### Akbar Akhmedov

### Ph.D., Botanist/Plant Ecologist

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### **BIO**

Nationality: Uzbekistan

Born on 27 Feb. 1984 in Samarkand, Uzbekistan.

### **EDUCATION**

01.09. 2001 – 30.06.2005 **B.S.:** Biological Sciences, Samarkand State University, Uzbekistan

"Floral composations of medicinal plants in Samarkand region"

01.09. 2005 – 30.06.2007 M.S.: Botany, Samarkand State University, Uzbekistan

Dissertation: Plant composition and transformation of Karnabchul rangeland.

31.01.2019 – **Ph.D.**, Institute of Botany, Academy of Sciences of the Republic of Uzbekistan

Dissertation: Ontogenetic structure and populations state of rare and endemic species of the genus

Lagochilus Bunge (Lamiaceae Lindl.) in the flora of Uzbekistan

### **EMPLOYMENT**

**2023** Current position: Researcher/Lecturer of Biology faculty of Samarkand State University

2020-2021 – Researcher/Lecturer Agro-biotechnology and food security of Samarkand State University

**2019-2020** – Senior researcher of International faculty of Samarkand State University

01/03/2018 - 29/09/2019 Senior researcher in Laboratory Geobotany and Plant Ecology, Institute of

Botany Academy of Sciences of the Republic of Uzbekistan

**2007 - 28/02/2018** – PhD student, Researcher and Lecturer Department of Botany and Plant Physiology of Samarkand State University, Samarkand, Uzbekistan

### TEACHING EXPERIENCE

01 Sept. 2007-2017 2019-2020 **Uzbek and English classes** on subjects *Botany- Systematic of Higher* plants, *Morphology and anatomy of plants, Geobotany and Plant Ecology* (dynamic of plant population, living collection of rare, endemic and endangered species), introduction to biology and ecology, Tree ring, and etc.

### **RESEARCH INTERESTS**

- Rangeland and Population Ecology of plants
- Population of endangered and endemic species (dynamics)
- Conservation and Restoration
- Stable Isotope Ratio Facility for Environmental Research
- Dendrochronology (tree ring, width, wood anatomy)
- Global Climate Change.

# **EXPERIENCE**

January 01. 2020	Coordinator for Chinese project "Research and Demonstration of Key Technologies for Vegetation Restoration and Reconstruction of Desertified Land in Karakul, Bukhara, Uzbekistan"
March – August 2019	Project: "Land-use mapping through collection of ecological and social aspects of pastoralism, fire-wood usage and carrying capacities" Central Asian Desert Initiative (CADI) of Michael Succow Foundation, University of Greifswald, Germany
January- December 2019	Project "Contemporary bellwether developing of vegetation cover and animals world of Ustuyrt in processing desertification" Uzbekistan
06/06-30/11/2018	Project on atmospheric effects on forest tree species in Israel and Uzbekistan Department of Plant & Environmental Sciences, Weizmann Institute of Science, Israel
01/03/2018 –29/09/ 2019	Junior Researcher in State Project of Uzbekistan (PZ-20170919165): Cadaster of rare and disappearing of higher plants of Navoi and Bukhara regions
01/03/-31/12/2018	Junior Researcher in State Project of Uzbekistan (VA-FA-F5-010): Systematic of dicot (dicoteledon) plants of Natural Flora of Uzbekistan
2015- 2017 years	Junior Researcher in State Project of Uzbekistan: Learning the structure of populations of medicinal plants from genus <i>Lagochilus</i> ( <i>Lamiaceae</i> ) in Nuratau mountain range and its neighboring territories. A-8-1
01/-12/2014	Junior Researcher in State Project of Uzbekistan: Creation of virtual catalog of herbarium of Samarkand State University
01/-12/2013	Junior Researcher in State Project of Uzbekistan: Studying diversity and origin of riparian vegetation in Uzbekistan

# PARTICIPATION IN INTERNATIONAL TRAINING COURSES AND RESEARCH STAYS

October-	Visiting Scientist to the Department of Geobotany, Faculty of Regional and
December	Environmental Sciences of University of Trier, Germany
2022	
June-August	Visiting Scientist to the Department of Plant & Environmental Sciences, "Tree Lab" of
2022	Weizmann Institute of Science, Israel
February-	Visiting Scientist to the Department of Plant & Environmental Sciences, "Tree Lab" of
June 2020	Weizmann Institute of Science, Israel
29.12.2019-	Visiting Scientist to Northwest Institute of Eco-Environment and Resources, Chinese
03.01.2020	Academy of Sciences
24-28	Society for Ecological Restoration (SER) 2019 8th World Conference in Cape Town
September,	South Africa
2019	

