalus* species of *Fabaceae* Lindll. family of the area are met in some literatuures. In spite of this literary informations do not completely show the taxonomic spectrum and objective laws of *Astragalus* species (4).

# Material and method

Since 2011 one has found out about the species belonging to *Astragalus* L. genus in the area of Nakhchivan AR. Constantly in the spring-autumn season the expeditions have repeatedly been arranged in the regions of Nakhchivan AR and the species belonging to *Astragalus* genus have been researched. During the researches the natural condition of the settlement where the species have been spread, phytocenoses which they formed, formations, and associations have been investigated with experimental methods (by setting up sample squares) by making phonological observations. In the use and determination of the gathered herbarium materials we first of all based on the known methods, long-term (2009-2015) own experiments and practices. Together with this, classical and modern botanical floristic methods, fundamental complete works "Flora of the USSR", "Flora of the Caucasus", "Flora of Azerbaijan" have also been used. Determination of the names of systematical tacsons, names of their authors have been carried out according to the works of S.K.Cherepanova and "Taxonomical spectrum of the flora of Nakhchivan AR" (1, 338-430; 2. 3, 62-83; 5, 6).

# **Experimental Part**

As a result of literary informaions and researching private eteppe research materials 72 species of *Astragalus* genus of *Fabaceae* Lindll. family in the area of Nakhchivan Autonomous Republic. *Astragalus alexandrii* Charadze, *A. lunatus* Pall, *A. contortuplicatus* L. of those species are menioned to be new for the area flora by us.

Bioecological features and the spreading areas of these species are mentioned below: A. lunatus Pall-Plant is greyish green in color with soft hairs and sparse leaves. Stem is projecting upward and has length of 20-40 cm. Leaf bases are small, triangular in shape and curtained. Leaves are in 10-15 pairs, narrow lined and leaflets are in lanset shape. Tassels are packed and long legged. Sepals have black wooly hairs and discs are shorter than tubules. Corolla are two times longer than sepals and is bright violet in color. Bean of the plant is pendant, has white and black hairs and archiform shape and straight noses.

Correspondence: D. Sh. Ganbarov Nakhchivan State University AZ 7000 Nakhchivan University Campus



Fig 1: A. lunatus Pall

Plant is spread and grows in Batabat, Agbulaq, till middle range zone of Camanyurd massif of Kecili village and in bush and grassy slopes.

A. Alexandri Chaparedze plant has stem in height of 10-25 cm. Leaves exist in 12-15 pairs or oval shape leaflet. Leaf bases are triangular, lanset in shape and pointed. Corolla is 25 mm in length and light red in color. Bean of the plant is 3-5 cm in length, nose in 2 mm, lower part is beaky.



Fig 2: A. Alexandri Chaparedze

The plant grows in rocky, stony bushes of lower and middle zones of villages Qizil Qishlaq, Bicanak and Kecili in Shahbuz region.

A. contortuplicatus L. is one year (annual) plant with long and leaning stem with packed hairs. Leaf bases are large and egg-shaped. Leaves are in 7-10 pairs and reverse egg-shaped and upper part is cavity leaf. Tassel leg is noatbly shorter than leaves. Tassels are polyflowery, balloon shaped initially and grows longer later.



Fig 3: A. contortuplicatus L.

Discs of sepals is sharp pointed, equal to corolla and slightly longer than tube. Corolla is yellow color. Bean of the plant is flat, archiform tub-shaped, external stitch site is wrinkled and polysemous.

The plant is spread and grows in humid, salty places of Duzdag village of Babek region and Qarababa village of Shahbuz region.

## References

- 1. Atlas areas and recourses of herbs of USSR. Moscow: 1976, 339 pages
- 2. Grossgeym A. A. Dterminer of the herbs of the Caucasus . M. State Publishing House. "Soviet Science", 1949, 747 pages.
- 3. Ibrahimov A. Sh. Nakhchivan AR Flora and the Use in the National Economy. Baku: Elm, 2005, 230 pages.
- 4. Talibov T. G. Tacsonomic Spectrum of the Nakhchivan AR Flora. Nakhchivan, Ajamy, 2008, 350 pages.
- 5. Azerbaijan Flora. Volume 5, Baku, Publishing House of the Azerbaijan AS, 1954, 579 pages
- 6. Cherepanov S.K. Vascular Plants of Russia and Neighbouring Countries (within the limits of the post SSSR). Sankt-Peterburg: "Мир и Семья 95", 1995, 992 pages.