# Systematic Analysis of Astracantha Species Spread in the Flora of Nakhchivan Autonomous Republic

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**Abstract-** In the article the systematic analysis of Astracantha species spread in the flora of Nakhchivan Autonomous Republic has been investigated. Our aim is to make known the works of investigators who has less or more roles in investigation of Astracantha species till now, to base on them, to define the direction of our further investigations correctly.

Index Terms- Astracantha, species, genus, flora, toxonomic

### I. INTRODUCTION

Ilora of Nakhchivan Autonomous Republic, its vegetable world in detail systematic, bio-morphological, ecological, phytocenological, plant reserves investigated in complex in bio-chemical directions. But the species belonging to Astracantha genus have not been invastigated according to scientific basis. Also it is known that the results of researches are getting older from time to time, new species appear or new species migrate to this area from neighbouring countries. That's why there is a great need of searching them periodically and investigating their newly formed features. For this reason spreading of the species belonging to Astracantha genus and their species content spread in this area have been precisely defined. In the given article our aim is to make known the works of investigators who has less or more roles in investigating them till now, to base on them, to define the direction of our further investigations correctly.

# II. MATERIAL AND METHOD

In the carried out work, searching flora and plant cover there has been used from generally accepted floristic, systematic, ecological, geographical, geo-botanic, plant reserves methods, "Flora of SSSR", "Flora of Caucasus" by A.A.Grossheym, a number of other modifiers, works of L.I.Prilipkon, methodical instructions, [3, 5], Flora of Iran and Turkey, also from works of Azerbaijani botanists, from their methodical instructions.

In the determination of species and in the spesification of their names nomenclatural changes have been carried out using "Flora of Azerbaijan", S.K.Cherapanov, "Conspect of Caucasus Flora", by A.M.Asgarov, "Taxonomic spectrum of Nakhchivan Autonomous Republic" [1, 2, 4, 6] .

# III. EXPERIMENTAL PART

According to the literary material it is noted that 16 kinds belonging to *Astracantha* species have spread in the area. But,

Astracantha alexeenkoana of those species has not been determined during our investigations. But Astracantha pycnophullus has been included to the other species. Below it has been shown the systematic analysis of Astracantha species spread in the flora of Nakhchivan Autonomous Republic.

1. A. Andreyi Rzazade Reports of ANSA, № 7, 407 (1953). – Andrey astracantha

It is a shrub. 80-150~cm, blooming VI-VII. Cserophit . Geographical type: Atropatan. In the low mountainous zone, pebbly, clayey slopes.

Species has been described from Azerbaijan (Samukh). General spreading: The Caucasus

2. A. Gudrathi Theod., Fed. et Rzazade Bot.Materials of Herbarium Botanical Institute of AS of the USSR, XVI (1954).-Gudrat astracantha

It is a shrub. 25 cm, blooming VII-VIII. Cserophit. Geographical type: Northern Iran. In the high mountainous zone, stony slopes.

Species has been described from Azerbaijan (Gapicig). General spreading: The Caucasus (Southern Transcaucasia)

3. A. microcephalus Willd., Sp. pl., III, 332 (1800); A. Borisov in the Flora of SSSR, XII, 335 (1946); A. Grossgame, Plant cover of the Caucasus 130. – Smallheaded astracantha

It is a shrub. 60 cm , blooming VI-VII. Cserophit. Geographical type: Small Asia. In the middle or sometimes high mountainous zones, dry slopes.

Species has been described from Small Asia. General spreading:Iran

4. *A. Insidiosa* Boriss. In the Flora of the USSS, XII, 351 (1946); A. Grossgame, Flora of Caucasus., V, 289, (1952); Plant cover of the Caucasus, 126. – Bitter astracantha

It is a shrub. 2-3,5 cm , blooming VII. Cserophit . Geographical type: Atropatan. In the sub-alp and alp zones, dry, stony slopes.

Species has been described from Azerbaijan (Urmus).

General spreading: The Caucasus (Southern Transcaucasia)

5. A. Meyeri Boriss., Diagn, ser, I, 9, 88 (1849); Fl. or., II, 349; A. Borisova in the Flora of the USSR, XII, 366 (1946); A. Grossgame, Plant cover of the Caucasus, 130- Meyer astracantha

It is a little shrub. 10-15 cm, blooming VII. Cserophit . Geographical type: Northern Iran. In the middle, sometimes high mountainous zones, stony slopes, bare areas without soil.