31/01-07/02, 2019	Seminar on Dendroecology at the Department of Plant & Environmental Sciences, Weizmann Institute of Science, Israel
01-23 September, 2018	"Training Course on Desertification and Its Control in Countries along the belt Silk Road economic belt" The Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences (CAREER, CAS). Lanzhou, Gansu Province, P.R. China
13 March – 14 September 2017	United Nations University Land Restoration Six Month Training Program (UNU-LRT), Agricultural University of Iceland and Soil Conservation Service of Iceland
14-23 November, 2016	United States Department of Agriculture Research, Forage and Range Research Lab at Utah State University in Logan and Stable Isotope Ratio Facility for Environmental Research Lab at the University of Utah in Salt Lake City, US
19-23 September, 2016	Training Course of Erasmus Plus Program Project: Enhancing Competencies of Central Asian Universities in Agricultural Policy focused on Environmental Protection & Land Management / ECAP. Prague, Czech Republic
13-19 April, 2015	Participation at International Isotope Course "Stable Isotopes in Agriculture, Ecology and Environmental Sciences". Technical University of Munich, Freising-Weihenstephan, Germany and University of South Bohemia, Budweis, Czech Republic
Feb-Apr 2015	Research Stay on topic "Ontogenetic and population analysis of Red List <i>Lagochilus</i> species". Laboratory of Introduction of Medicinal and Aromatic Plants, Central Siberian Botanical Garden, Russia
26-30 November 2014	Participation at Final Workshop of CABNet (Central Asian Biodiversity Network) Project. Greifswald University, Germany
Sept-Dec 2013	Research Stay on topic "Ecological characteristics of ontogenetic structure of Red List <i>Lagochilus</i> species". Laboratory of Introduction of Medicinal and Aromatic Plants, Central Siberian Botanical Garden, Russia

**Awards:** UNU-LRT scholarship of Iceland 2017., El Yurt Umidi Foundation scholarship of Uzbekistan 2021., Scholarship of Ministry of Innovative Development of Uzbekistan 2022., German Academic Exchange Service (DAAD) 2022.

# SKILLS Language; Uzbek (Mother tongue), English (good), Russian (good).

**Technical;** Binocular microscope, wood samples, soil samples, plant samples, transect, Mass spectrometry, microtome and etc.

## List of publications of Dr. Akbar Akhmedov Journal Articles

- **1. Akbar Akhmedov**, Zebunisso Nomozova, Zebo Umurzakova, Obidjon Turdiboev, Shoxira Atayeva, Numonjon Jumayev. Assessment of the current condition of populations of the red list species *Salvia submutica* Botsch. & Vved. (Lamiaceae Lindl.) in Nuratau Mountain ridge, Uzbekistan., Ekológia (Bratislava)., 2022
- **2.** Davlat Kh. Akramov., Nilufar Z. Mamadalieva., Andrea Porzel., Hidayat Hussain., Mthandazo Dube., **Akbar Akhmedov**., Ahmed E. Altyar., Mohamed L. Ashour., Ludger A. Wessjohann. Sugar Containing Compounds and Biological Activities of *Lagochilus setulosus*. *Molecules*., 2021
- **3. Akbar Akhmedov.**, Ido Rog., Amit Bachar., Habibullo Shomurodov., Muhtor Nasirov., Tamir Klein. Higher risk for six endemic and Red List *Lagochilus* species in Uzbekistan under drying climate. *Perspectives in Plant Ecology, Evolution and Systematics.*, 2020.
- **4. Akhmedov. A.K.,** Cheryomushkina. V.A., Shomurodov. H.F. Ontogenesis and ontogenetic structure of *Lagochilus inebrians* populations in Uzbekistan. *Journal of Orenburg State University*, Russia 2017, № 6(8), pp. 63-70.
- **5. Akhmedov A.K.,** H.F. Shomurodov, Z.B. Nomozova. The Ontogenesis and Ontogenetic Structure of *Lagochilus proskorjakovii* Ikram (*Lamiaceae*) populations in Nuratau Mountain Range (Uzbekistan). *American Journal of Plant Sciences*. 2016. 7, pp. 928-936.
- **6. Akhmedov. A.K.,** Cheryomushkina. V.A., Shomurodov. H.F. 2015. Ontogenesis and ontogenetic structure of *Lagochilus gypsaceus* Vved. (*Lamiaceae*) populations in Kyzyl-Kum (Uzbekistan). *Journal of Plant Resources*, Novosibirsk, № 2(8), pp. 32-38.
- **7.** Shomurodov H.F., **Akhmedov A.,** Saribaeva Sh.U. 2014. Distribution and the current state of *Lagochilus acutilobus* (*Lamiaceae*) in connection with the oil and gas sector development in Uzbekistan. *Ecological Questions*. Poland, 19:45-49.
- **8.** H.F. Shomurodov., U.Sh. Saribayeva., and **A. Akhmedov.** Distribution Pattern and Modern Status of rare Plant Species on the Ustyurt Plateau in Uzbekistan. Arid Ecosystem, Russia 2015, Vol, No.4(65), 81-89.
- **9.** H.F. Shomurodov., O.S. Abduraimov., **A. Akhmedov.** 2014. The flora of Kokchatau and its neighboring rangeland territories. *Biological journal of Uzbekistan*, pp 115-117.
- **10. Akhmedov. A.,** Bryndis Marteinsdottir. Assessment of the current condition of populations of the Red List species *Lagochilus proskorjakovii* Ikram and *Lagochilus olgae* R. Kam. (*Lamiaceae*) in Nuratau Mountain Ridge, Uzbekistan. Annual Report of UNU-LRT Iceland, 2017.

http://www.unulrt.is/static/fellows/document/akhmedov2017.pdf

#### CONFERENCE PROCEEDINGS

### **Short papers:**

- 1. **A Akhmedov.,** H. Shomurodov., Z. Nomozova., M. Khasanov., A. Kushbokov., N. Bobokandov. Higher pressure for the population of endemic *Lagochilus gypsaceus* in Uzbekistan under climate change "Food Security: National and Global Drivers" International Scientific and Theoretical Conference 2020 in Samarkand, Uzbekistan
- 2. **Akbar Akhmedov,** Bryndís Marteinsdóttir. Assessment of the current condition of populations of the *Lagochilus proskorjakovii* Ikram. (Lamiaceae) in Nuratau mountain ridge, Uzbekistan. Society for Ecological Restoration (SER) 2019 8th World Conference in Cape Town, South Africa
- 3. **Akbar Akhmedov,** Habibullo Shomurodov. Assessment of the current conditions of populations of *Lagochilus acutilobus* (Ledeb.) Fisch. &C.A.Mey and *Lagochilus vvedenskyi* R.Kam. & Zuckerwanik. (*Lamiaceae*) on the Ustyurt Plateau and Kyzylkum Desert. VII International Scientific-Practical Conference on the «Problems of rational use and protection of natural resources of southern Aral Sea region». Nukus, Karakalpakhistan 2018
- 4. **A.K. Akhmedov,** H.F. Shomurodov. The Structure of populations of *Lagochilus vvedenskyi* (*Lamiaceae*) in Kyzylkum Desert. 10<sup>th</sup> International Rangeland Congress. Canada. 2016. pp. 445-447.
- 5. Z.B. Nomozova, **A.K. Akhmedov**, M.A. Hasanov, Z.A. Rasulova. Distribution and phytocoenotic peculiarities of *Lagochilus proskorjakovii* Ikram in Nuratau mountain range. Proceedings of Scientific Conference "Actual problems of biology and ecology". Tashkent, 2015. Pp. 166-168
- 6. Ontogenetic structure of *Lagochilus inebrians* Bunge. (*Lamiaceae*) populations in Samarkand region (Uzbekistan). Proceedings of Scientific Conference "Perspectives of the development and problems of Modern Botany". Novosibirsk 2014, pp 89-90.
- 7. **Akhmedov. A.K.** 2013. Morphobiometrical values of different populations of *Lagochilus vvedenskyi* in Kyzylkum desert. Proceedings of Desert Technology 11 International Conference, 19-22 November 2013. Texas. pp. 58-59.
- 8. **Akhmedov. A.K.** Assessment of the condition of *Lagochilus vvedenskyi (Lamiaceae)* in different populations. Proceedings of Scientific Conference "Plant World of North Asia: the problems of studying and conservation of biodiversity." Novosibirsk, Russia, 1-3 October, 2013. Pp-1314.
- 9. **Akhmedov. A.K,** 2009. Some bioecological peculiarities of *Lagochilus proskorjakovii* Ikram Proceedings of Scientific Conference "Actual problems of biology and its teaching". Tashkent, pp. 128-130.