Species has been described from Zuvanda General spreading: Iran

6. A. barba-carpina Al.Theod., Fed. et Rzazade Bot Materials of Herbariu of Botanical Institute of AS USSR, XVI (1954).- Goat-beard astrakantha

It is a shrub. 50-70 cm, blooming VII. Cserophit . Geographical type: Northern Iran. In the low mountainous zone, dry southern slopes in the 1400-1500 m high, stony areas

Species has been described from Azerbaijan (Turkesh).

General spreading: The Caucasus (Southern Transcaucasia)

7. A. vedica Takht. Materials of Botanical Institute, Tibilisi, 9, 23 (1940); A. Borisova in the Flora of the USSR, XII, 378 (1946); A. Grossgame, Plant cover of the Caucasus, 129.-Astracantha of Vedi

It is a little shrub. 5-15 cm, blooming VI-VII. Cserophit . Geographical type: Atropatan. In the middle mountainous zones, stony slopes

Species has been described from Vedi

General spreading: The Caucasus (Southern Transcaucasia)

8. A. karjaginii Boriss. In the Flora of the USSR, XII, 377 (1946); A. Grossgame, Plant cover of the Caucasus, 130.-Astracantha of Karyagin

It is a shrub. 20-40 cm, blooming VII-VIII. Mezo-cserophit. Geographical type: Northern Iran. It is an endemy. In the middle mountainous zone, stony slopes.

General spreading: Iran

9. *A. jucunda* Theod., Fed. et Rzazade Bot. Materials of the AS of USSR, XVI (1954).- Happy astracantha

It is a little shrub. 5-15 cm, blooming VII. Cserophit . Geographical type: Atropatan. In the mid- mountainous zone, slopes containing lime

Species has been described from Nakhchivan (Garagush) General spreading: The Caucasus (Southern Transcaucasia)

10. A. aurea Willd. in Act. Berol., 29, t. L, f 3 (1794; A. Borisova in the Flora of SSSR, XII, 379 (1946); A. Grossgame, Plant cover of the Caucasus, 129.- A. pseudo tragacantha Pall., M.B., III, 499; Ledeb., I, 641 p. p- Golden astracantha

It is a shrub. 10-25 cm, blooming VII-VIII. Cseromezophit. Geographical type: Atropatan. It is an endemy. In the middle, high mountainous zone, alp lawns

Species has been described from Armenia

General spreading: Little Asia

11. A. flavirubens Theod., Fed. et Rzazade Bot. Materiajs of Herbarium of the Botanical Institute of AS of USSR, XVI (1954).- Yellow-red astracantha

It is a shrub. 25 cm, blooming VIII. Cserophit. Geographical type: Atropatan. It is an endemy. In the middle mountainous zone of the 1700-1800 m high, stony dry slopes

Species has been described from Nakhchivan (Gapicig)

General spreading: The Caucasus (Southern Transcaucasia)

12. A. oleifolia D. C., Astrag., 192 (1802); A. Borisova in the Flora of SSSR, XII, 381 (1946); A. Grossgame, Plant cover of the Caucasus, 130.- Olive-leafy astracantha

It is a little shrub. 25 cm, blooming VI-VII. Cseromezophit . Geographical type: Small Asia-Iran. In the middle mountainous zone, dry, stony sometimes more or less humid slopes

Species has been described from the East

General spreading: Balcans - Small Asia

13. A. karabaghensis Bge Astrag., geront., I, 93 (1868); A. Borisova in the Flora of SSSR, XII, 378 (1946); A. Grossgame, Plant cover of the Caucasus, 129.- A. araxinus Lipsky, Flora of the Caucasus, 306 (1899). – Astracantha of Garabagh

It is a little shrub. 7-20 cm, blooming V-VI. Cserophit . Geographical type: Northern Iran. In the low and middle mountainous zones, stony slopes and slopes containing lime Species has been described from Azerbaijan

General spreading: Iran

14. A. stenonychioides (Freyn & Bornm.) Diagn., ser. 1, 9, (1849); A. Borisova in the Flora of USSR, XII, 374 (1946); A. Grossgame, Plant cover of the Caucasus, 130. Straight-leafy astracanta

It is a little shrub. 20-30 cm, blooming VI-VII. Cserophit . Geographical type: Northern Iran. In the middle and high mountainous zones, slopes containing lime

Species has been described from Talagon

General spreading: The Caucasus (Southern Transcaucasia)

There is not doubt that these species don't completely represent all the *Astracantha* species of the region. In the future reserches it is expedient to investigate the species of *Astracantha* generally.

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